EXHIBIT S
Evaluating the Research on the Impact of Race in the California Death Penalty Regime

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When the Connecticut Supreme Court struck down the Connecticut death penalty as unconstitutional under the state constitution in the 2015 case State v. Santiago, Justices Norcott and McDonald endorsed the view that “When a capital defendant marshals a compelling argument that the death penalty as it is administered in our state is incurably racist …we should stop dead in our tracks until we have given the argument our most serious attention.”

This compelling evidence was established for capital regimes across the nation two decade ago in a sophisticated national-level study, Explaining Death Row’s Population and Racial Composition. In that study, researchers Blume, Eisenberg, and Wells analyzed data on murders and the composition of death row from 1977 through 1999 in the 31 states that sent ten or more defendants to death row during this time period.¹ This comprehensive study included 5,953 of the 5,988 (99.4 per cent) persons admitted to death row in the U.S. between 1977 and 1999. The researchers obtained data on the characteristics of murders, the racial composition of death row, and several other legal and political dimensions. They then compared the overall population of murderers to the death row population along a number of dimensions to determine which factors are related to the likelihood of being convicted of capital murder and placed on death row. The researchers found strong evidence that the race of the perpetrator and victim had a powerful impact on the likelihood of a death sentence being imposed. Specifically, black representation on death rows in states across the country was heavily influenced by the proportion of all murders that involve a Black offender and a White victim. This finding that Black offender/White victim murders were treated more harshly than other types of murders was statistically significant at the .01 level.

Racial bias in the administration of the death penalty has been documented in death penalty regimes across the country.² This memorandum explores the research specifically examining racial bias in California’s capital punishment regime.

In Section I, I begin my evaluation by focusing on three studies finding statewide evidence of racial bias in capital sentencing in California:


While the three studies use somewhat different datasets and examine different time periods, they collectively examine data from homicide cases throughout the state over the period from 1979-2018 and reach similar conclusions about the pernicious racial influences on the California capital regime. A fourth paper shows that the combination of the very broad level of death-eligibility for California homicides coupled with the small number of death sentences suffers from the same problem of standardless discretion that the Court in *Furman* deemed unconstitutional in part because it provides greater opportunity for impermissible factors such as race to influence capital outcomes.


Section II then turns to six studies that look within counties and generate the same conclusions of racial bias. One study examines the capital regime in San Diego County, three probe the operation of capital punishment in Los Angeles County, and the final two studies examine Riverside and Santa Clara counties.

5. Petersen, Racial Disparities in Riverside County’s Death Penalty System (Sept. 21, 2021).

Section III summarizes my broad conclusions concerning the influence of race on the California death penalty regime. In total, the ten studies I discuss collectively provide powerful and compelling evidence that racial factors have marred capital sentencing outcomes in the state.
I. Four Studies Focused on the Statewide Operation of the California Death Penalty Regime


This important new study examines the California death penalty regime with the high quality of empirical sophistication and care that the subject requires. This scientifically valid study sets forth clear factual findings that establish racial discrimination and overbreadth in California’s capital regime.

The Grosso, Fagan, and Laurence report (“GFL”) analyzes racial and ethnic disparities in decisions by California prosecutors to charge aggravating factors in capital-eligible cases and decisions by juries to impose a sentence of death over the period from 1978 to 2002. GFL find that, even after controlling for relevant circumstances of the crime, significant racial and ethnic disparities in California’s capital punishment system result in a greater likelihood of a death sentence for cases involving White victims, for cases involving minority defendants, and for cases involving both White victims and minority defendants.

GFL use data from the California Department of Corrections and Rehabilitation (CDCR) covering all 27,453 cases where a defendant was convicted of first-degree murder, second-degree murder, or voluntary manslaughter with an offense date between January 1, 1978, and June 30, 2002. The authors then drew a stratified sample of 1900 cases. From this universe, each case was coded using a data collection instrument by law students and law graduates for the presence of special circumstances and race/ethnicity of defendant and victim.

GFL initially report unadjusted tables comparing each racial/ethnic group’s representation in the sample to various outcomes and then confirm their results with a series of logistic regressions analyzing each phase of the capital punishment decision process.⁴ Since this study is so extensive and empirically strong, I provide an extended discussion that summarizes the results from their various tables in some detail.

Tables 1 and 2 reports simple cross-tabulations that document the gross racial disparities in the California capital regime. While minority defendants comprise only 70 per cent of death-eligible cases, they are sentenced to death at a somewhat higher rate of 79 percent. White-victim cases


⁴ Cases with at least one White victim are considered White-victim cases. Black, Latino, or Native American individuals are considered minorities for the purpose of the study.
are only 34 per cent of death-eligible cases, but a substantially higher 52 per cent of cases in which a death sentence was imposed. While cases with both a minority defendant and White victim are only 14 per cent of death-eligible cases, they are a dramatically larger 34 per cent of cases in which a death sentence was imposed. Table 2 notes that 10.4 per cent of minority-defendant/White-victim cases result in a death sentence, which is 3.2 times higher than the rate for all other cases of 3.3 per cent. This substantial difference in proportions is significant at the .01 level. In other words, the raw, unadjusted data shows a highly statistically significant racial disparity in death sentencing for minority-defendant/White-victim cases – confirming the pattern for the nation found by the Blume, Eisenberg, and Wells, discussed above (see text at fn 1).

Tables 3 – 6 then confirm that the raw results show in the earlier tables persist when controlling for factors that influence death sentencing using regression analysis. Table 3 shows the results from a regression of final case outcome on defendant race, victim race, and three indicators for the presence of the most predictive special circumstances (multiple victims, robbery felony, or sex crime felony). Minority defendants are shown to be 4.8 times as likely to receive a death sentence (p=0.002) and White victim cases are 2.5 times as likely (p=0.066).

Table 4 reports a similar specification, except it includes a “defendant culpability scale” in lieu of the set of predictive special circumstances. In this model, the minority-defendant coefficient is 4.3 (p=0.002) and the White-victim coefficient is 4.0 and gains statistical significance (p=0.005).

Tables 5 and 6 repeat the same specifications as Tables 3 and 4, except that instead of including separate variables for minority defendants and for White victims, minority-defendant/White-victim cases are compared to all other cases. These two models show, respectively, that such cases are 3.2 (p=0.025) and 4.5 (p=0.003) times as likely to end in a death sentence. In other words, the large gross racial disparities documented in Table 2 for minority-defendant/White-victim cases were not diminished by controlling for various elements of the cases – and if anything were exacerbated by these controls.

Next, GFL examine prosecutorial decision making in these capital cases using similar regression models to those just discussed to analyze the death sentencing outcome. Tables 7 and 8 use the decision to charge one or more special circumstances as the outcome variable. For Table 7, the explanatory variables are an indicator for whether the victim was White, four indicators for the factual presence of special circumstances most predictive of the decision by prosecutors to charge any special circumstance (multiple victims, robbery and burglary, felony kidnapping, or felony sex crimes), and a control for the California Supreme Court decision in Carlos. In this model, White-victim cases are 1.6 times as likely to result in a charge of one or more special

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5 GFL also control for the time period in which the California Supreme Court’s ruling in Carlos v. Superior Court temporarily narrowed the application of capital punishment. 672 P.2d 862 (Cal. 1983) until it was over-ruled by a subsequent California Supreme Court decision in People v. Anderson, 742 P.2d 1306 (Cal. 1987).

6 See fn 5, supra.
circumstances, holding the other factors constant. Substituting out for the, Table 8 repeats the Table 7 regression while using the culpability scale (instead of the special-circumstance controls), which elevates the odds ratio that the prosecutor will charge one or more special circumstances to 2.3 (p=0.000).

In the next four tables, GFL examine racial disparities in jury decisions, holding either predictive special circumstances (multiple victims or felony sex crimes) or culpability constant. Table 9 shows juries are 5.4 times as likely to sentence a minority defendant to death after controlling for special circumstances found or present (p=0.002) and Table 10 yields an estimate of 3.9 times as likely when controlling for the culpability scale (p=0.006). When looking at minority defendant/White victim cases, these ratios are 3.1 (p=0.058) and 3.5 (p=0.026), respectively, according to Tables 11 and 12. The magnitude of the racial bias in jury decisionmaking against minority defendants documented in these four regressions is impressively (and highly troublingly) large.

The overall methodology of this report is statistically sound, and the comprehensive analysis goes straight to the heart of the important empirical question of whether racial disparities mar California’s capital regime. The quality of the data collection and analysis is at the top of the empirical literature probing racial bias in death penalty regimes, and the report provides abundant support for GFL’s overall finding of large racial disparities in death sentencing in California as well as in the decisions of prosecutors and juries in this capital process. This study standing alone would be sufficient to indict the California death penalty regime as seriously marred by racial bias, but I now proceed to discuss nine additional studies that further solidify this conclusion.


This second important recent study of the California death penalty regime examines death sentencing trends in California during the post-Gregg period to determine whether there are racial disparities in sentencing during this period. While the just-discussed GFL study examined the period from 1978 – 2002, this 2022 Petersen study includes more recent data in analyzing the period from 1979-2018. The Petersen study strongly corroborates the GFL findings that (1) homicides with White victims or Black defendants are more likely to result in a death sentence, and 2) victim and defendant race interact to influence death sentencing patterns, with cases involving Black/Hispanic defendant and White victims being the most likely to generate a death sentence.

The 2022 Petersen study examines death sentencing in a population of 55,922 homicides that occurred in California from 1979 through 2018. The Supplemental Homicide Report (SHR) was used to gather data on all homicides known to the police in California between 1979 and 2018. Death sentencing data was obtained from the Habeas Corpus Resource Center. Petersen then used probabilistic matching to link homicides in the SHR with the death-sentencing data.
Petersen excluded all homicides committed by those under age eighteen and eliminated from consideration any homicide lacking suspect race information.7

Petersen controlled for an array of explanatory variables, including binary variables indicating whether the homicide incident involved multiple victims or a co-occurring felony, as well as time period controls for specific ten-year intervals. Petersen also controlled for the county in which the homicide occurred for the 10 most populous counties (with a single county indicator for all other counties because of their small size). Additional controls include the percentage of residents that are Black or Hispanic, percent urban, and annual homicide rate per 1000 residents.

According to the logistic regression models, victim and suspect race affect death sentencing even after controlling for the above set of explanatory variables. As we saw in the GFL study, homicides with a Black suspect are 2.17 times more likely to result in a death sentence than similar homicides with a White suspect, and those with a Hispanic suspect are 1.52 more likely to result in a death sentence. In addition, homicides with Black/Hispanic victims are less likely to result in a death sentence: Compared to homicides with a White victim, those with a Black or Hispanic victim are 66 per cent less likely to result in a death sentence. All of these results are highly statistically significant.

Petersen shows that the predicted probabilities of a death sentence are powerfully and consistently influenced by victim and suspect race. Specifically, no matter the victim, Black suspects are substantially more likely to be sentenced to death than Hispanic subjects, who in turn are more likely to be sentenced to death than White suspects. This pattern is clearly seen in Petersen’s Figure 4, which is reproduced below.

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7 The sample was limited to homicides involving victims and suspects who are White, Black, and Hispanic.

This article examines racial, ethnic, and geographic variations in the imposition of the death penalty in California using data on all homicides committed in California during the 1990s. The authors find that death sentencing is strongly correlated with the race of the homicide victim, the proportion of a county’s non-Hispanic White residents, and a county’s population density.

The authors began their analysis by documenting the 302 California homicides committed in the 1990s that resulted in a sentence of death before March 15, 2003. They compiled a dataset on these cases using data from California’s Department of Corrections and the nonprofit organization the California Appellate Project, supplemented with newspaper searches, phone interviews, or death certificates.

The authors then collected data on all California homicides from the California Department of Health Vital Statistics and the FBI’s Supplementary Homicide Reports (SHR). The authors present some analyses using data solely from the California Department of Health Vital Statistics, and they also present data that uses SHR data restricted to observations for which the race/ethnicity of both the suspect and suspect’s victims are known.\(^8\)

They use 25,648 observations in the SHR homicide dataset, excluding the observations where offenders who were given the death sentence had multiple victims with different races/ethnicities. The outcome variable is a binary outcome of whether the individual was sentenced to death, and the explanatory variables are dummy variables regarding county population density and proportion non-Hispanic White, victim race, and aggravating circumstances.

The authors find that the ratio between defendants sentenced to death and total homicide victims is substantially higher for White non-Hispanic victims than it is for either Hispanic or Black non-Hispanic victims. This is true in both the Vital Statistics data and the weighted SHR data. These racial/ethnic disparities continue to hold when the data is subdivided by either zero, one, or two aggravating circumstances. They also find that the ratio of death sentences to total homicide victims is substantially higher in counties with a higher proportion of non-Hispanic White residents (over 40 per cent White non-Hispanic) than those with a lower proportion of non-

\(^8\) The authors adjust for missing SHR victim race/ethnicity data by reweighting the SHR data using data from Vital Statistics data. Specifically, they weight each SHR observation with known victim race/ethnicity information by the ratio of total homicide victims of that race/ethnicity in the SHR data to the total homicide victims of that race/ethnicity in the vital statistics data. For example, there were 7,357 SHR homicides with White non-Hispanic victims and 8,136 Vital Statistics homicides with White non-Hispanic victims. Thus, each SHR observation with a White non-Hispanic victim is assigned a weight of 8,136/7,357 = 1.1059.
Hispanic White residents. In their logistic regression analysis, they show a strong and statistically significant negative correlation in imposition death sentence for each racial/ethnic victim group relative to White non-Hispanic victims.

While this study has a more limited set of control variables than we saw in the two previous studies, this limitation may not be a serious concern in that in both of these previously discussed studies -- and in other death penalty studies -- that did have more complete information about the details of the homicide, the additional information confirmed the presence of racial disparities in capital outcomes seen in the less fully adjusted data. In any event, the two previous studies discussed above had more years of data and more complete information and found statistically significant racial disparities, so the Pierce & Radelet study can be taken as further support for their findings of the presence of racial and ethnic disparities in the operation of the California capital regime.


The deeply troubling racial disparities in California’s capital regime that we have seen in the three previous studies are illuminated by this fourth study, which shows that racial bias has been facilitated by the state’s failure to adopt a system that narrowly tailored the application of the death penalty. As *Furman* instructed, a system that is not narrowly tailored permits the operation of racial bias to flourish more readily. California has mimicked the precise infirmities that led to *Furman*’s invalidation of existing death sentences because the state has established that a very high proportion of homicides are death eligible while operating a system in which death sentences are only imposed in a small fraction of these eligible cases. Baldus, et al. demonstrate that California’s death penalty regime is the worst offender in failing to narrowly tailor its capital punishment system compared to that of other post-*Furman* death penalty states.

The authors use a 1900-observation weighted stratified sample of the 27,453 cases of first- or second-degree murder or voluntary manslaughter with a date of offense between January 1,
1978, and June 30, 2002 in a database maintained by the California Department of Corrections and Rehabilitation. The sample is stratified based on crime of conviction (first- or second-degree murder or voluntary manslaughter), groupings of counties by population density, and by time periods. The primary information source for each case was the probation report prepared by a county probation officer. If the probation report did not have sufficient information, the authors sought assistance from the California Habeas Corpus Resource Center to obtain trial records. In the 11 percent of cases for which neither source of information was available, the case was removed from the sample.

For each case, University of Iowa law students and graduates filled out a data collection instrument. The instrument assessed whether the case would be considered death eligible under (1) pre-\textit{Furman} Georgia law, (2) California law from December 12, 1983 and October 13, 1987 (referred to as the “Carlos Window” when the state implemented stricter death-eligibility criteria than California law before and after the window), and (3) 2008 California law.

The authors also draw on other empirical studies to benchmark their findings. Specifically, they draw on studies that look at New Jersey (1982-1999),\textsuperscript{10} Maryland (1978–1999),\textsuperscript{11} Nebraska (1973–1999),\textsuperscript{12} and all 38 states (1978-2003) that had a death penalty statute as of 2003.\textsuperscript{13} They also relied on a study that sought to determine death sentencing rates across all states (1973-1995).\textsuperscript{14}

This study concluded that the death-eligibility rate among California homicide cases was the highest in the nation in that fully 95 per cent of all first-degree murder convictions and 43 per cent of all second-degree murder and voluntary manslaughter convictions were death eligible under California’s 2008 capital punishment statute (see Table 3, Part II).\textsuperscript{15} Moreover, from this vast number of death-eligible homicides only 4.3 percent of the defendants who committed a factually eligible capital murder were sentenced to death. This is the pattern most likely to maximize the influence of improper racial bias, which has been such a pernicious and damaging influence in capital sentencing across the nation.

\textsuperscript{10} David Baime, “Report of the New Jersey Supreme Court Proportionality Review Project” (April 28, 1999).
\textsuperscript{15} Baldus et al, at 713 (Table 2) and at 722 (Figure 1), comparing California’s death-eligibility rate to the rest of the country.
II. Six Studies Examining County-Level Disparities Based on Defendant and Victim Race.


   **Location: San Diego County**

Using potential first-degree murder cases from San Diego County between November 8, 1978 (the start of California’s current death penalty regime) and May 1993, the authors document the substantial prosecutorial discretion in seeking the death penalty, and find statistically significant disparities in the application of the death penalty based on defendant and victim race.

The authors use data on all murder or manslaughter prosecutions in San Diego County obtained by attorneys for the defendant in *People v. La Twon Weaver*. They then removed a case if the facts could not have supported a first-degree murder conviction, if the defendant was a juvenile or was not convicted of a homicide, or if there was insufficient information about a case. This left 1,081 cases. The authors primarily relied on charging documents from the DA’s office and pre-sentence reports and from the Superior Court to construct their data, supplemented by The California Department of Justice’s Willful Homicide Charts, FBI Supplementary Homicide Reports, appellate court opinions, and newspaper articles. Each case was coded by attorneys and students trained by one of the authors (Professor Shatz) to determine if there were any special circumstances in the case that would have made the defendant death eligible. The cases were also coded for other mitigating or aggravating factors, the race/ethnicity and gender of the defendant and victims, and whether the defendant was on parole or probation at the time of the crime and whether the defendant was a gang member.

The authors used logistic regression to determine what factors -- including the race/ethnicity/sex of the defendant and victims -- lead to the charging of special circumstances as well as the prosecutor’s decision to seek the death penalty. Special circumstances were present in 493 cases of the 1,081 cases they studied, but were only charged in 136 of these cases. Among the total 269 first degree murder convictions, 218 cases had special circumstances present and ultimately 23 were sentenced to death. The authors note that “These findings—a high death-eligibility rate and a low death-sentence rate—are consistent with the findings of prior studies concluding that the California death penalty scheme fails to “genuinely narrow” the death-eligible class.”

The authors found some striking racial disparities in death sentencing among 447 death-eligible cases with Black, Latinx, and White defendants and victims:

16 Id. at 1086.
Cases with a Black or Latinx defendant and a White victim resulted in a death sentence almost five times as often (10/76 = 13.2 per cent) as all other death-eligible cases (10/371 = 2.7 per cent). Strikingly, none of the 36 cases with White defendants and black or Latinx victims resulted in a death sentence. These racial disparities were highly statistically significant.17

The authors then used logistic regression models, which included an extensive array of control variables describing elements of the crime as well as the defendant and victim, to examine prosecutor decisions to charge special circumstances and seek the death penalty. The major finding was that there was a substantial and statistically significant higher rate in both charging a special circumstance (Table 6) and seeking the death penalty (Table 7) for cases with Black defendants killing a White victim than in cases with a Black or Latino victim.

This paper establishes for San Diego County (which had one DA for the entire time period) that prosecutors have “untrammeled discretion” to pursue the death penalty, which ultimately results in substantial racial disparities in capital sentencing.

2. Petersen, Examining the Sources of Racial Bias in Potentially Capital Cases: A Case Study of Police and Prosecutorial Discretion (2017) 7 Race & Justice 7-34 largely race of victim although it does say bl on wh

Location: LA County

While most death penalty studies focus on charging and capital sentencing, this study of LA County prosecutions of willful homicides in the early 1990s begins and ends the analysis somewhat earlier by examining only the factors influencing arrest and charging. It seeks to answer two primary questions: Do racial characteristics influence arrest decisions and prosecutors’ filing of death penalty-eligible charges? And does victim race have an indirect effect on prosecutors' death penalty charging practices, operating through homicide arrests? Petersen finds that cases involving minority victims are less likely to result in arrest and less likely to lead to a death-eligible charge conditional on arrest. Thus, both factors operate to diminish the likelihood that the killing of minority victims will generate a death-eligible charge.

The analysis focuses on willful homicides that occurred in LA County during the five-year period from 1990 - 1994 (accidental, vehicular, and justifiable homicides were excluded). Although this is a relatively short window, these years were some of the most violent in LA County and across the country, thereby allowing for a larger sample size.

The author uses demographic controls including race, gender, marital status, citizenship, education, age, as well as number of victims, crime-scene location, precipitating circumstance,

17 Id. at 1091.
weapon, incident day, and victim-offender relationship. Finally, the author includes the racial composition of the crime-scene community, measured as the percentage of Black and Latino residents per census tract.

The analysis proceeds in two parts. Part 1 focuses on whether the case is cleared (by arrest or “exceptional” means) using a binary dependent variable and all the controls described above. Part 2 examines death-penalty charging among the sample of cleared homicides.

The second analysis uses binary and ordinal measure of “special circumstance” filings. In addition to the previously mentioned control variables, Part 2 includes defendant demographics and characteristics associated with the court case. These factors are used in Part 2, but not Part 1, because defendant demographics and court case characteristics are (by definition) only available when a homicide is cleared. Characteristics associated with court case include log number of criminal counts, multiple victims, and contemporaneous felony.

The authors find that as the proportion of Black or Latino individuals in a neighborhood increases, the likelihood that a murder will be solved drops substantially, most sharply for higher levels of Black residents in the neighborhood (see Table 2). Specifically, a 1-unit change in the percentage of Black residents corresponds to a 35 per cent reduction in the odds of clearance, while the odds of clearance decrease by 21 per cent as the Latino population increases by 1 percentage point. On top of this effect, if the victim is Latino rather than White, the odds of clearance are an additional 26 per cent lower.

In terms of prosecutorial decision making, the odds of a death penalty charge are 62-65 per cent lower for cases with Black victims and 47-49 per cent lower for cases with Latino victims. Cases involving minority victims are less likely to be cleared (Model 1), which directly lowers the likelihood of death penalty charge because of the lower arrest rate, and there is an additional decrease via prosecutorial behavior in the odds of a death penalty charge (Models 2 and 3) for minority victim cases. In addition, Latino defendants are 36-39 per cent less likely to be charged with a death-eligible crime than White defendants, and while Blacks who kill Whites get an added penalty in terms of greater likelihood of a death penalty charge, this effect is not statistically significant after all the other factors have been considered on this relatively small data period.


Location: LA County (same data set as prior study, also by Petersen)

In this paper, Petersen seeks to answer the following questions: (1) does victim/defendant race/ethnicity influence prosecutorial decision-making? and (2) if so, do these racial/ethnic disparities accumulate across multiple stages of the criminal justice system? Results indicate that cases with minority victims are less likely to involve a death-eligible charge or death notice.
The previous Peter study just discussed focused on the universe of willful homicides (i.e., murder and voluntary manslaughter) occurring in Los Angeles (LA) County in the five-year period between 1990 and 1994, and began its analysis by examining the factors that explained which homicides would lead to arrest. This study begins by looking only at those arrested for willful homicide and examines first who is charged with special circumstances and then among those cases, which ones will result in a prosecutorial decision to seek the death penalty. Since this data is longitudinal, it enables an examination of the various stages in which race may be playing a role in outcomes as the case moves through the criminal justice system. This data set includes several variables absent from publicly available homicide data sets, such as newspaper coverage and educational attainment.

Petersen controls for a variety of explanatory variables including gender, age of victim and defendant, victim marital status and education, defendant’s (logged) prior felony convictions, location of homicide, weapon, incident time, victim–offender relationship, incident time (weekday or weekend), quick arrest (same day), and murder weapon (firearm or non-firearm). Additionally, controls for offense characteristics such as multiple victims and contemporaneous felony are included.

Petersen employs a two-stage modeling approach to estimate racial/ethnic disparities in prosecutors’ decisions to seek the death penalty, conditional upon the hazard rate of death-eligible charges. That is, the first model estimates the probability of a death-eligible charge and the second model estimates death notice conditional upon the hazard rate of the death-eligible charge. Models are run with and without defendant race and by various victim-defendant racial combinations.18

Petersen finds that victim race is statistically significant at both prosecutorial decision nodes, and the disparities between cases with minority and White victims increase at each successive stage, with the largest differences between Latino and White victims. Compared to White victim cases, those with Latino victims are 42 per cent less likely to involve a special circumstance (Model 1) and 69 per cent less likely to contain a death notice (Model 4). Similarly, cases with Black victims are 67 per cent less likely to involve a special circumstance (Model 1) and 64 per cent less likely to contain a death notice than White victim cases are (Model 4).

Among Black defendants, in Model 7, those who kill Black victims are 74 per cent less likely to have a special circumstance than those with White victims and in Model 9, those who kill Black victims are 58 per cent less likely to have a death notice than those with White victims. For Latino defendants, in Model 8, those who kill Latino victims are less 50 per cent less likely to

18 Victims and defendants divided into three groups, Latinos, Blacks, and White. Asians and “Other” races are excluded.
have a special circumstance than White victim cases and in Model 10, those who kill Latino victims are 78 per cent less likely to have a death notice than White victim. These findings indicate that minority defendants who kill White victims receive harsher punishments than those who kill minority victims.

Petersen explains his results through the cumulative disadvantage framework, which argues that initial advantages in group positionality increase over time, producing large disparities at the final stages. Victim-based racial/ethnic disparities accumulate as cases traverse through the court system, producing a Whiter pool of victims at each phase.


**Location: Los Angeles County**

This paper uses Bayesian methods to analyze death penalty charging in Los Angeles County homicide cases in the five-year period from 1990 to 1994. The cases are coded for race/ethnicity of victim and defendant and a variety of circumstances surrounding the murder, such as age and sex of the victim, whether the defendant and victim knew each other, and other factors. In total, more than 600 variables were coded for more than 5,000 defendants who were arrested for willful homicide.

The authors perform a Bayesian logistic regression using skeptical priors rather than priors derived from expert judgment, meaning that the findings are conservative (with respect to finding racial bias). This means that the prior distributions start from the assumption that there is no effect of race on charging or sentencing outcomes, and the empirical evidence must “overwhelm” the prior distribution in order to come to a finding of statistical significance.

The authors present the posterior coefficients and odds ratios for a Bayesian logistic regression model that includes separate indicators for defendant race, victim race, defendant-victim race interaction, and several circumstances of the murder (Table 13). They then convert this output into a more easily interpretable set of results (Table 14), showing the probability of a death penalty-eligible charge for each combination of victim and defendant race. The race of victim effect is striking: A Black defendant who kills a Black victim has only a 10.0 percent probability of receiving a death sentence (standard deviation of 2.8), but a Black defendant who kills a non-Black, non-Hispanic victim has a 41.1 percent probability (standard deviation of 8.2).

Table 15 assesses how the race of the defendant affects the probability of being charged with a death-eligible crime holding constant the victim race. The most striking finding occurs when the victim is non-Black, non-Hispanic: in this case, a hypothetical Black defendant is 3.17 times as likely to be charged with a death-eligible special circumstance as a non-Black, non-Hispanic defendant, and the probability this ratio is greater than one approaches 1.00. If the victim is Hispanic, a hypothetical Black defendant is 1.71 times as likely to be charged than a non-Black,
non-Hispanic defendant and the probability this ratio is greater than one is 0.95. Assuming the victim is Black, then a hypothetical Black defendant is only 0.39 times as likely as a non-Black, non-Hispanic defendant to be charged with a death-eligible special circumstance.

In summary, papers 2-4 in Section II of this memorandum examine the same 1990-1994 time period in LA County and reach similar conclusions about the substantial impact of race at various stages of the capital regime in that County at that time.

5. Petersen, Racial Disparities in Riverside County’s Death Penalty System (Sept. 21, 2021).

Location: Riverside County

This paper presents the results of two sets of logistic regression analyses for somewhat different outcomes and time periods for Riverside County, California. The first study analyzed death-penalty prosecutorial charging practices and jury decision-making for all 800 defendants arrested for willful homicide from 2006 through 2019 in Riverside County based on information from court documents and other official sources (the “charging study”). The second study examines broader death-sentencing trends in nearly 3,000 homicide incidents that occurred in Riverside County from 1976 through 2018 using information gathered from the Supplemental Homicide Report (the “SHR study”).

The charging study examined three areas of death-penalty decision making: 1) special circumstance allegation filing, 2) death notice filing, and 3) death verdict. The SHR study was limited to analyzing death verdicts due to the lack of publicly available state-wide data on special circumstance allegations and death notice filings.

In the charging study, victim and defendant race is coded as White, Hispanic, or Black. The author controls for co-defendants, log number of other criminal charges, felony or multiple-murder, and another indicator for a pattern of criminal history. In addition to variables drawn from the court files and DA records, information on victim demographics and case characteristics were derived from the California Department of Justice (DOJ) homicide database. This included victims’ age, gender, murder weapon, location type, and victim-offender relationship.

The main findings of the charging study are as follows:

a. Compared to White defendants, Black defendants are 1.71 times more likely to be charged with a special circumstance, are 9.06 times more likely to receive a death notice, and are 14.09 times more likely to be sentenced to death. All these White-Black disparities are statistically significant at the 10 per cent level.

b. Compared to White defendants, Hispanic defendants are 1.08 times more likely to be charged with a special circumstance, are 3.73 times more likely to receive a death notice and are 10.85 times more likely to be sentenced to death.
Peterson summarizes these findings as follows:

Even after controlling for important legally relevant factors like the presence of multiple victims or a felony, logistic regression results indicate that murders with Black and Hispanic defendants are more likely to involve a special circumstance, a death notice, and a death verdict. Moreover, cases with Black victims are less likely to result in a special circumstance, death notice, and death sentence compared to cases with White victims. Finally, these findings are especially pronounced in cases involving White victims and minority defendants, where they are more likely to result in a special circumstance, death notice, and death sentence.19

The results of the SHR part of the Riverside County study mimic the results of the overall California capital regime. Peterson summarizes the findings from this part of his Riverside County study as follows:

the SHR study finds that homicides with Black and Hispanic suspects are more likely to result in a death sentence even when controlling for other non-racial factors when compared to homicides with White suspects. Conversely, homicides with Black or Hispanic victims are less likely to result in a death sentence than those with White victims. Similar to the charging study, results also indicate that homicides involving White victims and minority defendants are more likely to result in a death sentence.

In other words, the Riverside study mimics the findings of the studies in Part I that examined homicide cases for the entire state of California.


Location: Santa Clara County

This report uses logistic regression to examine whether victim and suspect racial/ethnic disparities exist in Santa Clara County death sentencing trends from 1976 to 2018, and Petersen follows the same basic approach he employed in his SHR study in the previous paper. Specifically, Peterson gathers SHR data on all homicides reported to the police in Santa Clara County between 1976-2018. The SHR provides information on victim and incident characteristics. The author also uses death sentencing data from the Habeas Corpus Resource Center. The sample is restricted in several ways, only focusing on cases charged and tried in Santa Clara County, with offenders 18 years and older, and excluding homicides where an arrest did not occur. The author then uses probabilistic matching to link the two datasets. The final dataset includes 24 homicides that resulted in a death sentence and 1654 that did not.

The author also includes important homicide characteristics such as felony and multiple murder as controls. Race is coded as White vs. non-White.

19 Id. at 30.
A logistic regression model controlling for the presence of multiple murder victims and a concurrent felony (i.e., felony murder) indicates that homicides involving White victims are 2.07 times more likely to result in a death sentence than those with a non-White victim. In contrast, homicides involving White suspects are 14 per cent less likely to result in a death sentence than those with non-White suspects.

III. Conclusion

The collective strength of the evidence of racial bias in the implementation of the California death penalty that emerges from my evaluation of these ten studies is powerful. Race has played a substantial and statistically significant role in determining who lives and dies for crimes that are otherwise similar. This is true for the state as a whole as well as for a number of studies focused on individual counties. Race has been found to affect the likelihood of murder arrests, the charging of special circumstances, the prosecutorial decision to seek the death penalty, and jury decisions to impose the death penalty. These outcomes cannot be reconciled with the requirement of equal justice under law in California’s capital punishment regime.