

# Place Matters: Racial Disparities in Pretrial Detention Recommendations Across the U.S.

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**IN THE U.S.**, many jurisdictions are trying to reduce incarceration by improving pretrial decision-making. The pretrial decision is either to release the defendant until the court date or keep the defendant in jail to prevent re-offending or absconding. Rates of pretrial detention can be remarkably high, particularly in the federal system. There, the majority of defendants are detained before trial, even though less than 10 percent are arrested for a new crime or fail to appear while on pretrial release (Cohen & Austin, 2018; see also Rowland, 2018). Pretrial detention has serious consequences, including an increased likelihood of conviction, a harsh sentence, future re-offending, and unemployment (Dobbie et al., 2018; Leslie & Pope, 2017; Lowenkamp, 2022; Oleson et al., 2017). These consequences, in turn, are disproportionately borne by Black defendants (Didwania, 2021; Dobbie et al., 2018; Kutateladze et al., 2014; Leslie & Pope, 2017). Based on a sample of over 337,000 defendants drawn from 80 federal districts, Didwania (2021) found that 68 percent of Black defendants were detained

pretrial, compared to 51 percent of White defendants.

Increasingly, efforts to improve pretrial decision-making include the goal of reducing racial disparities. In pursuing this goal, stakeholders probably assume that personal bias is to blame—i.e., that racial disparities in pretrial detention reflect the influence of implicit racism on human decision-making, and therefore that (perhaps) diversity training for practitioners would prevent such discrimination (see Devine & Ash, 2022). The majority of Americans frame racism as an interpersonal rather than structural problem—meaning that they focus on “a few bad apples” who discriminate, rather than on laws, policies, and systems that have a disparate impact (Rucker & Richeson, 2021).

But disparities can also reflect “upstream” structural forces like socioeconomic and geographic conditions that lead to racial differences in the likelihood of rearrest or failure to appear. Black defendants tend to have more serious criminal histories and other potential risk factors for poor pretrial outcomes than White defendants (Didwania, 2021; Grossman et al., 2022; Spohn, 2008). Because risk of rearrest or flight are legitimate considerations for pretrial release, disparities related to differences in risk are hard to address via pretrial reform. Efforts to address disparities that flow from these kinds of structural forces would better be directed toward approaches like well-timed and well-targeted early prevention programs. In short, understanding the extent to which structural factors play a role in racial disparities is a matter of primary concern

for shaping effective solutions (see Beck & Blumstein, 2018).

In this study, we use federal data to explore the association between *place*—in this case U.S. district and geographic region—and racial disparities in pretrial officers’ recommendations for detention. We focus on officers’ recommendations in the federal system for three reasons. First, pretrial officers play a central role in assisting federal judges with the pretrial release decision, and officers’ detention recommendations strongly predict detention itself (see below, Pretrial Recommendation Context). Second, we conducted this work with the Probation and Pretrial Services Office of the Administrative Office of the U.S. Courts, as part of their effort to reduce disparities by specifying targets for change. Third, the vastness and diversity of the federal system provide a unique opportunity to characterize the districts and regions of the U.S. where racial disparities in pretrial detention are greatest, so that they can be prioritized in problem-solving efforts. The federal system encompasses 93 districts that differ geographically, socially, and culturally—but they are governed by a common set of pretrial laws, policies, and tools for practice.

This study is among the first to describe how racial disparities in pretrial detention vary by place across the U.S. Although some studies have examined racial disparities in arrests geographically (e.g., Fogliato et al., 2021), the most relevant research maps racial disparities in imprisonment (Beck & Blumstein, 2018; Enders et al., 2019; Nellis, 2021). Generally, these studies have yielded results that are

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non-intuitive based on mainstream narratives, and (for that reason) important. For example, using Bureau of Justice Statistics data collected from state departments of corrections, Beck and Blumstein (2018) calculated the incarceration rate ratios for each state in 2011 by dividing the percentage of the Black population in prison by the percentage of the White population in prison. They found that states with the largest incarceration disparities were in the North and Midwest (e.g., Minnesota, Iowa, New Jersey)—which “might be surprising if we simply presumed that the traditional racial prejudice of the South would contribute to a higher ratio” (p. 867). Instead, disparities were concentrated where incarceration rates were low, and Black citizens predominantly lived in urban areas. Of course, these studies focus on states, which differ in their laws and policies—unlike the federal system. Although the extent to which findings will generalize from the states to the federal system and from post-conviction incarceration to pretrial detention is unclear, we outline some tentative hypotheses or expectations below.

Again, our goal is to explore how racial disparities in pretrial officers’ recommendations for detention vary across U.S. districts and geographic regions, and to characterize the places where disparities are greatest. Given this goal, we have two general expectations. First, we expect to find that place “matters,” or that racial disparities vary systematically by district (rather than being uniform or haphazard). This expectation is based on observations that districts have their own practices, norms, populations, and cultures—that manifest in features like different base rates of detention. It is also based on the results of our companion study (Skeem, Montoya, & Lowenkamp, in press), where we found that most (79 percent) of the racial disparity in officers’ detention recommendations was explained by structural factors like pretrial policy’s emphasis on criminal history, rather than personally mediated factors like implicit racism. Place is another structural factor that is likely associated with disparities in recommendations. Second, we expect to find that disparities will be greatest in districts with relatively low rates of pretrial detention and high rates of inequality (rather than in the stereotypic South). This expectation is based on past state-level research. By shedding light on where racial disparities in pretrial recommendations are concentrated, we hope to inform strategies for addressing them—both within and beyond the pretrial criminal legal system.

## Method

The method involved defining an appropriate study population of defendants and districts, selecting variables and metrics to characterize racial disparities within each district, and completing descriptive analyses to address the study aims. In this section, we outline the pretrial context of the federal system before describing the study population, variables, and metrics for the analytic approach.

### *Pretrial Recommendation Context*

In the federal courts, when a person is charged with a criminal offense, a pretrial officer conducts an assessment on that person and then writes a pretrial services report (or “bail report”). The report’s primary purpose is to provide information for the judge to determine whether to release the defendant. As part of the assessment, the officer interviews the defendant about residence, family ties, foreign ties, employment, education, military service, financial resources, physical and mental health, substance abuse, gambling, criminal history, and other topics. The officer also gathers information from records and contacts with collateral informants and completes the Pretrial Risk Assessment (PTRA, Cohen & Lowenkamp, 2019; Cohen et al., 2018). The report includes the interviewing officer’s recommendation for detention or release and the conditions of release necessary to manage the risks of nonappearance and/or dangerousness (Probation & Pretrial Services Office, 2019).

Based in part on the officers’ recommendation, the judge decides whether to detain the defendant at either an initial hearing or later detention hearing. There are multiple potential decision points, because the federal bail statute allows the government to move for a formal detention hearing up to three days after the initial hearing if the defendant’s case meets one of many eligibility criteria (18 USC §3142(f)). In the current study’s population, 65 percent of officers’ recommendations were present at the initial hearing, 30 percent at the detention hearing, and 5 percent at a post-detention hearing.

Officers’ recommendations for detention strongly predicted judicial detention decisions. Absolute rates of agreement between officer recommendations and judicial decisions were 87 percent; chance-corrected levels of agreement were “good” and approached the “excellent” range (Kappa = .73, Fleiss et al., 2013). As shown later, racial disparities in officer recommendations are highly similar to those for actual detention.

### *Study Population*

To accurately represent recent practices, we began by defining the study population as all cases with a valid officer recommendation that were processed in calendar years 2015–2019 (the year prior to onset of the COVID-19 pandemic, which affected case processing, N=471,470). We pooled data across these four years to permit the inclusion of districts with relatively low representation of Black defendants while ensuring ample cell sizes for some key variables. This decision is supported by high levels of stability by year in (a) the degree of correlation between officer recommendations (on one hand) and defendants’ race and the covariates (on the other hand), and (b) the probability of a release recommendation (which fluctuated slightly between 48 percent and 45 percent).

The selection process for the final study population is described in Skeem et al. (in press). Exclusion criteria included (a) non-U.S. citizen status (n=233,347, because non-citizens are subject to unique policies and rarely released) and (b) race other than Black or non-Hispanic White (n=84,207). We focus on Black and non-Hispanic White defendants because disparities in the U.S. criminal justice system are greatest for these groups (Tonry, 2012). (We will examine Hispanic and non-Hispanic White disparities in a separate study.) We excluded 10 districts with fewer than n=100 or less than 10 percent Black defendants (n=4,100) because, even after pooling across years, these districts have insufficient diversity to study racial disparities.

The final study population includes 149,816 defendants, 51 percent of whom were Black. The population’s characteristics are described by race in Table 1.

## Variables

### *Race*

Defendant’s race was operationalized as Black or (non-Hispanic) White, given the value that the interviewing officer entered into the Probation and Pretrial Services Automated Case Tracking System (PACTS). The interviewing officer generates the race variable by integrating the official report of race and the defendant’s self-report. The official report of race is drawn from the Federal Bureau of Investigation’s National Crime Information Center (NCIC) data and local law enforcement reports relating to the current offense. If during the pretrial investigation process the defendant reported a race different from that in the official record, then the interviewing

officer entered the defendant's self-reported race. This race variable is ideal for addressing the aims of the present study, because it is likely to reflect the officer's perception of the defendant's race.

### *Detention Recommendations and Detention Itself*

Officers' pretrial recommendations were coded as "detention" or "release" when the officer recommended detention or release (with or without supervision or conditions), respectively. Similarly, defendants' outcomes were coded as "detention" or "release" based on judicial decisions.

## Metrics for Descriptive Analyses

### *Relative Risk Metrics*

We chose an unadjusted relative risk (RR) as the core metric for describing the degree of difference in the likelihood that an officer will recommend pretrial detention for Black and White defendants. RR is the probability of a detention recommendation occurring in the Black group divided by the probability of a detention recommendation occurring in the White group. RR does not provide information about the absolute risk of a detention recommendation, but rather the higher or lower likelihood of that recommendation in the Black versus the White group. A RR greater than 1.0 indicates an increased likelihood of a detention recommendation in the Black group, whereas RR less than 1.0 indicates an increased likelihood of a detention recommendation in the White group. We use RR because it is commonly used and less subject to misinterpretation than the odds ratio, particularly for events with moderate-high probabilities (Zhang & Yu, 1998), like detention recommendations.

We calculated two RRs for each district: (1) the basic or uncorrected RR, and (2) the population-corrected or standardized RR. The latter RR involves standardizing each district's risk ratio based on the racial diversity of its population (details provided below).

### *Detention Rates*

We contextualize racial disparities in detention recommendations (RRs) by cross-referencing local base rates for detention; specifically, whether the district has a "low detention" or "high detention" rate (using the median split of 52 percent). We do so because officers must make more judgments about who can be safely recommended for release in districts where base rates of detention are relatively

low—which introduces greater room for disparities. In keeping with this premise, districts with relatively low detention rates tend to have greater racial disparities in detention recommendations ( $r = -.41, p < .0001$ ).

### *Analytic Approach*

Our analytic approach is meant to be exploratory and purely descriptive of the association between racial disparities and detention recommendations in the U.S. We deliberately do not adjust for third variables (e.g., young age, male gender, risk) that partially explain this association (see Skeem et al., in press for an alternative approach).

## Results

### *Describing Racial Disparity Across Districts: Basic RRs*

We began with analyses that describe racial disparity (in RRs) by district. Although the median risk ratio for the system is 1.34 (Skeem et al., in press), the average risk ratio is 1.49, indicating a positive skew in the distribution that could be based on outliers with high disparities. Given that the average RR's standard deviation is 0.50, most districts (60 percent) have relative risk ratios that range from indicating no racial differences in the probability of a detention recommendation ( $RR=0.99$ ) to the probability of a detention recommendation being nearly 200 percent higher for black defendants compared to white defendants ( $RR=1.99$ ). Notably—and as expected, given that officer recommendations strongly predict judges' detention decisions—disparity in actual detention follows the same distributional pattern as detention recommendations ( $M\ RR=1.53, sd=.51; Mdn=1.39$ ).

### *Depicting the Variability in Racial Disparity and Association with Detention Rates*

In Figure 1, we plot each district's risk ratio as a black dot, ordering districts from the lowest RR (at the left end of the X axis) to the highest RR (at the right end of the X axis). The left-side Y axis is the Basic Risk Ratio. The figure indicates that a handful of districts (about ten) have unusually high disparity ratios ( $RR > 2.0$ ).

Figure 1 also displays each district's officer-recommended detention rate as a gray dot, corresponding to the right-side Y-axis. As noted earlier and as shown in the figure, increasing risk ratios are moderately associated with decreasing recommended detention rates ( $r=-.41$ ). This is consistent with past

research at the state level (Beck & Blumstein, 2018). In our view, this indicates that places that tend to detain everyone artificially leave little room for racial disparities.

### *Characterizing Where Racial Disparities Are Greatest: Population-Corrected RRs*

To characterize the places where disparities were greatest, we used an approach described in Beck and Blumstein (2018). Specifically, we standardized each district's risk ratio based on the racial diversity of its population in 2017 (U.S. Census Bureau, 2020). Then, we calculated the population-corrected District Recommendation Ratio (DRR) as follows:  $DRR = (\text{Black defendants/Black population}) / (\text{White defendants/White population})$ . Finally, we used the 2017 Region and Division Codes from the U.S. Census Bureau (2019) to characterize regions in which the districts with the 10 highest and 10 lowest DRRs were located.

Of the districts with the ten highest DRRs, virtually all (90 percent) were located in the Northeast or Midwest. In four of these districts, the DRR was 25 or more. Of the districts with the ten lowest DRRs, most (80 percent) were in the South (20 percent were in the West). This finding is consistent with our hypothesis that disparity would be greatest in places with the greatest structural inequality.

Given the association between disparities and detention rates, we also zeroed in on the 53 districts with recommended detention rates that fall in the average range for the system (i.e., within one standard deviation of 55 percent, or 43 percent to 67 percent). Based on this smaller set of districts with relatively homogeneous detention rates, we mapped the ten highest and lowest disparity districts based on DRRs. Importantly, the pattern of results was remarkably similar to that described earlier for the larger set of districts.

## Discussion

In this study, we explored how racial disparities in officers' recommendations for detention vary across U.S. districts and geographic regions, and characterized the places where disparities were greatest. Our results may be organized into three points. First, we found that place "matters," in keeping with both our hypothesis and past finding that institutional factors like pretrial policy strongly influence racial disparities in recommendations (Skeem et al., in press). Beneath our estimate of moderate racial disparity nationally ( $RR=1.34$ ), most districts ranged from no disparity to strong disparity ( $RR=1.99$ ). Nevertheless, the

probability of a detention recommendation was over 200 percent higher for Black than White defendants in about ten outlying districts (RR > 2.0). Ideally, efforts to reduce disparities would prioritize places where disparities are most pronounced.

Second, we found that districts with relatively low detention rates were moderately likely to have relatively high racial disparities in detention recommendations ( $r = -.41$ ; see also Beck & Blumstein, 2018). This tradeoff probably reflects the fact that officers in low detention districts must make more judgments about who can be safely released, which introduces more room for racial disparities. In contrast, high detention districts where virtually everyone is detained *artificially* leave little room for racial disparities—and incur unnecessary human and fiscal costs in the process (see above in the introduction to this article). Given the substantial harm that can be caused by pretrial detention, we recommend that districts prioritize reducing detention rates, perhaps by using structured decision-making tools like the PTRA to identify lower risk people for presumptive release while minimizing disparities (for details see Skeem et al., in press). The priority goal is to “first, do less harm” by eliminating unnecessary detention.

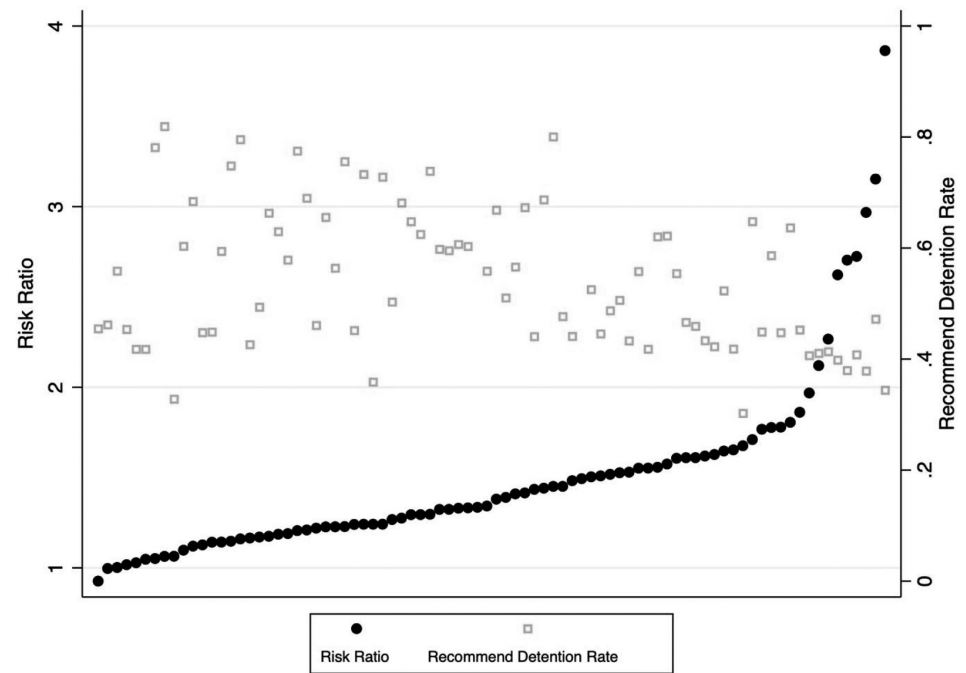
Third, population-corrected estimates indicate that districts with the greatest racial disparities in detention recommendations were predominantly Northeastern and Midwestern districts, and those with the most modest disparities were predominantly Southern districts. This pattern is the same for both the full set of districts and for the subset of districts with detention rates that fall within the system’s average range. This finding is consistent with both our hypothesis and past

studies of racial disparities in state incarceration (Beck & Blumstein, 2018; Nellis, 2021).

This finding that disparities were *not* concentrated in Southern districts, where racial prejudice has historically and stereotypically been greatest, may seem counterintuitive. But the results are consistent with our hypothesis that disparity would be greatest in places with the greatest structural inequality. Using

recent data from the U.S. Census Bureau, U.S. Department of Justice, and Centers for Disease Control, Stebbins (2022) used a multi-factor index to measure disparities between Black and White Americans in each state. The index included household income, poverty, educational attainment, homeownership, unemployment rates, imprisonment rates, and mortality rates. Based on this broad racial

**FIGURE 1**  
Racial disparities plotted across individual districts, with districts’ recommended detention rates



Note: The left side Y axis is the Risk Ratio (RR). Each district’s RR is plotted as a black dot, with districts ordered from low to high RR, left to right on the X axis, respectively. The right side Y axis is the officer-recommended detention rate for the district, which is plotted as a gray dot. The figure indicates that districts vary in racial disparities, with a handful of districts having RRs > 2.0; and that increasing RRs are moderately associated with decreasing recommended detention rates ( $r = -.41$ ).

**TABLE 1**  
Description of study population (N=149,816)

	All		Black (n=76,126)		White (n=73,690)	
	N	Mean (SD)/%	N	Mean (SD)/%	N	Mean (SD)/%
Age	149,803	38.01 (12.07)	76,119	34.87 (10.49)	73,684	41.25 (12.72)
Male sex	25,768	17.2	9,975	13.1	15,793	21.43
PTRA score (risk estimate)	129,868	7.44 (2.96)	66,591	8.28 (2.58)	63,277	6.57 (3.07)
Criminal history score (from bail report)	149,816	0.00 (3.25)	76,126	0.37(3.48)	73,690	-0.39(2.94)
Earned annual income (in \$)	149,816	1378.55 (65104.15)	76,126	801.85 (21098.55)	73,690	1974.32 (90314.52)
Educational attainment < High school or GED	51,414	38.54	32,073	47.08	19,341	29.63
Officer recommended detention	81,533	54.42	47,355	62.21	34,178	46.38
Detained pretrial	79,870	53.31	46,074	60.52	32,857	45.11

\*PTRA= Pretrial Risk Assessment; GED=General Education Development

inequality index, Stebbins found that most of the “worst states for Black Americans” were in the Midwest and Northeast. The overlap between Stebbins’s findings and our results suggests that institutionalized factors like socioeconomic inequality contribute to racial disparities in pretrial detention recommendations and must be considered in efforts to reduce disparities where they are greatest.

These results have implications for problem solving that extend beyond the pretrial system and broader criminal legal system. Pretrial reform alone cannot eradicate racial disparities that reflect true differences in risk that lie further upstream. In places where pretrial disparities are bundled with broader indices of racialized social inequality, it is essential to also address “root causes” of involvement in crime that include socioeconomic disadvantage, educational and job opportunities, and more (Beck & Blumstein, 2018). Investing in well-timed and well-targeted early prevention programs is one promising approach. Another promising approach involves engaging with community-based organizations that support marginalized groups by leveraging evidence-informed strategies to promote education, community bonding, and training for employment opportunities.

Alongside these efforts to disrupt “root causes” of crime outside the criminal legal system, reforms in pretrial policy and practice are also essential for reducing racial disparities in detention. In our companion study (Skeem et al., in press), we found that pretrial policies and, to a much lesser extent, personally mediated bias help explain these racial disparities. There, we provide detailed recommendations for reform—including strategic shifts in pretrial policies and their implementation. One promising direction is to corral criminal history by adopting a tight definition that demonstrably predicts violence and failure to appear, and limiting the weight assigned to criminal history versus other predictive factors when making recommendations. Another promising direction is to adopt a risk-based release policy that leverages the PTRAs to meaningfully reduce both detention rates and racial disparities. The one recommendation that we tentatively add, based on the results of the present study, is for pretrial policymakers and practitioners to deliberately consider their district’s rates of detention and racial disparities—with an awareness of their larger geographical context. It is possible that an awareness of the role that “place” can play in pretrial decision-making could inspire local

changes and improvements, both large and small.

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