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Cincinnati Police Department Traffic Stops

Applying RAND's Framework to
Analyze Racial Disparities

Greg Ridgeway

Sponsored by the City of Cincinnati



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Summary

Introduction

In Cincinnati, a memorandum of agreement (MOA) between the city and the U.S. Department of Justice (DOJ), dated April 12, 2002, sought to remedy a pattern or practice of conduct by law-enforcement officers that deprives individuals of rights, privileges, or immunities secured by the U.S. Constitution or federal law. Separately in 2002, the City of Cincinnati and other parties (collectively, *the parties*) entered into a collaborative agreement in an attempt to resolve social conflict, improve community-police relations, reduce crime and disorder, and resolve pending individual and organizational legal claims about racially biased policing in Cincinnati. In July 2004, the city, on behalf of the parties of the collaborative agreement, hired the RAND Corporation to conduct evaluations over the course of five years to assist the parties with measuring progress toward the goals of the collaborative agreement.

This monograph represents the final annual report, for the fifth year. While the evaluations in the previous years covered a large series of tasks, this evaluation focuses solely on three assessments of the traffic-stop data: (1) an assessment of whether there is a department-wide pattern of bias against black drivers in the decision to stop a vehicle, (2) an assessment of the fraction of CPD officers who disproportionately stop black drivers compared to other officers patrolling the same neighborhoods at the same time, and (3) an assessment of racial biases in post-stop outcomes, including stop duration, citation rates, and search rates.

Findings

In assessing *whether there is a department-wide pattern of bias against black drivers in the decision to stop a vehicle*, we take an approach that is different from the traditional approaches to creating an external benchmark—all of which have some limitations; our approach gets around those limitations by taking advantage of a natural experiment involving daylight saving time (DST) that does not require explicit external estimates of the racial or ethnic distribution of those at risk of being stopped. More specifically, to assess bias in the decision to stop, we compare stops immediately before and immediately after changes to and from DST, when a similar mix of drivers and a similar allocation of police officers will be in effect and in which the only major difference will be in officers' ability to see, because of the shift from daylight to darkness, the race of the drivers being stopped.

From that assessment, we found the following, for 2008:

- Black drivers were less likely to be stopped during daylight, when drivers' races are more visible, evidence that is counter to what we would expect if there were racial profiling.
- Aggregating six years of data, from 2003 to 2008, we find no evidence of racial profiling in officers' decisions to stop drivers.

In assessing *whether there is racial bias in the decision to stop at the individual officer level*, we use an internal-benchmarking approach that constructs a customized internal benchmark for each officer, comparing the racial distribution of suspects stopped by the officer in question with the racial distribution of suspects stopped by other officers at the same times and places and in the same contexts. This method selects an officer, identifies stops that other officers made at the same time and in the same neighborhood, and compares the racial distributions of the stopped drivers. Since the officers are patrolling the same areas at the same times, the racial distributions should be the same (assuming that the officers are on the same assignment).

When we conduct the internal-benchmarking assessment, we find the following:

- Ten officers appear to be stopping significantly more black drivers than did other officers patrolling at the same times and places and in the same contexts.

In assessing *whether there is racial bias or disparities in what happens after the stop*—in the length of the stop, in the rates at which officers cite motorists, and in the way they conduct vehicle searches—we use a method known as propensity-score weighting to identify stops involving nonblack drivers that are similarly situated to the stops involving black drivers and make post-stop comparisons between the two groups. Doing so allows us to account for a large number of factors—such as neighborhood, place of residence, reason for stop, day and month of stop, time of day of stop, state of vehicle registration, validity of the driver’s license, and number and age of occupants in vehicle—that can confound whether the differences we see in post-stop outcomes are actually the result of racial bias.

When we conduct the propensity-score weighting analysis of post-stop decisions, we find the following:

- Black drivers who were stopped were slightly more likely to have their stops exceed 10 minutes, compared to similarly situated nonblack drivers who were stopped.
- There was no racial difference in the percentage of stops lasting more than 30 minutes when comparing black drivers to similarly situated nonblack drivers.
- Black drivers were less likely to receive a citation than were similarly situated nonblack drivers.
- Officers were less likely to conduct a high-discretion search, such as a consent search, of a black driver than of a similarly situated nonblack driver.
- When searched, black and nonblack drivers were equally likely to be found in possession of contraband.

If we do not limit the compared drivers to those in similar situations, we do find large differences. For example, officers more frequently search black drivers than nonblack drivers (13 percent versus

6 percent). While this disparity is largely due to differences in when, where, and why the stops occurred, these differences in experience can shape black drivers' views of CPD officers.

Conclusions and Implications

Although we found no evidence of racial differences between the stops of black and those of similarly situated nonblack drivers, there are issues that can exacerbate the perception of racial bias. First, for each year of analysis, we find several officers who stop substantially more black drivers than their peers do. These represent a small fraction of CPD officers, and, as noted in the document, CPD has the capability to monitor, manage, and address issues that these officers may present to the department and the community. Second, although black and similarly situated nonblack drivers have similar stop outcomes, the burden of policing falls disproportionately on black residents, even though nonblack drivers have similar stop outcomes.

There are still substantial gaps between how black and nonblack residents view CPD. As noted in last year's RAND report (Ridgeway, Schell, Gifford, et al., 2009), the improvements that have been seen over the life of the collaborative agreement may be fragile. It will require a continued and concerted effort on the part of CPD and community leaders to maintain progress toward the goals stated in the collaborative agreement, as well as to prevent reversals in the positive trends that we observed while this agreement was in force.