



Review of Contact Card Reports

A review of previous reports / analyses of contact card data in Cincinnati

Introduction

As part of the 2002 Collaborative Agreement, the City of Cincinnati contracted two research teams to analyze contact card data:

- The University of Cincinnati (data spanning 6 months in 2001)
- The RAND Corporation (data spanning 2003 through 2008).

Federal court supervision ended in August 2008, and RAND's final report was published in October 2009. To Campaign Zero's knowledge, no public analysis of disparities in the contact card data, commissioned by the City or performed independently, has been conducted in the 17 years since. Contact card data continued to be collected, but the ongoing analysis was discontinued.

Neither RAND nor the University of Cincinnati analyzed pedestrian stops in any of their studies – they exclusively focused on motor vehicle stops. Campaign Zero's report finds that pedestrian stop disparities are more pronounced: Black residents were stopped 5.4x more often than White residents in 2025, accounting for 80% of all pedestrian stops. For a complete picture of racial disparities in officer-initiated stops, future analyses must include pedestrian stops alongside motor vehicle stops, as the two have different dynamics.

The data Campaign Zero analyzed, obtained through a public records request, covers 2009 through 2025 — the period immediately following RAND's final report. Because the data only spans these years, and the prior studies cover a different time period, we are not able to make direct numerical comparisons. However, we can compare patterns in the findings, recognizing that the prior studies cover a combined period of roughly 7 years while Campaign Zero's analysis spans the last 17 years, during which policing practices, city leadership, and community conditions have all changed.

University of Cincinnati

The University of Cincinnati's review, published in the fall of 2003, reviewed data spanning from July 1, 2001 to December 31, 2001. Researchers found that Black drivers were more likely to have no sanction following a stop, and more likely to be searched or arrested. (Eck et al., 2003, pp. 51, 45)

They concluded that “these data can neither support nor categorically rule out the bias hypothesis” (p. 52) but also identified three pieces of circumstantial evidence pointing toward departmental policy as a contributing factor:

1. Black drivers were stopped more often for equipment violations than White drivers

2. Black stops were more geographically spread out rather than concentrated at crime hotspots (as a crime-control rationale would predict), and
3. Black drivers were the most likely to have no action imposed following a stop.

RAND Corporation

RAND's analysis of motor vehicle stops from 2003 through 2008 documented several patterns consistent with Campaign Zero's findings. Across all six years, Black drivers received citations at lower rates than nonblack drivers in raw comparisons. In 2008, 56% of stops of Black drivers resulted in a citation versus 70% for nonblack drivers (Ridgeway, 2009, p. 42). Raw search rates were also substantially higher for Black drivers: officers searched 13% of stops involving Black drivers compared to 6% for nonblack drivers (Ridgeway, 2009, p. 44).

In the earlier study years, stops of Black drivers lasted longer on average, an estimated 600-700 Black drivers annually experienced stops that should have lasted under 10 minutes (Ridgeway et al., 2006, pp. 55–56). RAND also noted that Black drivers were stopped for equipment violations at nearly twice the rate of nonblack drivers in raw comparisons (Schell et al., 2007, p. 38).

RAND concluded there was no evidence of department-wide racial bias in the decision to make stops. To reach this conclusion at the front end (i.e. the decision to stop), RAND relied on the veil-of-darkness (VOD) method¹, for which they found no statistically significant effect. A VOD null result, finding no effect, is not the same as finding no racial disparity. It is a narrow test of one specific mechanism.

For post-stop outcomes, RAND used propensity score matching (PSM), which is a method that matches each Black-driver stop to comparable nonblack-driver stops (same neighborhood, time, reason, etc.) and compares outcomes, to ask whether otherwise-similar stops were treated differently by race. Employing PSM, RAND found that by far the largest factor attributable to disparities was which neighborhood the stops happened in (67% of the difference between the groups). After neighborhood, the next highest explanatory factor was where the driver's residence was (21%). This means that the method effectively asks: within a given neighborhood, were Black and nonblack drivers treated alike? It cannot reveal that the size of the disparity varies systematically with a neighborhood's racial composition; it can only hold neighborhood fixed and treat it as a factor to control away. Our own analysis finds precisely such a pattern — the whiter the neighborhood, the larger the Black stop disparity — a relationship PSM-type matching is structurally unable to surface, because the matching process eliminates the between-neighborhood variation where that

¹ This method compares the racial distribution of stops made in daylight versus darkness around daylight saving time changes, on the assumption that race is less visible to officers at night.



pattern lives. PSM also can't detect this relationship because it focuses on post-stop outcomes, and removes the effect of any potential bias in decisions to initiate stops.

RAND then used the percentages of how explanatory the factors were on disparities – results from the PSM analysis – to make a new model of disparity, adjusting disparities by treating nonblack driver stops to be equivalent to Black driver stops when they shared the same: neighborhood (which drove 67% of the adjustment), driver residence (21%), reason for stop, license validity, time of day, and others.

After this adjustment, RAND found similar outcomes between Black and matched nonblack drivers. Because location was 67% of the adjustment needed to make Black and nonblack stops comparable, the conclusion rests heavily on the assumption that where stops happen is itself a racially neutral factor. If Black drivers are disproportionately stopped in high-enforcement areas partly because of unequal deployment decisions, then controlling for location removes part of the racial disparity rather than explaining it away. RAND acknowledged that differences in stop outcomes "may be the result of racial bias or any unobserved factor not listed" in their model (Ridgeway, 2009, p. 39).

While RAND found no evidence of department-wide racial bias, at the officer level they identified individual officers each year who stopped Black drivers at significantly higher rates than peers working the same times and places.² In early 2007, RAND transferred to CPD an automated early warning system designed to flag these officers on an ongoing basis (Ridgeway, 2009, p. 23).

RAND's methodology was rigorous and transparent about its limitations. We do not dispute their findings - within the methods they used, they found what they found. However, the absence of evidence using these specific methods does not amount to a conclusion that no department-level racial bias exists. **The veil-of-darkness test and propensity score matching are tools that answer specific questions, but they cannot rule out racial disparities that operate through channels those tools were not designed to detect.**

For example, the veil of darkness is based on the premise that officers are less likely to observe the race of the driver when deciding whether or not to stop them. This test is designed to detect whether officers, on an individual level, are more or less likely to stop a driver based on their race. If this analysis, when done on a department level, finds significant bias, that bias is more an expression of the averaging of individual officer biases, and does not take into account potential policies or deployment factors that may contribute to any departmental bias.

² Officers flagged for stopping significantly more Black drivers than their peers: 4 of 91 in 2004; 5 of 133 in 2005; 3 of 294 in 2006; 3 of 294 in 2007; and 10 of 315 in 2008.

Propensity score matching, which compares stops that look similar across a range of observed characteristics, measures the net disparity *in stop outcomes* between racial groups. What it cannot account for are disparities that arise before a stop is ever made — for instance, decisions about where to deploy officers, how aggressively to enforce certain laws, or which neighborhoods to target for proactive policing. These upstream decisions shape who gets stopped in the first place, and propensity score matching has no way to see them. A department could produce racially disparate outcomes entirely through deployment and enforcement policy, and that disparity would be invisible to this method.

Together, these limitations point to the same gap: both tools measure what happens within stops that have already occurred, under conditions where officers have already been assigned. Neither is designed to detect bias that operates at the level of department policy, resource allocation, or institutional practice. A finding of “no detectable bias” using these methods means, more precisely, that no bias was detected through these particular windows. It does not mean that bias was looked for everywhere it might exist and not found.

It is also worth noting that RAND’s own findings were not entirely without concern: in every evaluation report, individual officers were identified who stopped substantially more Black drivers than White drivers as compared with their peers. The early warning system that RAND built and transferred to CPD was a direct response to those findings. This early warning system was an acknowledgement that officer-level disparities were real, ongoing, and required active monitoring.

RAND’s final report warned that “the improvements that have been seen over the life of the Collaborative Agreement may be fragile,” and that it would require “a continued and concerted effort” to prevent reversals (Ridgeway, 2009, p. 50). It also acknowledged that “the burden of policing falls disproportionately on Black residents” (Ridgeway, 2009, pp. 50, 64). Campaign Zero’s report documents the observed disparities in the absence of the continued effort to analyze this data in the subsequent 17 years.

Additional Non-City Commissioned Reviews

Aside from the reports commissioned by the city, in 2016, WCPO’s I-Team conducted an investigation that found that while traffic stops had declined, the share of Black drivers stopped had grown.³ This is consistent with Campaign Zero’s findings. WCPO also found that the early warning system installed by RAND had been abandoned by CPD in 2012.

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<https://www.wcpo.com/news/insider/i-team-early-warning-system-to-spot-racial-profiling-quietly-slips-by-wayside>
<https://www.wcpo.com/news/government/cincinnati-traffic-stops-to-get-in-depth-review-after-wcpo-uncovers-growing-racial-disparity>

Following that reporting, the City committed to an in-depth review and to rebuilding the system in-house, and City Council approved a budget to pay for a company to assess the raw data for signs of racial bias. By May 2017, the city reported a prototype was underway. In December 2019, three years after the initial investigation, WCPO followed up asking whether the review had been completed and whether the budget was still available. The city did not respond.⁴ This shows that the city was made aware of these growing disparities, the contact card data has always been in its possession, and despite committing to an external review, none was completed to Campaign Zero's knowledge.

Also notable is that the 2017 Collaborative Agreement Refresh included a self-report by CPD titled "Bias-Free Policing and Officer Accountability," which acknowledged that its contact card analysis was "not as extensive as the analysis previously provided by RAND, due to CPD's lack of the necessary technology and resources."⁵ The independent evaluator, Saul Green, found that the contact card data presented in the report was not disaggregated by race, neighborhood, stop outcome, or any other demographic indicator, leading him to conclude that the data were "severely under-analyzed in ways that are critical to assess whether CPD is progressing toward goals of bias-free policing."⁶ The internal review conducted during this period did not include a racial breakdown of stops, the most basic metric for assessing bias-free policing.

Conclusion

On June 12, the city published a Request for Proposal ([Bid / Project Number 265X901177](#)) for an "Independent Review and Analysis of CPD Contact Card Data." ⁷ We welcome all data reviews as long as they are truly independent. We have posted recommendations for the City's RFP on www.contactcards.org.

All data Campaign Zero used for its analysis, provided by the Cincinnati Police Department, is available for download at www.contactcards.org. We encourage extended analyses by researchers, community organizations, and journalists.

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<https://www.wcpo.com/news/local-news/hamilton-county/cincinnati/city-of-cincinnati-plan-to-analyze-traffic-stops-seems-to-stall>

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<https://www.cincinnati-oh.gov/police/collaborative-agreement-refresh/documents-and-media-resources/recent-reports-for-the-collaborative-agreement-refresh/bias-free-policing-report-from-cpd/ca-review-evaluation-bias-free-po-acct/>, pg 6

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<https://www.cincinnati-oh.gov/sites/police/assets/File/Bias-Free%20Policing%20%26%20Officer%20Accountability%20Progress%20Report%20-%20Saul%20Green%209-21-17.pdf>

⁷ Bid/project number 265X901177, <https://www.cincinnati-oh.gov/noncms/cmgr/business-opportunities/>
<https://www.highergov.com/si/contract-opportunity/oh-independent-review-and-analysis-of-cpd-c-69552482/>

Previous Reports

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<https://www.rand.org/pubs/monographs/MG914.html>