



Safety and Justice

A RAND INFRASTRUCTURE, SAFETY, AND ENVIRONMENT PROGRAM

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Safety and Justice Program](#)

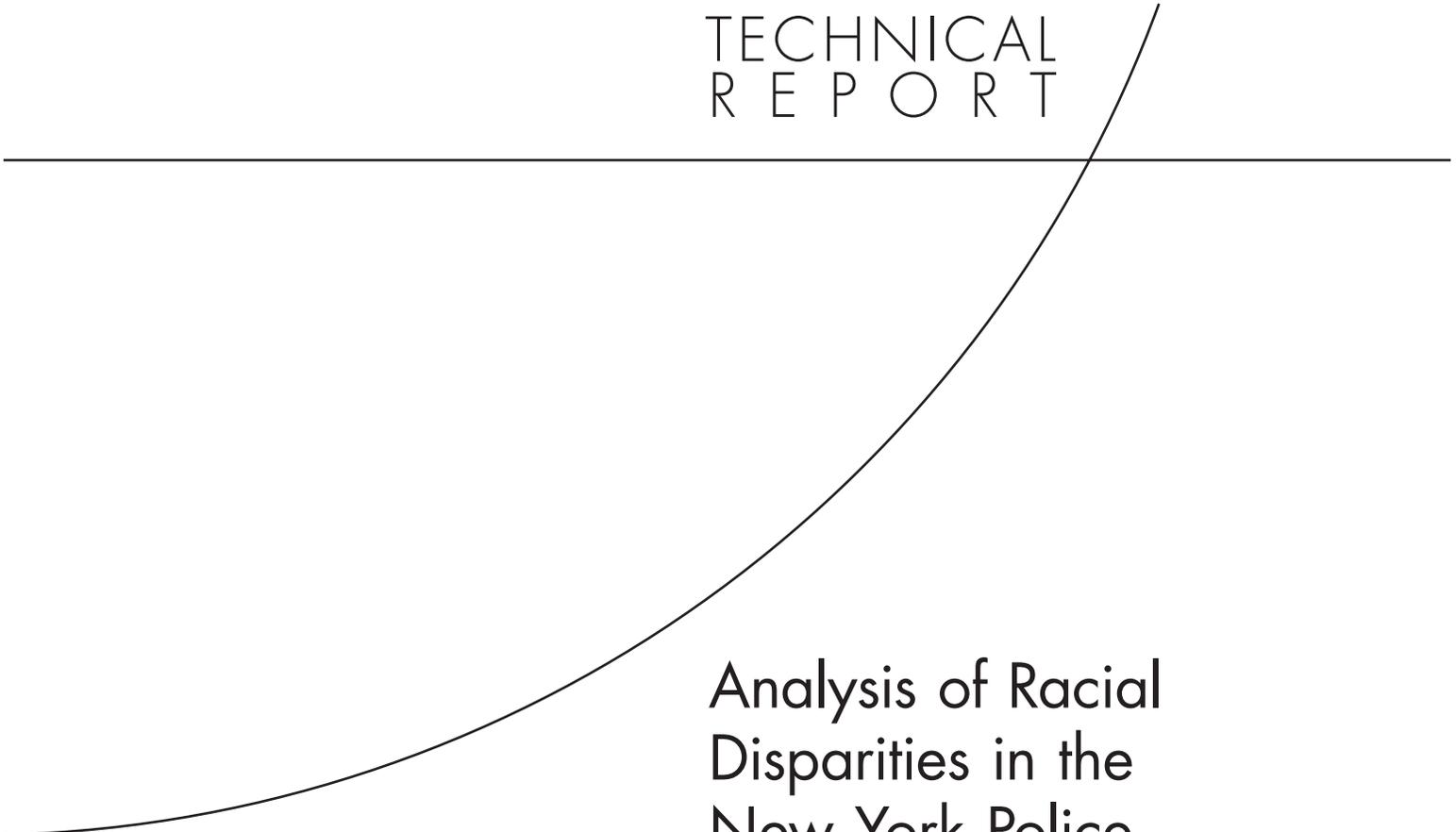
View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL
REPORT



Analysis of Racial
Disparities in the
New York Police
Department's Stop,
Question, and
Frisk Practices

Greg Ridgeway

Sponsored by the New York City Police Foundation



Safety and Justice

A RAND INFRASTRUCTURE, SAFETY, AND ENVIRONMENT PROGRAM

The research described in this report was supported by the New York City Police Foundation and was conducted under the auspices of the Center on Quality Policing (CQP), part of the Safety and Justice Program within RAND Infrastructure, Safety, and Environment (ISE).

Library of Congress Cataloging-in-Publication Data is available for this publication.

ISBN 978-0-8330-4515-7

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2007 RAND Corporation

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2007 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: <http://www.rand.org>
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Summary

In 2006, the New York City Police Department (NYPD) was involved in a half-million encounters with pedestrians who were stopped because of suspected criminal involvement. Raw statistics for these encounters suggest large racial disparities—89 percent of the stops involved nonwhites. Fifty-three percent of the stops involved black suspects, 29 percent Hispanic, 11 percent white, and 3 percent Asian, and race was unknown for the remaining 4 percent of the stops. Forty-five percent of black and Hispanic suspects were frisked, compared with 29 percent of white suspects; yet, when frisked, white suspects were 70 percent likelier than black suspects to have had a weapon on them.

These figures raise critical questions: first, whether they point to racial bias in police officers' decisions to stop particular pedestrians, and, further, whether they indicate that officers are particularly intrusive when stopping nonwhites.

Seeking answers, the NYPD turned to RAND to help it gain a clearer understanding of this issue and identify recommendations for addressing potential problems identified in the analysis. To examine the issue, RAND researchers analyzed data on all street encounters between NYPD officers and pedestrians in 2006, more than 500,000 stops that officers documented in SQF report worksheets (NYPD Unified Form 250 or UF250; see Appendix D for a reproduction).

RAND researchers conducted three types of analysis. First, we compared the racial distribution of stops to a variety of benchmarks. This process, commonly referred to as *external benchmarking*, attempts to construct what the racial distribution of the stopped pedestrians would have been if officers' stop decisions had been racially unbiased. Constructing valid external benchmarks is a difficult task, since it involves assessing the racial composition of those participating in criminal activity and the racial composition of those exposed to the patrolling officers. Both the rates of criminal participation and police exposure are challenging to estimate. We completed analyses using several candidate benchmarks, each of which has strengths and weaknesses for providing plausible external benchmarks. For example, residential census data—that is, the racial distribution of the general population in New York—possibly provide an estimate of the racial distribution of those exposed to police but do not reflect rates of criminal participation. As a result, external benchmarks based on the census have been widely discredited. The racial distribution of arrestees has been proposed as a more reliable benchmark. A more promising external benchmark is the racial distribution of individuals identified in crime-suspect descriptions, though this benchmark also has serious pitfalls.

Second, we compared each individual officer's stopping patterns with a benchmark constructed from stops in similar circumstances made by other officers. This process, known as

internal benchmarking, avoids the primary limitations of external benchmarking and is useful for flagging officers who are substantially overstepping nonwhites compared to their peers.

Third, we examined the outcomes of stops, assessing whether stopped white and non-white suspects have different rates of frisks, searches, uses of force, and arrests.

The results from these three analyses are described in more detail in the chapters that follow.

It is worth noting that most of the report focuses on comparisons between stops involving black, Hispanic, and white suspects. Concerns of racial bias also pertain to other racial groups and ethnic subgroups, such as those from Asia. Asians represent 3 percent of all stops, a relatively small proportion. However, and unfortunately, statistical analysis is unreliable under those circumstances.

Results of External-Benchmarking Analysis

Evaluating racial disparities in pedestrian stops using external benchmarks is highly sensitive to the choice of benchmark. Therefore, analyses based on any of the external benchmarks developed to date are questionable.

Benchmarks based on crime-suspect descriptions may provide a good measure of the rates of participation in certain types of crimes by race, but being a valid benchmark requires that suspects, regardless of race, are equally exposed to police officers.

We found that black pedestrians were stopped at a rate that is 20 to 30 percent lower than their representation in crime-suspect descriptions. Hispanic pedestrians were stopped disproportionately more, by 5 to 10 percent, than their representation among crime-suspect descriptions would predict.

We provide comparisons with several other benchmarks to demonstrate the sensitivity of external benchmarking. The arrest benchmark has been featured prominently in previous analyses of NYPD stop patterns (Spitzer, 1999; Gelman, Fagan, and Kiss, 2007). However, arrests may not accurately reflect the types of suspicious activity that officers might observe, arrests can occur far from where the crime occurred, and, since police make both the arrests and the stops, the arrest benchmark is not independent of any biases that officers might have.

Black pedestrians were stopped at nearly the same rate as their representation among arrestees would suggest. Hispanic suspects appear to be stopped at a rate slightly higher (6 percent higher) than their representation among arrestees.

The most widely used, but least reliable, benchmark is the residential census. Census benchmarks do not account for differential rates of crime participation by race or for differential exposure to the police. Comparisons to the residential census are not suitable for assessing racial bias.

Black pedestrians were stopped at a rate that is 50 percent greater than their representation in the residential census. The stop rate for Hispanic pedestrians equaled their residential-census representation.

Results of Internal-Benchmarking Analysis

This analysis compared the racial distribution of each officer's stops to a benchmark racial distribution constructed to match the officer's stops on time, place, and several other stop features.

This analysis found the following:

- Five officers appear to have stopped substantially more black suspects than other officers did when patrolling the same areas, at the same times, and with the same assignment. Nine officers stopped substantially fewer black suspects than expected.
- Ten officers appear to have stopped substantially more Hispanic suspects than other officers did when patrolling the same areas, at the same times, and with the same assignment. Four officers stopped substantially fewer Hispanic suspects than expected.
- Six of the 15 flagged officers are from the Queens South borough.

To put these findings into perspective, the analysis flagged 0.5 percent of the 2,756 NYPD officers most active in pedestrian-stop activity. Those 2,756 most active officers, about 7 percent of the total number of officers, accounted for 54 percent of the total number of 2006 stops. The remaining stops were made by another 15,855 officers, for whom an accurate internal benchmark could not be constructed, mostly because they conducted too few stops. While the data suggest that only a small fraction of the officers most active in pedestrian stops may be outliers, the stops made by the 15,855 that we could not analyze may still be of concern.

Results of Outcome Analysis

If there is race bias in the behavior of the 15,000-plus officers whose individual behavior we could not analyze with the internal benchmark, it may still reveal itself in the patterns of stop outcomes—that is, post-stop frisks, searches, uses of force, and arrests. Therefore we analyzed the outcomes of police stops.

Our analysis found the following:

- Officers frisked white suspects slightly less frequently than they did *similarly situated* nonwhites (29 percent of stops versus 33 percent of stops). Black suspects are slightly likelier to have been frisked than white suspects stopped in circumstances similar to the black suspects (46 percent versus 42 percent). While there is a gap, this difference is much smaller than what the aggregate statistics indicated.
- The rates of searches were nearly equal across racial groups, between 6 and 7 percent. However, in Staten Island, the rate of searching nonwhite suspects was significantly greater than that of searching white suspects.
- White suspects were slightly likelier to be issued a summons than were similarly situated nonwhite suspects (5.7 percent versus 5.2 percent). On the other hand, arrest rates for white suspects were slightly lower than those for similarly situated nonwhites (4.8 percent versus 5.1 percent).
- Officers were slightly less likely to use force against white suspects than they were to use it against similarly situated nonwhites (15 percent versus 16 percent); however, in Queens,

Brooklyn North, and the Bronx, there was no evidence that use-of-force rates varied across races.

- Officers recovered contraband (such as weapons, illegal drugs, or stolen property) in 6.4 percent of the stops of white suspects. The contraband recovery rate was 5.7 percent for similarly situated black suspects and 5.4 percent for similarly situated Hispanic suspects.

Overall, after adjustment for stop circumstances, we generally found small racial differences in the rates of frisk, search, use of force, and arrest. Nonwhites generally experienced slightly more intrusive stops, in terms of having more frequent frisks and searches, than did similarly situated white suspects. While most racial differences in post-stop outcomes were small, for some outcomes in some boroughs, the gaps warrant a closer review. For example, the Staten Island borough stands out particularly with several large racial gaps in the frisk rates (20 percent of whites versus 29 percent of similarly situated blacks), search rates (5 percent for whites versus 8 percent of similarly situated blacks), and use-of-force rates (10 percent for whites and 14 percent for similarly situated blacks).

The raw numbers on recovery rates for contraband indicated that frisked or searched white suspects were much likelier to have contraband than were black suspects. However, after accounting for several important factors, the disparity reduces sharply. The recovery rate for frisked or searched white suspects stopped in circumstances similar to those of black suspects was slightly greater than it was for black suspects (6.4 percent versus 5.7 percent). When considering only recovery rates of weapons, we found no differences by race. For every 1,000 frisks of black suspects, officers recovered seven weapons, and, for every 1,000 frisks of similarly situated white suspects, officers recovered eight weapons, a difference that is not statistically significant.

Conclusions

The raw statistics cited in the first paragraph of this summary distort the magnitude and, at times, the existence of racially biased policing. For example, we found that there are some legitimate factors that explain much of the difference between the frisk rate of black suspects (45 percent) and the frisk rate of white suspects (29 percent). Some of those factors include police policies and practices that can legitimately differ by time, place, and reason for the stop. As a result, the raw statistics, while easy to compute, often exaggerate racial disparities. Any racial disparities in the data are cause for concern. However, accurately measuring the magnitude of the problem can help police management, elected officials, and community members decide between the need for incremental changes in policy, reporting, and oversight or sweeping organizational changes.

Our results using more precise benchmarks do not eliminate the observed racial disparities. However, they do indicate that the disparities are much smaller than the raw statistics would suggest. This result does not absolve the NYPD of the need to monitor the issue, but it also implies that a large-scale restructuring of NYPD SQF policies and procedures is unwarranted.

Recommendations

Overall, we have six recommendations for NYPD to improve interactions between police and pedestrians during stops and to improve the accuracy of data collected during pedestrian stops.

Officers Should Clearly Explain to Pedestrians Why They Are Being Stopped

In 90 percent of the stops, the detained individual is neither arrested nor issued a summons. To mitigate the discomfort of such interactions and to bolster community trust, officers should explain the reason for the stop, discuss specifically the suspect's manner that generated the suspicion, and offer the contact information of a supervisor or appropriate complaint authority, so that the person stopped can convey any positive or negative comments about the interaction. While the latter suggestion might increase the number of official complaints, it might also reduce the number of unofficial complaints that would otherwise circulate in the suspect's social network. For a trial period in select precincts, the NYPD could require that officers give an information card to those stopped pedestrians who are neither arrested nor issued a summons. An evaluation of the program could identify the kinds of stops likeliest to result in positive or negative feedback from the stopped pedestrians. Most important, ongoing communication and negotiation with the community about SQF activities are helpful in maintaining good police-community relations.

The NYPD Should Review the Boroughs with the Largest Racial Disparities in Stop Outcomes

For most stop outcomes in most parts of the city, we found few, if any, racial differences in the rates of frisk, search, arrest, and use of force. However, for some particular subsets of stops, there are racial disparities, and, in some boroughs for some outcomes, the disparities are fairly large. In particular, there was evidence of large racial differences in frisk rates in several boroughs. For example, on Staten Island, officers frisked 20 percent of white suspects and 29 percent of similarly situated black suspects. Officers were likelier to use force of some kind against black suspects in Brooklyn South than they were to use it against similarly situated white suspects (29 percent versus 22 percent). However, the use-of-force finding on which we base this recommendation may be the result of incomplete details on the reason officers used force, the subject of the next recommendation. Regardless, a closer review of these outcomes in these boroughs may suggest changes in training, policies, or practices that can reduce these disparities.

The UF250 Should Be Revised to Capture Data on Use of Force

All of the reported differences resulting from our analysis are potentially due to unobserved or unmeasured features of the stops rather than racial bias. For example, the 1 percent difference observed in rates of use of force between stops of white and nonwhite suspects may be due to a factor not recorded on the UF250. It is possible that nonwhite suspects were slightly likelier to attempt to flee or threaten officers. If the percentage of nonwhite-pedestrian stops in which the suspect resisted officers was 0.8 percent more than the frequency with which white suspects resisted officers, then, statistically, the frisk rates would be indistinguishable. However, these reasons—attempting to flee or resisting officers—are not recorded on the UF250. The UF250 was intended for investigative purposes and not for assessing officer performance or

racial disparities. For the data to be more useful for careful analysis of racial bias in use-of-force incidents, the reason for the use of force needs to be recorded.

New Officers Should Be Fully Conversant with Stop, Question, and Frisk Documentation Policies

Officers with more than one year of experience seemed fully informed of the SQF practices and documentation policies. However, informal discussions with and observations of recent academy graduates indicated that some were not fully aware of the documentation policies and procedures, despite a substantial investment of time in the academy training curriculum on SQF. This is an issue that likely impacts a small fraction of stops. For the purposes of assessing racial bias, we do not find a need for investment to correct this, but, since data on UF250s are used in other facets of NYPD evaluation, some correction in training during new officers' initial days on the street might be in order, particularly for any evaluation of Operation Impact programs.

NYPD Should Consider Modifying the Audits of the UF250

The NYPD has multiple layers of auditing to ensure that the UF250s are complete and contain valid and sufficiently detailed entries to each question. This does not address whether stops are occurring that are not documented. Since officers have an incentive to demonstrate productivity through UF250s, most stops should be documented. However, particularly problematic ones may not be. Radio communications could be monitored for a fixed period in a few randomly selected precincts. Notes of the times and places of street encounters that should have associated UF250s can be noted and requests made for the forms.

All of our analyses rely on the data that officers record on UF250s. The accuracy of the information on the forms, such as time, place, and reason for the stop, is assumed to be approximately correct for the purposes of our analyses. For inaccuracies to adversely affect our analyses, officers would have had to consistently record events differently for nonwhites than they did for white suspects. However, unless officers were carefully tabulating which actions they failed to report, the analyses in this report would interpret the patterns that would result as evidence of a disparity. For example, if officers consistently did not record frisks of nonwhite suspects, then our analysis would have found white suspects to be substantially overfrisked. There is no evidence of such general patterns. That said, in interpreting the findings of this study, we must offer the caveat that systematic misreporting of data on the UF250 could potentially distort the findings.

NYPD Should Identify, Flag, and Investigate Officers with Out-of-the-Ordinary Stop Patterns

Our analysis indicates that the racial distribution of stops for several officers is skewed substantially from those of their colleagues. We recommend that the NYPD review these flagged officers and incorporate into their early warning system a component that flags officers with extreme deviations from their colleagues. These measured disparities are evidence that these officers differ substantially from their peers; however, they are not necessarily conclusive evidence that these officers practice racially biased policing. Supervisors may then investigate and address the disparities.