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Summary of the RAND Report on NYPD’s Stop, Question, and Frisk

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Chairman Vallone and Chairman Seabrook and distinguished Members of the committees, thank you for inviting me here today. I am honored to appear before you to discuss my analysis of the New York City Police Department’s Stop, Question, and Frisk data.

To clarify my perspective, I am a Senior Statistician at the RAND Corporation and the director of RAND’s Safety and Justice research program. RAND is an independent, non-profit, non-partisan policy research organization. I have a Ph.D. in statistics and was recognized by the American Statistical Association in 2007 for my methodological research on racial bias in policing.

In 2007 with a grant from the New York City Police Foundation and the cooperation of the NYPD, I conducted an analysis of data on the 500,000 pedestrian stops that NYPD officers made in 2006, the so-called UF250 data.

Before summarizing the report’s finding, I want to spell out what the report is not about. It does not attempt to assess whether the NYPD’s stop and frisk strategy is an effective crime reduction strategy. Also it does not attempt to assess the public’s opinion of the stop and frisk practice. And even though in some comparisons we find no evidence of racial bias, this does not imply that all encounters are bias free.

Is 500,000 Stops Surprising?

First I want to address the magnitude of the number of stops NYPD makes: 500,000. From Bureau of Justice Statistics public survey data I projected that among 100 US residents, 3 to 4 of them would be stopped in a given year. In a city the size of New York, this translates into 250,000

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to 330,000 stops. However, New York is not a typical US city. It has 50% more officers per capita and 42% more violent crime per capita than the national average. With this backdrop, 500,000 stops do not necessarily seem surprising.

Raw statistics for these encounters suggest large racial disparities—89 percent of the stops involved nonwhites. Forty-five percent of black and Hispanic suspects were frisked, compared with 29 percent of white suspects. 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.

Is There Race Bias in the Decision to Stop?

As to the key question of racial bias in the stops, we first assessed whether non-white pedestrians were disproportionately stopped. In 2006 55% of the stopped pedestrians were black. That is twice their representation in the 2000 residential census. Hispanic pedestrians comprised 31% of the stops, nearly equal to the census, and 11% were white about three times less than the census numbers. Does this definitively confirm the application of racial profiling? A definitive conclusion cannot be reached based solely on census benchmarking since census data do not accurately characterize the population at risk of being stopped by police. To more accurately address the question of racial bias, I instead examined several relevant issues and benchmarks.

First, we need to account for two key factors: differences in exposure to the police and differences in criminal participation. Many of the precincts with a large allocation of patrol officers also have large nonwhite populations. This unequal allocation could be of great concern for the community, but this is not racial profiling and requires a different policy response than racial profiling would require.

Comparisons to the census, while they are the most widely used, are not suitable for assessing racial bias. There is a long list of proposed alternatives, one of which is crime-suspect descriptions. These contain the public’s description of criminal involvement. The benefit of using crime-suspect descriptions as a benchmark is that it is independent of the police and, unlike the census, is linked to suspicious activity. However, it is not perfect since there may be bias about who the public reports to the police and might not capture many suspicious activities that the police target, such as trespassing.

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.

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. With the exception of the residential census benchmark, our
analysis does not indicate that black pedestrians were overstopped. Hispanic pedestrians appear
to have been stopped more frequently than their representation among arrestees and crime-
suspect descriptions would predict.

**Are There Problematic Officers?**

While assessing the NYPD’s stop patterns as a whole are challenging, I was able to focus
analysis on individual officers’ stop patterns to see if they are stopping more nonwhite
pedestrians than we expect.

For each officer I calculated the percentage of black pedestrians among their stops. For example,
for one officer I found that, among the 151 stops he made, 86% involved black pedestrians. Next,
I identified stops made by other officers at the same times, places, and context and calculated the
percentage of those stops involving black pedestrians. Only 55% of those stops involved a black
pedestrian. The difference between 86% and 55% cannot be due to time, place, or context. This
signals a potential problem. I repeated this analysis for the nearly 3,000 officers most involved in
pedestrian stops.

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. 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.

I transferred my analysis tools to NYPD so that they could repeat this analysis and evaluate it for
inclusion in their officer monitoring systems. I have deployed a similar system at the Cincinnati
Police Department, which they run as part of their quarterly evaluation process.

**Is There Racial Bias in Frisks, Searches, and Use-of-Force?**

As previously noted 45% of black and Hispanic suspects were frisked, compared with 29% of
white suspects. Simply comparing these two numbers is prone to an error known as Simpson’s
Paradox. The best known example of this error was a gender bias case against UC Berkeley in 1973. Men were much more likely to be admitted to the university. However, further analysis showed that men were applying to the easy-to-enter departments and that women were applying to those with the lowest admission rates. Without a deeper look into the data bad policy choices to equalize admission rates could have been made, such as discouraging women from applying for the difficult-to-enter departments.

Similarly for the analysis of racial bias we need to assess whether the stops of white and nonwhite pedestrians differ in relevant ways. For example, in Manhattan South 5% of white suspects and 3% of nonwhite suspects were stopped on suspicion of a drug crime. Two-thirds of white suspects had physical ID, but nonwhite pedestrians had physical ID in a little more than half of the stops. Such differences in the stops’ contexts can impact how officers handle the stop, whether they pursue a search or issue a summons rather than an arrest.

To remove these possible explanations for the observed differences, I compared stops involving black pedestrians to similarly situated stops involving white pedestrians. “Similarly situated” means that the collection of stops of white pedestrians that I used in this comparison occurred at the same times, places, and contexts as the stops of black pedestrians. 42% of these white pedestrians were frisked. As a result we find little difference in the frisk rates of black pedestrians and similarly situated white pedestrians.

Similar analysis found only small differences in search rates, arrest rates, and rates of use-of-force.

There were some exceptions to this finding. On Staten Island I found large differences in the frisk rates, search rates, and rates of use-of-force. For example, white pedestrians were frisked 20% of the time and similarly situated black pedestrians were frisked 29% of the time.

Conclusions

I started out noting that NYPD’s stop and frisk practices do disproportionately burden nonwhite pedestrians. These practices can certainly strain police-community relations. At the same time they also result in arrests and recovered guns. Balancing these issues is worthy of public discussion such as today’s hearing. My analysis of the 2006 stop data indicates that, with some exceptions, racial profiling is unlikely a major factor in the stop patterns. If racial profiling played a major role in the stops we would not see black pedestrians and similarly situated white pedestrians having the same frisk rates and use-of-force rates.
My recommendations to the NYPD included a plan to mitigate the discomfort of stop and frisk interactions. I recommended that officers should explain the reason for the stop clearly, discuss specifically the suspect’s manner that generated the suspicion, and offer the contact information of a supervisor or appropriate complaint authority. I also recommended a closer look at the unexplainable racial disparities on Staten Island and a regular examination of those officers with stop patterns that differed markedly from their colleagues.

As with all of RAND’s reports, this analysis went through a quality assurance process which includes peer review. The end goal is to provide policymakers, such as your committees and NYPD management, an objective, technically sound assessment of the role of race in NYPD’s stop and frisk practices.