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TECHNICAL REPORT

Police-Community Relations in Cincinnati

Year Two Evaluation Report

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Susan Turner, Travis L. Dixon

Sponsored by the City of Cincinnati

INFRASTRUCTURE, SAFETY, AND ENVIRONMENT

The research described in this report was conducted within RAND Infrastructure, Safety, and Environment (ISE), a division of the RAND Corporation, for the City of Cincinnati.

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Preface

This is the second annual report produced by the RAND Corporation on police-community relations in Cincinnati. The reports are required under RAND's contract to evaluate whether an agreement on police-community relations in Cincinnati is achieving its goals. The collaborative agreement was reached in 2002 when the Cincinnati Police Department joined with other agencies and organizations (collectively referred to as "the parties") to enact a series of reforms and initiatives intended to improve police-community relations in the city.

This report should be of interest to policymakers and community members in Cincinnati and elsewhere in Ohio. This report may also prove useful to residents and officials in other jurisdictions where similar issues are being confronted. The city of Cincinnati funded this project on behalf of the parties to the collaborative agreement. The first year's report was *Police-Community Relations in Cincinnati* (Riley et al., 2005). Other recent and related RAND works that may be of interest to readers of this report include the following:

- Jeffrey Grogger and Greg Ridgeway, "Testing for Racial Profiling in Traffic Stops from Behind a Veil of Darkness," *Journal of the American Statistical Association*, Vol. 101, No. 475, 2006, pp. 878–887.
- Greg Ridgeway, "Assessing the Effect of Race Bias in Post-Traffic Stop Outcomes Using Propensity Scores," *Journal of Quantitative Criminology*, Vol. 22, No. 1, April 2006, pp. 1–29.
- Stephen P. Klein, Richard A. Berk, and Laura J. Hickman, *Race and the Decision to Seek the Death Penalty in Federal Cases*, Santa Monica, Calif.: RAND Corporation, TR-389-NIJ, 2006.
- Barbara Raymond, Laura J. Hickman, Laura Miller, and Jennifer S. Wong, *Police Personnel Challenges After September 11: Anticipating Expanded Duties and a Changing Labor Pool*, Santa Monica, Calif.: RAND Corporation, OP-154-RC, 2005.

The RAND Safety and Justice Program

This research was conducted under the auspices of the Safety and Justice Program within RAND Infrastructure, Safety, and Environment (ISE). The mission of RAND Infrastructure, Safety, and Environment is to improve the development, operation, use, and protection of society's essential physical assets and natural resources and to enhance the related social

assets of safety and security of individuals in transit and in their workplaces and communities. Safety and Justice Program research addresses occupational safety, transportation safety, food safety, and public safety—including violence, policing, corrections, substance abuse, and public integrity.

Questions or comments about this report should be sent to the project leader, K. Jack Riley (Jack_Riley@rand.org). Information about the Safety and Justice Program is available online (http://www.rand.org/ise/safety). Inquiries about research projects should be sent to the following address:

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Introduction

In 2002, the Cincinnati Police Department (CPD), the Fraternal Order of Police, and the American Civil Liberties Union (ACLU) initiated a collaboration to resolve social conflict, improve community relations, and avoid litigation in Cincinnati. The collaborative agreement requires the participants (referred to collectively as "the parties") to undertake collective efforts to achieve these goals. Specifically, the agreement requires CPD to implement a variety of changes in pursuit of five primary goals:

- "[Ensure that p]olice officers and community members . . . become proactive partners in community problem solving."
- "Build relationships of respect, cooperation, and trust within and between police and communities."
- "Improve education, oversight, monitoring, hiring practices, and accountability of the CPD."
- "Ensure fair, equitable, and courteous treatment for all."
- "Create methods to establish the public's understanding of police policies and procedures and recognition of exceptional service in an effort to foster support for the police" (*In re Cincinnati Policing*, pp. 3–4).

The agreement requires evaluation of efforts to achieve and progress toward these goals. The parties chose RAND to be the evaluator in 2004. RAND will conduct the evaluation for five years, with the results published annually in a publicly available report. The evaluation is conducted using a variety of methods, including the following:

- a survey of citizen satisfaction with CPD
- a survey of CPD officers about their perceptions of community support, working conditions, and other factors related to job satisfaction and performance
- a survey of officers and citizens involved in a sample of citizen complaints against the officers and the department
- an analysis of motor vehicle stops for patterns of racial disparity in various aspects of the stop
- a review of CPD statistical compilations

- analysis of a sample of videotaped interactions between citizens and officers during motor vehicle stops.

The Context of Policing in Cincinnati

A critical component of the evaluation is to understand the context of policing in Cincinnati. To that end, CPD provides RAND with statistical compilations that detail arrest and citation activity, use of force, calls for service, and crime patterns. These compilations provide insight into how crime, and thus the allocation of law enforcement resources, varies across neighborhoods. The compilations also feed into other analyses conducted as part of the evaluation. The main crime pattern findings from our year-one[1] report continue in this analysis; the patterns of calls for service, reported crime, arrests, and police use of force were geographically clustered in Cincinnati. Neighborhoods with high crime rates were also more likely to have a high volume of calls for service and police use-of-force incidents. Over-the-Rhine and Central Business District (CBD)/Riverfront, and Pendleton were disproportionately affected by crime and police interventions such as stops, arrests, and use of force. Additional law enforcement effort, such as saturation patrols and targeted enforcement, activities that the community could perceive as a "sweep," necessitates regular dialogue with the community so that these programs are a part of building a police-community partnership rather than creating additional friction.

Arrests and Citations

As in 2004, five neighborhoods—constituting less than 10 percent of the city's 53 neighborhoods—accounted for more than one-third of CPD's arrests and nearly one-third of Cincinnati's reported crimes in 2005. CBD/Riverfront and Over-the-Rhine accounted for the largest share of arrests and reported crimes. As in the year-one report, citation rates and arrest rates across neighborhoods were strongly negatively correlated $(r = -0.70)$ and search rates and arrest rates strongly positively correlated $(r = 0.87)$. These findings are consistent with research that indicates that police are less likely to exercise their discretion to enforce traffic and other less serious offenses in high-crime neighborhoods (Klinger, 1997).

The Over-the-Rhine neighborhood saw a 25-percent jump in the number of arrests in 2005 and a 5-percent drop in the number of reported crimes. As a result of increased enforcement in early 2006, Over-the-Rhine is on track for nearly 11,000 arrests in 2006, a 44-percent increase from 2004.

Use of Force

Citywide, there were, on average, 14 use-of-force incidents per 1,000 arrests. This rate is down from 20 per thousand in the year-one report. There was no relationship between the type of force used and the subject's race. The increased deployment of electronic control devices (e.g.,

[1] The term *year one* refers to the first evaluation report of the contract (published in December 2005) and the data used therein. The data used in the year-one report came from calendar year 2003, 2004, or 2005, depending on the task.

TASER® less-lethal weapons[2]) in 2004 has led to officers utilizing them instead of pepper spray, batons, and physical force, nearly eliminating the latter methods. Police used electronic control devices in 73 percent of use-of-force incidents involving nonblack subjects and in 76 percent of those involving black subjects. The race of the officer involved also appears to be unrelated to subject's race.

Calls for Service

The numbers of calls for service and of reported Part 1 crimes (murder, rape, robbery, aggravated assault, burglary, larceny, and auto theft) in a neighborhood were highly correlated $(r = 0.96)$. Each Part 1 crime generated an average of 10.7 calls for service. The number of arrests was also highly correlated with both calls for service $(r = 0.87)$ and the number of reported crimes $(r = 0.81)$. Thus, as in year one, crime, calls for service, and arrests were geographically clustered in the same areas of Cincinnati.

Analysis of Vehicle Stops

The analysis of vehicle stops involved three stages: assessing race bias at the department level, at the officer level, and in post-stop outcomes. The reliability of the data has greatly improved since the year-one report that assessed 2003 and 2004 traffic stop data. Compliance rates are high and the number of missing data fields has decreased. The improved quality of the data is an assurance that CPD is diligent in documenting interactions with community members and appears to have reduced some of the disparities that we flagged as potential problems in the previous report. For example, the inclusion of data on invalid driver's licenses reduced and nearly removed the disparity in stop duration that we had previously reported. Also, earlier ambiguities in the analysis of racial bias in the decision to stop have been clarified as a result of the larger sample size; they indicate no evidence of a departmentwide practice of targeting black drivers.

Department-Level Stop Patterns

The first stage of the analysis examined stops occurring near the changes to and from daylight saving time (DST) and found no evidence of a racial bias in the decision to stop. Black drivers were more likely to be stopped during daylight when drivers' races were more visible, but this observed elevated risk for black drivers was not statistically significant. Including the 2003 and 2004 data from the year-one report further supported this conclusion. We repeated the analysis including stops occurring throughout the year. This analysis was more sensitive to seasonal changes in the distribution of officers and the racial mix of drivers on the road, but it also concluded that there was no statistical evidence of racial bias in the decision to stop.

On average, black drivers experienced longer stops than did white drivers. In the vehicle stop analysis, this difference disappeared after adjusting for when, where, and why the stop took place as well as other features of the stop such as whether the driver had a valid license.

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[2] TASER® is a registered trademark of TASER International, Inc.

This analysis concludes that race was not a factor in the difference in stop length. However, our analysis of traffic stop videos indicated some disparities in stop length that are explained in more detail in Chapter Four.

Individual-Level Stop Patterns

The second stage of the analysis examined 133 officers to assess whether individual officers were stopping a disproportionate number of black drivers relative to other, similarly situated officers. Five officers stopped black drivers at substantially higher rates than other, similarly situated officers. We estimate that the probability that these officers overstop black drivers exceeds 70 percent. We will be working with CPD's IT management to deliver analytical tools to CPD that will enable it to analyze the data and flag potential problem officers.[3]

Post-Stop Patterns

The third stage of the analysis examined stop outcomes, including stop duration, citation rates, and search rates and outcomes. Black drivers and similarly situated nonblack drivers were equally likely to have stops last less than 10 minutes. Black drivers were slightly less likely than were similarly situated nonblack drivers to receive citations (68 percent versus 71 percent), a change from the analysis of previous years, which had found no differences. Officers searched black and nonblack drivers at nearly the same rate in cases when the officers had discretion (6.1 percent versus 5.2). However, black drivers in 2005 were frequently subjected to weapon searches (a specific type of high-discretion search), significantly more than nonblack drivers and significantly more than black drivers stopped in previous years. For high-discretion searches, such as consent searches, black drivers were more likely to be found with contraband (29 percent versus 27). This is indicative of no racial bias in search decisions.

Analysis of Videotaped Police-Motorist Interactions

Perhaps the most common interaction between police and community members is the traffic stop. Available video and audio data from traffic stops in Cincinnati permit a detailed, objective examination of what typically occurs in traffic stops and how it may depend on the officer's or driver's race. This year, we analyzed a random sample of 325 video records of traffic stops. As with last year, this analysis revealed three key differences as a function of the officers' and drivers' races:

- Black drivers typically experienced more proactive policing than did white drivers. This included more questions about drugs or weapons, more searches, and more license checks on passengers, leading to longer stops.

[3] Federal regulations regarding the protection of human subjects prevent RAND from conducting research in a way that causes adverse consequences to the subjects of or participants in the research. Thus, we cannot identify the specific officers. We can, however, provide CPD with the tools and methods to enable it to analyze the data and identify specific officers.

- Several of these racial differences in stop characteristics were larger when the officers were white.
- White drivers, on average, communicated more positively than did black drivers. White drivers were more likely to be apologetic, cooperative, and courteous.

Stop Characteristics

One key finding that sets the background for understanding these interactions is that, on average, blacks and whites experienced very different types of traffic stops. White drivers' stops were typically shorter; less likely to involve searches for drugs, weapons, or contraband; and less likely to involve investigation of all of the vehicle's passengers. There are several plausible reasons for these differences other than racial profiling, including different neighborhood enforcement techniques or differences in the infraction types committed by whites and blacks. However, the longer, more-invasive traffic stops that black drivers experience are likely to contribute to a more negative attitude in future interactions with the police, and not simply among blacks whom police have stopped. These differences in traffic stops may be a significant barrier to improved police-community relations.

There is an additional complicating factor in this year's analysis. The general pattern of black drivers facing longer stop durations, higher rates of technical violations, and higher rates of requiring passengers to produce identification is primarily driven by stops conducted by white officers. Although this finding is consistent with racial bias, the video recordings cannot definitively rule out several alternative explanations, so we cannot conclude that racial bias caused it. For example, white officers may be given different assignments or instructions than black officers for reasons that are not directly related to race (e.g., seniority, neighborhood of assignment, shift being worked) that lead them to interact with blacks differently.

Even if racial bias does not explain this pattern, the fact that blacks are more likely to experience longer, more-invasive traffic stops when white officers stop them should be expected to contribute to more-negative attitudes within the black community. Since white officers conduct two out of three of all stops of black motorists, the white officer effects observed in the videotape analyses will affect a large number of blacks.

Communication Quality

We found that black drivers had a more negative communication style in traffic stops than did white drivers, even after controlling for a wide range of stop characteristics. Black drivers were less likely to apologize, less likely to use courteous phrases, and more likely to argue with the officer than were white drivers. This continues the pattern found last year. As noted in last year's report, it appears likely that the broad dissatisfaction among black residents with CPD affects their communication with white and black officers. Differences in cultural standards of expression cannot be ruled out as a contributing factor (e.g., Hecht, Jackson, and Ribeau, 2003).

Limits to the Analysis

There are limitations to our analysis of the audio and video records. Perhaps most important, the analysis uses observational data that allow us to describe what typically occurs in these

interactions, but do not allow us to isolate the causes of what we observe. Thus, for example, the reader should not conclude from our study that the police chose to search black motorists or hold them longer *because* they are black, simply based on the correlations that we observed in this study.

The strength of the current study is that it looks at a random sample of interactions. This sampling method increases the study's ability to describe accurately what typically occurs in motor vehicle stops. Despite the fact that CPD has made substantial improvements in reducing missing data, missing data presents some threat to the sample's representativeness. It is still possible that a different pattern of associations between race and behavior would be found in the data. Fortunately, there was no significant evidence that any of this missing data was associated with the driver's or officer's race.

Differences from the First Annual Report

Though the analytic methods were unchanged from last year's report, there are several noteworthy differences in findings. First, several statistically significant findings in last year's data were not significant this year. This is likely due to the fact that we do not have a sufficient number of cases to reliably detect significant effects. That is, with only approximately 300 observations per year, the effect would have to be very strong to be statistically significant in every year's sample. The fact that the effect of matched race on officers' communication behavior is not found this year should not be taken as evidence that the effect has disappeared or even changed, necessarily. Rather, such changes in significance across years are a necessary limitation of working from a random sample of 300 incidents.

In addition, several of the findings described in this report are based on variables that did not exist for last year's data. One important new variable is whether the officer demanded identification for passengers. Since these variables did not exist in last year's data, it is not possible to determine whether these factors have changed significantly between 2004 and 2005 data.

Reconciliation of the Traffic Stop Analysis and the Analysis of Videotaped Interactions

There are several notable differences in the data and analyses used in Chapter Three (Analysis of Traffic Stops) and Chapter Four (Analysis of Videotaped Police-Motorist Interactions) that are important to understand when synthesizing their separate findings. The traffic stop analysis is designed to assess the extent to which a motorist in a specific situation would receive different treatment if he or she were white versus black. It attempts to answer the causal question at the heart of racial profiling: "Do police treat individual drivers differently specifically because of their races?" The data sources for this analysis are well suited for this purpose because the large sample allows us to match black and white drivers on a wide range of situational factors and assess whether there is an effect of race.

However, police can treat black and white drivers very differently for reasons other than racial profiling, and these differences may still be a significant problem for community relations and racial fairness. If police have different enforcement practices or a greater presence

in those neighborhoods with a large number of black residents, it will likely appear racially biased to those residents even if individuals in those neighborhoods are actually being stopped without regard to their race. Perceptions of racial inequality in treatment drive attitudes and community relations, regardless of whether the true cause of that inequality is racial profiling, neighborhood profiling, enforcement priorities, or other factors. While the analysis of contact cards (Chapter Three) is effective at isolating the effect of race from other explanations for stop outcomes, it provides little information about the behaviors of police officers and citizens that could improve police-community relations.

The analysis of videotaped interactions addresses this shortcoming by documenting how race is related to police and citizen behavior, regardless of the behavior's cause. The data sources and analysis conducted in Chapter Four are designed to document these inequalities so that we better understand the community relations difficulties, but the data source is inadequate to determine whether the citizen's race directly caused those differences. For example, it is not possible to match incidents for 54 separate neighborhoods within a random sample that includes only 75 interactions of each type. For this reason, every difference we find as a function of driver race (e.g., asking passengers for identification) may actually be caused by different police practices in different neighborhoods, rather than by racial profiling.

In short, the analysis of video recordings is designed to identify why many Cincinnati citizens are convinced that racially biased policing takes place, but it cannot convincingly determine whether racially profiling actually occurs. The current data source does not allow us to rule out plausible alternative explanations for the observed inequalities. The RAND research team believes that understanding why citizens perceive racially biased policing is essential to improving police-community relations. Both the current report and the year-one report identify police behavior that fosters the perception of racial bias. The fact that white and black officers treat black citizens differently is a substantial barrier to improving relations with this community, even if it is inadequate evidence of civil rights violations.

Overall, our analysis of traffic stop data found limited evidence of actual, systemic racial profiling of individuals, that is, racially unequal police behavior that is uniquely attributable to the driver's race (though some officers' practices seem irregular). Separate from this issue of documenting actual racial profiling, the analysis of videotapes shows why a substantial proportion of Cincinnati believes that there is a problem with racially biased policing. This analysis also suggests specific changes that are likely to reduce this perception.

Satisfaction of Police Officers Working in Cincinnati

The officer survey was repeated in year two[4] because we obtained relatively few responses from officers to the year-one survey. As described in more detail later in this document, we made significant changes to the survey, fielded more of them, and revised the process by which we contacted the officers. As a result, we obtained a much larger number of responses this year than last and can now better generalize to the population of CPD officers as a whole. However,

[4] *Year two* refers to the current report and the data used in it.

the response *rate* remained low. With a response rate of 27 percent, those who chose to respond to this survey could differ systematically from those who chose not to respond. The survey was voluntary and anonymous, so it is not possible to discern what differences might exist between responders and nonresponders.

For those who responded to the survey, the findings indicate a high level of commitment to their jobs, but, at the same time, these officers suffer several strains from the community and citizens with whom they interact. The majority of responding officers thought that the media and the black community complained unfairly about racial profiling and police abuse of authority. That feeling was consistent across officers of different races.

Police officers who responded to the survey also appear to have been knowledgeable about community policing. While the majority of officers who responded to the survey viewed enforcing the law as their highest priority, they also reported that informal interactions with citizens are an important method for solving problems and solving crimes. Officers who responded to the survey expressed a high level of agreement that community residents should help shape the priorities of police work. However, half of the officers responding did not think that officers should try to solve non–crime-related problems in their district. They generally felt that proactively stopping cars and "checking people out" were components of good police work.

Citizen and Officer Satisfaction with the Complaint Process

The complaint survey assessed the perceived fairness of the complaint process, the level of input that citizens and officers have in the process, and the final resolution and its justification. In a change from our 2005 survey, officers and complainants received surveys along with the letter describing the complaint's adjudication. Results from the complainant survey are based on the eight citizen and 11 officer surveys returned of the 55 that were distributed. The small number of responses prevents us from drawing any inferences about the population of all citizens or officers involved in official complaints. For those who did respond to the survey, the complaint review process appears to be following up with an investigation and a meeting with the complainants. Five of the eight citizens who responded did not feel that the process was fair nor were they satisfied, though three of those who did not have their complaint sustained were still satisfied with the process, indicating that the complaint's final outcome did not necessarily dictate respondents' satisfaction with the complaint process. The eight citizens who responded fell into two categories. The first were involved in minor incidents in which officers were alleged to have been disrespectful or had not provided proper or timely service. There were four such cases. The second category of respondents alleged serious violations including excessive force, improper pointing of firearms, and discrimination, and these respondents indicated that they wanted nothing less than the officer terminated from the police force. Four surveys fell into this category. Using data from the Citizen Complaint Authority's (CCA's) 2005 annual report, the complaints do not seem to be disparately associated with interactions between nonblack officers and black residents. Black and nonblack residents were equally likely to file complaints with the CCA against white officers.

Summary and Conclusions

The second-year evaluation report has two objectives. The first is to report on key issues—the context of crime in Cincinnati, the analysis of motor vehicle stops, and the analysis of video records—that RAND will evaluate in every year of the contract. The second objective is to report baseline findings on officer perceptions and experiences with complaint adjudication that were not achieved in year one because of low response rates. By mutual agreement with the parties, RAND has not conducted analyses of staffing, CPD problem-solving interventions, or a survey of police-citizen interactions this year, nor will these be conducted in the remaining years of the evaluation. These components of the year-one evaluation have been eliminated because they are, respectively, covered by a consent decree, addressed sufficiently by the monitor team in its oversight responsibilities, or unlikely to ever provide scientifically valid results because of the unwillingness of people contacted to respond to the survey.

In most respects, the year-two evaluation provides the same implications for the collaborative agreement as did the year-one evaluation. It is not surprising that few changes were observed, because most of the data used in the current report were collected before the parties received RAND's year-one report. In short, we should not expect to see definitive progress toward the collaborative agreement's goals in this report.

Before turning to summary comments, we must point out one overarching issue. Both the motorist stop and video analyses conclusively show that blacks endure longer stops than do nonblacks. The analysis based on the stop data concludes that the difference in stop duration cannot be attributed to racial profiling of black drivers, as nonblack drivers in similar situations are detained for the same length of time. The analysis of video recordings, however, demonstrates that traffic stops for black drivers are, on average, longer when the officer is not black. Although this finding is not evidence of racial profiling, this police behavior is likely to lead to perceptions of racially biased policing in the community. As such, it represents a barrier to improved police community relations.

Data Issues

There were substantial improvements in the data quality over year one such that the problem of missing data is considerably reduced. Last year, in the video analysis task, 55 percent of the tapes requested were not available, compared to 40 percent this year. In addition, improvements were evident throughout 2006 such that by the final quarter only approximately one-third of the requested tapes were not available to be sent. As with last year, 10 percent of incidents could not be identified on the tapes that were sent because of mismatched time information or technical problems with the tapes. This yields an overall missing rate of 45 percent instead of last year's 60 percent. As with last year, these types of missing data are not related to either officer or driver race. The quality of the recordings themselves is approximately the same as last year. The largest quality problem was that the audio from the driver was not audible in approximately one-third of the incidents. As in the year-one report, we do not have evidence to suggest that the missing data threaten the validity of our findings, though this possibility cannot be rejected either.

Improvements were also seen in the motorist stop data. In the year-one report on CPD's 2003–2004 traffic stop data, an estimated 20 percent of the vehicle stops were not documented and 16 percent of the contact cards were missing important information. In the 2006 data, it appears that only about 3 percent of the stops were not documented and 3 percent of the completed contact cards were missing important data. Since this report analyzes data and incidents from calendar year 2005, the improvements in data quality reflect CPD efforts to improve compliance with CPD policies and procedures that were occurring even before the December 2005 delivery of the first report covering 2003 and 2004 data. Therefore, CPD was already improving its data collection systems even before delivery of last year's report.

Progress Toward the Goals of the Collaborative Agreement

The collaborative agreement specifies five key areas where progress is desired: the development of proactive police-community partnerships on problem-solving; building relationships between the police and the community; improving CPD's staffing, training, and management practices in multiple dimensions; ensuring fair and equitable treatment for all community members; and developing methods to increase support for the police. This year's report cannot provide a full picture of progress toward these five goals of the collaborative agreement because some evaluation tasks that contribute greatly to the overall assessment (such as the community survey) were not scheduled to be conducted. Nevertheless, we can provide some insights on issues of progress toward the goals.

Develop Proactive Partnerships in Community Problem-Solving. The officer survey contains an important finding about community problem-solving efforts: By a large majority, officers agree that citizen input is vital to developing effective problem-solving strategies. However, half the officers perceive that community members are unwilling participants in such problem-solving activities, a finding that was reinforced in last year's report when we noted limited community participation in problem-solving activities. It is unclear at this point whether the police and community are on the right trajectory for developing a proactive partnership on problem-solving. It appears, however, that the foundation for building such a partnership exists among the police, albeit with some skepticism.

Build Relationships Between Police and Communities. This year's analysis reinforced a key finding from last year's report: Black citizens in Cincinnati, by virtue of the neighborhoods in which they live and the generally higher rates of crime in those neighborhoods, are more likely than nonblacks to experience proactive policing strategies such as increased law enforcement presence and aggressive traffic enforcement. Such strategies place a greater burden on law-abiding residents living in the areas where the enforcement occurs.

It may not be possible to field a proactive enforcement strategy that affects all neighborhoods in the city equally. That does not mean, however, that the police are helpless to combat negative community perceptions that may be raised by their activity. Much of the force's interaction with the citizenry comes through vehicle stops. The department should thus pay special attention to maintaining and improving, where needed, the tenor and tone of these interactions. In addition, for blacks there is an elevated likelihood of being stopped without the resulting imposition of a citation. To the degree that such stops are necessary, it would be helpful to have the stops be as short as possible. Investment in infrastructure that shorten and improve

processes, such as license checks, could pay off disproportionately with the black community to the extent that they were the beneficiaries of such investments.

Ensure Fair, Equitable, and Courteous Treatment. CPD policing data show, just as in the year-one report, that CPD allocates resources disproportionately to a small slice of Cincinnati neighborhoods. Presumably, this allocation reflects policy decisions that the police command staff make in response to crime trends, calls for service, and other strategic factors. As in our year-one report, this means that, on average, black citizens in Cincinnati are likely to be experiencing substantively different kinds of policing than nonblack citizens. In particular, to the extent that police resources are disproportionately deployed to black neighborhoods, black residents are more likely to encounter the police engaging in proactive policing, such as questioning pedestrians, checking identification, and strict enforcement of vehicle registration and equipment requirements. However, similarly situated black and nonblack residents should enjoy the same treatment by the police. That is to say, two citizens who are in the same neighborhood doing the same thing at the same time of day should be treated the same, regardless of the citizens' or officers' races. Our year-two analysis of contact card data did not find a pattern of significant racial bias, once incidents had been equated on these situational factors. Evidence from the video recordings does suggest, however, some racial inequalities may exist. In particular, it appears that black and nonblack officers are not policing in the same manner, with nonblack officers more likely than black officers to scrutinize black passengers and more likely to pursue equipment violations against black motorists . Additional efforts need to be made within CPD to ensure a high degree of consistency in police methods, priorities, and behaviors, regardless of race. While the current data do not demonstrate a pervasive pattern in which CPD officers use a citizen's race in determining who to stop, cite or search, our findings should not be interpreted as suggesting that current CPD policies, procedures, and priorities are optimal. As we suggested in last year's report, we recommend that CPD review the possible sources of the white officer effects and implement training or reforms designed to remediate it.

Create Methods to Foster Support of the Police. The results from the survey of police officers point clearly to a series of major stresses, including the officers' perception that blacks complained and the media reported unfairly about racial profiling and police abuse of authority. The good news is that the vast majority of officers who responded think that community input is essential to problem solving. This note of optimism, however, is balanced against the fact that only half of the responding officers expect citizen cooperation in such endeavors. Thus, even though most officers who responded are satisfied with their career choice, they also perceive significant challenges associated with the profession. Some of these perceived challenges come from within the police department or city government. A significant fraction of the responding officers perceive that they have insufficient protection against unreasonable lawsuits, difficulty communicating with management, and insufficient recognition of superior job performance. As was reported last year, there are no easy solutions to these strains. The survey findings suggest that solutions reside in improving relations both with the community and with management.

Acknowledgments

We gratefully acknowledge the comments of two independent reviewers and the parties to the collaborative agreement. As in last year's report, John Eck from the University of Cincinnati helped sharpen our focus and presentation. Nelson Lim from RAND is an expert on the role of race in policy issues and his review helped us clarify our presentation on this complex topic. In addition, the parties' comments provided valuable insights about local context. We also thank our RAND colleagues Terry Fain and John MacDonald. Terry coordinated the data acquisition and human subjects protection review. John reviewed the survey instruments and survey results and helped the project team identify the relevant literature on police-community relations.

Although we benefited from these reviews, the authors alone remain responsible for errors and omissions in this analysis.

Abbreviations

ACLU	American Civil Liberties Union
ANCOVA	analysis of covariance
ANOVA	analysis of variance
CAD	computer-aided dispatch
CBD	Central Business District
CCA	Citizen Complaint Authority
CCRP	Citizen Complaint Resolution Process
CPD	Cincinnati Police Department
DOJ	U.S. Department of Justice
DST	daylight saving time
ETS	Employee Tracking System
fdr	false discovery rate
FI	field interview
FOP	Fraternal Order of Police
GIS	geographic information system
IIS	Internal Investigations Section
MOA	memorandum of agreement
MVR	mobile video recording
SRBI	Schulman, Ronca, and Bucuvalas, Inc.

CHAPTER ONE

Introduction

The Collaborative Agreement

In 2002, the city of Cincinnati and other parties (collectively, the parties) entered into a collaborative agreement that sought to achieve the following goals:

- "[Ensure that p]olice officers and community members . . . become proactive partners in community problem solving."
- "Build relationships of respect, cooperation, and trust within and between police and communities."
- "Improve education, oversight, monitoring, hiring practices, and accountability of the CPD [Cincinnati Police Department]."
- "Ensure fair, equitable, and courteous treatment for all."
- "Create methods to establish the public's understanding of police policies and procedures and recognition of exceptional service in an effort to foster support for the police" (*In re Cincinnati Policing*, pp. 3–4).

Other provisions and reports, including a memorandum of agreement (MOA) between the city and the U.S. Department of Justice (DOJ) and a 2001 DOJ review of CPD use of force, provide important context for the collaborative agreement. The MOA, dated April 12, 2002, seeks to "remedy a pattern or practice of conduct by law enforcement officers that deprives individuals of rights, privileges or immunities secured by the Constitution or federal law" (U.S. Department of Justice, City of Cincinnati, Ohio, and Cincinnati Police Department, 2002, para. II.1). Subsequent to the DOJ review of use of force, DOJ recommended changes in CPD policies and procedures and the city's internal mechanism for resolving citizen complaints. The MOA is appended to the agreement, though the MOA is enforceable only through paragraph 113 of the agreement.

An independent team monitors both the collaborative agreement and the MOA with DOJ. The monitor team, headed by Saul Green, tracks the parties' implementation of necessary reforms, changes, and procedures. A U.S. magistrate judge conciliates disagreements between the monitor team and the parties.

Evaluation of Progress Toward the Collaborative Agreement's Goals

The collaborative agreement binds the parties to evaluating and implementing its terms. The agreement notes, "this Agreement is outcome oriented, putting great emphasis on objective measures of police-citizen relations and police effectiveness" (*In re Cincinnati Policing*, p. 4). RAND was retained in July 2004 to conduct the required evaluations and assist the parties with measuring progress toward the goals of the collaborative agreement. RAND combines the evaluation's individual elements, referred to as *tasks*, into an annual report. RAND's second annual report was due in draft form to the parties on October 2, 2006, and in final form in December 2006.

The year-one[1] report (Riley et al., 2005) reported on all of the tasks under the contract's initial year. Those tasks were

1. to analyze Cincinnati crime and staff deployment patterns
2. to survey the community on its satisfaction with police services
3. to analyze motorist stop data
4. to analyze audio and video records from motorist stops
5. to assess CPD staffing patterns
6. to assess CPD problem-solving processes
7. to survey citizens who have interacted with the police
8. to survey officers and citizens involved in complaints
9. to survey officers to obtain their opinions about their work and the community.

In the first year, tasks 1–6 were completed to the mutual satisfaction of the parties and RAND. Tasks 7 through 9, however, failed to generate sufficient responses from which broader generalizations about the officer opinions, police-citizen interactions, and the complaint processes could be made. Consequently, the parties and RAND mutually agreed to modify the methodology for tasks 8 and 9 and to attempt them again in the contract's second year. The decision to redo tasks 8 and 9 in an attempt to achieve improved results necessitated changes to the overall task schedule, and thus the report content. Specifically, it led to the elimination of tasks 5, 6, and 7 in the remaining years of the contract. Table 1.1 provides information about the content of past, current, and future reports.

To summarize Table 1.1, the reporting and analysis of motorist stop data occurs in all five years of the contract. This is the only task that covers five years and it will be the sole subject of the fifth-year report. The audio and video analysis of motorist stops occurs in the first four years of the contract. The analysis of CPD staffing and CPD problem-solving issues were dropped both to accommodate the reconducting of the officer and complaint surveys in the year-two report and because other mechanisms address those issues. Specifically, a previous consent decree on CPD staffing covers CPD staffing patterns more thoroughly than these reports could. Similarly, the monitor's reports address CPD problem-solving efforts to a greater

[1] The term *year one* refers to the first evaluation report of the contract (published in December 2005) and the data used therein. The data used in the year-one report came from calendar year 2003, 2004, or 2005, depending on the task.

Table 1.1
Schedule of Reports and Content

	Report Year				
Task	**Year 1**	**Year 2[a]**	**Year 3**	**Year 4**	**Year 5**
Incident year(s) covered by CPD data[b]	2003[c], 2004	2005	2006	2007	2008
Community satisfaction survey	Yes	No	No	Yes	No
Motorist stop data	Yes	Yes	Yes	Yes	Yes
Audio and video analysis	Yes	Yes	Yes	Yes	No
CPD staffing	Yes	No	No	No	No
Problem-solving processes	Yes	No	No	No	No
Police-citizen interaction survey	Yes	No	No	No	No
Complaint process	Yes	Yes	No	Yes	No
Officer survey	Yes	Yes	No	Yes	No

NOTES: Shaded cells indicate future reports.

[a] indicates the reporting year covered by this document.

[b] CPD provides data on statistical compilations, staffing, motor vehicle stops, and tapes of motor vehicle stops. RAND collected all other data directly in the year of the report.

[c] Both 2003 and 2004 data were used for the motor vehicle stop task only.

degree than the evaluation contract permitted. RAND will conduct the officer and complaint surveys again in 2008 as a point of comparison to this year's surveys. The subsequent subsections describe in more detail the tasks that this report addresses.

Statistical Compilations

CPD provides RAND with statistical compilations on a wide variety of topics, including arrests and reported crimes by neighborhood; vehicle stops and citation, search, and arrest rates by neighborhood; use-of-force incidents by neighborhood; and calls for service by neighborhood. RAND reviews these compilations each year to help establish the context of policing in Cincinnati. The compilations help frame how CPD allocates resources, what kind of demand there is for police services in Cincinnati, and how these factors vary relative to the racial composition of Cincinnati's neighborhoods.

These compilations will be reviewed annually so that the authors can analyze changes in the statistics over time. In addition, these statistical compilations provide important inputs into other tasks of the contract. For example, the compilations reveal that crime is not uniformly distributed around Cincinnati, but tends to be clustered in specific parts of the city during certain times of the day and week. In turn, this means that law enforcement presence is going to be clustered in space and time in a way that correlates with the crime patterns. These patterns have implications for the traffic stop analyses, which must be adjusted for where

the stop occurred, since the risk of exposure to law enforcement is not uniform over the city's geography.

Traffic Stop Analysis

RAND will conduct an analysis of traffic stop patterns in each year of the contract. This section investigates whether racial biases influence police activities in the decision to stop, cite, and search vehicles in Cincinnati. RAND provides this assessment in three stages. The first stage assesses vehicle stops and whether a pattern of racial disparity exists at the department level. The second stage develops and applies internal benchmarks to look for patterns of racial disparity at the individual officer level. The third stage assesses whether racial disparities exist in stop outcomes, including such factors as the rates at which officers give citations, stop durations, and the rates at which officers initiate vehicle or personal searches. The traffic stop analyses are conducted through analysis of data that CPD provided to RAND. This section of the evaluation did not require the collection of any original data through surveys or other means.

Evaluation of Video and Audio Records

Information from vehicle-mounted video and audio recordings can shed light on the origins of police-community conflict and dissatisfaction. Personal expectations about an interaction are transmitted through verbal and nonverbal cues that each participant is constantly interpreting. Interactions that result in conflict can often be traced to verbal and nonverbal cues that a participant interprets (or misinterprets) as one of distrust, disrespect, or anger. Analysis of the video and audio recordings allows us to understand how verbal and nonverbal cues are interpreted and misinterpreted and, in turn, identify opportunities to train officers (and, to a much less significant extent, citizens) on how to spot relevant cues and reduce misinterpretation of benign cues. For each year of the evaluation contract, the authors expect to sample 300 videotapes of motor vehicle stops.

Police Officer Survey

RAND's evaluation contract requires a survey of CPD officers. The Police Officer Survey (or, officer survey), as with the satisfaction survey and the interaction, will be conducted in years one and four of the evaluation. This survey addresses officers' perceptions of personal safety, citizen support, working conditions, officer morale, organizational barriers to effective policing, and perceptions of fairness in evaluation and promotion. The officer survey provides important contextual information about how the line staff perceive their jobs. We expect that, over time, this task will provide the parties (and CPD in particular) with insights about how to improve communication with staff and the community, as well as improve staff morale.

Complaint and Internal Review Survey

The Complaint and Internal Review Survey (or, complaint survey) seeks the input of both officers and citizens about the same complaint. This survey covers all three complaint processes: the Citizen Complaint Authority (CCA), Citizen Complaint Resolution Process (CCRP), and Internal Investigations Section (IIS) investigations. The complaint survey assesses the perceived fairness of the complaint process, of the level of input that both citizens and officers have into

the process, and of the process outcome, as well as satisfaction with the process outcome. The complaint survey also asks both officers and citizens for their thoughts on how to improve the complaint process.

Structure of This Report

The remainder of this report is organized around the tasks presented previously. Chapter Two reviews the statistical compilations that Cincinnati provided, including their relevance for the other tasks of the evaluation. Chapter Three presents the findings from the traffic stop analysis. In Chapter Four, we assess the results of the videotaped interactions of police and motorists. Chapter Five reports on CPD officers' satisfaction. In Chapter Six, we detail citizen and officer satisfaction with the complaint process. Finally, Chapter Seven integrates the material from the preceding chapters to highlight issues relevant to the collaborative agreement.

CHAPTER TWO

The Context of Policing in Cincinnati: Crime, Arrests, and Use of Force

Overview

This chapter describes the relationship between demand for police services, law enforcement activity, and the racial composition of neighborhoods. CPD spends much of its law enforcement effort, as measured by actions such as arrests and citations, on a few neighborhoods. These neighborhoods also have the greatest demand for police, as measured by calls for service and reports of crime. The residents of these areas, such as Over-the-Rhine and Pendleton, are predominantly black. This leads Cincinnati's black residents to be more exposed to both crime and aggressive (even if necessary) police tactics, which can lead to a negative perception of the police.

Using data from CPD on calls for service, reported crime, arrests, and use-of-force incidents, this chapter sets the context for the remainder of the report, providing a description of the spatial distribution of incidents, the concentration of law enforcement effort, and crime in particular neighborhoods.

The key findings of this chapter are as follows:

- Crime, calls for service, and arrests were geographically clustered in the same areas of the city of Cincinnati.
- The residents of the neighborhoods most exposed to police are predominantly black, making the black residents of Cincinnati more likely than nonblack residents to be involved in or witness a negative interaction with the police.
- The Over-the-Rhine neighborhood saw a 25-percent jump in the number of arrests in 2005 and a 5-percent drop in the number of reported crimes. As a result of increased enforcement in early 2006, Over-the-Rhine is on track for nearly 11,000 arrests in 2006, a 44-percent increase from 2004. CPD must maintain a dialogue with the community to prevent friction from building between police and the community they serve.
- Use-of-force incidents have dropped from the 2004 rate of 20 per thousand arrests to 14 per thousand arrests in 2005.
- There was no relationship between the type of force used and the subject's race.
- The race of the officer(s) involved also appears to be unrelated to the subject's race.

Calls for Service and Serious Crimes

Figure 2.1 shows the number of calls for service by neighborhood for 2005. The areas with the greatest calls for service correspond to areas that CPD has identified as hot spots (CPD, undated[a]). The Over-the-Rhine neighborhood accounted for 23,040 calls for service, the greatest number of calls of any neighborhood and nearly the same as the number of calls in 2004 (23,349).

Figure 2.2 shows the number of Part 1 crimes (murder, rape, robbery, aggravated assault, burglary, larceny, and automobile theft) by neighborhood for 2005. The neighborhoods with the largest number of reported crimes were Westwood (2,330), Downtown/Riverfront (2,027), and Over-the-Rhine (1,939). The number of crimes in Westwood is up 15 percent while crime has dropped 2 percent in downtown and Over-the-Rhine. The number of calls for service and the number of reported Part 1 crimes in a neighborhood were highly correlated $(r = 0.96)$ with an average of 10.7 calls for service for every reported Part 1 crime. Those neighborhoods indicated in Figure 2.1 as having the greatest number of calls for service also had the greatest amount of reported crime. The number of arrests was also highly correlated with both calls for service $(r = 0.87)$ and the number of reported crimes $(r = 0.81)$. As we also noted in our year-one report, these findings indicate that crime, calls for service, and arrests were geographically clustered in the same areas of the city of Cincinnati. CPD (undated[b]) maintains regular updates on reported crime.

Figure 2.1
Number of Calls for Service, by Neighborhood, 2005

RAND *TR445-2.1*

Figure 2.2
Number of Part 1 Crimes, by Neighborhood, 2005

RAND *TR445-2.2*

Stops, Citations, Arrests, and Reported Crimes

Table 2.1 shows the number and percentage of arrests, reported crimes, and calls for service by neighborhood. Reported crimes may include Part 1 crimes but also include reports of harassment, domestic violence misdemeanors, and public indecency. Five neighborhoods, highlighted in the table, comprised 40 percent of CPD arrests and 32 percent of Cincinnati's reported crimes. The largest share of arrests occurred in Over-the-Rhine, East Price Hill, and Central Business District (CBD)/Riverfront. Over-the-Rhine in particular saw a 25-percent jump in the number of arrests in 2005 and a 5-percent drop in the number of reported crimes. We might expect similar jumps in 2006 due to a large increase in enforcement in the Over-the-Rhine neighborhood in April and May 2006. As of the end of August 2006, CPD had made 7,275 arrests in the Over-the-Rhine neighborhood, on track for nearly 11,000 arrests for the year.

Table 2.2 shows the number of motor vehicle stops and the citation rate, search rate, and arrest rate of those stops by neighborhood. Both Pendleton and Kennedy Heights continue to have high rates of arrests following vehicle stops even though few stops actually occur there. Over-the-Rhine had a large number of arrests (9,076), a large number of traffic stops (3,347), a large number of arrests following traffic stops (744), and a high arrest rate following traffic stops (22 percent). Only the freeways exceed the Over-the-Rhine neighborhood in the number

Table 2.1
Number of Arrests, Reported Crimes, and Calls for Service, by Neighborhood

	Arrests		Reported Crimes[a]		Calls for Service	
Neighborhood	**n**	**%**	**n**	**%**	**n**	**%**
Over-the-Rhine	9,076	18	3,106	7	23,040	8
East Price Hill	3,353	7	2,413	6	14,881	5
CBD/Riverfront	3,306	7	2,704	6	16,217	6
West End	2,913	6	1,616	4	11,769	4
Avondale	2,403	5	2,047	5	13,358	5
Westwood	2,320	5	3,548	8	18,564	6
Walnut Hills	2,115	4	1,829	4	11,808	4
West Price Hill	1,778	4	2,395	5	13,919	5
Northside	1,430	3	1,361	3	10,703	4
Evanston	1,178	2	940	2	7,914	3
Madisonville	1,163	2	818	2	7,556	3
Mt. Auburn	1,125	2	906	2	5,704	2
Clifton	1,031	2	977	2	6,765	2
College Hill	955	2	1,113	3	7,818	3
Corryville	931	2	803	2	5,747	2
South Fairmount	867	2	880	2	6,029	2
Fairview	853	2	905	2	5,821	2
Bond Hill	790	2	761	2	6,680	2
Mt. Airy	672	1	990	2	6,613	2
Paddock Hills	669	1	177	0	1,683	1
Oakley	619	1	914	2	5,759	2
Winton Hills	619	1	814	2	4,559	2
Hyde Park	590	1	584	1	3,970	1
North Avondale	577	1	836	2	5,215	2
Roselawn	566	1	818	2	5,500	2
Clifton/ University Heights	553	1	715	2	5,155	2
Lower Price Hill	486	1	477	1	3,315	1
Pendleton	473	1	283	1	1,881	1
Queensgate	470	1	401	1	3,688	1

Table 2.1—Continued

	Arrests		Reported Crimes[a]		Calls for Service	
Neighborhood	**n**	**%**	**n**	**%**	**n**	**%**
Winton Place	469	1	530	1	3,077	1
Fay Apartments	441	1	489	1	2,630	1
Camp Washington	440	1	465	1	4,676	2
Millvale	438	1	446	1	2,503	1
Mt. Washington	287	1	556	1	3,884	1
Kennedy Heights	286	1	361	1	2,427	1
East Westwood	270	1	308	1	1,950	1
Pleasant Ridge	262	1	452	1	3,356	1
Hartwell	228	0	452	1	2,958	1
North Fairmount	219	0	268	1	1,463	1
East End	205	0	306	1	2,207	1
East Walnut Hills	190	0	542	1	2,703	1
South Cumminsville	190	0	158	0	1,177	0
English Woods	181	0	329	1	1,735	1
Carthage	173	0	449	1	2,774	1
Mt. Adams	161	0	180	0	1,390	0
Sayler Park	160	0	311	1	1,598	1
Sedamsville	137	0	191	0	1,323	0
Columbia/Tusculum	135	0	178	0	1,843	1
Mt. Lookout	116	0	192	0	1,198	0
Riverside	94	0	279	1	1,303	0
O'Bryonville	39	0	55	0	333	0
Linwood	39	0	61	0	832	0
California	33	0	33	0	497	0

[a] Reported crimes include reports of Part 1 crimes as well as less serious offenses.

of traffic stops. Citation and search rates varied widely across the neighborhoods, 55 to 93 percent for citation rates and 0 percent to 40 percent for search rates. Citation rates and arrest rates were strongly negatively correlated $(r = -0.70)$, implying that neighborhoods with the highest citation rates had the lowest arrest rates. Neighborhoods with high search rates, on the other hand, generally had high arrest rates $(r = 0.87)$. These findings are consistent with research that indicates that police are less likely to exercise their discretion to enforce traffic and other less serious offenses in high-crime neighborhoods (Klinger, 1997). That is, officers in

Table 2.2
Number of Motor Vehicle Stops and the Citation Rate, Search Rate, and Arrest Rate, by Neighborhood (sorted by arrest rate)

Neighborhood	Stops	Citations (%)	Searches (%)	Arrests (%)
Fay Apartments	297	61	27	25
Pendleton	278	63	31	24
S. Cumminsville	193	55	40	24
Over-the-Rhine	3,347	67	33	22
Winton Hills	533	66	22	21
Kennedy Heights	122	58	35	21
Madisonville	941	69	31	20
Millvale	446	64	29	20
English Woods	123	68	28	20
Avondale	1,601	67	26	19
Walnut Hills	1,589	63	25	19
East Price Hill	1,856	59	27	18
Interstate 471	12	75	25	17
West End	1,571	69	21	16
South Fairmount	1,567	65	15	16
Roselawn	430	62	24	16
Paddock Hills	294	65	14	16
North Fairmount	224	62	22	16
College Hill	1,151	60	14	15
Mount Auburn	1,089	76	22	15
Bondhill	914	67	20	15
Hartwell	235	65	18	15
West Price Hill	1,513	66	18	14
Evanston	1,084	71	21	14
Corryville	958	68	20	14
Winton Place	898	69	12	14
East Westwood	598	61	17	14
North Avondale	555	57	18	14
Northside	2,260	67	17	13
Carthage	293	69	16	13

Table 2.2—Continued

Neighborhood	Stops	Citations (%)	Searches (%)	Arrests (%)
Mount Airy	1,284	68	14	12
Fairview	1,079	63	13	12
Westwood	2,028	66	13	11
Clifton/Univ Hts	1,007	66	15	11
East Walnut Hills	431	72	13	11
Pleasant Ridge	269	72	19	11
State Route 562	248	89	6	11
CBD/Riverfront	1,990	68	14	9
Camp Washington	1,328	81	12	9
Queensgate	792	82	9	9
California	35	80	6	9
Clifton	1,444	75	9	8
Lower Price Hill	1,235	77	11	8
Oakley	662	69	18	7
O'Bryonville	15	60	33	7
State Route 126	14	93	7	7
Mt. Lookout	330	69	6	6
Interstate 75	4,117	89	5	5
Sedamsville	525	79	3	5
Interstate 71	2,335	93	4	4
Interstate 74	870	88	4	4
Mt. Washington	780	88	4	4
Hyde Park	544	68	4	4
Riverside	337	81	6	4
Sayler Park	194	75	8	4
East End	961	90	4	3
Columbia/Tusculum	895	89	4	3
Mt. Adams	190	65	8	3
Linwood	580	92	1	2
Interstate 275	11	91	0	0
Total	54,013			

SOURCE: 2005 contact cards.

high-crime areas are often too busy to address minor traffic infractions while officers in low-crime areas may have traffic violations as the primary neighborhood issue.

Use of Force

RAND obtained data on use-of-force incidents occurring in 2005. For each incident, data included the incident date, the incident location (address or intersection), race and sex of the individual involved, identifiers for the officers involved in the incident, the officers' races, the reason or charge that led to force, and the type of force used. The independent monitor also reports on use-of-force incidents including an individual review of appropriateness in each case. Green and Jerome (2006) show counts of incidents that CPD's Police Relations Section tabulates. These differ slightly from the numbers shown in this section, since they are based directly on the information extracted from the narrative describing each incident. Uses of multiple forms of force are all recorded and counted. The data we received derive from CPD's Employee Tracking System (ETS) and record the most severe type of force according to a hierarchy.

In 2005, there were 926 use-of-force incidents in Cincinnati. This is down from 1,067 that we reported for 2004. Table 2.3 summarizes use-of-force incidents by type that occurred in 2005, along with a comparison to the 2004 data. Nonlethal weapons (such as electroshock guns) are the most commonly used type of force and account for 58 percent of the incidents $(n = 527)$. Not all incidents recorded as "Injury to Prisoner" are as a result of use of force. For example, if the subject were injured when fleeing from police, crashing their vehicle, or swallowing drugs, these would be recorded on an Injury to Prisoner form and would appear

Table 2.3
Use-of-Force Incidents in 2005

	CPD Data 2004	CPD Data 2005
Type of Force	**Number of Incidents**	
Chemical irritant	128	30
Noncompliant suspect	143	96
Canine	8	22
Electronic control device–beanbag-pepperball-foam	581	527
Weapon discharge at an animal	11	4
Firearms and physical force	28	23
Injury to prisoner	168	224
Total	1,067	926

[a] Six incidents indicated "Injury to Prisoner" in addition to another type of use of force. These incidents are not counted as an injury-to-prisoner incidents but under the type of force used.

in ETS. At this time, ETS cannot separate the 224 injury-to-prisoner incidents by whether these resulted directly from police contact. CPD's Police Relations Section reports regularly on the causes of injuries to prisoners (Green and Jerome, 2006). From those reports, we estimate that only about 10 percent of the 224 injury-to-prisoner incidents were a result of police contact.

Table 2.4 shows the number of use-of-force incidents broken down by type and neighborhood. Over-the-Rhine has the largest number of use-of-force incidents with 198 incidents, accounting for 21 percent of Cincinnati's total. Avondale and CBD/Riverfront, both of which are in close geographic proximity to Over-the-Rhine, respectively had about 7 and 8 percent of the incidents. Eleven incidents occurred outside of the city limits.

Table 2.4 also shows the rate of uses of force per 1,000 arrests. These rates do not include injury-to-prisoner incidents since few of these were the result of police contact. Citywide, there were, on average, 14 use-of-force incidents per 1,000 arrests. This rate is down from 20 per thousand in 2004 (this rate has been recomputed from the rate reported in RAND's first-year report to exclude injury-to-prisoner incidents). Several neighborhoods have rates that greatly exceed the citywide rate (shaded cells); however, most of these neighborhoods had few arrests and so the rates are highly sensitive to the small samples. Avondale had a large number of arrests (2,403) and use-of-force incidents (45). Over-the-Rhine also had a large number of arrests and an elevated rate of use of force.

Table 2.5 shows the number of use-of-force incidents broken down by type and race. Black individuals are the most common subjects of use of force and are involved in 75 percent of these incidents $(n = 525)$, about the same as their prevalence among arrestees (75 percent). There is no difference in the type of force used against individuals of different races $(\text{p-value} = 0.44)$.

Table 2.6 compares the distribution of the officers' and subjects' race. The race of the officers involved in incidents does not appear to differ for black and white subjects $(\text{p-value} = 0.44)$. Black and white subjects appear to be equally likely to be involved in incidents including more than one officer (30 percent).

CPD has made several changes in use-of-force policy since our report covering 2004 incidents. Patrol officers no longer have access to foam rounds although these were used rarely in the past. The number of chemical irritant uses and physical force incidents (with hands or body) has dramatically decreased as the deployment of electronic control devices becomes more widespread in the second half of 2004. By 2005, electronic control devices largely replaced the use of chemical irritants and physical force. The use of batons has essentially been eliminated as well.

Beginning in 2006, CPD instituted a Use of Force Review Board to review all incidents that result in serious injury to the subject, those that generate an excessive force complaint from the subject, and any incident that command staff directs to the board. Next year's report will address implications of this policy change.

Table 2.4
Number of Use-of-Force Incidents, by Neighborhood and Type

Neighborhood	Chemical Irriant	Noncompliant Suspect Arrestee	Canine	Electronic Control Device–Beanbag-Pepperball-40mm Foam	Firearms and Physical Force	Weapon Discharge at Animal	Percent of Incidents	Uses of Force per 1,000 Incidents
Mount Adams	2	3	0	4	0	0	1	56
Pendleton	0	1	1	14	0	1	2	36
Sedamsville	0	1	0	4	0	0	1	36
Mt. Lookout	0	0	0	2	2	0	1	34
California	0	0	0	1	0	0	0	30
Lower Price Hill	1	1	1	10	0	0	2	27
East Walnut Hills	0	1	0	4	0	0	1	26
Clifton/University Heights	1	3	0	9	0	0	2	24
East End	0	0	1	4	0	0	1	24
English Woods	0	2	0	1	1	0	1	22
Avondale	1	7	1	34	2	0	6	19
North Avondale	0	0	0	9	2	0	2	19
Bondhill	1	1	0	12	0	0	2	18
Winton Hills	0	2	0	9	0	0	2	18
Carthage	0	0	1	2	0	0	0	17
Over-the-Rhine	4	18	1	123	4	0	21	17
CBD/Riverfront	4	5	0	40	3	0	7	16
Camp Washington	0	1	1	5	0	0	1	16
Corryville	0	2	1	11	0	1	2	16
Millvale	1	1	0	5	0	0	1	16
Roselawn	0	1	1	6	1	0	1	16
South Cumminsville	0	0	0	3	0	0	0	16
Evanston	1	4	0	13	0	0	3	15
College Hill	2	1	1	9	0	0	2	14
Fay Apartments	0	1	1	4	0	0	1	14
Kennedy Heights	0	1	0	3	0	0	1	14

Table 2.4—Continued

Neighborhood	Chemical Irriant	Noncompliant Suspect Arrestee	Canine	Electronic Control Device–Beanbag-Pepperball-40mm Foam	Firearms and Physical Force	Weapon Discharge at Animal	Percent of Incidents	Uses of Force per 1,000 Incidents
Walnut Hills	2	2	1	24	1	0	4	14
Hartwell	0	0	1	2	0	0	0	13
Mount Auburn	0	0	0	13	0	0	2	12
East Westwood	1	0	0	2	0	0	0	11
East Price Hill	1	5	2	30	0	0	5	11
Fairview	0	3	1	4	1	0	1	11
Queensgate	0	1	0	4	0	0	1	11
Riverside	0	1	0	0	0	0	0	11
West End	3	6	0	20	2	1	5	11
West Price Hill	1	3	0	13	1	1	3	11
South Fairmount	0	2	0	7	0	0	1	10
Madisonville	0	0	2	8	0	0	1	9
North Fairmount	0	0	0	2	0	0	0	9
Northside	1	3	0	7	0	0	2	8
Pleasant Ridge	0	0	0	2	0	0	0	8
Westwood	2	4	0	10	2	0	3	8
Columbia/Tusculum	0	0	0	1	0	0	0	7
Oakley	0	0	0	3	1	0	1	6
Clifton	1	1	0	3	0	0	1	5
Paddock Hills	0	0	1	2	0	0	0	4
Winton Place	0	0	0	2	0	0	0	4
Mount Washington	0	0	1	0	0	0	0	3
Hyde Park	0	0	0	1	0	0	0	2
Outside Cincinnati	0	0	0	10	0	0	1	NA
Unknown	0	3	0	5	0	0	1	NA
Total	30	96	22	527	23	4	100	14

Table 2.5
Type of Force Used, by Recipient's Race

	Recipient's Race (%)			Recipients (n)
Type of Force	Black	White	Other	Total
Chemical irritant	4	7	0	30
Noncompliant suspect or arrestee	14	15	14	96
Canine	3	4	0	22
Electronic control device–beanbag-pepperball–40mm foam	76	73	86	525
Firearms and physical force	4	2	0	23
Total	100	100	100	696

NOTE: Four cases of weapon discharges at an animal and two cases in which race was missing are excluded from this table. Injury-to-prisoner incidents are also not counted in this table.

Table 2.6
Distribution of Officers' Races, by Subjects' Races

	Officers' Races (%)				
Subject's Race	Black	White	Black and White	Other	Total
Black (n = 528)	24	64	10	2	100
White (n = 165)	21	70	7	2	100
Other (n = 7)	29	71	0	0	100

NOTE: Injury-to-prisoner incidents are not included in these counts.

Summary

As we noted in our year-one report, patterns of calls for service, reported crime, arrests, and police use of force are geographically clustered in Cincinnati. Neighborhoods that are afflicted by high rates of crime are also more likely to have a high volume of crime and police use-of-force incidents. Over-the-Rhine and other neighborhoods located in District 1 appear to be neighborhoods that crime and police interventions (e.g., stops, arrests, and use of force) disproportionately affect. As a result, these neighborhoods' residents are likely to be exposed to negative interactions with police, either personally or by witnessing an arrest or use-of-force incident in their neighborhood.

CHAPTER THREE

Analysis of Vehicle Stops

Overview

This chapter examines data on traffic stops from 2005 to assess whether the data indicate racial profiling on the part of CPD officers. RAND's approach involves three phases: (1) an assessment of whether there is a departmentwide 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; (3) an assessment of racial biases in post-stop outcomes including citation rates, stop duration, and search rates.

There are seven key findings:

- An analysis of stops occurring near the changes to and from daylight saving time (DST) found no clear statistical evidence of a racial bias in the decision to stop. Black drivers were 11 percent more likely to be stopped during daylight when drivers' races are more visible, but this observed elevated risk for black drivers may be due to chance rather than a race bias. Combining all of the data from 2003 through 2005 (to increase the detection capabilities) indicates that black drivers were 2 percent more likely to be stopped during daylight, an elevated rate that is likely due to chance.
- Black drivers and similarly situated nonblack drivers had nearly the same chance of having a stop lasting less than 10 minutes (45 percent versus 47 percent). While previous years indicated differences of 3 and 4 percent, this year we included an adjustment for having an invalid driver's license, which may be explain the gap.
- Black drivers received citations less frequently than similarly situated nonblack drivers (68 percent compared with 71 percent). This difference may be due to officers' reluctance to cite black drivers or it may be an indicator that officers are stopping black drivers for discretionary offenses for which citations are rarely given. We did not find this effect in the year-one report, though the difference may have existed. This differs from the findings of previous years. The difference could have gone undetected in the year-one report if the large number of unreported stops in 2003 and 2004 disproportionately involved uncited black drivers.
- Officers search black and nonblack drivers at nearly the same rate when the officers have discretion (6.1 percent versus 5.2 percent). However, black drivers were 2.8 times more likely than were nonblack drivers to undergo a high-discretion weapon search. The rate

is also twice that observed for black drivers in 2003. This large change from the year-one report suggests a shift in police practice or in the frequency of officers completely documenting their traffic stops.

- For high-discretion searches, such as consent searches, black drivers were slightly more likely to be found with contraband (29 percent versus 27 percent). Since the detection rates are similar, this indicates no racial bias in search decisions.
- While we did not find departmentwide evidence of racial bias, a few officers seemed to have stop activity consistent with racially biased policing. Five officers out of 133 officers stopped black drivers at substantially higher rates than did other similarly situated officers. One officer appeared to be stopping more nonblack drivers than did similar officers.
- Trends in results show possible improvements, but this finding is not conclusive, because of the uneven quality of the data across years. We know that CPD's data collection effort is vastly improved compared to last year. In addition, based on comparing the traffic stop data collection forms with stop logs from computer-aided dispatch (CAD), compliance with the data collection has reached 97 percent. Of the completed stop forms, 3 percent were missing one or more key variables, a large improvement over the 2004 rate of 16 percent.

Note that, in this chapter, each of the analyses removes the effect of other plausible explanations for differences. This includes adjustments for when, where, and why stops occur. The aim is to isolate race's effect from that of other factors on the decision to stop, cite, and search vehicles. Even though these analyses find few differences between black and *similarly situated* nonblack drivers, this should not minimize the fact that black drivers in Cincinnati are exposed to more policing and are likely to be stopped in situations that are more likely to result in longer stops, searches, and generally negative interactions. Nonblack drivers in those same areas may be treated identically, but, across the city, black and nonblack drivers collectively will have different experiences. The analysis of videotaped interactions in Chapter Four more directly studies those differential experiences.

Introduction

This section investigates whether racial biases influence police activities in the decision to stop, cite, and search vehicles in Cincinnati. We develop this assessment in three stages. The first stage assesses whether a racial pattern exists at the department level in initiating vehicle stops. The second stage assesses whether individual officers appear to have racial biases in their decisions to stop. The third stage assesses whether there are racial disparities in the outcomes of stops (citation, duration, searches).

First, to assess bias in the decision to stop, we took advantage of a natural experiment, comparing stops made during darkness to stops made during daylight. If there is a racial bias, then that bias will be most prevalent during daylight hours when drivers' race is most visible. In the absence of racial bias, we expect the percentage of black drivers among drivers stopped during daylight to equal the percentage of black drivers among those stopped in darkness. The

driving population may vary between daylight and darkness. For example, black drivers may compose a larger share of the driving population at later hours. To handle this situation, we compare stops immediately before and immediately after changes to and from DST. On one Monday, it is light at 6:30 p.m. and the following Monday, it is dark at 6:30 p.m. Such comparisons help adjust for the changes in the race distribution in the driving population. As a result, it does not require explicit information on the characteristics of drivers at risk of being stopped.

Second, we implemented an internal benchmark, comparing each officer to other officers who patrol the same neighborhoods at the same times and with the same assignment. This method selects an officer, identifies stops that other officers made in the same time and place, and compares the race distributions of the stops. Since the officers are patrolling the same neighborhood at the same time, the race distributions should be the same (assuming that the officers are on the same assignment). We report estimates of the percentage of officers who appear to stop black drivers disproportionately.

Third, we analyzed stop outcomes, citation rates, stop duration, search rates, and search outcomes, to assess racial bias in actions taken post-stop. We statistically removed the effects of when, where, and why the stop took place in order to isolate the effect of racial bias in the stop outcomes.

Data

Contact Cards

CPD's investigatory stop policy (CPD, 2006) requires officers to complete Form 534, a citizen contact card, for all motor vehicle stops. In addition, for any passenger detained separately, the officer must complete a separate Form 534. The contact cards include information on the vehicle (license plate, car make, and year), the driver (race, age, driver's license), passengers, and the stop (stop location, stop reason, whether a search occurred, stop outcome, stop duration). CPD officers also completed contact cards for some pedestrian stops, collecting information on the individual detained and stop attributes. Our analyses primarily rely on the data from a database that CPD created from these contact cards for the 2005 calendar year.

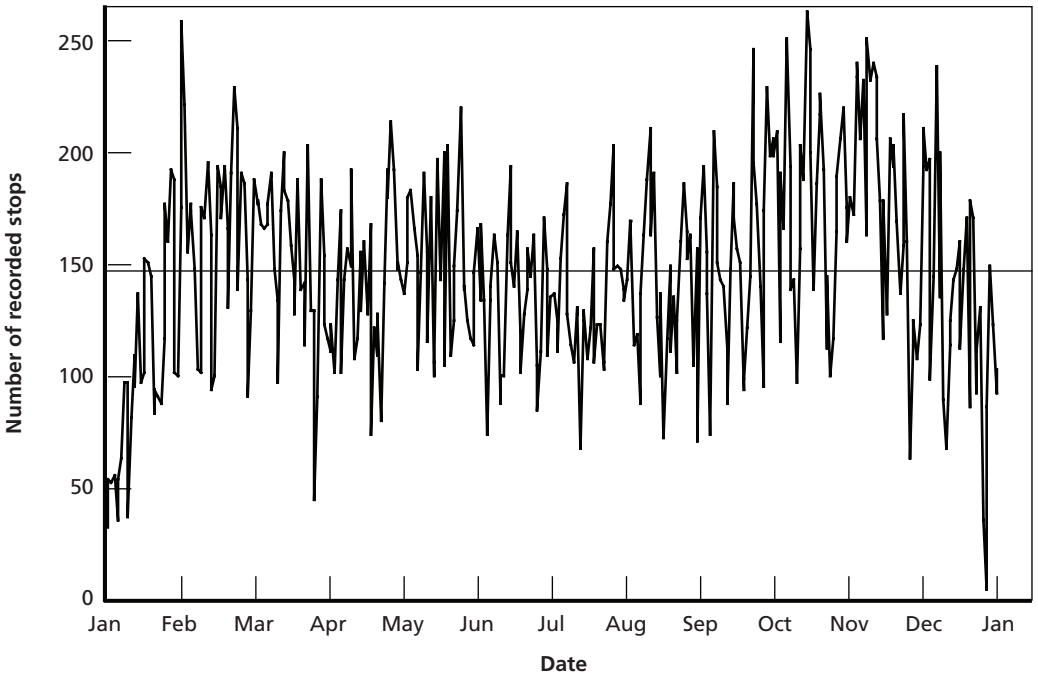
Geocoding. CPD provided RAND with a geographic information system (GIS) shape file with the 53 neighborhoods' boundary definitions. We mapped each stop's address or intersection as documented on the contact cards to one of the 53 neighborhoods. Since highways are of a distinctly different nature, in both enforcement practices and driving population, we did not map stops occurring on highways to any of the Cincinnati neighborhoods. Instead, we considered each Cincinnati highway (Interstates 471, 71, 74, and 75, and 562/Norwood Lateral) as a separate neighborhood. We mapped those vehicle stops that occurred between the highway and surface streets (e.g., Interstate 75 off-ramp to eastbound Hopple) to the first neighborhood in the description (in this example, Interstate 75). The code violation and exposure to police most likely occurred in the first neighborhood, so mapping such stops in this way associates them with other similarly situated stops.

Data Quality Issues. For any traffic stop analysis to offer an accurate view of CPD's policing practices, the data quality is of primary importance. CPD's data collection effort is vastly improved compared with 2003 and 2004. Furthermore, the recommendations from our year-one report were released after these data had already been collected. As a result, these improvements could not be in response to the issues raised in our year-one report, but instead reflect changes CPD initiated prior to our 2005 analysis.

Data. We received data on 54,013 stops in 2005 (51,099 stops for moving violations). We also received CAD logs for all of 2005 containing 54,319 traffic stops. We examined the volume of contact cards recorded on each day as an initial check for regular completion of the cards. Figure 3.1 shows the number of stops on each day in 2005. The day-to-day volume of stops seems generally consistent, averaging 150 stops per day with no obvious gaps in collection.

For closer inspection of the completion rates, we obtained CAD logs from CPD for all traffic stops in 2005. These CAD logs indicate the date and time of stop initiation, the stop's completion time, the stop location including district, disposition, and an incident number. The incident numbers should match to an associated contact card (Form 534) giving additional stop details. For every traffic stop, CPD officers radio dispatch indicating that they are involved in a traffic stop and unavailable to be redeployed elsewhere. It is unlikely that any traffic stop would not be recorded in the CAD logs. We utilized the CAD log data both to supplement the geocoding effort identify the stop locations and to check whether incident

Figure 3.1
Number of Contact Cards on Each Day in 2005



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numbers in the CAD logs have a matching contact card in order to estimate the contact card completion rate.

Stop Duration. CPD noted that, in the process of upgrading the contact card database, stop durations were not being recorded in the database. Missing data greatly increased after the October 19 upgrade. Table 3.1 shows the percentage of missing data by month.

Missing data are problematic only when associated with the value that we would have observed had the data not been missing. For example, if officers do not fill in the stop duration when the stop was very short, then dropping stops with missing stop duration would cause us to overestimate the stop lengths. A worse case, for the purposes of RAND's study, occurs when missing data are associated with *both* stop duration and race. However, neither of these problems is likely to occur, since the cause of missing data is due to a switch in the database's front end such that a missing stop duration is certainly unassociated with both race and the actual stop duration. As a result, the missing data will not skew the results. The only possible effect is reduced accuracy, but, since 43,000 stops still have stop duration recorded, the loss of precision will be small.

Geocoding of Stops. We geocoded each stop to identify the neighborhood in which the stop took place.

- We identified and easily labeled 7,593 as highway stops (Interstates 275, 471, 71, 74, and 75 and State Routes 126 and 562).
- We could readily identify 42,772 of the addresses or intersections.
- We could not easily locate the remaining stops using the addresses from the contact cards. However, we could link them to CAD records by incident numbers (and by requiring the date to match and time to be nearly the same). Doing so identified an additional 2,919 stops' locations.
- We could match another 451 stops by hand (going through each one, using telephone books and maps).
- Of the remaining stops for moving violations, we could not locate 229 with contact card addresses or CAD addresses. We submitted the list of those addresses to CPD. CPD staff could identify four more addresses that identified seven stops' locations.

Ultimately, we could identify the neighborhood in which the stop occurred in all but 344 of the moving violations, a match rate of 99.3 percent of the stops. This rate is an improvement over 2003 (97.1 percent) and 2004 (98.3 percent). In 2006, the department has instituted additional checks on the address' validity and maps the stop location directly to a policing block.

Table 3.1
Contact Cards Missing Stop Duration, by Month

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cards (%)	6	4	4	4	3	3	3	5	4	24	87	81

Contact Card Completion Rates. To assess contact card completeness, we attempted to match each CAD record with a contact card. CPD had recorded 54,319 traffic stops in the CAD logs.

- We could directly match 43,215 (79.6 percent) of CAD records with completed contact cards.
- We could identify 1,850 additional records by considering, as we did in our year-one report, stops with incident numbers that were off by one or two digits but had matching districts, dates, and occurred within 30 minutes of the CAD record. The rate of unmatchable CAD records does seem to vary by district.
- At the time of data entry, we noticed that 2,628 contact cards had problematic incident numbers (e.g., duplicated). These were likely document stops that were recorded in CAD but could not be matched to incident numbers on the contact cards. See Table 3.2 for the percentage not matched, by district.

This leaves 12.2 percent (6,626) of the stops recorded in the CAD logs as traffic stops that do not have corresponding contact cards, yielding an estimated compliance rate of 87.8 percent. There are 4,781 contact cards for moving violations with seemingly valid incident numbers that do not seem to appear in the CAD logs. These may actually document some of the 6,626 CAD logs without matching contact cards, but they cannot be readily matched, possibly due to data entry errors on the incident number and at least one of the district, date, or time variables. If indeed these contact cards document some of the 6,626 unmatched CAD records, then the true compliance rate could be as high as 96.6 percent. This rate is much improved over the estimated rate in 2004 (between 78 percent and 83 percent).

Quality of Recorded Data and Missing Attributes of Documented Stops. Items from the contact cards were missing at times. In 2005, 3 percent of stops were missing at least one of the following: stop location, date, time, driver age, race, or sex. In 2004, this figure was 16 percent. Table 3.3 gives some more specific information on the types of fields that are important for RAND's analyses. Table 3.3 also includes a comparison with the 2004 rates and, besides the technical error involving lost stop durations, the missing information rate has greatly decreased.

Table 3.2
CAD Records by District That Could Not Be Matched to Contact Cards

District	1	2	3	4	5
CAD Records (%)	22	17	18	20	13

Table 3.3
Missing Basic Stop Information from Moving Violations

Stop Feature	Missing (n)	Missing (2005) (%)	Missing (2004) (%)	Decrease in the Rate of Missingness (%)
Time	118	0.2	0.6	–67
Duration	10,052	20.0	7.5	+167
Location	344	0.7	1.7	–59
No information	233	0.5	0.3	67
Unable to geocode	111	0.2	1.4	–86
Officer	316	0.6	1.6	–62
Driver race	375	0.7	6.0	–88
Driver sex	436	0.9	6.1	–85
Driver age	844	1.7	6.9	–75

NOTE: n = 51,099.

Assessing Racial Disparities in the Decision to Stop Using a Natural Experiment

The difficulty in assessing a racial bias in traffic stops is in developing a reasonable expected rate, often known as "the benchmarking problem." The 2000 census reports that 44 percent of Cincinnati's residents are black. In 2005, 47 percent of the stops involved black drivers. This is nearly the same as the rates in 2003 (48 percent) and 2004 (49 percent). Even though the differences between the residential census and the stop percentages differ little, these differences say little, if anything, about unequal treatment. For example, in the same data set, we found that 68 percent of the drivers stopped were male. Even though this figure differs greatly from the residential rate of 47 percent, we believe that much of this difference is due to men driving in the city more often and being more likely to break traffic laws when they drive. We must reason in the same fashion when dealing with race rather than sex. We must ask whether something besides racial profiling can explain the difference between the observed rate at which black drivers are stopped and the stop rate expected if there were no bias.

We must account for three factors when comparing the race distribution of stops. We do not know whether any of the following factors were true in Cincinnati, but the analysis must be able to separate them in order to assess racial biases.

1. Driving behavior might vary by race. That is, black drivers may be stopped more often because they may be more likely to commit some kind of traffic infraction. This may include expired license plates, speeding, or mechanical violations. Some studies have shown differences by race in speeding (Lange, Blackman, and Johnson, 2001) and seat-

belt use (Mueller, Veneziano, and Hallmark, 2004), but we do not know whether this is the case in Cincinnati.
2. Exposure to law enforcement might vary by race. Black drivers may be stopped more often because they are more likely to be exposed to law enforcement. They may drive more often or, more likely, in regions with greater police presence, so that any infraction they make would be more likely to be noticed.
3. Police might be practicing racially biased policing. Black drivers may be stopped more often because officers are actively seeking black drivers to stop. When officers observe vehicles involved in some traffic infraction, they might be more likely to stop the vehicle if the driver is black.

Any method that aims to assess a race bias in the decision to stop a vehicle must be able to account for or rule out differences resulting from the first two items. Comparisons to the residential census are inadequate, since they do not account for either of the first two reasons. Potentially, a large fraction of motorists does not even reside in the neighborhood in which police stopped them. In 2004, more than 25 percent of the drivers stopped in Cincinnati were not Cincinnati residents. Several proposed methods aim to assess the race distribution of drivers on the streets either by posting observers on street corners or by using surrogate measures such as the race distribution of not-at-fault car crashes. While these methods might adjust for differential police exposure, they do not adjust for different rates of offending. Instead, such methods require the assumption that drivers of each race group have equal rates of offenses, which may or may not be true. Studies have shown that almost all drivers have some vehicle code violation while driving (Lamberth, 2003); however, police do not stop vehicles for all violations and are expected to use discretion when selecting certain offenses and certain vehicles for a traffic stop. RAND aims to assess whether this discretion differentially affects black drivers.

Methods

To assess racial bias in the decision to stop, we use the veil-of-darkness method described in Grogger and Ridgeway (2006). Fridell (2004, Chapter Seven) also discusses this method, describing it as a method for "benchmarking with data from blind enforcement mechanisms."

In its basic form, our analysis compares the race distribution of stops made during daylight to the race distribution of stops made at night. If there were a practice of targeting black drivers, then the effects of this practice would be most pronounced during daylight when driver race is most visible. While the race of some nighttime drivers might be visible, the rate of police knowing driver race in advance of the stop must be smaller at night than during daylight. An overly simplistic analysis compares the percentage of black drivers among those stopped during daylight with the percentage of black drivers among those stopped at night. However, things might be different during daylight versus nighttime. For example, even if there were no racially biased practices, we still may observe differences in the prevalence of black drivers among those stopped, daytime versus nighttime, if the mix of black and nonblack drivers on the road changes over the course of the day. Differences in work schedules can cause changes in the mix of black and white drivers (Hamermesh, 1996). However, every spring and

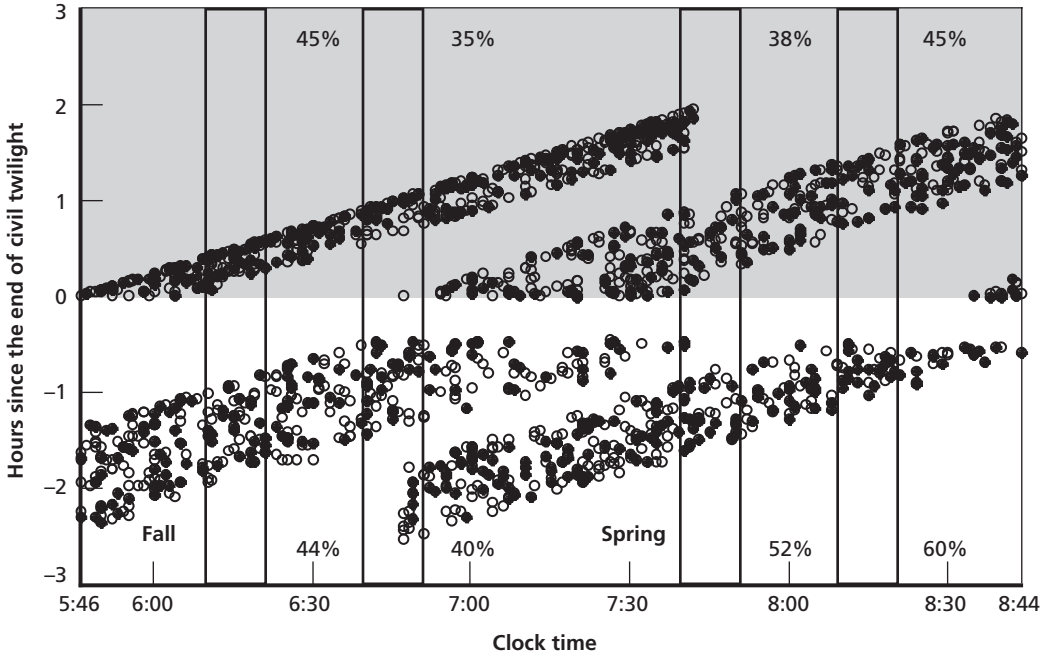
fall, Cincinnati switches between Eastern DST and Eastern standard time. Around the time that these changes occur, on one Monday, it is daylight between 6 p.m. and 6:30 p.m., while on the following Monday, it is dark between 6 p.m. and 6:30 p.m. During both of these periods, the authors hypothesized that the mix of black and nonblack drivers on the road would not drastically change, the kinds of drivers who commit offenses for which police make stops would not change, and the patterns of police allocation would not change. The major difference between these two periods is the officers' ability to identify race in advance of the stop. In practice, for such an analysis, we use several weeks of data on either side of the transitions to and from DST. Within short time slices, we compared the prevalence of black drivers among all stopped drivers, daylight versus darkness.

Figure 3.2 is a scatterplot of stops by clock time and darkness that occurred within 45 days of either the 2005 spring or fall DST change. A solid dot indicates a black driver and an open circle indicates a nonblack driver. We used the end of civil twilight as the technical definition of the beginning of darkness; at this point, artificial lighting is essential for most outdoor activities. Between sunset and the end of civil twilight, natural lighting is neither bright nor completely dark. Consequently, we dropped stops that occurred between sunset and civil twilight; therefore, our analysis contains no stops within approximately 30 minutes before the end of civil twilight. The diagonal upward-sloping gap illustrates the switch to DST. To explain this phenomenon, consider stops that occur at 6:30 p.m. The stops that took place one hour before darkness occurred in October. As the fall season progresses, stops at 6:30 p.m. occur closer to darkness. On October 30, 2005, DST ended (when the clock is turned back one hour), resulting in stops at 6:30 p.m. that occurred after darkness.

In Figure 3.2, we consider fall stops occurring between 5:46 p.m. and about 7:45 p.m. During this period, stops may occur in either daylight or darkness depending on the season. Stops before this time window always occur in daylight; after this time window, they are always in darkness. This time window is the intertwilight period and the focus of the analysis is on these stops. The intertwilight period is shifted later in the day in spring due to differences between spring and fall in the scheduling of DST changes.

Figure 3.2 shows four time windows. Within these intervals, we computed the percentage of stopped drivers who were black. At 6:45 p.m., for example, 35 percent of the drivers stopped in darkness were black and 40 percent of the drivers stopped in daylight were black. These statistics imply that officers stop more black drivers when race visibility is greater. Note that both samples of stopped drivers occurred at 6:45 p.m. so that the only likely difference between the daylight and darkness groups of drivers is race visibility. While the statistics at 6:45 p.m. imply a race bias, there are too few stops to be conclusive. In addition, calculations at other time points, such as 6:15 p.m., suggest no racial bias against black drivers, though these computations also involve too few stops. Statistically, we average over all time points using logistic regression to estimate the race effect. Averaging over all time points combines all of the observations while still adjusting for clock time. In addition, we adjust for day of the week so that we contrast stops made in daylight and darkness on the same day of the week.

Figure 3.2
Stops of Black and Nonblack Drivers, by Darkness and Clock Time (Fall and Spring 2005)



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Recall that methods must be able to tease out effects of racially biased practices from racial differences in exposure to police and racial differences in driving offenses. Drivers at 6:30 p.m. are exposed to the same distribution of police on either side of the DST switch. While incidents will, from time to time, draw police to particular locations, according to CPD, the allocation of police effort does not suddenly change following the time change. As a result, this method is not prone to errors due to differential police exposure. The drivers who are likely to offend during daylight are also likely to be the ones who offend at nighttime. At nighttime, the overall rate of offending might decrease (e.g., speeding in poorly lit areas might decrease). However, we assume that there is not a differential change in relative offending rates by race as daylight moves into nighttime. We believe that headlight violations are a special case, in that they might be more likely to be associated with minority drivers and are only noticed at nighttime. We removed all equipment violations from the analysis so that the method is not prone to errors due to differential offending rates. As a result, the method does not label as racial bias those differences that are due to differential exposure or due to differential offending rates. Table 3.4 shows the data used for the veil-of-darkness analysis. Clearly this analysis excludes a large percentage of the recorded stops. However, it focuses on those stops that have the greatest potential to isolate the effect of race bias. Other analyses in this report do make use of all of the available data.

Table 3.4
Stops Used in the Veil-of-Darkness Analysis

Characteristic	Stops
Stops in data set	54,013
Motor vehicle stop	51,099
Moving violations only	38,840
Race not missing	38,760
Date and time not missing	38,699
Evening stops (intertwilight period)	7,403
Evening spring stops (±30 days of DST)	323
Evening fall stops (±30 days of DST)	441

Results

Overall, we did not find evidence of a race bias. The analysis included evening stops that occurred within 30 days of either the spring or fall DST change. We isolated this group of stops believing that the racial mix of drivers on the road is more similar during this limited period than during the rest of the year. There were relatively few reported stops in the morning hours, so we focused exclusively on evening stops. The estimates adjust for clock time, as shown in Figure 3.2, to control for the possibility that the racial mix of drivers exposed to the police may change at different clock times. Table 3.5 shows the results.

The odds ratio indicates how much more likely daylight stops are to involve a black driver than are nighttime stops. For example, we previously reported that, for 2003, the odds that a daylight stop would involve a black driver were 15 percent greater than the odds that a nighttime stop would. In 2004, the daylight odds were 19 percent greater than the nighttime odds. In 2005, this trend appears to continue; the daylight odds were 11 percent higher than the nighttime odds. This indicates that black drivers were more likely to be stopped when race was more visible. However, there is substantial uncertainty around these estimates shown by the wide 95-percent confidence intervals. This means that additional data could swing the results one way or another. Combining across the previous three years makes no change to the conclusion; there is no clear evidence of bias, but the data point toward a slightly increased risk for black drivers of being stopped. Additional data from subsequent years will improve these estimates' precision further.

The analysis in Table 3.5 focuses on those stops in a tight period around the DST changes. That narrow focus aims to mitigate the risk that any observed differences might be due to seasonal differences of drivers on the road rather than racial bias (e.g., the mix of black and nonblack drivers on the road in July may differ from the racial mix in December). Although we believe that the analysis is less prone to such errors, the price of that prudence is that we could only utilize 1,637 stops across three years. Large racial biases would be easily detected if they were present. For example, if, in reality, black drivers are twice as likely to be stopped as nonblack drivers when race is visible, then the previous analysis will detect that with probability greater

Table 3.5
Comparison of Black and Nonblack Drivers Between Daylight and Dark, Seasonally Focused

Year	Odds Ratio	95% Interval	p-value	n
2003	1.15	(0.79, 1.68)	0.24	470
2004	1.19	(0.79, 1.80)	0.20	403
2005	1.11	(0.81, 1.52)	0.51	764
Combined	1.10	(0.91, 1.33)	0.31	1,637

NOTE: Includes all stops occurring within 30 days of the spring or fall DST change during the evening intertwilight period.

Table 3.6
Comparison of Black and Nonblack Drivers Between Daylight and Dark, Year-Round

Year	Odds Ratio	95% Interval	p-value	n
2003	1.01	(0.88, 1.16)	0.45	4,013
2004	0.98	(0.86, 1.12)	0.63	4,589
2005	1.07	(0.98, 1.16)	0.14	10,890
Combined	1.02	(0.95, 1.09)	0.65	19,492

NOTE: Includes all stops during the evening intertwilight period.

than 80 percent, depending on how much darkness hides driver's race. If racial bias is not so pronounced, the analysis might not be sufficiently powerful to detect it.

We repeated the veil-of-darkness analysis using all stops occurring during the intertwilight period, regardless of when during the year they occurred. The result is a test that has less variance but is more sensitive to possible seasonal changes in the mix of black and nonblack drivers exposed to police. Table 3.6 shows the results, which indicate no evidence of racial profiling. The odds ratios in the second column are very near 1.0 for all years, indicating that drivers have an equal chance of being stopped regardless of whether or not their races were visible in advance of the stop. Combining the analysis across all three years reinforces the conclusion of no racial bias in the decision to stop.

Assessing Racial Disparities in the Decision to Stop Using Internal Benchmarking

The daylight/darkness analysis tests whether racial bias is a departmentwide pattern of practice. If problems are not departmentwide, but rather the result of a few problem officers, the effect of their biases will likely not be large enough for the analysis in the previous section to detect the problem. In this section, we use an internal benchmarking approach. For each officer, we compare the race distribution of drivers that the officer stopped with the race distribution of drivers whom other officers have stopped in the same neighborhoods and at similar

times. See Fridell (2004, Chapter Eight) for an overview of internal benchmarking and its use in other jurisdictions.

Methods

The fundamental goal of internal benchmarking is to compare a particular officer's rate of minority stops with the rate of minority stops of other officers patrolling the same area at the same time. Matching in this way assures us that both the target officer and the comparison officers are exposed to the same set of offenses and offenders. Table 3.7 presents an internal benchmark for a particular CPD officer (the neighborhood codes have been scrambled to de-identify the officer). Most of those stops occurred in neighborhood J (49 percent) and neighborhood K (33 percent), with some stops elsewhere in the city. Seventy-one percent of these stops involved black drivers. Depending on the distribution of the race of drivers committing stoppable offenses that this officer could have stopped, the 71-percent figure could be too high. If vehicle stops that other officers made in the same areas and times at which this officer's stops occurred involved considerably less than 71 percent black drivers, then further investigation of this officer is in order.

Table 3.7
Example of Internal Benchmarking for an Example Officer

Variable		Stops Made by Officer 534 (%)	Similar Stops Made by Others (%)	Effect Size[a]
n =		111	571.3[b]	
Time	(12–4 p.m.][c]	9	9	0.01
	(4–8 p.m.]	57	56	0.01
	(8 p.m.–12 a.m.]	34	35	–0.02
Day	Mon	20	20	0.00
	Tue	12	11	0.02
	Wed	12	12	–0.00
	Thu	20	21	–0.03
	Fri	14	14	–0.01
	Sat	11	11	–0.01
	Sun	13	12	0.03
Month	Jan	12	12	0.01
	Feb	14	15	–0.02
	Mar	7	7	–0.01
	Apr	6	6	0.00
	May	8	7	0.05
	Jun	3	3	–0.03

Table 3.7—Continued

Variable		Stops Made by Officer 534 (%)	Similar Stops Made by Others (%)	Effect Size[a]
	Jul	4	4	–0.02
	Aug	10	10	0.00
	Sep	6	6	0.03
	Oct	4	5	–0.03
	Nov	14	14	0.01
	Dec	11	11	–0.01
Neighborhood[d]	H	1	1	–0.01
	I	1	1	–0.01
	J	49	48	0.02
	K	33	34	–0.02
	L	5	5	0.01
	M	11	11	–0.01
Stop reason	Equipment	64	63	0.01
	Moving	26	27	–0.01
	Other	10	10	–0.00
Outcome	Stops involving black drivers	71	46	

[a] The effect size is the difference of the two columns divided by the standard deviation of the first column. Generally 0.2 is considered a small effect size, a value much larger than any effect size computed for this comparison.

[b] For the comparison stops, N represents the effective sample size.

[c] Square brackets indicates the inclusion of that boundary.

[d] The neighborhoods have been given random letter codes to mask the officer.

We located 571 stops that collectively have the same distribution of stop features as the stops made by the officer in question. They were made in the same places, at the same times, on the same days, during the same months, and for the same reasons. Since the officer made few stops in June and few in neighborhood H, the matched stops also showed very few stops in June and neighborhood H. Importantly, we created the matches without looking at the race of the drivers involved in the stops, mitigating the risk of setting up a comparison group of stops that would either absolve or fault the officer unfairly.

Of the matched stops, 46 percent involved a black driver. The officer in question appears to have stopped a larger fraction of black drivers (71 percent) than did other officers making stops in the same area. Statistically, this difference is larger than could be expected by chance. However, in a large collection of comparisons, some extreme differences can occur

by chance. We present two methods for assessing the number of officers with unusually large minority stop fractions.

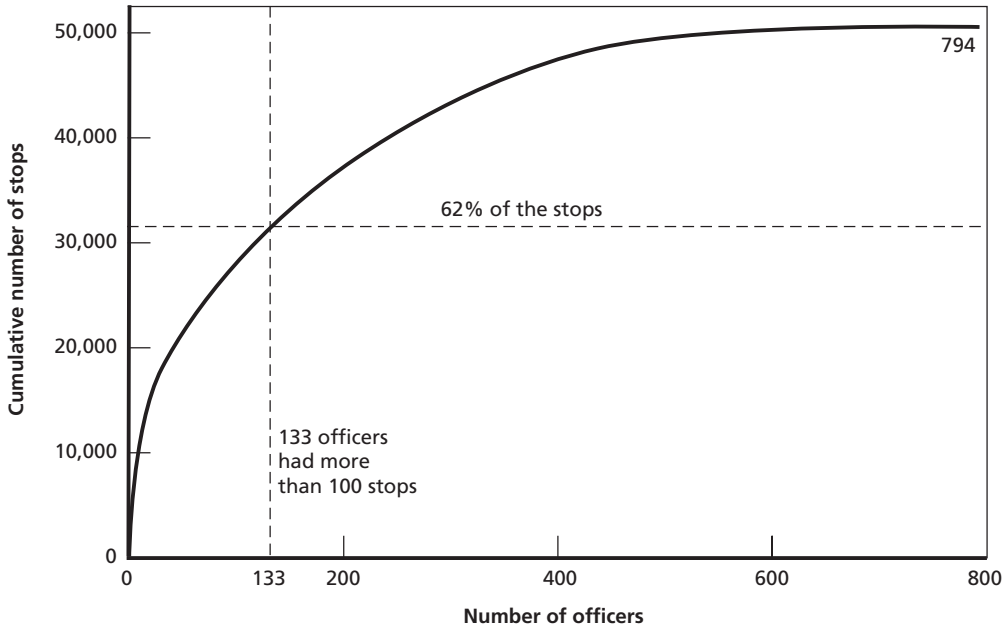
We selected all CPD officers with more than 100 reported stops in 2005 for the analysis; 133 officers exceeded that cutoff. The 100-stop cutoff focuses the analysis on those officers most frequently interacting with drivers in Cincinnati. It also ensures having at least a minimum level of statistical power for detecting differences if they exist. Figure 3.3 shows the distribution of the number of stops by officer. These 133 officers amount to 16 percent of the CPD officers who reported a stop in 2005 and account for 62 percent of the 2005 stops.

Results

Stops were matched on month, day, time, neighborhood (53 neighborhoods plus eight highways), and reason for the stop.

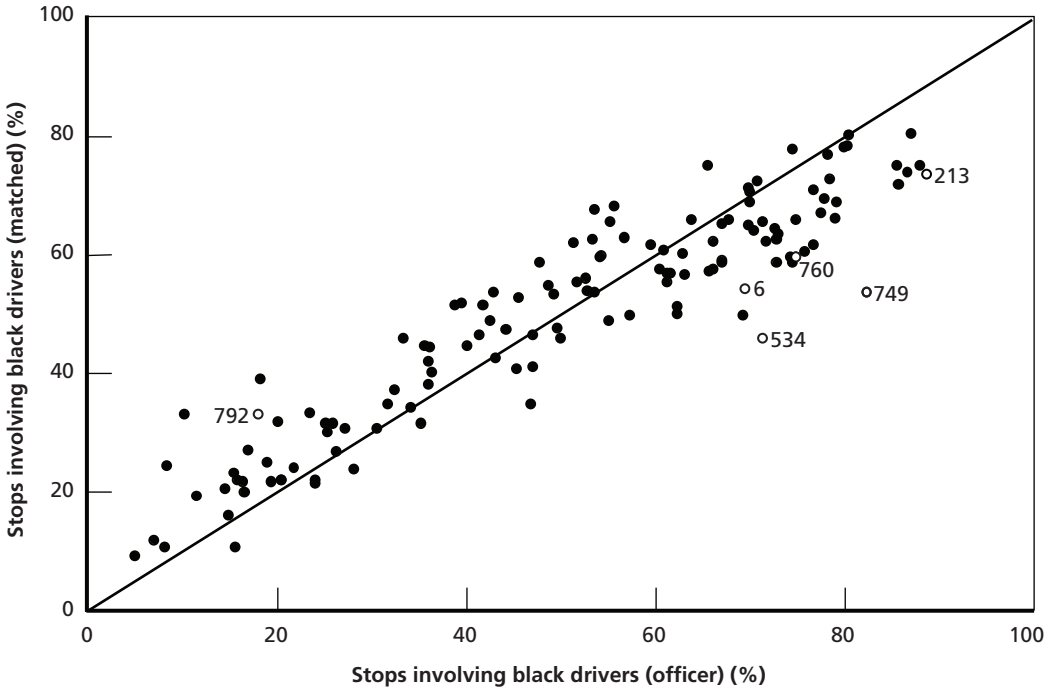
Figure 3.4 graphically represents the results. Each solid dot represents one of the 133 officers with more than 100 stops in 2005. The horizontal axis indicates the percentage of stops that the officer made that involved a black driver. The vertical axis is the same percentage of black drivers among the matched stops. In the absence of differences between officers, all the dots should line up near the diagonal line. Some variability is expected, but our analysis will suggest that some of these points are too far off the diagonal line to be consistent with no racial differences in stop patterns among officers. Six officers have been highlighted in Figure 3.4. These officers will be flagged in the subsequent analysis. Officer 534 is the officer used in the above example.

Figure 3.3
Cumulative Number of Stops by Officer



RAND *TR445-3.3*

Figure 3.4
Internal Benchmark Comparisons for the 133 CPD Officers with More Than 100 Vehicle Stops



RAND *TR445-3.4*

Fridell (2004) notes a popular statistic for measuring the difference between an officer's minority stop fraction and the officer's internal benchmark is the *z*-statistic,

$$z = \frac{p_t - p_c}{\sqrt{\frac{p_t(1-p_t)}{N} + \frac{p_c(1-p_c)}{ESS}}},$$

where p_t and p_c are, respectively, the proportion of stops involving minority drivers for the target and the weighted comparison officers. This statistic is computed for all officers under consideration. The denominator standardizes this term to have variance 1. In usual settings, there is a 5-percent probability that z would exceed 2.0 when there is no difference between the officer's stop rate and the internal benchmark. As a result, some have suggested that any officer with a z exceeding 2.0 should be flagged and subjected to an intervention by the officer's supervisor.

However, in a collection of 133 *independent* comparisons with no racial bias, we should expect about three officers (2.5 percent of 133) to have *z*-statistics exceeding 2.0 by chance. Thus, flagging officers with z exceeding 2.0 is bound to select officers with no race biases. Further complicating matters is that the 133 *z*-statistics are *not* independent. They are correlated with each other, since each officer might be used in another officer's internal benchmark.

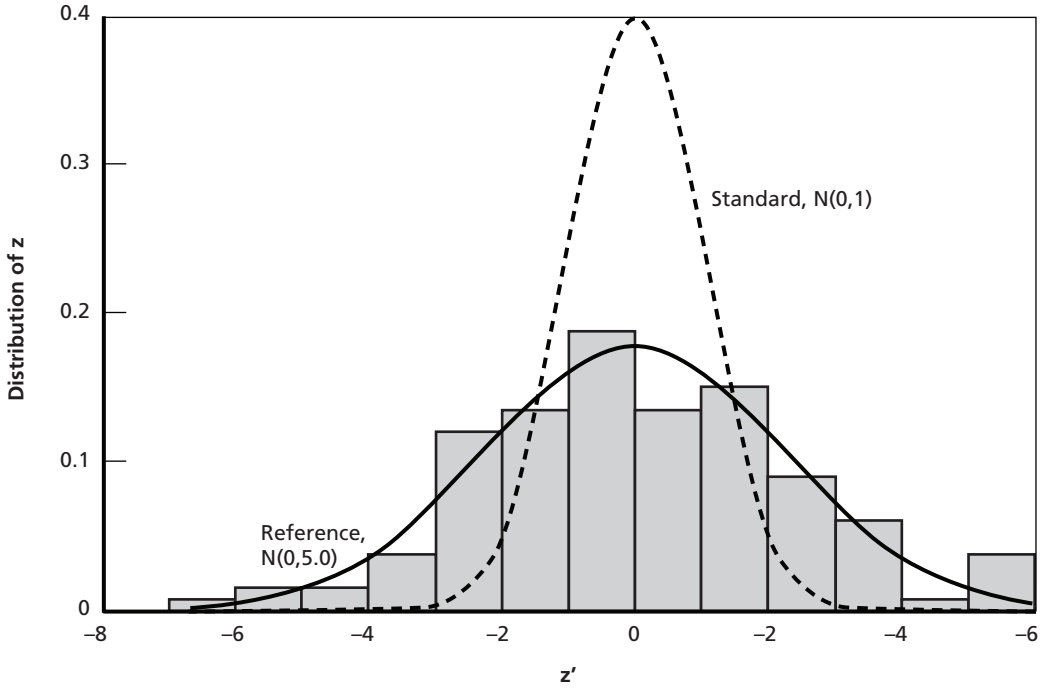
Theory behind false discovery rates offers a more compelling analytical framework than the commonly used 2.0 cutoff. Appendix A contains technical details about the methodology.

Figure 3.5 shows a histogram of the 133 *z*-statistics computed for the CPD data. Overlaid on the histogram is the standard reference to which Fridell (2004) refers (labeled "standard" in the figure). Note that the standard procedure predicts that few officers should have *z*s greater than 2.0 or less than –2.0 if there were no racial bias. However, a more appropriate reference that properly accounts for the dependence among officers is labeled "reference" in Figure 3.5. The bar for $z > 5$ is of particular concern. This bar corresponds to five of the 133 CPD officers, all of whom were also identified in Figure 3.4. For each of the five officers in the extreme right tail, we computed the probability that they are overstopping black drivers relative to similarly situated officers. All of them had probabilities exceeding 50 percent.

The left tail of the histogram represents officers who stop more nonblack drivers than do other similarly situated officers. One officer (officer 792 in Figure 3.4) appears to have a *z*-statistic less than –6 and an estimated probability of overstopping nonblack drivers of 78 percent.

We estimate that five officers differ sufficiently from the internal benchmark to warrant further investigation. At this stage, we do not know whether there is a problem with these officers, as we can only detect a disparity up to the data's resolution. That is, officer 534's assignment may be to a particular section of the neighborhood driven more frequently by black

Figure 3.5
Distribution of 133 *z*-Statistics and Their Reference Distributions



RAND *TR445-3.5*

drivers than nonblack drivers, but the resolution of our analysis limits us to neighborhood-level analyses.

Discussion

The internal benchmark compared each officer's stops to stops made by other officers at the same time and place and for the same reason. Officers patrolling the same areas at the same times will be exposed to the same offender population. If the officers all had the same duties, then we would expect the race distribution of their stops to be similar, if not the same. We compared the race distributions of these stops. We noted five officers who appeared to be stopping a much larger fraction of black drivers when compared with similar stops made by other officers.

All RAND studies fall under an Institutional Review Board that reviews research involving human subjects, as required by federal regulations. RAND's Federalwide Assurance for the Protection of Human Subjects (U.S. Department of Health and Human Services, through 2008) serves as its assurance of compliance with the regulations of 16 federal departments and agencies. According to this assurance, the committee is responsible for review regardless of funding source. These federal regulations prevent RAND's research from singling out specific individuals whom its research could adversely affect. The analysis in this section offers an estimate of the number of CPD patrol officers of concern. RAND will be working with CPD to transfer the analytical capabilities to CPD analysts so that a proper review of these officers can occur.

Assessing Racial Disparities in Post-Stop Outcomes

This section focuses on post-stop outcomes, including the decision to cite and search and stop duration. We used 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. Ridgeway (2006) gives a complete technical description of the method.

Methods

Traffic stops involving black drivers occur at different times and places than those involving nonblack drivers. For example, nearly 8 percent of stops involving black drivers occur in the Over-the-Rhine neighborhood, while 4 percent of stops of nonblack drivers occur there. In addition, the driver's sex and age, the number of passengers, where they live, and whether they have a license all differ by race. In addition, these factors may, independently of race, influence an officer's post-stop decision process. For example, an officer may feel more (or less) compelled to issue a citation to a driver from Kentucky than to a Cincinnati resident. Since 11 percent of nonblack drivers have Kentucky license plates compared with only 3 percent of black drivers, apparent racial disparities in citation rates may be due to differences in place of residence or other factors that are correlated with race.

Whether these possible scenarios in fact occur in the post-stop decision process, to ensure a fair comparison, we must match similarly situated black and nonblack drivers and compare their stop outcomes.

Table 3.8 gives detailed information on stop features by driver race. The Black Drivers column shows the distribution of stop features involving black drivers. The Nonblack Drivers column shows the same distribution for *all* stops involving nonblack drivers. Comparisons between these two columns show large differences. The shaded rows mark a few of the particularly large differences. On the other hand, the Matched Nonblack Drivers column is nearly identical to the Black Drivers column. To arrive at this near match on the distribution of stop features required effectively paring the set of stops of nonblack drivers down from nearly 27,000 down to 6,600. This process downweighted and, at times, removed stops of nonblack drivers that had features that were atypical of stops involving black drivers. The key point of Table 3.8 is that any differences between black drivers and the matched nonblack drivers that we observe in post-stop outcomes *cannot* be due to any of the factors listed in Table 3.8. To isolate the effect of a racial bias, we must adjust for all factors associated with both race and post-stop outcomes, and we have made a concerted effort to include all such observable features in this analysis.

Table 3.8
Comparison of the Features of Stops Involving Black Drivers with the Features of Stops Involving Nonblack Drivers, Matched and Unmatched

Feature		Black Drivers (%) (n = 23,725)	Matched Nonblack Drivers (%) (n = 6,603)	Nonblack Drivers (%) (n = 26,972)
Neighborhood	CBD/Riverfront	2.4	2.4	4.3
	Queensgate	0.9	0.9	2.1
	West End	4.3	4.4	1.6
	Over-the-Rhine	7.8	7.9	4.2
	Mt. Adams	0.2	0.2	0.5
	Pendleton	0.6	0.6	0.4
	East End	0.6	0.6	2.9
	East Walnut Hills	0.7	0.7	0.9
	Evanston	2.7	2.8	1.1
	Hyde Park	0.3	0.3	1.7
	California	0.0	0.0	0.1
	Oakley	0.6	0.6	1.7
	O'Bryonville	0.0	0.0	0.0
	Pleasant Ridge	0.6	0.6	0.3

Table 3.8—Continued

Feature		Black Drivers (%) (n = 23,725)	Matched Nonblack Drivers (%) (n = 6,603)	Nonblack Drivers (%) (n = 26,972)
	Kennedy Heights	0.3	0.3	0.1
	Mt. Lookout	0.1	0.1	1.1
	Columbia/Tusculum	0.5	0.5	2.9
	Linwood	0.1	0.1	2.0
	Madisonville	2.1	2.1	1.2
	Mt. Washington	0.3	0.3	2.6
	Sayler Park	0.0	0.0	0.7
	Riverside	0.1	0.1	1.2
	Sedamsville	0.3	0.3	1.7
	North Fairmount	0.8	0.7	0.1
	English Woods	0.4	0.3	0.1
	East Westwood	1.9	1.9	0.4
	Millvale	1.2	1.2	0.5
	Fay Apartments	0.9	0.9	0.2
	S. Cumminsville	0.5	0.3	0.2
	East Price Hill	3.1	3.3	3.5
	West Price Hill	1.7	1.8	3.7
	Westwood	3.7	3.9	4.0
	Lower Price Hill	0.9	0.9	3.7
	South Fairmount	3.7	3.9	2.4
	Mount Auburn	2.7	2.7	1.5
	Corryville	2.2	2.1	1.4
	Avondale	5.3	5.1	1.0
	North Avondale	1.8	1.7	0.3
	Paddock Hills	0.9	0.9	0.2
	Hartwell	0.5	0.5	0.4
	Carthage	0.6	0.6	0.5
	Roselawn	1.4	1.2	0.2
	Bondhill	3.1	2.8	0.4
	Walnut Hills	4.2	4.1	1.8

Table 3.8—Continued

Feature		Black Drivers (%) (n = 23,725)	Matched Nonblack Drivers (%) (n = 6,603)	Nonblack Drivers (%) (n = 26,972)
	College Hill	3.5	3.5	0.8
	Clifton/Univ Hts	1.7	1.8	1.9
	Fairview	1.6	1.6	2.1
	Northside	5.2	5.5	3.2
	Clifton	2.3	2.4	3.1
	Mt. Airy	3.3	3.4	1.6
	Winton Hills	1.6	1.3	0.4
	Winton Place	2.4	2.3	1.1
	Camp Washington	2.8	2.9	2.3
	Interstate 275	0.0	0.0	0.0
	Interstate 471	0.0	0.0	0.0
	Interstate 71	1.9	2.1	6.8
	Interstate 74	0.6	0.6	2.6
	Interstate 75	4.5	4.7	10.9
	State Route 126	0.0	0.0	0.0
	State Route 562	0.4	0.4	0.6
Weekend		25.8	25.4	22.0
Time	12–3 a.m.	26.4	26.2	18.6
	3–6 a.m.	6.4	6.5	3.6
	6–9 a.m.	4.0	4.5	8.3
	9 a.m.–12 p.m.	6.3	6.0	12.2
	12–3 p.m.	5.6	5.9	11.7
	3–6 p.m.	16.5	17.1	15.9
	6–9 p.m.	16.4	16.3	13.3
	9 p.m.–12 a.m.	18.2	17.3	16.3
	Missing	0.2	0.1	0.2
Month	Jan	6.3	6.1	5.8
	Feb	8.9	8.9	8.7
	Mar	8.8	8.6	9.1
	Apr	7.9	7.7	8.0

Table 3.8—Continued

Feature		Black Drivers (%) (n = 23,725)	Matched Nonblack Drivers (%) (n = 6,603)	Nonblack Drivers (%) (n = 26,972)
	May	7.9	8.2	9.3
	Jun	7.1	6.9	7.6
	Jul	8.2	7.7	7.3
	Aug	7.9	8.3	8.0
	Sep	8.8	8.5	8.7
	Oct	10.4	10.7	10.4
	Nov	10.4	10.3	10.0
	Dec	7.6	8.0	7.1
Reason	Equipment violation	18.5	18.8	8.9
	Moving violation	68.2	69.5	83.7
	None	1.2	1.2	1.1
	Offense	1.6	1.3	0.7
	Other	5.9	5.3	4.2
	Stolen auto	0.6	0.4	0.1
	Suspect in vehicle	3.6	3.3	1.2
	Missing	0.3	0.2	0.2
Number of occupants	1	60.7	61.1	72.6
	2	25.2	25.3	18.3
	3	8.5	8.2	5.5
	4	3.6	3.9	2.4
	5–9	1.4	1.2	0.7
	Missing	0.6	0.4	0.5
Residence	Cincinnati	92.8	92.6	65.0
	Ohio (not Cin.)	3.3	3.5	16.9
	Outside Ohio	3.6	3.7	17.9
	Missing	0.3	0.2	0.2
Registration	OH	91.9	92.0	81.4
	KY	2.7	2.6	11.2
	Other	2.6	2.9	5.9
	Missing	2.9	2.6	1.5

Table 3.8—Continued

Feature		Black Drivers (%) (n = 23,725)	Matched Nonblack Drivers (%) (n = 6,603)	Nonblack Drivers (%) (n = 26,972)
Age	0–17	2.5	2.0	2.6
	18–25	37.5	35.8	34.5
	26–35	28.9	29.3	26.0
	36–45	17.0	18.5	18.1
	46+	14.0	14.3	18.8
	Missing	0.1	0.0	0.0
Sex	Female	29.2	30.3	34.4
	Male	70.7	69.6	65.4
Invalid driver's license		22.7	21.5	7.2

Table 3.9 shows the data used for post-stop analysis. The first row indicates the number of stops in the entire data set. Subsequent rows remove particular stops for the reason indicated. We include only drivers who were stopped for moving violations or equipment violations (no pedestrian stops or field interviews). For the citation analysis, RAND included only drivers who were not arrested (fifth row of Table 3.9). This focuses the comparison on stops that are not affected by an arrest.

Results

In the process of matching stops involving nonblack drivers to stops involving black drivers, the matching process can determine the factors that most distinguish their stops. Table 3.10 lists the relative influence of each of the factors, essentially how much each of the factors contributed to eliminating the differences between the two groups (Friedman, 2001). Most of the difference between the features of stops of black and nonblack drivers involves differences in

Table 3.9
Stops Used in Post-Stop Analyses

Characteristic	Stops Remaining
Stops in data set	54,013
Exclude field interviews and pedestrian stops	51,099
Race not missing	50,697
Could be matched to driver post-stop outcomes	50,582
Only moving violation, equipment violation, no arrest	44,538

NOTE: Each row in the table indicates the total number of stops remaining in the data set after dropping any stops that did not meet the specified criterion.

Table 3.10
Relative Influence of Variables

Variable	Relative Influence (%)
Neighborhood	63.9
Driver residence (Cincinnati/Ohio/not Ohio)	17.2
Time of stop	5.8
Invalid driver's license	4.4
Reason for stop	3.4
Number of vehicle occupants	2.0
Age of driver	1.8
License plate state	1.2
Month stop occurred	0.8
Driver sex	0.4
Weekend	0.1
Total	100.0

stop locations. Driver residence was also an important factor on which the black and nonblack driver stops greatly differed.

Stop Duration. The stop duration analyses adjusted for all of the factors listed in Table 3.10 as well as whether the officer issued a citation and whether a search occurred. The relative influence of citations was between just below "license plate state" and the relative influence of search was just below "month stop occurred." Any differences in stop duration, therefore, cannot be attributed to citations, searches, or any of the factors listed in Table 3.10.

Several race groups composed the nonblack comparison group. The comparison group was predominantly white (91.6 percent) but also includes Latino (2.6 percent), Asian (1.4 percent), and other (4.2 percent) racial groups.

Table 3.11 shows the stop durations for black and nonblack drivers. Our analysis of 2003 and 2004 indicated that black drivers were slightly more likely to have stops lasting more than 10 minutes. Those differences no longer appear to be statistically significant in 2005. Forty-five percent of black drivers' stops lasted less than 10 minutes, while similarly situated nonblack drivers have stops lasting less than 10 minutes 47.4 percent of the time. The rate of long stops—stops lasting more than 30 minutes—is 4 percent for both black and nonblack drivers. One possible explanation for the narrowing of the stop duration gap from previous years could be our inclusion of driver's license status in the year-one report. Invalid driver's licenses are prevalent among stopped black drivers (23 percent) and are likely to extend the stop length.

Note that 60 percent of the unmatched stops of nonblack drivers lasted less than 10 minutes, but much of the difference between 60 and 45 percent is due to differences in stop location, the driver's residency, and other factors. As a result, the places, times, and conditions under which officers stopped black drivers tended to yield longer stops. Nonblack drivers stopped under those same conditions had essentially the same stop durations, indicating

Table 3.11
Stop Durations for Black and Nonblack Drivers

Year	Stop Duration (Minutes)	Black Drivers (%)	Nonblack (Matched) (%)	Nonblack (Unmatched) (%)
2003[a]		n = 16,708	n = 4,881	n = 18,548
	(0,10)	40	43	56
	(10,20)	42	41	36
	(20,30)	10	9	5
	(30,360)	8	7	4
2004[b]		n = 18,721	n = 5,190	n = 20,390
	(0,10)	40	44	59
	(10,20)	43	39	33
	(20,30)	10	10	5
	(30,360)	8	7	3
2005[c]		n = 15,571	n = 4,965	n = 20,431
	(0,10)	45	47	60
	(10,20)	43	42	34
	(20,30)	7	7	4
	(30,360)	4	4	2

[a] This analysis excludes stops with missing stop durations, which comprised about 20 percent of the 2005 stops.

[b] In 2003 and 2004, there was a significant difference in the distribution of stop durations between black and nonblack drivers.

[c] In 2005, there was no significant difference in the distribution of stop durations between black and nonblack drivers.

that individual officers' biases were not likely to cause longer stops. However, as we reported in 2005, the long stops result in Cincinnati's black residents having extended negative interactions with CPD and may contribute to greater police-community friction within the black communities.

Citation Rates. Table 3.12 compares citation rates for black drivers with a matched set of nonblack drivers. Stops resulting in arrest were excluded from this analysis. Citation rates have generally been decreasing over the last three years. In 2003 and 2004, we had found no difference in citation rates between the two groups. In 2005, we find a 3-percent gap between the citation rates for black and nonblack drivers, 68 percent versus 71 percent. Statistically, this is a significant difference. A 3-percent gap may not be negligible. We do not expect all stops to result in citations and expect some number of investigatory stops. However, one interpretation of the 3-percent gap is that police stopped an excess of 600 black drivers (3 percent of 19,375) for such stops. This result did not appear in our analysis of 2003 and 2004 data. One possible explanation is that the effect did in fact exist but was masked by the large number of

Table 3.12
Citation Rates of Black Drivers with a Matched Set of Nonblack Drivers

Year	Black	Nonblack (Matched)	Nonblack (Unmatched)	p-value
2003	n = 12,064	n = 4,438	n = 16,318	0.98
	74.6%	74.6%	82.7%	
2004	n = 12,507	n = 4,386	n = 16,920	0.14
	69.2%	70.4%	79.9%	
2005	n = 19,375	n = 6,141	n = 25,163	< 0.001
	67.7%	70.8%	78.1%	

NOTE: The shaded cells indicate the most relevant comparisons.

unreported stops in those years. For this to have occurred, the unreported stops would have to have involved a disproportionate number of uncited black drivers.

Search. The decision to search involves many factors and different levels of officer discretion. If a search occurred, the contact card included the legal basis for the search. We coded the following legal bases as high discretion: consent, reasonable suspicion of weapons, dog alert, odor (alcohol or drugs), and other probable cause. We coded the following legal bases as low discretion: plain view, inventory, and incident to arrest.

Table 3.13 shows a comparison of the adjusted search rates broken down by level of discretion. The shaded cells indicate the most relevant comparison. For high-discretion searches, the searches most at risk for a race bias, black and matched nonblack drivers have nearly the same search rates. In all years, officers were slightly more likely to search black drivers. Although the difference is statistically significant, this finding is attributable to the enormous sample size. The practical significance of this difference appears to be small.

Table 3.14 breaks down the searches in more detail. The high-discretion search rate difference for 2005 noted in Table 3.13 appears to be due to a sizable difference in searches based on a reasonable suspicion of weapons, shaded in Table 3.14. In prior years, the rates of such searches did not differ much by race. In 2005, however, black drivers were 2.8 times more likely than nonblack drivers to have a reasonable suspicion of weapons search. The rate is also twice that observed for black drivers in 2003. The rate of searches based on odors also greatly differed between black and nonblack drivers, as it did in 2004.

Black drivers were more likely to be involved in a low-discretion search, but this difference is attributable to a large difference in searches that were incident to arrest, as shown in Table 3.14. Our data are insufficient to determine whether there may have been a race bias in the arrest decision, but, once an officer made an arrest, CPD policy requires a search of the arrested motorist. Therefore, since more stopped black motorists were arrested than were stopped nonblack motorists, we expected this difference. Interestingly, the rate of searches incident to arrest is much lower than the rates that we had observed in previous years.

Table 3.13
Searches of Black Drivers and a Matched Set of Nonblack Drivers

Year	Discretion	Black	Nonblack (Matched) (%)	Nonblack (Unmatched) (%)	p-value
2003		n = 16,708	n = 4,992	n = 18,548	
	High	5.9	5.4	2.8	0.00
	Low	8.1	5.5	2.7	0.00
	All	14.0	10.9	5.5	0.00
2004		n = 18,721	n = 5,342	n = 20,390	
	High	6.7	6.2	3.2	0.00
	Low	10.7	7.0	3.9	0.00
	All	17.4	13.2	7.1	0.00
2005		n = 19,375	n = 6,141	n = 25,163	
	High	6.1	5.2	2.8	0.00
	Low	4.4	3.5	1.6	0.00
	All[a]	11.4	9.4	4.7	0.00

NOTE: The shaded cells indicate the most relevant comparison, comparing black drivers to matched nonblack drivers on high-discretion searches.

[a] All is slightly greater than the sum of high and low because the reason for the search is missing in some cases.

Again, we stress that comparisons with unmatched nonblack drivers exaggerate the search rate disparity, conflating potential officer bias with circumstances surrounding the stop. When properly matched, black and nonblack drivers stopped under the same conditions had more similar search rates, though some differences may be cause for concern about potentially biased behavior.

In addition, as noted in our year-one report, police search practices put the greatest burden of search on stop conditions that were more common to black drivers. As a result, Cincinnati's black residents were more likely to be stopped under conditions (i.e., neighborhood or time) that elevated the chance of a search. Some characteristics, such as having a valid driver's license, are clearly in the driver's hands. Officers searched 10 percent of the drivers stopped without a license, regardless of race. However, stopped black drivers were three times more likely than nonblack drivers to have an invalid driver's license, greatly increasing the prevalence of searches among black drivers.

Table 3.14
Detailed Comparison of Searches of Stopped Black Drivers with a Matched Set of Nonblack Drivers

Year	Legal Basis (sorted roughly from high- to low-discretion)	Black	Nonblack (Matched) (%)	Nonblack (Unmatched) (%)	p-value
2003		n = 16,708	n = 4,992	n = 18,548	
	Consent	4.3	3.9	2.1	0.35
	Reasonable suspicion of weapons	0.4	0.3	0.1	0.54
	Dog alert	0.0	0.0	0.0	0.76
	Odor (alcohol or drugs)	0.9	0.8	0.5	0.00
	Other probable cause	0.4	0.4	0.2	0.94
	Plain view	0.4	0.3	0.2	0.17
	Inventory	0.7	0.5	0.2	0.11
	Incident to arrest	7.0	4.8	2.4	0.00
2004		n = 18,721	n = 5,342	n = 20,390	
	Consent	4.5	4.5	2.3	0.83
	Reasonable suspicion of weapons	0.5	0.4	0.2	0.25
	Dog alert	0.2	0.0	0.0	0.12
	Odor (alcohol or drugs)	1.1	0.6	0.4	0.00
	Other probable cause	0.6	0.6	0.3	0.91
	Plain view	0.7	0.7	0.6	0.97
	Inventory	0.6	0.3	0.1	0.00
	Incident to arrest	9.4	6.0	3.3	0.00
2005		n = 19,375	n = 6,141	n = 25,163	
	Consent	3.8	3.9	2.0	0.70
	Reasonable suspicion of weapons	0.8	0.3	0.1	0.00
	Dog alert	0.0	0.0	0.0	0.01
	Odor (alcohol or drugs)	0.9	0.3	0.2	0.00
	Other probable cause	0.7	0.8	0.4	0.81
	Plain view	0.5	0.5	0.3	0.52
	Inventory	0.6	0.5	0.1	0.36
	Incident to arrest	2.9	2.3	0.9	0.00

Hit Rates

A search's success partially depends on whether contraband is found (Ayres, 2002). If police searched more drivers, their hit rates (the rate at which they recovered contraband) would likely

decrease, because they would be searching drivers who are less suspicious. If the hit rate were lower for one racial group, this would provide evidence that officers searched that racial group more often than other racial groups. Table 3.15 shows the type of contraband found during searches across races. Most of the contraband was drugs and alcohol. The number of reported searches has increased substantially, 1.6 times more than reported in 2004 and 2.2 times more than reported in 2003.

Table 3.16 separates hit rates by discretion level. For high-discretion searches, the hit rates for black drivers are higher than for nonblack drivers. For lower-discretion searches, the hit rates are similar for black and nonblack drivers with the exception of 2005, when the hit rate was higher for black drivers. These rates imply that officers appear to be rather efficient at selecting individuals to search. Even though they recorded many more searches in 2005, the

Table 3.15
Contraband Found During Searches, by Race

Year	Contraband	Black	White	Hispanic	Asian	Other	Total
2003	Currency	3	1	0	0	0	4
	Drugs, alcohol, or paraphernalia	465	172	9	0	4	650
	Stolen property	4	0	0	0	0	4
	Weapon	21	8	0	0	0	29
	Other	3	2	0	0	0	5
	None	1,846	738	57	7	14	2,662
	Total	2,342	921	66	7	18	3,354
2004	Currency	4	1	0	0	0	5
	Drugs, alcohol, or paraphernalia	694	300	9	1	9	1,013
	Stolen property	10	2	0	0	0	12
	Weapon	27	7	0	0	0	34
	Other	10	9	0	0	1	20
	None	2,489	1,017	46	6	39	3,597
	Total	3,234	1,336	55	7	49	4,681
2005	Currency	3	2	0	0	0	5
	Drugs, alcohol, or paraphernalia	1,000	415	7	1	5	1,428
	Stolen property	12	12	0	0	0	24
	Weapon	59	9	0	0	1	69
	Other	16	11	0	0	0	27
	None	3,804	1,789	79	7	40	5,719
	Total	4,894	2,238	86	8	46	7,272

Table 3.16
Hit Rates, by Year and Race

		Black		Nonblack		
Year	Discretion	Searches	Hit Rate (%)	Searches	Hit Rate (%)	p-value
2003	High	982	28.0	517	22.4	0.02
	Low	1,360	16.3	495	16.2	0.96
2004	High	1,250	28.8	649	26.7	0.35
	Low	1,984	19.4	798	20.8	0.43
2005	High	1,743	29.0	1,011	26.5	0.18
	Low	2,763	19.6	1,203	15.5	0.00

NOTE: The number of searches may not equal the total in Table 3.15 due to officers not recording the legal basis for 7.6 percent of the searches.

hit rate for high discretion searches is nearly 30 percent. Furthermore, the officers are slightly more likely (though the difference is not statistically significant) to find contraband on black drivers, indicating that there does not seem to be a racial bias in their selection of which drivers to search.

Even though we found no race bias, officers conducted 1,238 high-discretion searches of black drivers in 2005 that recovered no contraband. Such stops, which are likely to be viewed as being made for no good reason, disproportionately affect the black community and likely contribute to blacks' perceptions of unfair policing that were identified in last year's report. While recovery of contraband such as 69 weapons and 1,428 drug recoveries can have a social benefit for the Cincinnati community, there is a societal cost for searches that result in no recovery of contraband.

CHAPTER FOUR

Analysis of Videotaped Police-Motorist Interactions

Overview

To better understand interactions between CPD and community members, we analyzed 325 randomly sampled video records of traffic stops from 2005. An interracial group of independent, trained coders viewed these recordings and described the interactions using a wide range of measures. These included measures of the stop's objective characteristics (e.g., duration, infraction type, time) as well as measures of the communication between the driver and the police officer.

This analysis differs in important ways from the analysis of CPD stop data in Chapter Three. Most notably, we cannot match groups on all situational characteristics (e.g., neighborhood) due to the smaller sample size. Because of this, the current analysis is not designed to determine whether racial inequalities are uniquely attributable to racial profiling. Instead, the analysis is designed to look for differences that community members are likely to perceive as evidence of racially biased policing, regardless of their cause. This approach highlights the factors that are barriers to improved police community relations, rather than searching for definitive evidence of civil rights violations.

This analysis revealed three key differences as a function of the officers' and drivers' races: (a) black drivers were more likely to experience proactive policing during the stop, resulting in longer stops that were significantly more likely to involve searches; (b) several of these differences between the stops of white and black drivers were larger when the officer was white; and (c) white drivers' communication quality was more positive than that of black drivers—specifically, it was more apologetic, cooperative, and courteous.

We believe that reducing these differences is important for improving the relationship between CPD and the community it serves. These improvements will likely require a closer alignment between police practices and community priorities, the implementation of policies to ensure that white and black officers police black neighborhoods similarly, and efforts by individual officers and citizens to minimize the inconvenience and irritation caused by traffic stops.

Background

Information from vehicle-mounted video and audio recordings can shed light on the origins of police-community conflict and dissatisfaction. Traffic stops constitute one of the most common interactions between police and community members. Prior to last year's report, there had been very little objective information about what typically occurs in traffic stops and how this may depend on the officer's or driver's race. In the absence of any valid data, beliefs about possible racial difference in these interactions are inevitably based on anecdotes, prejudices, or fears. By having trained, independent observers carefully analyze a random sample of traffic stops, this report provides the needed empirical evidence to assess possible problems in these interactions. This information may also point to specific policies and procedures that can improve police-community relations.

Data available in the video can address a much more diverse array of interaction characteristics than is available from the contact cards, including details of the communication and behavior of both the officers and the citizens involved. It also allows for third-party verification of the data that the officer provides on the contact card (e.g., stop duration and vehicle search), which may be more convincing to those community members with low trust in the police.

Recent research in communications, linguistics, and psychology has focused on the processes governing interactions between individuals. One conclusion of this research is that individual behavior can be understood only as part of a reciprocal, dynamic process between the participants. Personal expectations about an interaction are transmitted through verbal and nonverbal cues that each participant is constantly interpreting. These interpretations determine behavior, and these behaviors then affect the other party's responses (Darley and Fazio, 1980; Giles and Smith, 1979). Interactions that result in conflict can often be traced to verbal and nonverbal cues that a participant interprets (or misinterprets) as distrust, disrespect, or anger (e.g., Mehrabian, 1968; Schlenker and Leary, 1982). Neither individual may be solely to blame for a conflict; instead, each person sees his or her own behavior as a reasonable and justified reaction to the situation. Nevertheless, changes in interpersonal interaction could have prevented the conflict.

Unfortunately, intergroup and interracial interactions, even among persons harboring no prejudice against the other group, often exhibit the sort of verbal and nonverbal cues that have led to conflict or hostile interactions (e.g., Devine and Vasquez, 1998; Hecht, Jackson, and Ribeau, 2003; Word, Zanna, and Cooper, 1974). In the absence of prejudice, interracial interactions may still go poorly because of low expectations of a pleasant interaction, misattribution of behavior to prejudice, or different cultural expectations for communication. For example, a driver may appear irritated or defensive during a traffic stop because of a personal history of negative interactions in similar situations, and not because of any disrespect for a particular officer. Similarly, a nonprejudiced white officer may actually behave differently in interactions with blacks because of concern about being perceived as prejudiced, even though such behavioral changes may be seen as defensive, aggressive, or disrespectful (Devine, Evett, and Vasquez-Suson, 1996).

Our analysis of the audio and video records of traffic stops is designed to shed light on how these interactions between police and community members unfold. Our study pinpoints

how these interactions differ as a function of the officer's and driver's races. We have also identified aspects of the traffic stops that are associated with counterproductive or dissatisfying interactions. Finally, this report provides guidance on training and policies that may improve these interactions.

Methods

Sample of Interactions

The current study was designed to investigate the extent to which interactions occur differently as a function of officers' and drivers' races. We conducted these analyses on a stratified random sample of video records $(n = 325)$ received from CPD.

The contact card data filled out by police officers defined the sampling frame for this sample. Contact cards were used to define the universe of stops because other data sources (e.g., call logs) are not linked to race data, so driver race would typically be unknown. CPD policy mandates contact card completion, and our attempts to validate the completion rates indicate a substantial degree of compliance (see Chapter Three) that represents an improvement from year one. However, any systematic biases in contact card completion could still influence the generalizability of the findings. Our sampling frame included all incidents that (a) had contact card data associated with the incident, (b) involved a motor vehicle stop, (c) had a driver's race that the officer assessed as either "white" or "black," (d) had an officer's race that was reported as either "white" or "black" in CPD records, and (e) occurred between January 1, 2005, and December 31, 2005. Incidents were included in the sampling frame without regard to the mobile video recording (MVR) data field on the contact card, which was designed to indicate whether a video recording was made. Thus, the authors requested to see recordings even when the officer did not explicitly state that a recording existed.

We created four sampling strata based on the officer and driver races: black officer/black driver, black officer/white driver, white officer/black driver, white officer/white driver. We randomly sampled incidents within each of these four strata using a computer-generated random number, i.e., all incidents within a racial group had an equal probability of being requested. To best achieve the goals of this task, we requested an equal number of incidents from each of the four strata. This provides the maximum analytic power (the ability to detect a difference that actually exists in the population) for describing racial differences in the interactions. By requesting an equal number of interactions from each stratum, RAND oversampled incidents involving black officers and drivers. Thus, the aggregate sample is not a representative sample of all incidents involving CPD, though it is a representative sample of incidents within each of the four race-defined strata. The authors believe that the stratified random sampling method employed resulted in the strongest possible sample for the study's intended goals, avoiding common problems associated with convenience samples or correlated observations that plague many studies of interpersonal communication.

For each month of 2005, CPD sent RAND a data file including the relevant contact card data. RAND researchers sampled incidents from these monthly data and requested that CPD send any video records associated with those incidents. To account for the possibility of miss-

ing data (incidents not recorded, records not found, or damaged records), the authors requested more incidents than needed for the analysis. In order to achieve the desired sample of 300 analyzable incidents, RAND included 960 incidents in the requests: 20 incidents in each of four racially defined strata in each month. The incidents in each request were sequenced based on a random number, and RAND requested that CPD send the first eight records that were available within each stratum for each month. This yields a total request for 384 recordings to be sent, while allowing that up to 60 percent of incidents in a given stratum or month may have been unavailable. Because CPD chose to send all available recordings on the request list, 564 recordings were actually sent, rather than just the requested eight of each type in each month. To preserve the desired random sample, we analyzed only the first eight available recordings of each type in each month. Of the incidents requested, 40 percent were not sent to us (see Table 4.1) and thus *not available* for analysis. This is a substantial improvement from the 55-percent rate of *not available* incidents in 2004. There was also evidence of continued improvement within 2005; the missing rate for January through June was 47 percent, but was 33 percent for July through December. This indicates an improvement from 55 percent in the last four months of 2004 to 33 percent in the last four months of 2005.

Incidents were labeled *not available* when no video recording ever existed. For example, all requested motor vehicle stops conducted by motorcycle or foot patrol officer would be considered *not available* for analysis. Similarly, any stops conducted by patrol cars without video equipment installed or with malfunctioning equipment are *not available*. We do not know what proportion of the 40 percent missing in 2005 can be attributed to these causes, but CPD is forwarding this information for 2006 recordings to be analyzed in the year-three report.

CPD labeled each recording with an incident number. When a recording contained more than one incident, RAND staff located the requested incident on the tape or digital recording by matching the time stamp on the recording with the time reported on the contact card. When none of the incidents occurred within one hour of the time listed on the contact card or

Table 4.1
Data Quality of the Video Records

Aspect of Data Quality	Records Affected (%)
Of incidents requested, percentage of records not available	40
Of recordings sent, percentage of time incident not found[a]	10
Overall percentage of requested incidents missing	45
Of the usable records (n = 325):	
Percentage with "poor" video quality	4
Percentage in which incident is not completely recorded	6
Percentage in which the officer's voice is not audible	22
Percentage in which the driver's voice is not audible	34

[a] An incident was considered not found when the record labeled with the incident number did not contain an incident with an electronic time stamp within 60 minutes of the time marked on the contact card.

when other information from the contact card was clearly incorrect, RAND determined that a match was *not found* and coded that incident as missing. Ten percent of the available recordings did not have a satisfactory match to the contact card data and were considered *not found* (see Table 4.1). This rate is essentially the same as the 11 percent found in 2004. This yields a total missing rate of 45 percent, which is a substantial improvement over the 60-percent missing rate in 2004.

Because we had more recordings this year than were needed to achieve a 300-incident sample size, we did not attempt to code recordings with extensive technical problems. Consistent with our goal of coding at least 300 incidents, we coded 325 nonmissing incident recordings.

Several more minor types of missing information affect only some of our measured variables. Similar to last year, in approximately one-third of the recordings, either the video or the audio was of poor quality (e.g., camera was not aimed so that driver and officer were in the field of view, the audio quality prevented coders from understanding the driver). For these cases, variables that could not be measured were treated as missing. Although the overall number of recordings with missing data is similar to 2004, there was some improvement in specific types of missingness. In particular, the number of cases in which the video record was not complete (omitting either the beginning or end of an incident) dropped from 15 percent to 6 percent. There was also better use of the cameras themselves, with the number of incidents with a poorly aimed camera dropping from 9 percent to 4 percent. The largest source of missing data, the inability to hear at least 10 percent of the drivers' comments, remains approximately the same as last year's at 33 percent.

As with the 2004 data, the rates of missing records (missingness) for both the incidents *not available* and those *not found* were approximately equal across the racially defined strata. Because the missingness is not associated with the primary predictor variables in the analyses, it is less likely to constitute a threat to the study's validity. Nevertheless, missing data may be of the "nonignorable" type (Little and Rubin, 1987) if the causes of the missing data are different for the different racial groups. Therefore, the fact that rates of missingness are equal across the different groups does not totally ensure that RAND's results are immune to problems caused by these missing data. It is still desirable to further reduce missingness in the study's subsequent years to further reduce this threat to validity.

The total usable sample size of 325 is very near RAND's target of 300 coded incidents. We chose this sample size because it provides a good balance between costs and statistical power to detect differences. It allows RAND an 83-percent chance of detecting a difference in means across two groups (using standard statistical assumptions) when the true difference is half of one standard deviation, a medium effect size (Cohen, 1988). Many of the effects found in the first-year report were smaller than half of a standard deviation. For instance, when the difference between groups is one-quarter of a standard deviation, we have less than 40-percent power. In other words, when the differences in the population are relatively small, we will detect them less than half of the time that we conduct a study. For this reason, the reader should expect that many of the small or medium-sized effects we found as significant in 2004 data will not be detected as significant in the 2005 data, entirely due to chance inherent in random sampling. The fact that an effect is not significant within every year's data should not

be interpreted as a change in police or driver behavior across years, but an inherent limitation of working with a random sample of 300 incidents. Analyses of the communication variables have somewhat less power, due to the incomplete data caused by inaudible audio.

Coding Procedures

Codebook. The key to this analysis is the conversion of raw video and audio records into meaningful measurements, a process called *coding*. The finalized set of measures and coding instructions, called a *codebook*, were developed after a review of the study's goals, an intensive review of the scientific literature, and an empirical examination of the content that could be discerned from the recordings. The recordings' actual content and quality presented real limitations on what measures can be reliably extracted from these interactions. Specifically, the single camera position (almost always 30–50 feet behind the driver), low video resolution, single "lapel" style microphone on the officer, and high ambient noise limited the measurements that could be taken from analyzing the recordings.

The starting point for the year-two codebook was the codebook developed during year one of the project. The development process for the year-one codebook can be found in the year-one report, along with a comprehensive list of constructs included. Several revisions to the year-one codebook were made to improve its measurement characteristics and to better investigate some of the effects we found in the year-one report. In particular, we added more items that document the level of scrutiny that passengers received, because this was hypothesized as a possible explanation for the longer stops of black drivers. We added several additional objective measures of communication between drivers and officers, such as documenting when the officer claimed to be giving the driver a break or driver or officer use of polite terms such as "thank you." We also added communication variables that were designed to assess whether the officer or the driver was trying to escalate or deescalate tensions in the interactions. The entire year-two codebook, along with detailed descriptions and instructions, is contained in Appendix B.

Coder Training. Four graduate students at the University of Illinois at Urbana-Champaign worked as coders during the codebook development. Individuals were recruited in the Speech Communication Department and screened to obtain those with strong academic records. The coders are from the Midwest region (two from Ohio) and have different racial backgrounds. To serve as a coder, students had to master all aspects of the codebook, which defines all of the variables and measures in detail at both the conceptual and operational levels. Initial training was accomplished with approximately 30 hours of instruction in a small seminar class setting on coding interpersonal interactions, followed by extensive practice with the incident recordings. During the training, all coders would independently code several recordings. The coders' responses were then compared to ensure a high level of agreement. When disagreements among coders existed, they discussed the differences as a group. For items that caused regular disagreement, we added instructions or examples to the codebook to clarify the coding procedure. Training continued until the average interrater reliability across all of the items was 0.85.

Coding Procedures. Once training was complete, we randomly assigned each of the 325 incidents to a coder. We did not give coders information about officer or driver race from the

contact cards; however, racial information was often available from the recording itself at some point during the incident. Coders viewed each recording alone and could watch the entire incident, or any segment of it, as many times as necessary to make the required coding judgments. Data for most incidents were obtained from a single coder. For this reason, it was essential to demonstrate that the coding process maintained a strong and consistent level of performance over time to ensure reliability of the data. To assess this, we asked all coders to code a common set of eight incidents at five points in the coding process, for a total of 40 incidents. By looking at the agreement among coders on these incidents, RAND monitored the ongoing reliability of the coding procedure. The overall results of these analyses indicated a high level of inter-rater reliability on virtually all variables, with no evidence of coder fatigue over the course of the study.

Analysis

The basic analyses are designed to describe how a range of possible outcomes measured from the recordings were related to (a) the officer's race, (b) the driver's race, and (c) the similarity between the officer's and driver's races. For most of the objective characteristics of the stop (e.g., duration, number of vehicle occupants, infraction type, citation issued), RAND assessed these three types of racial differences for each stop characteristic. As described in our year-one report, communication measures were designed to be grouped into scales, rather than to be analyzed individually. This helps to limit the number of separate statistical hypotheses that were tested—and thus limit exposure to false positive statistical errors. Four scales were created: Officer Communication Quality, Driver Communication Quality, Officer Emotional Reaction, and Driver Emotional Reaction.

We used a range of statistical methods to assess the associations between the racial groups and the outcomes that were coded from the recordings. For dichotomous or polytomous outcomes, RAND used the χ^2 test of independence and logistic regression to assess for differences as a function of the officer's race, the driver's race, and the similarity between the officer's and driver's races. For continuous outcomes, we used analysis of variance (ANOVA) and analysis of covariance (ANCOVA) to assess for differences as a function of the officer's race, the driver's race, and the similarity between the officer's and driver's races. These are common statistical techniques used to ensure that we can make appropriate generalizations to a broader population given the limited sample of incidents and the reliability of the authors' measures.

In general, each type of race effect reported (mean differences across groups defined by officer race, driver race, or racial similarity) is controlling for the other two effects. For example, if RAND reports a difference in the probability of being searched across black and white drivers, that difference controls for any additional effects of officer race or racial similarity. The proper interpretation of that effect is that white and black drivers differed in the probability of being searched *regardless* of officer race or racial similarity between the driver and officer.

We implemented additional statistical controls when analyzing the officer's or driver's communication quality. These communication variables are inherently reciprocal across the individual within an interaction (e.g., Giles and Smith, 1979); an individual's communication quality typically rises or sinks to the communication level of his or her interlocutor. Because of this interdependence, we controlled for the driver's communication quality when assessing

predictors of the officer's communication. Similarly, we controlled for officer communication quality when assessing predictors of driver communication. For example, when looking at the average communication level for black versus white drivers, RAND adjusted the results to account for the possibility that police officers could, on average, communicate differently with black versus white drivers. This ensured that black drivers were being compared to white drivers whom officers treated similarly. In several instances, we performed additional analyses that employed more-complex multivariate models to better understand the nature of the observed effects.

Because of the large number of measures being examined, we only present findings when statistically significant $(p < 0.05)$ differences were found. For example, if the authors discuss a difference between black and white drivers in the proportion of stops involving searches but do not present data on the proportion of searches as a function of officer race, the reader should assume that no reliable differences as a function of officer race were found. In interpreting "nonresults," it is important to keep in mind that not finding a significant difference does not mean that no difference exists. Differences may exist in the full population of traffic stops without being found in the random sample of 325 records analyzed.

Results

Data Quality

Coders assessed several aspects of the audio or video recording's quality. In the majority of sampled incidents, the interaction between officer and driver was clearly visible and their speech was audible and intelligible. However, some recording quality problems resulted in missing data on specific measures (see Table 5.1). The video quality was rated as "poor" in 4 percent of cases, often involving a camera or lights directed such that the interaction between the officer and driver was not visible. This is approximately half the rate of that in 2004. Approximately 6 percent of recordings ended before the incident was completed or began in the middle. This is approximately half the rate of partial-recordings of what occurred in 2004.

As with 2004 data, the most important recording quality problem was the intelligibility of the audio. In slightly more than one-third of the recordings, the audio did not allow measuring either the officer's or the driver's speech or both. For these cases, most of the communication and emotional reaction variables were coded as missing and these incidents are not included in the analyses of these outcomes. The sample size for these analyses is reduced to 198, which results in slightly less analytic power for communication outcome analyses than for the stop characteristic outcomes. Because most of the communication effects found in the year-one data were medium or small in size, the current amount of power makes it likely that we will fail to find some of the significant communication effects observed in the year-one data.

Differences in Incidents as a Function of the Driver's Race

Several differences in the circumstances of the motor vehicle stop emerged as a function of the driver's race (see Table 4.2). Black drivers were, on average, carrying more passengers and were driving older vehicles than were white drivers. A lower proportion of the stops of black drivers

occurred due to moving violations; the likelihood of being stopped for a technical violation (equipment violation or expired registration) was almost twice as high for black drivers as for their white counterparts. The analysis cannot indicate the reasons for these different types of stops for black and white drivers. These differences could, for example, occur because white drivers had different rates of certain types of infractions, because whites were more likely to be driving in areas in which the police had different enforcement practices or because the driver's race was influencing the officer's behavior.

There were also several differences in the characteristics of the stop itself for white relative to black drivers. These differences indicate that black motorists experience more proactive or intensive policing than their white counterparts. The stops of black drivers took an average of 2.3 minutes longer than stops of white drivers (18 percent longer), and they were more likely to involve multiple police officers. Black drivers and their vehicles were also more likely to be investigated for illegal items. Relative to white drivers, blacks were approximately three

Table 4.2
Differences in Stop Characteristics as a Function of Driver Race

Stop Characteristics	Black Drivers % or Mean	White Drivers % or Mean	N[a]	Statistical Significance
Mean number of passengers	0.53	0.22	316	<0.001
Vehicle more than 6 years old	44%	29%	325	<0.001
Stop was for a moving violation	81%	90%	246	<0.05
Mean duration of stop (minutes)	14.6	12.3	316	<0.01
Mean number of officers at scene	1.6	1.3	325	<0.001
Drugs mentioned in the stop	7%	2%	257	<0.05
Driver asked about drugs or weapons	22%	7%	239	<0.01
Any occupant was searched	12%	4%	322	<0.01
Vehicle was searched	10%	3%	324	<0.05
Passengers required to give ID	14%	5%	313	<0.01
Driver told they are getting a "break"	38%	24%	251	<0.05
Officer uses "please" or "thank you"[b]	26%	45%	246	<0.05
Officer leaves with a pleasant word[b]	41%	54%	237	<0.05
Mean driver's communication quality[c]	7.0	7.3		<0.05

NOTE: All effects of driver race control for officer race and interaction between races.

[a] N gives the number of nonmissing observations on each variable.

[b] Significance tests for racial differences are conducted while controlling for driver age and sex and officer age, sex, and communication quality.

[c] Higher values indicate a better communication style. Mean levels are adjusted for several additional factors, including driver age and sex and officer age, sex, and communication quality.

times as likely to (a) be asked whether they were carrying drugs or weapons, (b) be searched, (c) have a passenger searched, (d) have the vehicle physically searched, and (e) have their passengers required to provide identification. Racial differences in stop circumstances as well as in stop characteristics were very similar to year-one results, with no significant changes across this interval.

The observed differences in stop characteristics may not be directly caused by driver race. Although these results show an association with driver race, the reason for the differences could be any factor that is correlated with driver race. For example, black drivers may be more likely to be stopped in high-crime neighborhoods than their white counterparts. This could lead to higher rates of searches of black motorists, even if the officer did not consider the driver's race in the decision to search.

In addition to the effects on stop characteristics, the driver's communication behavior differed significantly as a function of race. Replicating findings from year one, black drivers had less positive communication quality, on average, than did their white counterparts. This difference persisted after controlling for the officers' communication quality, the stop characteristics, individual characteristics, and data quality variables. We added some objective communication variables to the year-two codebook that revealed differences as a function of driver race. Officers are more likely to tell black drivers that they are "getting a break" on the citation (citation rates do not differ across racial groups). However, officers are less likely to use polite terms (e.g., "please," "thank you") and less likely to end the interaction with a pleasant word (e.g., "have a nice day," "take care") in interactions with black drivers. These word-use differences persist even after controlling for a range of interaction characteristics, including driver communication quality and politeness.

To better describe the communication quality effect in terms of specific communication behavior, the researchers looked at the individual items that are combined to create the driver communication quality scale. This analysis showed that, relative to white drivers, black drivers were less pleasant, less apologetic, less courteous, and more argumentative (see Table 4.3). While the size of each of these effects is only medium or small by typical behavioral science standards (Cohen, 1988), there is a consistent pattern across the items.

Table 4.3
Specific Aspects of the Driver's Communication That Vary as a Function of Driver's Race

Item #	Driver Characteristic	Quality	Black Average	White Average	Standard Deviation	Effect Size[a]
88	Pleasantness	Positive	5.0	5.8	1.62	0.46
96	Apologetic	Positive	1.4	2.4	2.39	0.42
94	Courteous	Positive	5.2	5.8	1.70	0.34
101	Argumentative	Negative	2.7	2.2	2.42	–0.24

NOTE: The listed items made the largest contributions to the observed racial difference in driver communication quality. For full definitions of specific items, see the codebook definitions included in Appendix B.

[a] Effect size is measured by Cohen's D, with 0.50 typically considered a medium-sized difference and 0.20 typically considered a small one.

Differences in Incidents as a Function of Officer Race

Similar to year-one results, comparisons between stops involving black and white officers revealed very few differences. The only outcome that showed differences between black and white officers was the tendency to include their name when talking to the driver. Black officers revealed their name 27 percent of the time, while white officers mentioned theirs in only 6 percent of incidents.

Differences as a Function of the Racial Similarity Between Officers and Drivers

Although we did not find critical differences in average stop characteristics as a direct function of officer race, there appear to be important differences in officer behavior as a function of the similarity between officer and driver races. In the year-one results, this was demonstrated primarily on measures of communication quality; however, in the 2005 data, there are important differences in officers' stop behavior.

Specifically, the stop was more likely to be for a technical violation (expired registration or equipment violations) when the officer and the driver were of different races (see Table 4.4). In addition, the mixed-race stops took longer, which may be due to the fact that passengers were more likely to be required to produce identification when the officer and the driver were of different races. Finally, officers in mixed-race interactions were more likely to tell the driver that they were getting a "break"—that the officer could have given additional or more serious citations if he or she wished.

The differences in stop characteristics that occur due to an interaction between officer and driver races are particularly difficult to interpret in light of the fact that they occur on the same variables on which black drivers differ from white drivers. These two effects can only be interpreted together. Stating that stops are longer for black drivers may not be entirely accurate, because it also depends on whether the officer was white or black. To better understand these race interactions, we break down these effects in Table 4.5.

Table 4.4
Differences in Stop Characteristics as a Function of the Similarity Between Officer and Driver Races

Stop Characteristics	Same Race (% or Mean)	Different Races (% or Mean)	N[a]	Statistical Significance
Stop was for a technical violation	2%	16%	246	<0.001
Passengers required to give ID[b]	23%	51%	79	<0.01
Driver told they are getting a "break"	23%	38%	251	<0.05
Mean duration of stop (minutes)	12.5	14.4	316	<0.05

NOTE: All effects reported control for driver and officer races.

[a] N gives the number of nonmissing observations on each variable.

[b] Percentage of passengers is computed based on the number of vehicles containing passengers, not all incidents.

Table 4.5
Stop Characteristics as a Function of Officer and Driver Races

	White Officer		Black Officer	
Stop Characteristic	**Black Driver**	**White Driver**	**Black Driver**	**White Driver**
Stop was for a technical violation	20%	3%	2%	13%
Passengers required to give ID[a]	55%	20%	24%	40%
Driver told they are getting a "break"	43%	15%	32%	33%
Mean duration of stop (minutes)	15.9	11.9	13.2	12.8

[a] Percentage of passengers is computed based on the number of vehicles containing passengers, not on all incidents.

The pattern of effects is very similar across all four of these variables, with the white officer/black driver combination having the highest values (significantly higher than the average of the other three cells at $p < 0.05$), and the white officer/white driver having the lowest values. For each measure, driver race mattered less when the officer was black than when the officer was white. White officers stopped black motorists an average of four minutes longer than they stopped white drivers; this difference was only 25 seconds when the officer was black. This may be because a passenger in a car with a black driver who is stopped by a white officer is more than twice as likely to have his or her license requested as during a stop by a black officer of a black driver. Running the identification of all passengers adds considerably to the length of the stop; these stops average seven minutes longer than the stops in which the passengers were not asked for identification.

An inspection of Table 4.5 may give the impression that, on two of these variables, there is discrimination, i.e., black officers show higher values when stopping white drivers than when stopping blacks. However, these differences as a function of driver race are considerably smaller for black officers than for white officers on each variable. Moreover, the rates found in the black officer/white driver combination were never significantly different from the average of the other three conditions. As stated earlier, these variables do show a significant race-matching effect (see Table 4.4) such that treatment is generally better when officers and drivers are of the same race; however, this race match finding is driven predominantly by the white officers' actions.

The general finding that black drivers are getting pulled over for registration or equipment violations at a higher rate appears to be true exclusively for stops involving white officers. This suggests that white and black officers may be using different criteria for determining who to stop, are being given different types of work assignments, or are choosing to explain the stops differently to the drivers. Because stops for technical violations take, on average, five minutes longer than stops for moving violations, this also contributes to the observed race interaction effect on stop length.

The difference in giving the driver a break is difficult to interpret. This variable was included in the codebook because coders in year one noticed that officers were regularly claiming to give drivers a break; we did not have a theory that indicated whether this was positive or negative communication. Telling the driver that he or she is "getting off easy" or that "the ticket could have been for twice this amount" may be intended to establish a friendly, nonad-

versarial relationship between the officer and the driver. On the other hand, it could be used to prevent the driver from trying to talk himself or herself out of the ticket, to threaten the driver with the possibility of additional punishment, or because the infraction for which they were stopped was too minor to warrant a citation.

Predictors of Constructive Officer-Driver Communication

To better understand the factors that are associated with pleasant and productive interactions between officers and the community, we explored factors that were associated with high communication quality. We did this using multivariate models in which stop characteristics, individual characteristics, and data quality factors predicted communication quality. Because it appeared that different factors were important for driver communication from those important for officer communication, separate models were developed for these two outcomes. Table 4.6 displays the best set of predictors for each outcome.

These results largely replicate the year-one findings. Driver race was associated with differences in communication quality; however, the best predictors of positive driver behavior are under the officer's control. Driver communication was most positive (e.g., respectful, apologetic, pleasant) when the stop was shorter and when officer communication was more positive. Officer communication quality was the single most important factor in predicting driver communication quality. The officers' communications were also well predicted by

Table 4.6
Best Predictors of Communication Quality

Predictors	Standard Regression Coefficient[a]	Statistical Significance
Model of driver communication quality[b]		
Officer communication quality	0.35	<0.001
Stop length	–0.23	<0.001
Passengers required to give license	0.17	<0.05
White driver	0.13	<0.05
Model of officer communication quality[c]		
Driver communication quality	0.35	<0.001
Vehicle searched	–0.24	<0.001
Car towed	–0.15	<0.05

[a] The standardized regression coefficients provide a measure of the relative effect size for each predictor while controlling for the other predictors in the model.

[b] Multiple-R = 0.49.

[c] Multiple-R = 0.50.

several factors. They were most positive when the drivers' communications were positive and were most negative in incidents when the vehicle was being searched or needed to be towed.

Differences Between 2004 and 2005 Data

In general, the results largely replicate the year-one findings. There were several significant findings in year-one data that were not significant in year-two data. Most notably, the better officers' communication in same-race interactions found in year one was not detected in year two. However, these changes in significance should be anticipated due to the modest analytic power to detect small effects with 300 incidents. In other words, the failure to find this effect in year two should not be interpreted as evidence that it does not exist. A direct comparison across 2004 and 2005 data did not reveal significant changes in officer communication. Considering that all 2004 data were taken from September through December and that almost all 2005 data were collected prior to the release of the year-one report, we did not expect to find significant changes in behavior between year-one and year-two data. Similarly, several nonsignificant trends in the 2004 data were statistically significant in 2005. Most importantly, the race interaction effects on stop duration and stop type were not statistically significant in year-one data but are in this year's data.

Overall, there were no significant changes across the two-year period with the exception of data quality variables. On those, we found significant reductions in the number of recordings not found, the number of incidents that were not entirely recorded, and the number of incidents in which the camera was not directed at the officer-citizen interaction.

Finally, several of the findings reported on the 2005 data are based on variables that did not exist in the 2004 data (e.g., demanding identification for passengers). We cannot determine whether these factors have changed significantly between 2004 and 2005 data.

Discussion

The random sample of video records analyzed sheds light on the nature of ordinary interactions between Cincinnati's citizens and its police. One key finding that sets the background for understanding these interactions is that, on average, blacks and whites experienced very different types of policing. White drivers typically experienced traffic stops that were shorter and were less likely to involve an investigation beyond the original vehicle infraction—inquiries and searches for drugs, weapons, or contraband and investigation of all of the vehicle's passengers. This finding is generally consistent with the results of the racial profiling analyses presented in Chapter Three, although the video analyses use independent observers rather than the officers' self-report to determine stop characteristics.

As we discussed in the year-one report, the fact that black citizens are typically subjected to more intensive and time-consuming traffic stops may be a significant barrier to improved police-community relations. There are several plausible reasons for these differences in stops other than racial profiling, including different neighborhood enforcement techniques or differences in the types of infractions committed by whites and blacks. However, the longer, more-

invasive traffic stops that black drivers experience are likely to contribute to a more negative attitude in future interactions with the police.

These concerns about enforcement patterns are increased in this year's report because there is evidence that these differences in the stops of black and white drivers depend, to a significant extent, on officer race. The general results that black drivers face longer stop durations, higher rates of technical violations, and higher rates at which passengers are required to produce identification occur primarily due to those incidents in which the officer is white. While some community members may view this result as evidence of racial profiling, we cannot rule out other plausible explanations with the existing data. White officers may be given different instructions or assignments from those given to black officers, or they may understand their assignments differently for reasons that are not directly related to race (e.g., seniority, neighborhood of assignment, shift being worked). For example, white officers may tend to be older and have received different training, which may result in different enforcement techniques when they are assigned to high-crime neighborhoods like Over-the-Rhine. Because we cannot definitively rule out several factors that may be correlated with officer race, we do not conclude that this indicates racially biased policing. However, the nature of these effects is consistent with the fundamental asymmetry in outcomes that typically indicates racial discrimination against minorities: White officers are more aggressively policing black neighborhoods than are black officers.

Regardless of the ultimate cause of these effects, the fact that the longer, more-invasive traffic stops that black drivers experience occur primarily when they have been stopped by white officers should be expected to contribute to more-negative attitudes within the black community. The fact that white officers conduct approximately two-thirds of all stops of black motorists exacerbates this problem, so any problems in these interactions are likely to affect a large number of blacks. Improving relations between CPD and this community will likely require efforts to ensure that white and black officers act similarly when stopping black motorists.

Consistent with findings from 2004, we found that black drivers had a more negative communication style in traffic stops than did white drivers. Compared to blacks, white drivers were more likely to apologize for the infraction, were more likely to use phrases that indicate courteousness, and were less likely to argue with the police. These communication differences persisted even after controlling for all of the measured stop characteristics. Given findings presented in the year-one report that blacks in the community at large have a more negative view of CPD, it appears likely that this dissatisfaction affects their communication with the officer. On the other hand, the differences in communication could reflect different cultural standards of expression, even when underlying attitudes are quite similar (e.g., Hecht, Jackson, and Ribeau, 2003).

Suggestions for Improvement

Correlational research has a very limited ability to identify the ultimate causes of what we observe. Thus it is difficult to know whether the inequalities we have found are caused by racial bias or are the unintended outcome of policies that are race blind. Regardless of the cause of the observed inequalities, we believe that they represent a significant barrier to improved police-community relations. Several steps could be taken to remove these barriers.

First, it may be possible to make improvements in relations between CPD and the black community by rethinking how black neighborhoods are policed. The proactive policing of motor vehicles that occurs in these communities (longer stops, more searches) is likely to put a high burden on law-abiding members of these communities, and it may not match these communities' policing priorities. The high-crime neighborhoods may want more police assistance with drugs and violent crime, but what they are getting is more tickets for expired registrations, more time having their passengers investigated, and more occasions when they get patted down in public. This type of aggressive policing will certainly help to apprehend a small number of offenders, but it may have high costs on community relations. CPD should make efforts to identify methods of targeting the specific offenses that are a concern to the community while minimizing the impact on community members who are not involved in those offenses.

Second, CPD should make efforts to ensure that black and white officers are consistent in their enforcement priorities and methods, particularly within predominantly black neighborhoods. The large discrepancy in the investigation of black passengers during traffic stops suggests that no enforced CPD policy governs this procedure. We recommend that specific guidelines be developed to determine when officers should run identification checks on vehicle passengers who have not violated any traffic law. We also suggest that these guidelines reflect the inconvenience to law-abiding passengers that results from an identification check, as well as the low proportion of arrests that can be attributed to these checks. Similarly, we suggest that CPD communicate clear traffic enforcement priorities to officers. White officers working in areas with a high percentage of black drivers appear to be pursuing technical violations at a greater rate than do black officers in the same situation. Clear tasking and enforcement priorities may reduce this discrepancy. To best improve police-community relations, policies that determine enforcement priorities for moving versus technical violations should reflect the priorities of the community being served.

The results from year two also replicated several of the communication problems that were found in year one. Black drivers continued to be less polite and cooperative in these interactions. In addition, some evidence suggests that officers are less likely to thank black drivers for their compliance and to wish them well at the end of the incident. The current data demonstrate that, for both the driver and the officer, their interlocutor's behavior is highly dependent on their own behavior. Drivers and officers who were argumentative, impolite, or indifferent were rewarded with a more unpleasant interaction.

In addition to improving their communication, officers may also be able to minimize the inconvenience caused by the stop. Stop length was the second-best predictor of the driver communication quality, so efforts to expedite the stop—or to give the impression of trying to expedite the stop—may improve the driver's perception of the interaction.

Community members also have a role to play in the improvement of police-community relations. While negative communication by black drivers may be an understandable reaction to the more proactive policing they have experienced, it is likely to be counterproductive. Even if one's dissatisfaction with CPD was entirely justified based on past experience, treating an individual officer with disrespect will likely increase the inconvenience caused by the current stop and impede the long-term improvement of police-community relations.

Limitations

There are limitations to the analysis of the audio-video recordings. One primary limitation is that it uses observational data, and we cannot match black and white drivers on the full range of situational factors (e.g., neighborhood of stop). These methods allow us to describe what typically occurs in these interactions, but the authors cannot know definitively why it happens. Because of this limitation, the reader should avoid assuming a specific cause of the effects that we report. For example, the reader should not conclude from our study that the police chose to search black motorists or to hold them longer *because* they are black, simply based on the correlations that we observed in this study.

The current study's strength is that it looks at a random sample of each type of interaction, drawn from all motor vehicle stops that occurred in 2005. This sampling method greatly strengthens the study's ability to describe accurately what typically occurs in motor vehicle stops; however, there are several possible threats to the sample's representativeness due to missing data. CPD has made substantial improvements in reducing this missing data, but it is still possible that a different pattern of associations between race and behavior would be found in the data. Fortunately, there was no significant evidence that this missingness was associated with driver or officer race.

Conclusions

An analysis of 325 randomly sampled video records revealed three key differences as a function of the officers' and drivers' races: (a) black drivers were more likely to experience proactive policing during the stop, resulting in longer stops that were significantly more likely to involve searches; (b) several of these differences between the stops of white and black drivers were larger when the officer was white, (c) the communication quality of white drivers was more positive than that of black drivers—specifically, it was more apologetic, cooperative, and courteous.

The authors believe that reducing these differences is important for improving the relationship between CPD and the community it serves. These improvements will likely require a closer alignment between police practices and community priorities, the implementation of policies to ensure that white and black officers police black neighborhoods similarly, and efforts by individual officers and citizens to minimize the inconvenience and irritation caused by traffic stops.

CHAPTER FIVE

Satisfaction of Police Officers Working in Cincinnati

Overview

A key objective of the evaluation was to obtain information from CPD officers whose duties entail significant interactions with citizens. The information was obtained through a survey that asked officers about personal safety, working conditions, morale, organizational barriers to effective policing, fairness in evaluation and promotion, and attitudes of citizens in Cincinnati.

Our year-one survey effort yielded responses from 40 officers but, in the process, identified several barriers for achieving good response rates from officers. As a result, we made substantial changes to the survey plan for the year-two report, which yielded 83 returned surveys.

First, we changed the survey distribution. During the spring and summer of 2006, patrol officers received training at the police academy on new mobile terminals. Selection into a particular class is balanced across districts so as not to interfere with police allocation and, as a result, the officers surveyed were representative of CPD patrol officers. CPD management distributed the surveys to each class with encouragement to complete them.

Second, we removed all identifying questions, so that signed consent was no longer required. As a result, the cover letter was changed from the legal document–like image that it had in year one to a cover letter from Chief Streicher and Fraternal Order of Police (FOP) President Kathy Harrell encouraging response. Since this year's surveys were anonymous, we could neither send reminders or replacement surveys to those officers who did not respond nor send incentives, all of which promote response. Telephone follow-up is a common strategy to promote response, but anonymous surveying made this impossible.

Last, we reduced the number of questions from 26 in the year-one report to 15 in the year-two report. Shorter surveys are more likely to be completed; we estimate that this survey took, *at most*, 15 minutes to complete. We eliminated several demographic questions, such as marital status, education, and birth year, to reduce the risk of disclosure for the responding officer. Some questions on the year-one survey asked similar questions (e.g., whether citizens are disrespectful, whether citizens use derogatory words). We condensed those. We removed questions that asked for information that CPD monitors separately, such as whether the officer had been injured on the job.

Despite these changes and CPD's active encouragement for officers to complete the survey, the response rate remained at just below 30 percent. However, the doubling in the absolute number of responding officers means that we can use this group as a baseline for comparison

to the 2008 survey, assuming that response patterns will be similar. This is largely possible because we increased the number of surveys conducted from approximately 125 in the year-one report to 300 in the year-two report.

The survey identified five key findings:

- Officers expressed a high level of commitment to their jobs.
- Ninety percent of officers indicated that residents' input is critical to solving neighborhood problems. However, only half of the officers felt that residents were actually likely to help officers.
- Officers believe that the media and black community complained unfairly about racial profiling and police abuse of authority.
- Officers generally believe that the CPD command staff is capable of identifying those officers who abuse authority. Eighty-two percent of officers expressed this opinion.
- Officers did not express feeling supported by CPD management; 77 percent indicated insufficient protection from unreasonable lawsuits; 73 percent felt that communicating suggestions to management was not easy; 74 percent indicated that there was insufficient recognition for exceptional officers; and few officers felt that they had adequate input from their supervisors about their performance (39 percent).

Officers who responded were satisfied and committed to their jobs. Despite their commitment and satisfaction, the officers who responded to this survey suffered several strains from the community and citizens with whom they interacted. The majority of respondents thought that the media and black community complained unfairly about racial profiling and police abuse of authority. They also felt that citizen complaints were too easy to file, yet any barriers to filing legitimate complaints would surely be taken as the police being nonresponsive to the community's concerns. Officers seemed to appreciate the principles of community policing, especially including residents in identifying and solving crime-related problems. However, counter to one of the tenets of community policing, many officers did not think that officers should try to solve non–crime-related problems.

Methods

Sampling Strategy

CPD distributed 300 surveys to patrol officers attending training programs at CPD academy. To avoid disclosing responses to CPD, surveys were anonymous and the survey packets included prepaid envelopes for returning the surveys directly to Schulman, Ronca, and Bucuvalas, Inc. (SRBI). SRBI entered all returned surveys twice to ensure data accuracy. We developed questions for the police officer survey from a review of the existing research literature on police officer job satisfaction and pared them down to six questions on the officers' background and nine questions on their perceptions of police work in Cincinnati. The survey assessed officers' perceptions of Cincinnati citizens' attitudes, personal safety, working conditions, morale,

organizational barriers to effective policing, and fairness in evaluation and promotion.[1] Appendix C contains the specific survey items.

CPD received the surveys on June 1 and distribution began soon after that. All surveys had been distributed by August 22. We allowed three weeks for the last officers to complete their surveys. SRBI created the final data set on October 31.

Survey Responses

Table 5.1 presents the number of survey respondents contacted and returned. A total sample of 300 officers who had significant citizen interactions in their daily duties received the survey during routine academy training. The surveys were anonymous, so no follow-up was possible. Eighty-three officers returned completed surveys. The response rate was 28 percent.

Demographic Characteristics of Respondents

Table 5.2 displays the basic demographic characteristics for the officers who responded to the survey. For comparison, the last column of the table shows the composition of CPD.

Results

Cooperation and Complaints from Citizens

The police officer survey asked several questions about the level of cooperation and complaints from citizens. Police officers were asked to rate how likely it is that citizens of Cincinnati would work with the police to try to solve neighborhood problems. Approximately 52 percent of officers who responded indicated that it was somewhat unlikely or very unlikely that citizens would work with the police to solve neighborhood problems (Table 5.3). Officers working in Districts 2 and 3 were slightly more likely to indicate that citizens would be willing to work with police.

Police officers were also asked to rate their levels of agreement on several questions related to how much they agreed or disagreed that the black community complained unfairly about racial profiling and police abuse of authority. The majority of responding officers (93 percent) indicated that they strongly agreed or agreed that the black community complained unfairly about racial profiling. Similarly, 91 percent of respondents indicated that they strongly agreed or agreed that the black community complained unfairly about police abuse of authority (see

Table 5.1
Disposition of Survey Responses

Contacts	Start Date	End Date	Total Completed	Response Rates (%)
300	6/2/2006	9/22/2006	83	28

[1] The following sources were drawn upon to construct the survey items: Hackman and Oldham (1980), Mastrofski et al. (2002), Skogan (1995), and Weisburd et al. (2000).

Table 5.2
Respondent Demographics

Category	Characteristic	N	Percent	CPD Officers (%)[a]
Race	Black	11	13	31
	White	68	82	68
	Other	3	4	1
Sex	Male	66	80	78
	Female	17	20	22
Age	18–25	2	2	
	25–35	29	35	
	35–50	45	54	
	50+	7	8	
Rank	Officer	51	61	67
	Specialist	18	22	14
	Sergeant	10	12	15
	Lieutenant	4	5	4
District[b]	1	22	27	24
	2	10	12	15
	3	24	29	24
	4	11	13	17
	5	9	11	20

NOTE: In some cases, percentages do not sum to 100 because of rounding.

[a] Race, sex, and rank data reflect CPD composition in 2004.

[b] This distribution is for officers who made stops of any kind in 2005.

Table 5.4). Although they agreed to a lesser degree, black officers also generally held this opinion, with 64 percent agreeing with both statements.

Consistent with their perceptions regarding the black community, the majority of respondents indicated that they strongly agreed or agreed (93 percent) that the media reports unfairly about racial profiling, as well as police abuse of authority (87 percent) (see Table 5.5). In contrast, officers indicated that the general community did not complain unfairly. These perceptions were consistent regardless of the officer's race.

Table 5.3
Cooperation Between Police and Citizens

Would Cincinnati citizens work with police to solve neighborhood problems?	Officers Responding Yes (%)
Very likely	4
Somewhat likely	45
Somewhat unlikely	40
Very unlikely	12

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Table 5.4
Perceived Unfairness of Blacks' Complaints

	Officer Opinion on Statement (%)			
Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
Blacks complain unfairly about racial profiling.	54	39	7	0
Blacks complain unfairly about police abuse of authority.	54	37	8	0

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Table 5.5
Perceived Unfairness of Media and General Community Complaints

	Officer Opinion on Statement (%)			
Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
The media complain unfairly about racial profiling.	50	43	7	0
The media complain unfairly about police abuse of authority.	50	37	13	0
The community complains unfairly about police abuse of authority.	15	26	54	6
It is too easy for a citizen to file a complaint against a police officer.	40	45	16	0

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Officers generally thought that the complaint process makes filing a complaint against an officer too easy (85 percent agreed or strongly agreed). This perception did not vary by officer race, rank, or district. Despite this perception, easy access to a complaint system is critical for community members to trust that their police force is responsive to their concerns. Citizens can file complaints by mail, telephone, fax, or email or in person, indeed offering them easy access to the complaint process. The public would perceive any barriers as a threat to police

accountability. Despite officers' concerns that filing complaints was too easy, our analysis in Chapter Six of a survey of officers actually involved in the complaint process indicated that 70 percent thought that the process was fair and were satisfied with the process.

We also queried officers on the resistance level they face from suspects and citizens during their duties. We asked officers, for example, how many citizens with whom they interacted on the street acted disrespectfully toward police (e.g., making obscene hand gestures, swearing). The officers were split, with half indicating that none or only a few citizens act in a disrespectful way on the street and the other half indicating that most citizens are disrespectful (Table 5.6). We asked officers how many suspects with whom they come into contact attempted to resist arrest through physical force, and almost all respondents (92 percent) indicated that this occurs sometimes.

Officers reported that it is not uncommon for them to feel in serious danger when dealing with criminal suspects. Twenty-three percent of respondents indicated that they usually or always feel that they are in serious danger. These rates did not vary by the district in which the officer worked. Almost all officer respondents (91 percent) indicated that the training that they received from CPD on officer safety was good or excellent.

Work Environment

We surveyed officers about several aspects of their daily work environments. We asked officers to indicate their levels of satisfaction with their work environments and the support and feedback they received from police management. In terms of job satisfaction, we asked officers to indicate the extent to which their jobs as police officers were major sources of satisfaction in their lives and whether they had personal commitments to their job. Approximately 54 percent of officers who responded to the survey indicated that their jobs were major sources of satisfaction in their lives, while 87 percent of respondents strongly agreed or agreed that they were personally committed to their jobs (Table 5.7).

Table 5.6
Citizen Attitude and Behavior Toward Police

Question	Officers Responding Yes (%)			
Do citizens on the street act disrespectfully toward police?	Almost all	Half or more	A few	None
	6	45	49	0
Do suspects attempt to resist arrest through the use of physical force?	Always	Usually	Sometimes	Never
	0	7	67	25
When with a criminal suspect, how often do feel that you are in serious danger of physical violence?	Always	Usually	Sometimes	Never
	10	13	55	22
How would you rate CPD training and procedures on officer safety?	Excellent	Good	Fair	Poor
	43	48	9	1

NOTE: In some cases, percentages do not sum to 100 because of rounding.

The survey asked several questions about the nature of supervision, feedback, and input in the CPD organization. Table 5.8 shows the results. We asked officers to indicate how strongly they agreed that effective supervision could identify police officers who abused their authority, and 82 percent strongly agreed or agreed. We asked officers to indicate how likely police management was to help fix a problem that their unit identified. Most officers believed this to be unlikely (70 percent). They also felt little support and protection from police management regarding lawsuits and accusations; 77 percent did not think CPD offered protection. Note that responding to lawsuits rests outside the CPD with city administration.

In terms of officer feedback, we asked officers to indicate how likely management was to publicly recognize an officer who was exceptional at his or her job, whether supervisors often provided them with feedback, the level of input they had in their jobs, and the expectations for officers for evaluations and promotions. Most officers (74 percent) believed that public recognition for exceptional officers was rare. Officers were mixed as to whether supervisors let them know how well they were performing; 39 percent thought supervisors gave adequate input, while 61 percent of officers felt they had inadequate input. Similarly, most officers (53 percent) did not feel that they received clear guidance from CPD on what was expected of officers for evaluations and promotion (see Table 5.9).

Table 5.7
Officer Satisfaction

	Officer Opinion on Statement (%)			
Statement	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
One of the major satisfactions in my life is my job.	14	40	30	16
I have a personal commitment to my job.	33	54	10	4

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Table 5.8
Officer Attitudes Toward Management and Administration

	Officer Opinion on Statement (%)			
Statement	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
CPD command staff can identify officers who abuse authority.	13	69	13	5
Police management is likely to help fix an identified problem.	1	29	55	15
CPD protects its officers from unreasonable lawsuits and accusations.	0	23	44	33

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Table 5.9
Officer Attitudes Toward Supervisor Feedback

	Officer Opinion on Statement (%)			
Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
Management publicly recognizes exceptional officers.	1	25	45	29
Supervisors often let me know how well I am performing.	4	35	47	14
CPD provides clear guidance on expectations for evaluations and promotions.	2	45	39	14

NOTE: In some cases, percentages do not sum to 100 because of rounding.

In terms of input into their jobs, 60 percent of respondents indicated that they did not have a lot of input into how they did their work. Furthermore, the majority of respondents (73 percent) indicated that they disagreed or disagreed strongly that it was easy for them to communicate suggestions for improving their jobs (Table 5.10).

Community Policing Knowledge

Officers were asked several questions about their knowledge of the communities in which they work and of the community policing philosophy. Approximately 48 percent of officers who responded to the survey indicated that they were familiar with the Community Police Partnering Center. This compares with 20 percent of the general population of Cincinnati that we found in our 2005 survey of Cincinnati residents.

Officers were asked to indicate the extent to which they agreed that police officers should try to solve noncrime problems in their districts and make frequent informal contact with people in their districts to establish trust and cooperation and to find out what residents think are the neighborhood problems, in order to focus their efforts on these issues (see Table 5.11). Almost all officers (90 percent) felt that consulting with community residents was an important part of the problem-solving process. Most (96 percent) also felt that working with residents was key in solving crime. However, officers were split on whether CPD officers should also take on solving non–crime-related problems in their districts, a central tenet of the community

Table 5.10
Officer Input to Management

	Officer Opinion on Statement (%)			
Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
I have a lot of input into how I do my job.	6	34	36	24
I can easily communicate suggestions to management.	0	28	39	34

NOTE: In some cases, percentages do not sum to 100 because of rounding.

policing model. Finally, almost all respondents (96 percent) indicated that police officers should make frequent informal contact to establish trust and cooperation with citizens.

The officer survey also asked respondents several questions about their levels of support for various crime control philosophies of police work. We asked officers to indicate the extent to which they thought that a good patrol officer works proactively (e.g., stopping cars, checking people out, running license checks). Most officers who responded to the survey (92 percent) indicated that they strongly agreed or agreed that these proactive activities were signs of a good patrol officer. We also asked officers to indicate the extent to which they agreed that enforcing the law was a patrol officer's most important responsibility and whether police officers had reason to be distrustful of most citizens. The majority of respondents (77 percent) indicated that they agreed or agreed strongly that enforcing the law was an officer's highest priority. Finally, we asked officers to indicate whether they should be distrustful of most citizens, but few (31 percent) believed that police officers had reason to be so (see Table 5.12).

Table 5.11
Officer Attitudes About Community Relations

	Officer Opinion on Statement (%)			
Statement	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
A good officer consults with residents about problems.	23	67	10	0
Officers should work with residents to solve crime problems in their districts.	36	60	4	0
Officers should try to solve noncrime problems in their districts.	4	45	41	11
Officers should make frequent informal contact with people in their districts.	41	55	4	0

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Table 5.12
Officer Attitudes About Responsibility

	Officer Opinion on Statement (%)			
Statement	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
A good patrol officer works proactively.	43	49	6	1
Enforcing the law is an officer's most important responsibility.	20	57	21	2
Officers have reason to be distrustful of most citizens.	4	27	58	12

NOTE: In some cases, percentages do not sum to 100 because of rounding.

Conclusions

Results from the police officer survey are based on 83 returned surveys, a 28-percent response rate. Those who chose to respond to this survey may differ systematically from those who chose not to respond. The survey was voluntary and anonymous, so we cannot discern what differences there might be between responders and nonresponders.

The findings indicate a high level of commitment to their jobs, but, at the same time, those officers who responded to the survey suffer several strains from the community and citizens with whom they interact. The majority of responding officers thought that the media and the black community complained unfairly about racial profiling and police abuse of authority. That feeling persisted regardless of officer race.

Police officers who responded to the survey also appear to have been knowledgeable about community policing. Although the majority of officers who responded to the survey viewed enforcing the law as their highest priority, they were also aware that informal interactions with citizens were an important method for solving problems and solving crimes. Officers who responded to the survey also expressed a high level of agreement that community residents should help shape police work priorities. However, half of the officers responding did not think that officers should try to solve non–crime-related problems in their districts. They generally felt that proactively stopping cars and "checking people out" were components of good police work. Such practices, though, taken to extreme, may tax the relationship between the police and community members.

CHAPTER SIX

Citizen and Officer Satisfaction with the Complaint Process

Overview

RAND was asked to conduct a survey of officers and citizens who were parties to official complaints. The survey assessed the perceived fairness of the complaint process, the level of input that citizens and officers had in the process, and justifications for the final resolution. Additionally, the survey asked for input from officers and citizens on improving the internal complaint process. We surveyed one officer and one citizen involved in each complaint handled through CCRP, IIS investigations, and CCA.

Few officers and citizens responded to the survey. With so few responses, we cannot draw any inferences about the population of all citizens or officers involved in official complaints, but we can comment on perceptions that the respondents indicated.

The survey identified five key findings:

- For almost all complaints, investigators followed up with citizens $(n = 7)$ and officers $(n = 9)$, and most resulted in formal meetings.
- There was a lot of diversity among both officers and citizens in how they felt about the investigation of complaints in terms of fairness and the respect they received during the investigation.
- The final outcome of the complaint did not necessarily dictate respondents' satisfaction with the complaint process. Most citizens who responded did not feel that the process was fair nor were they satisfied, though three citizens who did not have their complaint sustained still were satisfied with the process.
- Citizen respondents generally fell into two categories. The first were involved in minor incidents in which officers were alleged to have been disrespectful or had not provided proper or timely service. The second category of respondents alleged serious violations including excessive force, improper pointing of firearms, and discrimination, and these respondents indicated that they wanted nothing less than the officer terminated from the police force.
- Using data from CCA's 2005 annual report, the survey cited complaints that do not seem to be disparately associated with interactions between nonblack officers and black residents. Black and nonblack residents were equally likely to file complaints with the CCA against nonblack officers.

Methods

Sampling Strategy

In our complaint survey effort in the year-one report, we distributed surveys to parties involved in 169 complaints and received completed surveys from 34 citizens and 19 officers. For the year-two report survey effort, we made large changes to the survey and its distribution in an attempt to increase the response rate from all parties involved.

First, we changed the distribution of the survey so that each of the three complaint processes would distribute the survey and complaint resolution to one officer and one citizen. In this way, the incident to which the survey refers would be a recent event and might improve response and recall.

Second, we made the surveys anonymous by removing questions, including the complaint, that could identify the respondent. Although this increases confidentiality and eliminates the need for signed consent, it does prevent follow-up to decrease nonresponse and precludes the analysis from linking the survey to the complaint itself.

Third, for the officer complaint survey, we replaced the cover letter with one from Chief Streicher and FOP President Kathy Harrell encouraging officer participation.

Lastly, we reduced the number of questions from 33 in the year-one report to 22 in the year-two report. We estimate that the survey took respondents five minutes to complete. Appendix D contains the survey items.

CPD received the surveys on June 1 and distribution began soon after that. Table 6.1 shows the number of surveys distributed and received. SRBI created the data set used for analysis in this chapter on September 12.

The survey response rate was extremely low—20 percent for officers and 15 percent for citizens. These are nearly the same rates we obtained in the year-one report after extensive follow-up with nonrespondents. Although the response rate for both citizens and officers was low, other evaluations of citizen-complaint processes have received response rates under 20 percent (Walker and Herbst, 2001).

Table 6.1
Number of Surveys Distributed and Received

Responsible Body	Distributed to Officers	Distributed to Complainants
IIS and CCRP[a]	45	47
CCA[a]	10	7
	Officer Surveys Received	Complainant Surveys Received
SRBI[b]	11	8

[a] As of August 23, 2006.

[b] As of September 12, 2006.

Demographic Characteristics of Respondents

Table 6.2 displays the demographic characteristics of those who responded to the survey. Four citizens (50 percent) who responded to the survey were black and four (50 percent) were not black. In comparison, two officers (18 percent) who responded to the survey were black and nine (82 percent) were not black.

Nature and Characteristics of Complaints

First, we examined the nature and characteristics of the complaints associated with the respondents. Table 6.3 shows descriptive statistics of these incidents. Most of the complaints were in regard to face-to-face interactions between officers and citizens. In most cases, the incident had other witnesses. Five citizens indicated that the incidents had another civilian witness. Eight officers reported that their incident had another civilian witness, and six of the officers also had another officer as a witness. Most complaints generated from incidents in which either the citizen initiated the contact (e.g., requested police services) or the police initiated contact (e.g., traffic stop) rather than those who witnessed an incident.

Table 6.2
Demographics of Respondents

Category	Characteristic	Officer (n)	Citizen (n)
Sex	Male	9	6
	Female	2	2
Race	Black	2	4
	Nonblack	9	4
Age	Under 18	0	1
	18–25	0	1
	25–35	7	2
	35–50	3	2
	Over 50	1	2
Rank	Officer	10	—
	Specialist	1	—
Years at CPD	0–3	1	—
	3–10	6	—
	More than 10	4	—

Table 6.3
Nature of the Complaint

Survey	Officers (n)	Citizens (n)
Was the complaint filed because of a face-to-face interaction?		
Yes	10	7
No	1	1
District in which the incident that generated the complaint occurred:		
1	5	5
2	1	0
3	1	1
4	3	1
5	1	1
Other police officers witnessed the incident. (number indicating yes)	6	NA
There were other civilian witnesses to the incident. (number indicating yes)	8	5
Was a civilian injured during the incident? (number indicating yes)	1	1
What initiated the incident?		
Call for service	4	NA
Officer initiated stop	4	NA
Other	3	NA
Why did you have contact with the police officer(s)?		
I called for the police.	NA	2
The police stopped me.	NA	4
I witnessed the incident.	NA	1
Other	NA	1

Of those who reported filing a complaint, one reported being physically injured during the interactions that resulted in official complaints. One officer reported that a civilian was injured during the incident.

Table 6.4 shows the distribution of the reported reasons for the complaint. All complainants accused the police of discourtesy or an unprofessional attitude. Three citizens also indicated that their complaints involved criminal misconduct or discrimination. Five officers, on the other hand, indicated that excessive use of force was the primary cause for the complaint. We received no surveys back from officers involved in criminal, serious misconduct, or improper pointing of firearm complaints. For comparison, the last column shows the distribution that CCA reported in its 2005 report. Most of the survey respondents were involved in the

CCA process, yet there are substantial differences in the reported reasons. This may be due to our survey allowing respondents to mark all reasons that apply to their cases.

Among all 19 officer and citizen complaint surveys, nonblack complainants filed equally against black and nonblack officers (50 percent each). All of the surveys regarding incidents with black complainants involved nonblack officers. However, this finding appears to be an artifact of our sample as CCA's year-one report indicated that complainant race was independent of officer race. Nonblack CCA complainants filed against nonblack officers 76 percent of the time and black CCA complainants filed against nonblack officers at nearly the same rate, 79 percent.

Three respondents noted that, when filing their complaints, the person who took the complaint did not act professionally.

Investigation of Complaints

In terms of the investigation of the complaints, seven of the citizens and nine of the officers indicated that an investigator contacted them about the complaint. Most were also asked to attend a meeting to resolve the complaint (five citizens and seven officers) and many did actually attend (four citizens and seven officers). These survey results suggest that most respondents believed that an investigation was conducted. Table 6.5 shows survey answers to questions regarding complaint responses.

Table 6.4
Reason for the Complaint

Survey	Officers (n)	Citizens (n)	CCA[a] (%)
What were the reasons for complaint? (multiple)			
Discourtesy or unprofessional attitude	3	8	12
Criminal misconduct	0	3	—
Serious misconduct	0	3	—
Discrimination	1	3	8
Lack of timely or proper service	2	2	—
Excessive use of force	5	2	47
Improper pointing of firearm	0	2	5
Improper searches and seizures	1	1	9
Sexual misconduct	1	0	—

[a] SOURCE: CCA (2006).

Table 6.5
Responses to Complaints

Survey	Officers (n)	Citizens (n)
Did the investigator contact you about the complaint? (number indicating yes)	9	7
Were you asked to attend a meeting regarding this complaint? (number indicating yes)	7	5
Did you attend a meeting regarding this complaint? (number indicating yes)	7	4
Why did some officers not attend?		
Was told I didn't need to attend.	1	NA
The civilian did not want to attend.	2	NA
Other	1	NA
Why did some complainants not attend?		
The meeting would be pointless.	NA	4
I did not want to see the officer again.	NA	4

Satisfaction with Process and Outcomes

Citizens were asked to indicate their levels of satisfaction with the complaint-review process. Specifically, we asked respondents to indicate the extent to which, during the investigation and review process, their views were considered and how much they thought that those investigating the complaint showed care for their concerns. There was a lot of diversity among both officers and citizens in how they felt about the investigation of complaints. Citizens were evenly split about whether their views mattered. Half of the officers felt that they were treated with respect and dignity during the process and 70 percent felt that investigators considered their views (see Table 6.6).

Respondents were also asked to indicate their levels of agreement with statements regarding their overall treatment during the review and investigation. Specifically, respondents were

Table 6.6
Characteristics of Investigation

		Response to Survey (n)			
Survey	Respondent	A Great Deal	A Fair Amount	Only a Little	Not at All
Did investigators consider your views?	Officer	2	5	1	2
	Citizen	4	0	1	3
Were you treated with respect and dignity?	Officer	3	2	3	2
	Citizen	2	2	1	3

asked to indicate how much they agreed or disagreed that they were treated the same as anyone else in a similar situation, that officials investigating the case were basically honest, that the decisions made about their complaint were based on facts, and that the process allowed them to tell their side of the story. One citizen and five officers agreed or strongly agreed that they were treated the same as anyone else in a similar situation. Officers and citizens had uneven views on investigators' honesty; seven officers thought the investigators were honest and two citizens held this belief. However, in many cases, those involved in the complaint did not think that investigators had the facts of the case straight; roughly half of the officers and half of the citizens who responded to the survey did not think that officials understood the facts.

Most of the officers $(n = 7)$ and citizens $(n = 6)$ felt that the complaint process did offer an opportunity to tell their side of the story. These results suggest that citizens and officers who responded to the survey may not have been happy with the complaint process but acknowledged that the process allowed them to tell their side of the story. This select sample of citizen and officer respondents believed that the complaint process did not show enough concern for their rights and that investigators did not care about their concerns.

Survey respondents were asked whether they thought that the outcome of their complaint was fair. Table 6.8 shows the results. Seven officers thought that the process was fair and that they were satisfied with the process. Citizens were less impressed with the process with five of them believing that the process was not fair and were not satisfied with the process. These findings are consistent with other research that finds that citizens who respond to surveys on civilian review or complaint processes generally have a low level of satisfaction with the process (Walker and Herbst, 2001). On the other hand, this may reflect respondents to such surveys being a select group of complainants who are more likely to be vocal about their dissatisfaction. Satisfaction among citizens was not necessarily associated with complaint outcome. Three citizens were satisfied in spite of the officer being exonerated, the complaint being unfounded, or

Table 6.7
Treatment of Complaints

		Response to Survey (n)			
Survey	**Respondent**	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**
I was treated the same as anyone else in a similar situation.	Officer	2	3	3	2
	Citizen	0	1	1	3
Officials investigating and reviewing case were honest.	Officer	2	5	2	1
	Citizen	0	2	2	3
Officials accurately understood the facts of the incident.	Officer	2	3	4	1
	Citizen	2	2	1	2
The process allowed you to tell your side of the story.	Officer	3	4	1	2
	Citizen	2	4	0	2

the citizen's uncertainty as to what the final outcome was. Similarly, three officers felt that the process was unfair, yet one of them was cleared of wrongdoing. As a result, there is evidence from both citizens and officers that the complaint's formal outcome may not be the critical ingredient to satisfaction in the process.

In half of the cases, citizens either wished no punishment at all for the officer or just a warning from the officer's supervisor. These complaints generally involved lack of courtesy or lack of proper service and the individuals were generally satisfied with the complaint process. In the other cases, citizens were at the other extreme, wishing that the officer be fired, if not also charged with a crime. These complaints stemmed from incidents involving excessive use of force and unnecessary pointing of firearm supplemented with charges of discrimination.

Conclusions

Results from the complainant survey are based on a small number of responses from citizens and officers involved in official complaints. With such a low response rate, the results could not be generalized to all citizens and officers involved in official complaints. The current response rate is too low to know how these opinions might compare among CCA, IIS, and CCRP cases. For those who did return surveys, the complaint-review process did appear to be working, in that respondents indicated that investigators followed up on a majority of complaints and both officers and citizens had an opportunity to present their views.

There was diversity among both officers and citizens in how they felt about the investigation of complaints. Some respondents felt that investigators carefully weighed their views, while others felt that they were not treated with respect and their views concerning the incident were not valued in the process. Most citizens who responded did not feel that the process was fair nor were they satisfied, though three of those who did not have their complaint sustained were still satisfied with the process. Citizen respondents generally fell into two categories. The first were involved in minor incidents in which officers were alleged to have been disrespectful or had not provided proper or timely service. The four respondents having such cases sought only to make their point known and perhaps have a supervisor give the officer a warning. The second category of respondents alleged serious violations including excessive force, improper

Table 6.8
Fairness of and Satisfaction with Complaint Process

		Response to Statement (n)			
Statement	Respondent	Strongly Agree	Agree	Disagree	Strongly Disagree
The outcome was fair.	Officer	4	3	1	2
	Citizen	1	1	1	4
I am satisfied with the complaint process.	Officer	1	6	1	2
	Citizen	1	2	1	4

pointing of firearms, and discrimination. These four respondents indicated that they wanted nothing less than the officer terminated from the force if not criminally charged. In all of the complaints from citizens who responded to the survey, all of the officers were cleared or the citizen did not know the result.

Using data from CCA's 2005 annual report, the complaints do not seem to be disparately associated with interactions between nonblack officers and black residents. Black and nonblack residents were equally likely to file complaints with CCA against nonblack officers.

CHAPTER SEVEN

Summary and Conclusions

This second-year evaluation reports on key issues that are required parts of the year-two evaluation. These issues include the context of crime in Cincinnati, the analysis of motor vehicle stops, and the analysis of video records. In addition, this report provides baseline findings on officer perceptions and experiences with complaint adjudication that were not achieved because of low response rates in year one. Although this is the second year of the evaluation, we cannot expect to see definitive progress toward the goals of the collaborative agreement at this point for two reasons. First, this report primarily analyzes data and events from 2005. Since our first-year report was published in December 2005, the parties have not yet had time to develop strategies to address the issues raised in the first-year report. Second, many of the issues at the core of progress toward the goals of the collaborative agreement are behavioral and institutional in nature. It is unreasonable to expect behaviors and institutions to change rapidly. More likely, we will see the effects of changes over the five-year life of this evaluation. With these caveats in mind, in virtually every respect, the year-two report provides the same implications for the collaborative agreement as did the year-one report.

Before turning to summary comments, we must point out one overarching issue. The apparent difference in the findings on stop duration between Chapter Three (Analysis of Vehicle Stops) and Chapter Four (Analysis of Videotaped Police-Motorist Interactions) is explained by the fact that the chapters serve two different purposes. The traffic stop analysis is designed to assess the extent to which a motorist in a specific situation would receive different treatment if they were black versus nonblack. It attempts to answer the causal question at the heart of racial profiling: "Do police treat individual drivers differently specifically because of their race?" The data sources for this analysis are well suited for this purpose, because the large sample allows us to match black and nonblack drivers on a wide range of situational factors and still detect any effect of race.

However, police can treat black and nonblack drivers very differently for reasons other than racial profiling, and these differences may still be a significant problem for community relations and racial fairness. Police choosing to enforce laws differently in those neighborhoods with high proportions of black residents would likely appear racially biased to those residents even if individuals in those neighborhoods are actually being stopped without regard to race. Perceptions of racial inequality in treatment drive attitudes and community relations, regardless of whether the true cause of that inequality is racial profiling, neighborhood profiling, enforcement priorities, or other factors. For this reason, the racial profiling analysis in Chapter

Three provides very little information about officer and citizen behaviors that could improve police-community relations.

The analysis of videotaped interactions addresses this shortcoming by documenting how race is related to police or citizen behavior, regardless of behavior's cause. The data sources and analysis reported in Chapter Four are designed to document these inequalities so that we better understand the community relations difficulties, but the data source is inadequate to determine whether citizen race directly caused those differences. For example, we cannot match incidents for 54 separate neighborhoods within a random sample that includes only 75 interactions of each type. For this reason, every difference we find as a function of driver race (e.g., asking passengers for identification) may actually be caused by different police practices in different neighborhoods, rather than by racial profiling.

In short, the analysis of video recordings is designed to identify why many Cincinnati citizens are convinced that racially biased policing takes place, but it cannot convincingly determine whether racial profiling actually occurs. The video data sources do not allow us to rule out plausible alternative explanations for the observed inequalities. The RAND research team believes that understanding why citizens perceive racially biased policing is essential to improving police-community relations. Both the current report and the year-one report identify police behavior that encourages the perception of racial bias. The fact that black and nonblack officers treat black citizens differently is a substantial barrier to improving relations with this community, even if there is no proof of civil rights violations.

Overall, our analysis of traffic stop data found no evidence of actual, systemic racial profiling of individuals, i.e., racially unequal police behavior that is uniquely attributable to the driver's race. Moreover, the inequality we found, a lower citation rate for black drivers, is difficult to interpret. It may be seen as a problack bias (giving black drivers a break), or antiblack (stopping black drivers for infractions that are not serious enough to warrant a citation). Separate from this issue of documenting actual racial profiling, the analysis of videotapes shows why a substantial proportion of Cincinnati believes that there is a problem with racially biased policing. This analysis also suggests specific changes that are likely to reduce this perception.

Data Issues

There were substantial improvements in the data quality over the year-one report such that the problem of missing data is considerably reduced. Last year, in the video analysis task, 55 percent of the recordings requested were not available to be sent, compared to 40 percent this year. In addition, improvements were evident throughout 2006, so that, by the final quarter, only approximately one-third of the requested recordings could not be located or otherwise could not be provided. As with last year, we could not identify 10 percent of the incidents on the recordings sent because of mismatched time information or technical problems with the recordings. This yields an overall missing rate of 45 percent instead of last year's 60 percent. Among video recordings that were received and reviewed, approximately one-third demonstrated audio problems and approximately 15 percent of the recordings ended before the incidents were complete, the same as in 2005. As in the year-one report, we do not believe the

missing data adversely affected our findings, at least to the extent that there was no correlation between race and missing data.

We also saw improvements in the analysis of motorist stop data. In the year-one report, an estimated 20 percent of the vehicle stops were not documented and 16 percent of the contact cards were missing important information. In the year-two report data, it appears that only about 3 percent of the stops were not documented and 3 percent of the contact cards were missing important data.

Since this report analyzes data and incidents from calendar year 2005, the improvements in data quality reflect CPD efforts to improve compliance with CPD policies and procedures that were occurring even before the December 2005 delivery of the first-year report covering 2003 and 2004 data. CPD did not wait for delivery of last year's report to initiate improvements in its data systems.

Progress Toward the Goals of the Collaborative Agreement

The collaborative agreement specifies five key areas in which progress is desired: the development of proactive police-community partnerships on problem-solving; building relationships between the police and the community; improving CPD's staffing, training and management practices in several dimensions; ensuring fair and equitable treatment for all members of the community; and developing methods to increase support for the police. This year's report cannot provide a full picture of progress because some evaluation tasks that contribute greatly to the overall assessment (such as the community survey) were not scheduled. Nevertheless, we can provide some insights on issues of progress toward the goals.

Proactive Partners in Community Problem-Solving. The officer survey contains an important finding with respect to community problem-solving efforts: By a large majority, officers agree that citizen input is vital to developing effective problem-solving strategies. However, half the officers perceive that community members are unwilling participants in such problem-solving activities, a finding that was reinforced in last year's report when we noted limited community participation in problem-solving activities. It is unclear at this point whether the police and community are on the right trajectory for developing a proactive partnership on problem-solving. It appears, however, that the foundation for building such a partnership exists among the police, albeit with some skepticism.

Build Relationships Between Police and Communities. This year's analysis reinforced a key finding from last year's report: Black citizens in Cincinnati, by virtue of the neighborhoods in which they live and the generally higher rates of crime in those neighborhoods are more likely than nonblacks to experience proactive policing strategies such as increased law enforcement presence and aggressive traffic enforcement. Such strategies place a greater burden on law-abiding residents living in the areas where the enforcement occurs. This burden may be alleviated, in part, by developing a clear sense of what the community values in terms of crime reduction and developing tailored interventions that reduce the target crime but minimize official contact with law-abiding citizens. For example, traffic enforcement may help in an overall effort to reduce drug sales in a neighborhood. However, traffic enforcement's contribution to

drug control must be weighed against the racially disparate impact that such enforcement will have and the availability of potentially equally effective and less intrusive alternatives.

Improve CPD Education, Oversight, Monitoring, Hiring Practices, and Accountability. It may not be possible to field a proactive enforcement strategy that is racially neutral. That does not mean, however, that the police are helpless to combat the issues raised by their activity. Much of the force's interaction with the citizenry comes through vehicle stops. The department should thus pay special attention to maintaining and improving, where needed, the tenor and tone of these interactions. In addition, blacks have an elevated likelihood of being stopped without the resulting imposition of a citation. To the degree that such stops are necessary, it would be helpful to have the stops be as short as possible. Investment in information infrastructure and processes, such as license checks, could pay off disproportionately with the black community to the extent that they were the beneficiaries of such investments. Such improvements would be strong signals of CPD's accountability and responsiveness to oversight.

Ensure Fair, Equitable, and Courteous Treatment. CPD policing data show, just as in the year-one report, that CPD allocates resources disproportionately to a small slice of Cincinnati neighborhoods. Presumably, this allocation reflects policy decisions that are made by the police command staff in response to crime trends, calls for service, and other strategic factors. As in the year-one report, this means that on average, black citizens in Cincinnati are likely to be experiencing substantively different kinds of policing from what nonblack citizens experience. In particular, to the extent that police resources are disproportionately deployed to black neighborhoods, black residents are more likely than nonblack ones to encounter the police engaging in proactive policing, such as engaging in verbal interaction with youth on the streets, stopping vehicles for warrant checks, and other related crime disruption activities. However, to the extent that policing is not biased in Cincinnati, similarly situated black and nonblack residents should enjoy similar outcomes. *Similarly situated* means all other factors, such as age, gender, and time and location of the encounter with police, are accounted for, so that the only difference is race. Thus, despite finding, as we did in the year-one report, no clear pattern of bias and post-stop activity, it remains evident that black residents experience a very different form of policing by virtue of deployment and enforcement patterns. We underscore a point from last year's report: The city needs to avoid the assumption that effective law enforcement and good community relations are mutually exclusive goals and to work to find policies that can maximize both outcomes.

Create Methods to Foster Support of the Police. The results from the survey of police officers point clearly to a series of major stresses, including the officers' perception that blacks complained and the media reported unfairly about racial profiling and police abuse of authority. The good news is that the vast majority of officers think that community input is essential to problem solving. This note of optimism, however, is leavened by the fact that only half of the officers expect citizen cooperation in such endeavors. Thus, even though most officers are satisfied with their career choices, they also perceive significant challenges associated with the profession. Not all of the challenges come from the community, either. A significant fraction of officers perceive insufficient protection against unreasonable lawsuits, difficulty communicating with management, and insufficient recognition of outstanding performance. As we

reported last year, there are no easy solutions to these strains. The survey findings suggest that solutions reside in improving relations with both the community and management.

APPENDIX A

Technical Details of the Internal Benchmark

Fridell (2004) notes that a popular statistic for measuring the difference between an officer's minority stop fraction and the officer's internal benchmark is the *z*-statistic,

$$z = \frac{p_t - p_c}{\sqrt{\frac{p_t(1-p_t)}{N} + \frac{p_c(1-p_c)}{ESS}}},$$

where p_t and p_c are, respectively, the proportion of stops involving drivers of marginalized races for the target and the weighted comparison officers. The denominator standardizes this term to have variance 1. In standard circumstances, *z* will have a standard normal distribution, and the probability that *z* exceeds 2.0 when there is no difference between the officer's stop rate and the internal benchmark is 2.5 percent. However, in a collection of 133 *independent* comparisons with no racial bias, we should expect about three officers (2.5 percent of 133) to have *z*-statistics exceeding 2.0 by chance. Thus, flagging officers with *z* exceeding 2.0 is bound to select officers with no race biases. Further complicating matters is that the 133 *z*-scores are *not* independent. They are correlated with each other, since each officer might be used in another officer's internal benchmark. In this case, the empirical distribution of the *z*s may be much wider than statistical theory would predict (Efron, 2006). Benjamini and Hochberg (1995) pioneered the use of the false discovery rate (fdr) as an alternative methodology for locating truly extreme values in multiple comparison situations. The fdr is the probability of no group difference given the value of an observed test statistic, *z*.

We can derive the probability of an officer being problematic as

$$\begin{aligned} P(\text{problem} \mid z) &= 1 - P(\text{no problem} \mid z) \\ &= 1 - \frac{f(z \mid \text{no problem}) f(\text{no problem})}{f(z)} \\ &\geq 1 - \frac{f_0(z)}{f(z)}, \end{aligned}$$

where $f_0(z)$ is the distribution of z for nonproblem officers and $f(z)$ is the distribution of z for all officers (Efron, 2004). If the fraction of problem officers is small (less than 10 percent), then the bound in the last line of this equation is near equality. We estimate $f_0(z)$ with the empirical null assuming a mean 0 normal but with a variance estimated using only the central data of the distribution. We estimate $f(z)$ with the histogram shown in Figure 3.5.

We used the R package locfdr 1.1-2 for this analysis' calculations.

APPENDIX B

RAND Codebook, Year Two

This appendix contains the codebook we used for this report.

RAND-Cincinnati Police Department Year 2
2006 Police-Civilian Videotaped Interactions Codebook
Diagnostic Draft 1 (02-17-06)

RAND-CPD Identifiers for contacts

RAND Corporation and CPD (Cincinnati Police Department) use a number of identifiers in order to track interactions. Use these in order to track the specific stops that are coded. Some of these include demographic information on the occupants and officers. All of this information is contained on the contact report spreadsheet used by RAND.

1. Coder number
1 = Jessie
2 = Erica
3 = Kate
4 = Chris

2. Incident Report# (incp): This is the random number assigned to all traffic stops. Although we have tapes that contain multiple incidents, RAND has identified the specific stops that we will investigate based upon incident/contact reports that must be filed by officers for all interactions they have with citizens. In most cases these numbers will be sequential, and at other times they will not be sequential.

3. Date of Incident (date): Record information about the date of the incident using the standard format of MM/DD/YYYY.

4. Time of Incident (time): Record the time of the incident using military time 0:00 to 24:00 hours.

Quality of tape variables

5. Poor video quality (prvideo): The quality of the video was such that it rendered many of the variables of interest essentially uncodeable. This would include cameras that were not focused properly or were pointed in the wrong direction. In addition, video quality that was hampered because of poor lighting would also be included here. As a rule of thumb, we will say that if 20%-30% of the interaction cannot be seen, code the interaction as a 1.

0 = not poor video quality
1 = poor video quality

6. Primary officer audible (poaudibl): To what extent was the primary officer audible on the tape? This would the percentages of her/his utterances that were understandable WHILE interacting with the civilian.

not at all audible 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% audible

7. Driver audible (draudibl): To what extent was the driver audible on the tape? This would the percentages of her/his utterances that were understandable WHILE interacting with the primary officer.

not at all audible 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% audible

Length of time variables

For each of the following variables do your best to estimate the time that each took. The best method for undertaking this is to use a stop watch. You should also feel free to use the time stamp information provided by RAND. Each of the behaviors that should be timed are detailed below.
Please use standard rounding rules. Anything below .49 rounds down, anything above .50 rounds up.

8. Total time the civilian was detained in seconds (tltime): The beginning of the detention begins once both the civilian and police officers cars have stopped. This estimate will end when the civilian drives away. Please use the video time stamp to record the time of this variable.

9. Civilian wait time in seconds (cwaitime): How long does the civilian wait in the car before the officer approaches? This estimated count should begin after the civilian and police officer have pulled over and stopped. This time should end when the officer begins to speak. Please use your stopwatch to record the time on this variable.

10. How many times did the officer interrupt the driver (pointrpt): An interruption includes when one cannot get his or her thought to completion before someone else begins speaking.

_____
9999 = not applicable/cannot be coded

Estimate the length of time for each of the following for the driver in seconds

11. How many times did the driver interrupt the primary police officer (drintrpt): An interruption includes when one cannot get his or her thought to completion before someone else begins speaking.

_____
9999 = not applicable/cannot be coded

Description of Event Variables

Officer Descriptors/Behaviors

12. Officer loudspeaker system (speaker): The officer used his or her loudspeaker system while pulling the car over.

0 = no
1 = yes
99 = not determinable

13. Walking backwards (pobkwalk): Did the officer walk backwards when moving from the civilian car to his/her police cruiser? The officer needs to make a conscious effort to walk backwards. We will consider a police officer as walking backwards if he walked backwards to at least the end of the civilian's car.

0 = does not walk backwards
1 = walked backwards
99 = someone was arrested or you cannot see how the officer walked

14. Officer bright lights (blights): Does the officer use floodlights during the interaction?

0 = no
1 = yes
99 = not determinable

15. Officers who approach (ofaprch): How many officers approached the vehicle? This would include all officers who actually got out of their car to assist during the interaction. This would **NOT** apply to officers who just stopped by the scene and asked other officers if they needed assistance. It would also **NOT** apply to officers who responded but never left their police vehicles.

1=1
2 =2
3=3
4=4+
99 = not determinable

16. Total officers at scene (tofscene): How many total officers were at the scene whether or not they took part in the interaction including the primary officer? This would include all officers who actually got out of their car to assist during the interaction or who just stopped by to offer assistance to the officers at the scene. It would also apply to officers who responded but never left their police vehicles. Use the majority rule when determining this variable.

_____ _____ (two digits)
99 = not determinable

17. Race of additional officers (racothof): Not counting the primary officer who initially approaches the driver what was the predominate race of the other officers at the scene?

0 = no other officers at the scene
1 = Black
2 = White
3 = Other
4 = Equal number of black and white officers
99 = not determinable/applicable

18. Officer body commandments (ofbodcom): Did any of the officers at the scene order any of the passengers out of the car or to move their bodies in a particular fashion (e.g., out of the car, hands on top of the vehicle)? This does **NOT** include any discussion regarding the occupant's speech or talking. This should only be regarding the occupant's body movements.

0 = no
1 = yes
99=not applicable/determinable (only if the coder cannot see or hear)

Vehicle and Occupant Search variables

19. Probable cause search (pre-search) (presrch): Do any of the officers at the scene including the primary officer attempt to do a preliminary search of the car? Usually the officers will be close to the car. The search is not simply a glance. It is an attempt to find probable cause for a more in-depth search. The specific behaviors involved in a pre-search would include: 1) looking intently through the windows of the car – with attention directed to the backseat; 2) use of a flashlight to intently locate any items apparently visible in the vehicle without moving any materials.

0 = no probable cause search conducted
1 = probable cause search undertaken
99 = not determinable/applicable

20. Consent for search direct (cnsrchd): Do any of the officers ask for permission to physically search either the vehicle or occupants? This would not refer to situations where the officer asks whether the occupants have illegal materials on them. This is a request to search the occupants or vehicle. [MAKE SURE TO MARK 0 IF CONSENT WAS NOT ASKED]

0 = not asked
1 = occupant was asked and said no
2 = were asked and said yes
3 = asked and was not given adequate time to answer
99 = not determinable/applicable (e.g., there is no sound or tape ends suddenly)

21. Consent for search implied (cnsrchi): Do any of the officers indirectly ask for permission to physically search either the vehicle or occupants? At times, officers ask indirectly whereby the request appears implied (e.g., do you have a latch for your trunk?; are you carrying anything in your trunk?; are you storing anything underneath your seat?).

0 = not asked indirectly
1 = occupant was asked indirectly and said no
2 = were asked indirectly and said yes
3 = asked indirectly and was not given adequate time to answer
99 = not determinable/applicable (e.g., there is no sound or tape ends suddenly)

22. Driver search (search): Was the driver personally searched by the primary officer during the traffic stop?

0 = driver not searched
1 = driver searched
99 = not applicable/not determinable

23. Any passengers searched? (searchpas): Were any passengers searched during the traffic stop?

0 =no passengers searched
1 = passengers searched
99 = not applicable/not determinable

24. Amount of time spent physically searching the occupants in seconds (srchotim): Estimate how much time is spent on inspection by officers. This involves a physical search for alcohol, illegal drugs, or weapons. If no time was spent searching the occupants then this variable will be coded as 0. Please use your stopwatch to record the time on this variable.

_____ (in seconds)

25. Vehicle searched (vhcserch): Was the *vehicle* searched during the interaction? This would **NOT** include the time that occupants are searched. This only refers to physical searches of the vehicle whereby the officer enters the car or opens the trunk and looks for illegal items. This would also **NOT** include time spent on visual (pre-searches).

0 = no
1 = yes

26. Amount of time spent physically searching the vehicle in seconds (srchvtim): Estimate how much time is spent on inspection by officers. This involves a physical search for alcohol, illegal drugs, or weapons. If no time was spent searching the vehicle then this variable will be coded as 0. Please use your stopwatch to record the time on this variable.

_____ (in seconds)

Occupant description and behaviors

27. Number of occupants (numoc): Besides the driver, how many other occupants are in the car? If there are clearly none or there is no indication that there are additional drivers based on what can be seen or heard, then zero should be indicated _____ _____

28. Race of additional occupants (racothdr): Not counting the driver what was the predominate race of the other occupants of the vehicle that is stopped?

0 = no other occupants at the scene
1 = Black
2 = White
3 = Other
99 = not determinable/applicable

29. An officer request for passengers to leave the vehicle (lvehclpa): Did an officer ask any passengers (excluding the driver) to get out of the vehicle?

0 = no
1 = yes

30. Other occupant license check (oolicns): The primary officer or another officer at the scene requested the licenses of other occupants in the vehicle besides the driver.

0 = no other passenger licenses requested
1 = other passenger licenses requested

Vehicle Descriptors

31. Vehicle age (veage): Estimate in number of years how old the car seems to be:

1= 1-3 years old
2 = 4-6 years old
3 = 6 years and older

32. Vehicle type (vetype): What type of vehicle was stopped?

1 = Car
2 = Truck
3 = SUV
4 = Semi-truck
5 = Motorcycle
6 = Van/mini-van
7 = Other

The offense (general)

33. The nature of the stop (natstop): What reason eventually emerged as the justification for the stop? Use the entire interaction to make a determination, but much of your decision will rely on what is offered by the officer as the reason. If the driver was stopped for multiple reasons, code the one that is mentioned first by the officer and or the one for which a citation is issued.

1 = expired registration/tags
2 = "fix it" ticket (e.g. tail lights out)
3 = warrant for an arrest or suspicion of committing a crime
4 = traffic violation (speeding)
5 = traffic violation (all others beside speeding)
6 = drunk driving
7 = other
99 = not determinable

34. The outcome of the interaction (outcome): How did the interaction end? What is the end result? Pay special attention here to what happens regarding the driver. If the driver signs something, assume that it is a ticket and not a verbal warning. Also, if the driver receives more than one of the options below, code for the most severe punishment.

1 = no warning
2 = verbal warning
3 = written warning
4 = citation (i.e. ticket)
5 = arrest
6 = expressed concern for driver's/passenger's welfare
99 = not determinable/applicable (e.g., there is no sound or tape ends suddenly)

35. Was the car towed (cartow): Was the civilian's car towed at any point during the interaction? Use all ways of knowing whether or not the car was towed to determine this outcome. For example, if you hear the officer state to the driver that his or her car is being towed, but actually do not see it, code it as being towed. If the officer gives the driver the option of having someone pick the car up instead of it being towed, and the driver says that is her plan, code that as the car not being towed.

0 = car was not towed
1 = car was towed

36. Drugs mentioned in relation to the crime (drugsmen): Drugs were mentioned in connection with the crime.

0 = Drugs were NOT mentioned
1 = Drugs were mentioned
99 = not determinable/applicable (e.g., there is no sound or tape ends suddenly)

37. Traffic flow (traffic): What was the level of traffic on the street where the vehicle was pulled over? This should be judged based on the side of the road in which the driver has been stopped.

0 = driver pulled into an alley or parking lot where traffic would naturally be low
1 = light (hardly any cars; there is more than 20 seconds *on average* between cars)
2 = medium (there is a break between cars going by)
3 = heavy (constant flow of cars; there is about 1-2 seconds *on average* between cars)
99 = not determinable

38. Light conditions during stop (light): Did the stop occur during daylight or at night?

0 = day
1 = night
99 = not determinable

Primary Interaction Variables (primary officer and driver)

Some interactions contain multiple officers and civilians, but all interactions contain at least one interaction between the primary officer on the scene and a driver. Therefore, the following variables will attempt to assess the characteristics of such an interaction.

Primary Police Officer Characteristics and Behaviors

****The primary officer is the officer who approaches the car first.****

39. Phenotypical race of primary officer (phporace): This is the race of the officer based on how they look to you. Do **NOT** use the RAND log book. Instead, base your decision on the appearance of the officer.

1 = Black
2 = White
3 = Other
99 = not determinable

40. Sex/gender of the primary officer (sexof): Indicate the gender/sex of the primary officer who approaches the vehicle of the car.

1 = Male
2 = Female
99 = Not given/determinable

41. Approximate age of the primary officer (agegspo). Use all of the indicators (visual, voice etc.) in order to make your guess about this.

1 = 20's
2 = 30's – 40's
3 = 50's – 60's
4 = over 60's
99 = Not applicable/Not determinable

42. Primary officer greeting (greetpo): The primary officer greeted the driver at the start of the interaction. A typical greeting would involve an attempt to "break the ice" with the driver. It is more than a rhetorical question or salutation. In the most typical case, an officer would pause or wait for a response to the greeting before proceeding on with the "business" surrounding the stop (e.g., "good evening sir/maam;" "how are you doing this evening?").

0 = officer did not greet
1= officer greeted
99 = not determinable

43. Primary officer addresses driver by name (namepo): After the driver identified herself or himself, the primary officer addressed her or him by name.

0 = primary officer did not use name
1 = primary officer used name
99 = not determinable

44. Deferential terms (deftrmof): When asking for compliance, did the officer use any of the following differential terms?

0 = no differential terms were used by the officer to address the driver
1 = sir/ma'am/miss
2 = other _____ (please specific)
99 = not determinable

45. Primary officer reason for stop (reasonpo): The primary officer offered the driver a reason for the stop during the interaction.

0 = primary officer did not offer reason
1 = primary officer offered reason
99 = not determinable

46. Primary officer interrogation question (qustinpo): Did the primary officer ask the driver "Do you know why you were pulled over?"

0 = no
1 = yes
99 = not determinable/not applicable

47. Primary officer interrogation answer (ansrpo): If asked, did the primary officer allow the driver to respond to the following question before cutting them off: "Do you know why you were pulled over?"

0 = no
1 = yes
99 = not determinable/not applicable

48. Driver asked why they were pulled over (drask): Did the driver ask the officer why he or she was pulled over?

0 = no
1 = yes
99 = not determinable/not applicable

49. Primary officer incriminating question (icrmqst): Does the primary police officer ask the driver whether or not they have any drugs or weapons on them? (e.g., "Do you have anything on you that you shouldn't?")

0 = no
1 = yes
99 = undeterminable

50. The primary officer offers a break (break): Did the primary officer offer a break to the driver (e.g., lessening a speeding penalty from 40 mph to 35 mph to avoid a higher fine)?

0 = no
1 = yes
99 = not determinable/not applicable

51. Primary officer good word (goodwrd): The primary officer left the driver with a good word. This is **NOT** facetious or sarcastic. The officer appears to offer a sincere discursive pleasantry to the driver (e.g., "Have a nice day; "I hope your day gets better;" "I hope the rest of your trip goes well;" "You take care now").

0 = good word not left
1 = good word was left
99 = not determinable/not applicable

52. Primary officer name (nameof): The officer introduces himself and provides his name to the driver, during the initiation of the interaction.

0 = officer does not introduce himself
1 = officer introduces himself
99 = not determinable/not applicable

53. Polite terms (ofpoltrm): Did the officer use polite terms while asking for compliance from the driver during the traffic stop. These would include saying thank you, please etc.

0 = no polite terms were used during the stop
1 = polite terms were used during the traffic stop
99 = not determinable

Communication Accommodation Variables – Primary Officer

CAT suggests that individuals use communication, in part, in order to indicate their attitudes toward each other and, as such, it is a barometer of the level of social distance between them. This constant movement toward and away from others, by changing one's communicative behavior, is called *accommodation*. Among the different accommodative strategies that speakers use to achieve these goals, *convergence* has been the most extensively studied—and can be considered the historical core of CAT (Giles, 1973). It has been defined as a strategy whereby individuals adapt their communicative behaviors in terms of a wide range of linguistic (e.g., speech rate, accents), paralinguistic (e.g., pauses, utterance length), and nonverbal features (e.g., smiling, gazing) in such a way as to become more similar to their interlocutor's behavior. (Giles, et al., in press).

FOR EACH OF THE COMMUNICATION VARIABLES (ACCOMODATION, NON-ACCOMODATION ETC.) ONLY CHOOSE 99 IF YOU CAN HEAR/AND OR SEE LESS THAN 50% OF THE CONVERSATION DURING THE INTERACTION, OTHERWISE MAKE A CHOICE USING THE PROVIDED SCALES

54. Primary officer overall pleasantness (cplsntpo): How pleasant did the primary officer seem when her or she interacted with the driver? Overall pleasantness is typically used in an effort to calm and put the driver at ease. It will be evident through both language and paralanguage. An officer would most likely be rated as pleasant if they introduced themselves and attempted to remain personable throughout the interaction or perhaps they gave the driver heart felt and useful advice for avoiding future tickets. In addition, officers who are pleasant are also very likely to be engaging, non-monotone, and expressive speakers. Officers who are **NOT** pleasant are likely to **NOT** engage the civilian on a personal level. They would distance themselves through the use of commands and a police script. [Code as 0 if the characteristic is totally absent]

not at all pleasant 0 1 2 3 4 5 6 7 8 9 10 pleasant
99 = not applicable/cannot be coded

55. Primary officer overall listening (calstnpo): Overall how well do you think that the primary officer listened to the driver during the interaction? An officer would score high on this variable if they allowed the driver to tell their own story/side of the events. The primary officer was attentive to the driver's communication. An officer would receive a score of 10 if: 1) they tended to **NOT** interrupt the driver when they spoke, 2) they yielded to the driver when they spoke, and 3) they asked thoughtful clarification questions when they did not follow the rationale of the driver. Non-verbally an officer would receive a 10 if they consistently nodded their head in recognition of what the driver was saying, and engaged in "back-channeling" (e.g., uh huh, OK, yes). Officers who are **NOT** good listeners will frequently interrupt the driver, and may **NOT** give the driver an opportunity to speak. [Code as 0 if the characteristic is totally absent]

did not listen 0 1 2 3 4 5 6 7 8 9 10 listened
99 = not applicable/cannot be coded

56. Primary officer perspective taking (caviwspo): Overall, how well did the primary police officer take into account the views, needs, and perspectives of the driver involved and take into account the emotional state of the driver? Police officers would be scored as taking the drivers perspective if they: 1) decided to not give a ticket because they saw that a couple was rushing to the hospital for a baby delivery; 2) made statements about how difficult it must be to have to deal with _____; and 3) offering help to deal with any special factors that might face the driver including disabilities; 4) having a *mother* step away from her car so that her children will not hear negative information about her. An example of an officer who would be rated high (around 8) on perspective taking would be one who writes the drivers speed as being less than it actually was so the driver does not have to go to court. Officers who do **NOT** perspective take will lean heavily on the "police script" regardless of the unique circumstances of the driver. [Code as 0 if the characteristic is totally absent]

not at all 0 1 2 3 4 5 6 7 8 9 10 took driver's perspective
99 = not applicable/cannot be coded

57. Primary officer respect and politeness (capolit): In general how respectful and polite was the primary officer toward the driver? Does the officer show regard for the civilian through speech, manners and behavior. An exceptionally polite officer will attempt to make sure that the driver feels comfortable during the interaction by using both verbal and non-verbal messages. For example, a police officer could say "please" and "thank you" rather than just instructing the civilian what he or she needs. The officer could also be seen as polite by using differential language to refer to the driver (e.g., "sir," "madam," "first name"). Impolite and disrespectful officers will tend to be rude and curt. They will treat the civilian simply as a threat or an "offender" [Code as 0 if the characteristic is totally absent]

not at all polite 0 1 2 3 4 5 6 7 8 9 10 polite
99 = not applicable/cannot be coded

58. Primary officer overall explanations (cxplnpo): How well did the primary police officer explain things to the driver and in ways they could understand (i.e., talk to people in ways that "sit right" with them, and that they understand)? This would include officers who use verbal clarification questions to make sure that civilians understand their options (e.g., "Do you have any questions for me?" "Is there anything else I could help you with today?"). These officers would go through a step by step process of explaining what they are doing and why. These officers will **NOT** rush through their explanations, but will take their time. Officers who score low on this scale will tend to rush through explanation, stick to the "script" without regard for whether the civilian follows what is happening to them and why. [Code as 0 if the characteristic is totally absent]

no explanation 0 1 2 3 4 5 6 7 8 9 10 explanation
99 = not applicable/cannot be coded

59. Primary officer helpfulness (helpflpo): The primary officer took into consideration the driver's characteristics (e.g., race, age, disability) in a helpful way. The primary officer who is helpful will tend to do the following: 1) point to where a civilian should sign on a citation or warning; or 2) offer the citizen directions or some useful information not associated with the stop. An example of an officer who would be high on the scale of being helpful (around an 8) would be one who offered to show a lost driver how to arrive at a destination by actually leading the driver there. Officers who are **NOT** helpful will tend to **NOT** provide any additional assistance to the driver beyond what is required to undertake the stop. [Code as 0 if the characteristic is totally absent]

not helpful 0 1 2 3 4 5 6 7 8 9 10 helpful
99 = not applicable/cannot be coded

60. Primary officer approachability (aprochpo): The primary officer appeared approachable while interacting with the driver. Approachable officers will tend to 1) have a relaxed tone in their voice, 2) stand where the driver can see their face, and 3) allow the conversation to stray momentarily from the specifics of the stop. Officers that are **NOT** approachable will tend to be rigid in tone and body posture. **[Code as 0 if the characteristic is totally absent]**

not approachable 0 1 2 3 4 5 6 7 8 9 10 approachable
99 = not applicable/cannot be coded

61. Primary officer courteous (courtypo): The primary officer appeared to be extremely courteous towards the driver. An officer who is courteous will remain polite throughout the interaction by minding their manners, avoiding interrupting the driver and overall listening. They will tend to take a positive approach to the interaction regardless of the behavior of the driver. A primary officer who is **NOT** courteous will be rude throughout the interaction through the use of 1) frequent interruptions and, 2) a general lack of manners towards the driver by ignoring questions posed by the driver. **[Code as 0 if the characteristic is totally absent.]**

not at all courteous 0 1 2 3 4 5 6 7 8 9 10 courteous
99 = not applicable/cannot be coded

Non - Accommodation Variables – Primary Officer

62. Primary officer is dismissive (dismispo): To what extent did the primary officer dismiss the arguments and communication exhibited by the driver? In many cases, an officer will hear an excuse for the offense and will reject that excuse as invalid. An officer who is dismissive of the driver might say the following: "I've heard that one before" or "That's the oldest one in the book." Another example of dismissiveness might be the reaction of an officer who hears from a new dad that he is rushing to the hospital to see his new baby. The officer might say to the new dad, "I am happy you are a new father, but we want to make sure you get to the hospital in one piece" or "We want to make sure you get to actually be a dad to your child." An officer who is **NOT** dismissive will be responsive to the excuses or protests of the driver. They will listen and at least hear the driver out. Perhaps, they will reduce the penalty for what they may consider a valid excuse. [Code as 0 if the characteristic is totally absent – this would include cases where the driver does not offer any explanations for their behavior]

not dismissive 0 1 2 3 4 5 6 7 8 9 10 dismissive
99 = not applicable/cannot be coded

63. Primary officer indifference (indifpo): To what extent was the primary officer indifferent to the driver? A primary officer who is indifferent will say that he or she does not care regardless of the circumstances. The officer will bring up to the driver that they are in the wrong and in most circumstances they will issue a ticket to the driver. These officers will typically apply a strict code of enforcement regardless of the personal circumstances of the driver. An officer who is **NOT** indifferent will listen to the concerns of the driver and will behave as if they actually care. [Code as 0 if the characteristic is totally absent.]

not indifferent 0 1 2 3 4 5 6 7 8 9 10 indifferent
99 = not applicable/cannot be coded

64. Primary officer impatience (impatpo): To what extent was the primary officer impatient with the driver? A primary officer who is impatient will rush through the interaction with the driver. An impatient officer may be less thorough in his/her explanations and may not listen well to the needs and questions of the primary driver. Officers who are highly impatient may be visibly so through fidgeting, non-verbal gestures with their hands to hurry the driver, insistence that the driver facilitate the stop by quickly offering their identification or signature for paperwork. An officer who is **NOT** impatient will appear quite relaxed and **NOT** frustrated with the driver regardless of how long the interaction takes. [Code as 0 if the characteristic is totally absent.]

not at all impatient 0 1 2 3 4 5 6 7 8 9 10 impatient
99 = not applicable/cannot be coded

65. Primary officer rigidity (rigidpo): The primary officer appeared to be rigid towards the driver. A primary officer who is rigid will most likely not take any excuse that a driver has to offer. Rigid officers are inflexible. Rigid officers will remain very textbook and rely on the "script" and laws to mandate the outcome of the interaction. They tend to take on a more rigid posture and tone in their voice. An officer who is **NOT** rigid will remain more relaxed and receptive to the driver. Their overall tone tends to be warm and receptive. They are also more likely to offer the driver more options instead of simply the most punitive outcome associated with the stop. [Code as 0 if the characteristic is totally absent.]

not rigid 0 1 2 3 4 5 6 7 8 9 10 rigid
99 = not applicable/cannot be coded

66. Primary officer patronizing (patronpo): The primary officer spoke to the driver in a patronizing manner. An officer who is patronizing will use his or her position as an officer to belittle and degrade the less authoritative position of the driver. This may entail referring to a clearly older male as "boy," or telling a blonde woman that she just must have been suffering "from a blonde moment when you made that turn without seeing the 'No Turn On Red' sign." A patronizing officer may "dumb down" his or her speech and/or purposely offer an overly simple explanation, perhaps in a tone as if speaking to a child. An officer who is **NOT** patronizing will **NOT** use his or her position of authority to remind the driver that they lack power during the stop. A non-patronizing officer will speak to the driver as an adult who is fully capable of understanding the situation. [Code as 0 if the characteristic is totally absent]

not at all patronizing 0 1 2 3 4 5 6 7 8 9 10 patronizing
99 = not applicable/cannot be coded

67. Primary officer air of superiority (superpo): The primary officer spoke to the driver with an air of superiority. A primary officer who speaks with an air of superiority will use his or her tone in a belittling manner. These officers may rely on jargon filled language when speaking to the driver. Typically, the officer uses both non-verbal and verbal communication to put a hierarchical social distance between himself/herself and the driver. An officer who does **NOT** speak with an air of superiority will **NOT** use this jargon filled language when offering explanations and will make an effort to speak to the driver using every day language the common layman would understand.[Code as 0 if the characteristic is totally absent]

no air of superiority 0 1 2 3 4 5 6 7 8 9 10 air of superiority
99 = not applicable/cannot be coded

68. Primary officer interruptions (intrptpo): The primary officer appeared interruptive of the driver. Interruption includes when one cannot get his or her thought to completion before someone else begins speaking. An officer who is interruptive will frequently not allow the driver to finish his or her thoughts before beginning to speak. Interruptive officers who cut the driver off more than three or four times during an interaction would typically be coded as interruptive. In addition, primary officers who interrupt drivers at crucial times during the interaction (e.g., when the driver is giving an excuse for why they were speeding) would also be coded as interruptive. An officer who is **NOT** interruptive will frequently allow the driver to completely finish his or her thoughts before beginning to speak. [Code as 0 if the characteristic is totally absent]

not at all interruptive 0 1 2 3 4 5 6 7 8 9 10 interruptive
99 = not applicable/cannot be coded

69. Primary officer disconfirming (dscnfrpo): The primary officer appeared disconfirming of the ideas put forth by the driver. An officer who is disconfirming will reject any idea or excuse a driver is attempting to make. Disconfirming officers will not be willing to believe the driver and may show this through statements like, "Sure, whatever you say, you are still getting a ticket," or "I saw you make the illegal turn, anything you say now is just digging yourself deeper." An officer who is **NOT** disconfirming will be willing to listen to the ideas and comments made by the unique situation of the driver. [Code as 0 if the characteristic is totally absent]

not at all disconfirming 0 1 2 3 4 5 6 7 8 9 10 disconfirming
99 = not applicable/cannot be coded

70. Primary officer sarcasm (sarcpo): The police officer expressed sarcasm during the traffic stop. A primary officer who is sarcastic will use ironic comments in combination with tone to purposefully rebut the driver's position. For example, "So, where's the fire?" Or the driver may offer an excuse and the officer may come back with something like "right…and I can do a handspring off the hood of my cruiser." An officer who is **NOT** sarcastic will remain straightforward within his or her language and paralanguage. [Code as 0 if the characteristic is totally absent]

not at all sarcastic 0 1 2 3 4 5 6 7 8 9 10 sarcastic
99 = not applicable/cannot be coded

Emotional Reactions - Primary Officer

71. Primary police officer aggravation (poaggrv): The primary officer appeared very aggravated during the encounter. A primary officer who appears aggravated may 1)become rushed during his or her speaking, 2) change tone, or 3) pause a lot and start over again signaling that they are becoming frustrated with the way the interaction is going. An aggravated police officer may be fidgety and make several sighs during the interaction displaying their aggravation. A primary officer that is **NOT** aggravated will remain calm throughout the interaction. They will typically have a calm tone and demeanor throughout the entire interaction regardless of what happens during the stop. [Code as 0 if the characteristic is totally absent]

not at all aggravated 0 1 2 3 4 5 6 7 8 9 10 aggravated
99 = not applicable/cannot be coded

72. Primary police officer apologetic (poapolog): The primary officer seemed genuinely apologetic or remorseful during the interaction. This could be expressed by saying something like "I am sorry I have to give you this ticket, but it is my job…" or "I am sorry that I said that you went through a light, when I meant to say stop sign." Non-verbal communication could also indicate an apologetic orientation (e.g., an officer "sounds" sorry for a mistake he makes that causes a ticket to be re-issued) An officer who is **NOT** apologetic will in no way admit fault for anything at any point during the interaction. DO NOT count as apologetic officers who say "I'm sorry" or "pardon me" as they seek clarification for something said by the driver during the interaction. [Code as 0 if the characteristic is totally absent]

not at all apologetic 0 1 2 3 4 5 6 7 8 9 10 apologetic
99 = not applicable/cannot be coded

73. Primary officer anxiousness (anxiuspo): The primary officer appeared anxious during the interaction. A primary officer who is anxious will seem unable to stand still during the interaction. He or she may fiddle a lot with the equipment on his or her belt. These officers may not have a strong, steady voice, but may waiver instead. These officers may seem particularly focused on the **threat** that the driver might pose to them. An officer who is **NOT** anxious will remain steady and unwavering throughout the interaction. They would appear to be rather relaxed during the traffic stop**.** [Code as 0 if the characteristic is totally absent]

not at all anxious 0 1 2 3 4 5 6 7 8 9 10 anxious
99 = not applicable/cannot be coded

74. Primary officer anger (angrpo): The primary officer appeared angry during the traffic stop. A primary officer who is angry will raise their voices, shout, yell, or become very stern through tone of voice. These officers will demonstrate disgust toward the driver usually through both verbal and non-verbal behavior**.** An officer who is **NOT** angry will most likely **NOT** yell and appear rather calm during the interaction.

not at all angry 0 1 2 3 4 5 6 7 8 9 10 angry
99 = not applicable/cannot be coded

75. Primary police officer humor (pohumor): The primary police officer showed his or her humorous side during the interaction with the driver. A primary officer who is humorous would show this by laughing, or chuckling and/or making jokes. For example, a humorous officer may laugh with the driver about something said during the interaction. In this context, humor must remain light hearted and fun. Humor is not an officer laughing *at* a driver, or laughing as a means of dismissing a driver's excuse. The humor will always occur during the interaction with the driver. Comments and laughter made in the cruiser will not be coded as humorous. An officer who is **NOT** humorous will not joke or laugh during any part of the interaction. [Code as 0 if the characteristic is totally absent]

0 = not at all humorous
1 = officer humorous
99 = not applicable/cannot be coded

Non-verbal measures – Primary Officer

For the following measures, consider the relationship of the primary officer to the driver.

76. Proximity of the primary officer relative to the driver (poclose): How close, in feet was the primary officer to the vehicle during the interaction with the driver? As an indication of proximity, estimate the distance between the torso of the officer and the door/window of the driver. If the civilian exited the car, this estimate should be based on the time before the civilian exited. This should be an average estimate based on the entire incident.

0 = less than 1 feet
1 = 1 feet
2 = 2 feet
3 = 3 feet
4 = more than 3 feet
99 = not determinable

77. What was the body orientation of the primary officer towards the driver (pobdor): During the majority of the interaction, did the officer position himself in front of the driver, besides the driver or behind the driver? In general, being besides the driver facilitates greater face-to-face interaction. [Code as 0 if the characteristic is totally absent]

1 = the officer was standing in front of the driver (behind the side mirror)
2 = the officer was standing directly beside the driver and making eye contact
3= the officer was standing behind the driver
99 = not applicable/cannot be coded (in general only when the camera angle or size of vehicle does not permit)

Escalation

78. Escalation (esclpo): If there was any unpleasantness in the interaction, to what extent was the police officer responsible for the escalation of this unpleasantness. If there was no escalation and the interaction was pleasant with no problems, choose 0. Otherwise use the endpoints to indicate responsibility.

Not responsible for a problem 1 2 3 4 5 6 7 8 9 10 Responsible
0 = no problem/not applicable

79. De-escalation (desclpo): If there was an unpleasantness in the interaction, to what extent was the police officer responsible for the de-escalation of this unpleasantness. If there was no escalation and the interaction was pleasant with no problems, choose 0. Otherwise use the endpoints to indicate responsibility.

Not responsible for a problem 1 2 3 4 5 6 7 8 9 10 Responsible
0 = no problem/not applicable

Driver characteristics and Behaviors

80. Phenotypical race of the driver (phdrace): This is the race of the driver based on how they look to you. Do not use the RAND log book. Instead, base your decision on the appearance of the driver based on the videotape.

1 = Black
2 = White
3 = Other
99 = not determinable

81. Sex of the driver (sexdrvr): Indicate the gender/sex of the driver of the vehicle. Use any possible indicators for this variable including voice of the occupant.

1 = Male
2 = Female
99 = not given/determinable

82. Age group of the driver (agegrpdr) : What age group would best describe the driver during the interaction? Use all of the indicators (visual, voice etc.) in order to make your guess about this.

1 = teen
2 = adult
3 = elderly
99 = not applicable/not determinable

83. Driver handcuffed (hand): Was the driver handcuffed?

0 = driver is **NOT** handcuffed
1 = driver is handcuffed
99 = not applicable/not determinable

84. An officer requests that the driver leave the vehicle (lvehclpo): Did an officer ask the driver to get out of the vehicle?

0 = no
1 = yes
99 = not determinable/not applicable

85. Driver incriminating answer (icrmansr): How does the driver respond to the question of whether or not he or she is carrying illegal drugs or weapons?

0 = driver is not asked by the police officer
1 = driver admits to carrying something illegal
2 = driver denies carrying anything illegal
3 = driver avoids responding to the question
99 = not determinable

86. Deferential terms driver (deftrmdr): When complying with any officer directions, did the driver use any of the following differential terms?

0 = no differential terms were used by the driver to address the officer
1 = sir/ma'am/miss/officer
2 = other _____ (please specific)
99 = not determinable

87. Evidence of politeness (drpolev): Did the driver use polite terms while complying with the officer during the traffic stop. These would include saying thank you, please etc.

0 = no polite terms were used during the stop
1 = polite terms were used during the traffic stop
99 = not determinable

Communication Accommodation Variables – Driver

CAT suggests that individuals use communication, in part, in order to indicate their attitudes toward each other and, as such, it is a barometer of the level of social distance between them. This constant movement toward and away from others, by changing one's communicative behavior, is called *accommodation*. Among the different accommodative strategies that speakers use to achieve these goals, *convergence* has been the most extensively studied—and can be considered the historical core of CAT (Giles, 1973). It has been defined as a strategy whereby individuals adapt their communicative behaviors in terms of a wide range of linguistic (e.g., speech rate, accents), paralinguistic (e.g., pauses, utterance length), and nonverbal features (e.g., smiling, gazing) in such a way as to become more similar to their interlocutor's behavior. (Giles, et al., in press)

FOR EACH OF THE COMMUNICATION VARIABLES (ACCOMODATION, NON-ACCOMODATION ETC.) ONLY CHOOSE 99 IF YOU CAN HEAR/AND OR SEE LESS THAN 50% OF THE CONVERSATION DURING THE INTERACTION, OTHERWISE MAKE A CHOICE USING THE PROVIDED SCALES

88. Overall driver pleasantness (caplesdr): How pleasant did the driver seem while interacting with the primary officer? Overall pleasantness is typically used in an effort to engage the police officer and keep the interaction de-escalated. It will be evident through both language and paralanguage. A driver would most likely be coded as pleasant if they introduced themselves and attempted to remain personable throughout the interaction or perhaps they gave the officer a heart felt excuse and apology. In addition, drivers who are pleasant are also very likely to be engaging, non-monotone, and expressive speakers. Drivers who are **NOT** pleasant are likely to **NOT** engage the officer. They would distance themselves from the officer through avoiding any attempt to be warm. [Code as 0 if the characteristic is totally absent]

not at all pleasant 0 1 2 3 4 5 6 7 8 9 10 pleasant
99 = not applicable/cannot be coded

89. Driver overall listening (calistdr): Overall how well do you think that the driver listened to the primary police officer during the interaction? A driver would score high on this variable if they allowed the officer to finish before trying to speak. A driver would be scored as listening if: 1) he or she tended to not interrupt the officer when the officer spoke, 2) the driver yielded to the officer when he or she spoke, and 3) the driver did not interject with "but I was just…" or "but wait, that's not what I did…" Non-verbally a driver would receive a 10 if they consistently engaged in "back-channeling" (e.g., uh huh, OK, yes). Drivers who are **NOT** good listeners will frequently interrupt the officer, and may **NOT** give the officer an opportunity to speak because they are consistently interjecting and trying to get an excuse or some unique information on the table. [Code as 0 if the characteristic is totally absent]

did not listen 0 1 2 3 4 5 6 7 8 9 10 listened
99 = not applicable/cannot be coded

90. Driver perspective taking (caviwdr): Overall, how well did the driver take into account the views, and job-perspective of the officer involved? Drivers would be rated as taking the officer's perspective if: 1) the driver made statements about how difficult it must be to have to deal with _____ when being an officer 2) the driver told the officer something along the lines of "look officer, I know you saw me speeding, I can't argue with that, I probably shouldn't have done that". An example driver who would receive a high score (around 8) on perspective taking may tell the officer not to apologize that he/she was just doing his/her job. Drivers who do **NOT** perspective take may frequently ask the officer to make exceptions for his or her personalized situation. [Code as 0 if the characteristic is totally absent.]

not at all 0 1 2 3 4 5 6 7 8 9 10 took officer's perspective
99 = not applicable/cannot be coded

91. Driver general respect and politeness (carsptdr): In general how respectful and polite was the driver toward the officer? Does the driver show regard for the officer through speech, manners and behavior? An exceptionally polite driver will attempt to make sure that the officer is aware that they are not going to escalate the situation by using both verbal and non-verbal messages. For example, a driver could say "please" and "thank you" rather than seeming harsh or jaded because they are getting a ticket. The driver could also be seen as polite by using differential language to refer to the officer (e.g., "sir," "madam," "Officer Wilson"). Impolite and disrespectful drivers will tend to be rude and curt. They will treat the officer simply as a jerk in uniform. [Code as 0 if the characteristic is totally absent.]

not at all respectful 0 1 2 3 4 5 6 7 8 9 10 respectful
99 = not applicable/cannot be coded

92. Driver overall explanations (caxpnldr): How well did the primary driver explain things to the officer in ways they could easily understand (i.e., talk to the officer in ways that "sit right" with them, and that they comprehend)? This would include drivers who take their time in explaining exactly what is unique to their situation so that the officer has a thorough understanding of what they are talking about. Drivers who are low on this scale may simply blurt argumentative statements like "that wasn't me" or "you saw the wrong person". They will make no effort to thoroughly explain themselves with little regard for whether or not they are making sense or if the officer is following their story (or lack thereof). [Code as 0 if the characteristic is totally absent]

no explanation 0 1 2 3 4 5 6 7 8 9 10 explanation
99 = not applicable/cannot be coded

93. Driver self-disclosure (slfdisdr): The driver engaged in some form of self-disclosure while interacting with the primary officer. Drivers who reveal anything personal about themselves would be counted as self-disclosing. Statements that count as self-disclosure would include: 1) "I am a Democrat!" 2) "I think our children go to the same school," 3) "I voted for the referendum that would give the police officers more holiday break time."

0 = driver does not self-disclose
1 = driver self-discloses
99=not applicable/determinable

94. Primary driver courteous (courtydr): The driver appeared to be extremely courteous towards the police officer. A driver who is courteous will remain polite throughout the interaction by minding their manners, avoiding interrupting the officer and overall listening. They will tend to take a positive approach to the interaction regardless of the behavior of the officer. A driver who is **NOT** courteous will be rude throughout the interaction through the use of 1) frequent interruptions and, 2) a general lack of manners towards the officer by avoiding answering questions posed by the officer. [Code as 0 if the characteristic is totally absent]

not at all courteous 0 1 2 3 4 5 6 7 8 9 10 courteous
99 = not applicable/cannot be coded

95. Driver cooperativeness (coopdr): The driver was extremely cooperative with the primary officer. The driver complied with all of the officer requests. In addition, the driver did whatever he or she could to facilitate the process of the stop. A driver who is cooperative might already have identification ready before the officer approaches the car. A driver who is **NOT** cooperative will try and resist complying with some or all of the primary officer's requests. They will typically be slower as they respond. In addition, they would be more likely to question the officer or the rationale for the stop. [Code as 0 if the characteristic is totally absent.]

Not at all cooperative 0 1 2 3 4 5 6 7 8 9 10 cooperative
99 = not applicable/cannot be coded

96. Driver apologetic (apolgydr): The driver seemed genuinely apologetic during the interaction. This could be expressed by saying something like "I am so sorry, I didn't even see that stop sign." "I am very sorry for speeding; I don't usually do things like this." A driver who is **NOT** apologetic will in no way admit fault for anything at any point during the interaction. [Code as 0 if the characteristic is totally absent]

not at all apologetic 0 1 2 3 4 5 6 7 8 9 10 apologetic
99 = not applicable/cannot be coded

Non - Accommodation Variables – Driver

97. Driver belligerence (beligdr): To what extend did the driver display belligerence towards the primary officer? Examples of belligerence would include drivers who demonstrate adamant hostility towards the primary officer (e.g., "you stupid cop, why did you pull me over!?"). Belligerence is often demonstrated through an abrasive tone or verbal jabbing. A non-belligerent driver will not question the primary officer's authority or reason for the stop. They would not be hostile, but will be fully cooperative with the primary officer. [Code as 0 if the characteristic is totally absent]

not at all belligerent 0 1 2 3 4 5 6 7 8 9 10 belligerent
99 = not applicable/cannot be coded

98. Driver is dismissive (dismisdr): To what extent did the driver dismiss the arguments and communication exhibited by the primary officer? In many cases, a driver will hear the reason why he or she was pulled over and then reject the reasoning of the officer. For example a driver might say, "I was not speeding, your radar actually clocked a driver who was passing me." A highly dismissive person will insist throughout the interaction that the officer's reasoning is flawed. A driver who is **NOT** dismissive will accept the officer's reasoning for the stop and interrogation. [Code as 0 if the characteristic is totally absent]

not at all dismissive 0 1 2 3 4 5 6 7 8 9 10 dismissive
99 = not applicable/cannot be coded

99. Driver indifference (indifdr): To what extent was the driver indifferent to the primary police officer? A driver who is indifferent will not make an effort to change the outcome of the stop. If the officer raises safety issues with the driver they will not be attuned to them. They simply express a nonchalant attitude toward the officer and the circumstances of the stop. They have a "whatever" attitude. A driver who is **NOT** indifferent will listen to the officer and will behave as if they actually care about the outcome of the stop. [Code as 0 if the characteristic is totally absent]

not at all indifferent 0 1 2 3 4 5 6 7 8 9 10 indifferent
99 = not applicable/cannot be coded

100. Driver impatience (impatdr): To what extent was the driver impatient with the primary officer? A driver who is impatient will rush through the interaction with the officer. An impatient driver may be less thorough in his/her explanations and may not listen well to the needs and questions of the primary officer. An impatient driver is likely to mention that he or she is late for something or in a rush to get somewhere. The driver might suggest that the officer "Hurry up." Drivers who are highly impatient may be visibly so through fidgeting or non-verbal gestures with their hands to hurry the officer, or they may request that the officer write the ticket quickly. A driver who is **NOT** impatient will appear quite relaxed and **NOT** frustrated with the officer regardless of how long the interaction takes. [Code as 0 if the characteristic is totally absent]

not at all impatient 0 1 2 3 4 5 6 7 8 9 10 impatient
99 = not applicable/cannot be coded

101. Driver argumentativeness (arguedr): The driver was argumentative with the primary officer. Drivers who are argumentative will tend to escalate the confrontation with the officer (e.g., "I can't believe you pulled me over!"). They will tend to raise their voices, be more expressive, animated and passionate about their argument, and they tend to either contradict or resist the officer's understanding of the situation or event. Drivers who are **NOT** argumentative will be much more cooperative and respectful of the officers. They will also be more pliable during the interaction. [Code as 0 if the characteristic is totally absent.]

not at all argumentative 0 1 2 3 4 5 6 7 8 9 10 argumentative
99 = not applicable/cannot be coded

102. Driver submissiveness (submitdr): The driver was submissive to the primary officer. Driver's who are submissive will tend to be fully compliant with all of the officer's requests and arguments. Submissive drivers are completely accepting of the officer's authority. They will not argue back during the interaction. Drivers who are **NOT** submissive will tend to challenge the officer's authority and judgment. In addition, they will consistently reiterate their point of view during the interaction. [Code as 0 if the characteristic is totally absent. **]**

not at all submissive 0 1 2 3 4 5 6 7 8 9 10 submissive
99 = not applicable/cannot be coded

103. Driver engages over-emphasizes their excuse (excusedr): The driver appeared to spend an excessive amount of time providing excuses for why he or she might have been pulled over and detained. The occupant focuses on these excuses because they expect them to eventually be accepted by the officer as valid. During the course of an interaction, the driver who over-emphasizes their excuses will continually repeat them and elaborate on them. Drivers who do **NOT** over-emphasize their excuses either 1) offer no excuse for their behavior or 2) mention an excuse in passing ONLY once. [Code as 0 if the characteristic is totally absent]

did not make excuses 0 1 2 3 4 5 6 7 8 9 10 excuses made
99 = not applicable/cannot be coded

104. Driver interruptions (intrptdr): The driver appeared interruptive of the primary officer. Interruption includes when one cannot get his or her thought to completion before someone else begins speaking. A driver who is interruptive will frequently not allow the primary officer to finish his or her thoughts before beginning to speak. Interruptive drivers who cut the primary officer off more than two or three times during an interaction would typically be coded as 10. In addition, drivers who interrupt primary officers at crucial times during the interaction (e.g., when the police officer is explaining why the driver was pulled over) would also be coded as interruptive. A driver who is **NOT** interruptive will frequently allow the officer to completely finish his or her thoughts before beginning to speak. [Code as 0 if the characteristic is totally absent]

not at all interruptive 0 1 2 3 4 5 6 7 8 9 10 interruptive
99 = not applicable/cannot be coded

105. Driver sarcasm (sarcdr): The driver expressed sarcasm during the traffic stop. A driver who is sarcastic will use ironic comments in combination with tone to purposefully rebut the officer's position. Usually the driver will use the sarcasm to express suspicion of the officer's motives. In addition, sarcasm is often expressed through the use of paralanguage or sarcastic tone. For example, "Yeah I am SURE that's the reason I was pulled over (sarcastic tone)." A driver who is **NOT** sarcastic will remain straightforward within his or her language and paralanguage. [Code as 0 if the characteristic is totally absent]

not at all sarcastic 0 1 2 3 4 5 6 7 8 9 10 sarcastic
99 = not applicable/cannot be coded

Emotional Reactions – Driver

106. Driver aggravation (draggrv): The driver appeared very aggravated during the encounter. A driver who appears aggravated may 1) become rushed during his or her speaking, 2) change tone, or 3) pause a lot and start over again signaling that they are becoming frustrated with the way the interaction is going. An aggravated driver may be fidgety and make several sighs during the interaction displaying their aggravation. A driver that is **NOT** aggravated will remain calm throughout the interaction. He or she will typically have a calm tone and demeanor throughout the entire interaction regardless of what happens during the stop. [Code as 0 if the characteristic is totally absent]

not at all aggravated 0 1 2 3 4 5 6 7 8 9 10 aggravated
99 = not applicable/cannot be coded

107. Driver humor (drhumor): The driver showed his or her humorous side during the interaction with the officer. A driver who is humorous would show this by laughing, or chuckling and/or making jokes. For example, a humorous driver may laugh with the officer about something said during the interaction. In this context, humor must remain light hearted and fun. Humor is not a driver laughing *at* an officer, or laughing as a means of dismissing an officer's reasoning for the stop. The humor will always occur during the interaction with the officer. A driver who is **NOT** humorous will not joke or laugh during any part of the interaction. [Code as 0 if the characteristic is totally absent]

0 = not at all humorous
1 = officer humorous
99 = not applicable/cannot be coded

108. Driver expressed confusion (drconfus): The driver expressed confusion during the interaction with the primary police officer. Usually this confusion occurs during the point during the stop when punishment is meted out to the civilian. Confusion might be represented by the use of multiple clarification questions during the interaction. For example: "Can you repeat that again?" or "What am I supposed to be doing with this paperwork?" "Am I gonna be arrested?" A driver who does **NOT** express confusion will not ask any clarification questions, especially when being administered a citation. [Code as 0 if the characteristic is totally absent]

not at all confused 0 1 2 3 4 5 6 7 8 9 10 confused
99 = not applicable/cannot be coded

109. The driver appeared anxious (dranxuos): During the interaction, the driver appeared nervous or anxious. Usually this surrounds the outcome (e.g., citation) associated with the stop. Often times this will be expressed as worry about the implications of the outcome (e.g., tarnished driving record etc.) In many cases, there will be crackling, strained, and unsteady voices coming from drivers who are anxious. A driver who is **NOT** anxious will remain steady and unwavering throughout the interaction. They would appear to be rather relaxed during the traffic stop**.** [Code as 0 if the characteristic is totally absent]

not at all anxious 0 1 2 3 4 5 6 7 8 9 10 anxious
99 = not applicable/cannot be coded

110. Driver anger (angrdr): The driver appeared angry during the traffic stop. A driver who is angry will raise their voices, shout, yell, or become very stern through tone of voice. These driver's will demonstrate disgust toward the officer usually through both verbal and non-verbal behavior**.** A driver who is **NOT** angry will most likely **NOT** yell and appear rather calm during the interaction. [Code as 0 if the characteristic is totally absent]

not at all angry 0 1 2 3 4 5 6 7 8 9 10 angry
99 = not applicable/cannot be coded

Non-verbal measures – Driver

For the following measures, consider the relationship of the driver to that of the primary officer.

111. Proximity of the driver relative to the police officer (drclose): Does the driver remain in his or her seat throughout the interaction, or do they ever leave their car without being asked by the officer to disembark from their vehicle. If the driver leaves his or her seat without being asked at any point, code this as 1.

0 = driver never left his or her seat
1 = the driver got out of his/her seat
99 = not applicable/cannot be coded

Escalation

112. Escalation (escldr): If there was any unpleasantness in the interaction, to what extent was the driver responsible for the escalation of this unpleasantness. If there was no escalation and the interaction was pleasant with no problems, choose 0. Otherwise use the endpoints to indicate responsibility.

Not responsible for a problem 1 2 3 4 5 6 7 8 9 10 Responsible
0 = no problem/not applicable

112. De-escalation: If there was an unpleasantness in the interaction, to what extent was the driver responsible for the de-escalation of this unpleasantness. If there was no escalation and the interaction was pleasant with no problems, choose 0. Otherwise use the endpoints to indicate responsibility.

Not responsible for a problem 1 2 3 4 5 6 7 8 9 10 Responsible
0 = no problem/not applicable

APPENDIX C

Police Officer Survey

This appendix contains the police officer survey.

POLICE OFFICER SURVEY

POLICE OFFICER SURVEY

City of Cincinnati
Fraternal Order of Police

Dear Fellow Officer:

The RAND Corporation has been selected by the Police Department and the Fraternal Order of Police, Queen City Lodge #69, to conduct a study of police/community relations in Cincinnati. We are asking you to take the time to participate in this process by completing the attached survey.

Just as citizens are being asked to provide feedback on their contacts with officers and their perception of policing in this City, your insight is also valuable in helping to identify the issues you face in your daily contact with the public.

To ensure your confidentiality, all surveys are being returned directly to SRBI, a RAND contractor. A postage-paid envelope is included so that you can mail this survey to SRBI. RAND will treat your answers as completely confidential. RAND will not provide individual information to anyone outside of the RAND research staff, except as required by law.

Although participation in this process is strictly voluntary, we encourage you to have your voice heard. Please complete the survey within the week of receiving it and mail it in the supplied return envelope.

Thank you for taking the time and making the effort to provide your perspective.

Sincerely,

Thomas H. Streicher, Jr.
Police Chief

Kathy Harrell
President, FOP Queen City Lodge 69

POLICE OFFICER SURVEY

The survey will take you about 15 minutes to complete. Please mail your completed survey to SRBI in the enclosed prepaid envelopes. SRBI is helping us coordinate the survey. They will record your responses and destroy the original surveys.

For additional information:

If you have any questions about the survey you can call collect to speak with Dr. Jack Riley, RAND, (412) 683-2300 during business hours 9am to 5pm Monday through Friday.

The following questions ask you about your experience as a police officer in Cincinnati.

Please mark (X) in the ❒ box to indicate your answer.

1. How many years have you been a Cincinnati Police Officer?

- ❒1 0-3 years
- ❒2 3-7 years
- ❒3 7-12 years
- ❒4 more than 12 years

2. What is your current rank in the CPD?

- ❒1 Officer
- ❒2 Specialist
- ❒3 Sergeant
- ❒4 Lieutenant
- ❒5 Captain
- ❒6 Other

3. What district do you work in?

- ❒1 DISTRICT ONE
- ❒2 DISTRICT TWO
- ❒3 DISTRICT THREE
- ❒4 DISTRICT FOUR
- ❒5 DISTRICT FIVE

4. How often do the citizens of Cincinnati provide information about a crime when they know something and are asked about it by the CPD?

- ❒1 ALMOST ALWAYS
- ❒2 USUALLY
- ❒3 SOMETIMES
- ❒4 ALMOST NEVER

POLICE OFFICER SURVEY

5. How likely are the citizens of Cincinnati to work with the police to try to solve neighborhood problems?

- ❒1 VERY LIKELY
- ❒2 SOMEWHAT LIKELY
- ❒3 SOMEWHAT UNLIKELY
- ❒4 VERY UNLIKELY

6. Are you familiar with the Community Police Partnering Center?

- ❒1 YES
- ❒2 NO

7. How many of the citizens you interact with on the street act disrespectfully towards the police (for example, making hand signals, swearing, derogatory words towards officers)?

- ❒1 ALMOST ALL
- ❒2 MORE THAN HALF
- ❒3 A FEW
- ❒4 NONE

8. How often do suspects you come into contact with attempt to resist arrest through the use of physical force?

- ❒1 ALMOST NEVER
- ❒2 SOMETIMES
- ❒3 USUALLY
- ❒4 ALMOST ALWAYS

9. When you come into contact with a criminal suspect, how often do feel you are in serious danger of physical violence.

- ❒1 ALMOST NEVER
- ❒2 SOMETIMES
- ❒3 USUALLY
- ❒4 ALMOST ALWAYS

10. How would you rate the CPD training and procedures on officer safety?

- ❒1 EXCELLENT
- ❒2 GOOD
- ❒3 FAIR
- ❒4 POOR

POLICE OFFICER SURVEY

11. The following statements ask you to rate your level of AGREEMENT or DISAGREEMENT based on your personal experience as a police officer in Cincinnati.

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
a.	"A good patrol officer will try to find out what residents think the neighborhood problems are and then will focus his/her efforts on these issues."	❒1	❒2	❒3	❒4
b.	"Police officers should work with citizens to try and solve crime related problems in their district."	❒1	❒2	❒3	❒4
c.	"Enforcing the law is by far a patrol officer's most important responsibility."	❒1	❒2	❒3	❒4
d.	"Police officers have reason to be distrustful of most citizens"	❒1	❒2	❒3	❒4
e.	"A good patrol officer is one who works proactively stopping cars, checking people out, running license checks, and so forth."	❒1	❒2	❒3	❒4
f.	"Police officers should try to solve non-crime problems in their district."	❒1	❒2	❒3	❒4
g.	"The African American community complains unfairly about racial profiling."	❒1	❒2	❒3	❒4
h.	"The African American community complains unfairly about police abuse of authority."	❒1	❒2	❒3	❒4
i.	"The media complains unfairly about racial profiling."	❒1	❒2	❒3	❒4
j.	"The media complains unfairly about police abuse of authority."	❒1	❒2	❒3	❒4
k.	"The general community complains unfairly about police abuse of authority."	❒1	❒2	❒3	❒4
l.	"Currently, it is too easy for a citizen to file a complaint against a police officer."	❒1	❒2	❒3	❒4
m.	"There are clear guidelines in the CPD that define what 'reasonable suspicion' is and indicate when officers are allowed to stop and question citizens."	❒1	❒2	❒3	❒4
n.	"In order for police officers to effectively fight street crime, some innocent citizens will have to experience the occasional inconvenience of being stopped or questioned by the police."	❒1	❒2	❒3	❒4
o.	"Police officers should make frequent informal contact with people in their district to establish trust and cooperation."	❒1	❒2	❒3	❒4

POLICE OFFICER SURVEY

12. The following statements ask you to rate your level of AGREEMENT or DISAGREEMENT about work conditions in the CPD based on your personal experience as a police officer in Cincinnati.

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
a.	"Effective supervision does identify police officers who abuse their authority."	❒1	❒2	❒3	❒4
b.	"When my unit identifies a problem, the police management is likely to help fix the problem."	❒1	❒2	❒3	❒4
c.	"Management is likely to publicly recognize a police officer that is exceptional in his/her job."	❒1	❒2	❒3	❒4
d.	"My supervisors often let me know how well I am performing."	❒1	❒2	❒3	❒4
e.	"The CPD protects its officers from unreasonable lawsuits and accusations."	❒1	❒2	❒3	❒4
f.	"In general, I have a lot of input over how I go about doing my job"	❒1	❒2	❒3	❒4
g.	"One of the major satisfactions in my life is my job."	❒1	❒2	❒3	❒4
h.	"I have a personal commitment to my job."	❒1	❒2	❒3	❒4
i.	"If I had a suggestion for improving my job in some way, it is easy for me to communicate my suggestions to management in the CPD"	❒1	❒2	❒3	❒4
j.	"The CPD provides clear guidance on what is expected of officers for evaluations and promotions."	❒1	❒2	❒3	❒4

POLICE OFFICER SURVEY

Our last few questions are used to ensure that our sample for this survey accurately reflects the population of Cincinnati police officers.

13. What is your age?

- ❒1 18-25
- ❒2 25-35
- ❒3 35-50
- ❒4 Over 50

14. What race do you consider yourself to be?

- ❒1 BLACK OR AFRICAN AMERICAN
- ❒2 WHITE
- ❒3 OTHER

15. What is your gender?

- ❒1 MALE
- ❒2 FEMALE

Thank you for participating in this survey. Please mail your completed survey in the enclosed prepaid envelopes to SRBI. SRBI is helping us coordinate the survey. They will record your responses and then destroy the original survey. To preserve confidentiality do not put your name on the survey or the envelope.

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APPENDIX D

Citizen Complaint Review and Police Officer Complaint Surveys

This appendix contains the citizen complaint review survey and the police officer complaint survey.

CITIZEN COMPLAINT REVIEW SURVEY

CITIZEN COMPLAINT REVIEW SURVEY

CITIZEN COMPLAINT REVIEW SURVEY

RAND, a nonprofit research company, is working with the City of Cincinnati and the ACLU to improve relations between the police department and the community. We would like you to be a part of this study by expressing your views about the police complaint process. The enclosed survey collects no identifying information, such as your name, address, or the complaint that you filed. Your responses will be kept confidential and cannot be associated with you. Your participation in this survey is voluntary and you may skip any questions that you prefer not to answer. By participating in this study you will be able to provide us with the citizen's perspective on the complaint process. Your honest opinions about your experience will help us identify ways to make the complaint process fairer and less difficult for citizens bringing complains.

The survey will take you about 5 minutes to complete. Please mail your completed survey to SRBI in the prepaid envelopes. SRBI is helping us coordinate the survey. They will record your responses and destroy the original surveys.

For additional information:

If you have any questions about the survey you can call collect to speak with Dr. Jack Riley, RAND, (412) 683-2300 during business hours 9am to 5pm Monday through Friday.

CITIZEN COMPLAINT REVIEW SURVEY

CITIZEN COMPLAINT REVIEW SURVEY

This survey asks questions about the complaint documented or resolved in this packet. Please answer the following questions regarding only this complaint.

Please mark (X) in the ❒ box to indicate your answer.

First, we would like to ask a few questions about the incident that caused you to file a complaint.

1. Was the complaint filed because of a face-to-face interaction with a CPD officer?

❒1 YES

❒2 NO

2. In which Cincinnati neighborhood did the incident occur? _____

(examples: Over-the-Rhine, Hyde Park, Westwood, Avondale, Clifton)

3. Were there any witnesses to the incident besides police officers?

❒1 YES

❒2 NO

4. Why did you have contact with the police officer(s)?

❒1 I wanted or needed police assistance

❒2 The police stopped me

❒3 Don't know. I witnessed the incident

❒4 Other

5. How would you describe the reason or reasons for your complaint?

Mark (X) next to ALL that apply to your complaint situation.

❒1 Discourtesy/unprofessional attitude

❒2 Lack of proper or timely service

❒3 Criminal misconduct

❒4 Sexual misconduct

❒5 Serious misconduct (e.g. severe procedural violations, etc.)

❒6 Excessive use of force

❒7 Unnecessary pointing of firearms at persons

❒8 Improper Searches and seizures

❒9 Discrimination

❒10 Any other reason

CITIZEN COMPLAINT REVIEW SURVEY

6. Were you (or the person you filed the complaint for) physically injured as a result of the incident?

- ❒1 YES
- ❒2 NO

7. How many police officers were accused in the complaint?

- ❒1 One
- ❒2 Two
- ❒3 Three or more

8. What was the race of the police officer? (If more than one was involved, what was the race of the officer with the most troublesome behavior)

- ❒1 WHITE
- ❒2 BLACK
- ❒3 OTHER
- ❒4 DON'T KNOW

Now we would like to ask a few questions about your filing of the complaint.

9. Which organization handled your complaint? (mark all that apply)

- ❒1 Citizen Complaint Review Process (CCRP)
- ❒2 Citizen Complaint Authority (CCA)
- ❒3 Internal Investigations Section (IIS)
- ❒4 Don't know

10. If you filed the complaint in person or by telephone, did the person who took your complaint act professionally?

- ❒1 YES
- ❒2 NO
- ❒3 I DID NOT FILE IN PERSON OR BY PHONE

Now we would like to ask you some questions about your experiences with the investigation of the complaint.

11. Did an investigator contact you about the complaint?

- ❒1 YES
- ❒2 NO

CITIZEN COMPLAINT REVIEW SURVEY

12. Were you contacted about attending a meeting to address the complaint?

❒1 YES

❒2 NO

13. Did you attend a meeting regarding this complaint?

❒1 YES

❒2 NO

If no, why not? (mark the most important reason)

❒3 THE MEETING WOULD BE POINTLESS

❒4 I DID NOT WANT TO SEE THE OFFICER AGAIN

❒5 I DID NOT HAVE TIME TO ATTEND THE MEETING

❒6 I WAS NOT INTERESTED IN ATTENDING THE MEETING

14. During the investigation and review process how much did those investigating the complaint consider your version of events?

❒1 A GREAT DEAL

❒2 A FAIR AMOUNT

❒3 ONLY A LITTLE

❒4 NOT AT ALL

15. During the investigation and review process of the complaint, how much do you feel you were treated with politeness, respect, and dignity?

❒1 A GREAT DEAL

❒2 A FAIR AMOUNT

❒3 ONLY A LITTLE

❒4 NOT AT ALL

CITIZEN COMPLAINT REVIEW SURVEY

16. How much do you AGREE or DISAGREE with the following statements about the citizen complaint process?

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
a.	"I was treated the same as anyone else in a similar situation."	❒1	❒2	❒3	❒4
b.	"The officials investigating and reviewing my case were honest."	❒1	❒2	❒3	❒4
c.	"The officials investigating my case accurately understood the facts of the incident."	❒1	❒2	❒3	❒4
d.	"The process allowed me to tell my side of the story."	❒1	❒2	❒3	❒4
e.	"The outcome was fair."	❒1	❒2	❒3	❒4

17. Overall, how satisfied are you with the complaint process in this case?

❒1 VERY SATISFIED

❒2 SATISFIED

❒3 UNSATISFIED

❒4 VERY UNSATISFIED

18. What would you like to happen to the officer or officers? (mark only one choice)

❒1 No punishment needed. It was just a misunderstanding

❒2 The officer apologizes

❒3 The officer receives a warning from superiors

❒4 The officer is reassigned to different duties

❒5 The officer is demoted with a cut in pay

❒6 The officer is suspended temporarily ("time off without pay")

❒7 The officer is fired

❒8 The officer is fired and charged with a crime

CITIZEN COMPLAINT REVIEW SURVEY

19. What was the actual outcome of the complaint?

- ❒1 Sustained
- ❒2 Not Sustained
- ❒3 Exonerated
- ❒4 Unfounded
- ❒5 Open Case
- ❒6 No Jurisdiction
- ❒7 Don't know yet

The following questions will help us better understand the circumstances surrounding the complaint. All your responses will be kept completely confidential.

20. What race do you consider yourself to be?

- ❒1 BLACK OR AFRICAN AMERICAN
- ❒2 WHITE
- ❒3 OTHER

21. What is your gender?

- ❒1 MALE
- ❒2 FEMALE

22. What is your age?

- ❒1 Under 18
- ❒2 18-25
- ❒3 25-35
- ❒4 35-50
- ❒5 50-65
- ❒6 Over 65

Thank you for participating in this survey. Please mail your completed survey in the enclosed prepaid envelopes to SRBI. SRBI is helping us coordinate the survey. They will record your responses and then destroy the original survey. To preserve confidentiality do not put your name on the survey or the envelope.

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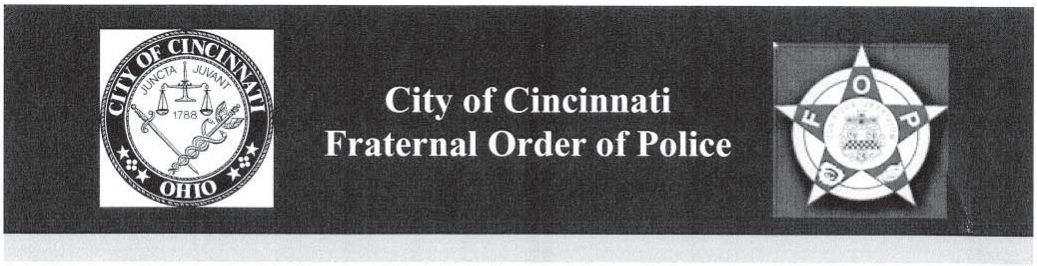
POLICE OFFICER COMPLAINT SURVEY

POLICE OFFICER COMPLAINT SURVEY



Dear Fellow Officer:

The RAND Corporation has been selected by the Police Department and the Fraternal Order of Police, Queen City Lodge #69, to conduct a study of police/community relations in Cincinnati. We are asking you to take the time to participate in this process by completing the attached survey about your recent experience with the citizen complaint process.

Just as the person who filed the complaint is being asked to provide feedback on their experience, your insight is also valuable in helping to identify your perception of the process.

To ensure your confidentiality, all surveys are being returned directly to SRBI, a RAND contractor. A postage-paid envelope is included so that you can mail this survey to SRBI. RAND will treat your answers as completely confidential. RAND will not provide individual information to anyone outside of the RAND research staff, except as required by law.

Although participation in this process is strictly voluntary, we encourage you to have your voice heard. Please complete the survey within the week of receiving it and mail it in the supplied return envelope.

Thank you for taking the time and making the effort to provide your perspective.

Sincerely,

Thomas H. Streicher, Jr.
Police Chief

Kathy Harrell
President, FOP Queen City Lodge 69

POLICE OFFICER COMPLAINT SURVEY

POLICE OFFICER COMPLAINT SURVEY

The survey will take you about 5 minutes to complete. Please mail your completed survey to SRBI in the prepaid envelopes. SRBI is helping us coordinate the survey. They will record your responses and destroy the original surveys.

For additional information:

If you have any questions about the survey you can call collect to speak with Dr. Jack Riley, RAND, (412) 683-2300 during business hours 9am to 5pm Monday through Friday.

Please mark (X) in the ❒ box to indicate your answer where applicable.

First, we would like to ask a few questions about the incident that caused the complaint.

1. Was your complaint filed as a result of a face-to-face interaction with a civilian?

❒1 YES

❒2 NO

2. In which district did the incident that generated the complaint occur?

❒1 DISTRICT ONE

❒2 DISTRICT TWO

❒3 DISTRICT THREE

❒4 DISTRICT FOUR

❒5 DISTRICT FIVE

3. Were there any other police officers that witnessed the incident?

❒1 YES

❒2 NO

4. Other than the person who filed the complaint, were there any other civilian witnesses to the incident?

❒1 YES

❒2 NO

5. What initiated the incident?

❒1 I was responding to a call for service

❒2 I stopped or detained the civilian (e.g. traffic stop, investigation)

❒3 Other

POLICE OFFICER COMPLAINT SURVEY

6. How would you describe the reason or reasons given by the citizen for filing the complaint against you?

Mark (X) next to ALL that apply to your complaint situation.

- ❒1 Discourtesy/unprofessional attitude
- ❒2 Lack of proper or timely service
- ❒3 Criminal misconduct
- ❒4 Sexual misconduct
- ❒5 Serious misconduct (e.g. severe procedural violations, etc.)
- ❒6 Excessive use of force
- ❒7 Unnecessary pointing of firearms at persons
- ❒8 Improper Searches and seizures
- ❒9 Discrimination
- ❒10 Any other reason

7. Was any civilian injured during the incident?

- ❒1 YES
- ❒2 NO

8. How many police officers were accused in the complaint?

- ❒1 One (just you)
- ❒2 Two
- ❒3 Three or more

9. What was the race of the civilian who filed the complaint? (If more than one civilian, what was the race of the civilian with the most serious accusation.)

- ❒1 WHITE
- ❒2 BLACK
- ❒3 OTHER RACE

Now we would like to ask you some questions about your experiences with the investigation of the complaint.

10. Did an investigator contact you about the complaint?

- ❒1 YES
- ❒2 NO

POLICE OFFICER COMPLAINT SURVEY

11. Were you asked to attend a meeting regarding this complaint?

❒1 YES

❒2 NO

12. Did you attend a meeting regarding this complaint?

❒1 YES

❒2 NO

If no, why not?

❒3 SOMEONE ADVISED ME NOT TO ATTEND

❒4 THE CIVILIAN DID NOT WANT TO ATTEND

❒5 OTHER

13. During the investigation and review process how much did those investigating the complaint consider your version of events?

❒1 A GREAT DEAL

❒2 A FAIR AMOUNT

❒3 ONLY A LITTLE

❒4 NOT AT ALL

14. During the investigation and review process of the complaint how much do you feel you were treated with politeness, respect and dignity?

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❒2 A FAIR AMOUNT

❒3 ONLY A LITTLE

❒4 NOT AT ALL

POLICE OFFICER COMPLAINT SURVEY

15. How much do you AGREE or DISAGREE with the following statements about the citizen complaint process?

		STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
a.	"I was treated the same as anyone else in a similar situation."	❒1	❒2	❒3	❒4
b.	"The officials investigating and reviewing my case were honest."	❒1	❒2	❒3	❒4
c.	"The officials investigating my case accurately understood the facts of the incident."	❒1	❒2	❒3	❒4
d.	"The process allowed me to tell my side of the story."	❒1	❒2	❒3	❒4
e.	"The outcome was fair."	❒1	❒2	❒3	❒4

16. Overall, how satisfied are you with the complaint review process in this case?

❒1 VERY SATISFIED

❒2 SATISFIED

❒3 UNSATISFIED

❒4 VERY UNSATISFIED

17. What was the actual outcome of the complaint?

❒1 Sustained

❒2 Not Sustained

❒3 Exonerated

❒4 Unfounded

❒5 Open Case

❒6 No Jurisdiction

❒7 Don't know yet

POLICE OFFICER COMPLAINT SURVEY

Lastly, the following questions ask for basic information about you and your experience. All your responses will be kept confidential

18. How many years have you been a Cincinnati Police Officer?

- ❒1 0-3 years
- ❒2 3-10 years
- ❒3 more than 10 years

19. What is your current rank in the CPD?

- ❒1 Officer
- ❒2 Specialist
- ❒3 Sergeant
- ❒4 Lieutenant or above

20. What is your gender?

- ❒1 MALE
- ❒2 FEMALE

21. What race do you consider yourself to be?

- ❒1 BLACK OR AFRICAN AMERICAN
- ❒2 WHITE
- ❒3 OTHER

22. What is your age?

- ❒1 18-25
- ❒2 25-35
- ❒3 35-50
- ❒4 Over 50

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APPDNEIX E

Parties' Responses to the Report

This appendix contains responses sent to RAND by the parties. RAND has not edited or altered these responses in any way.

INDEPENDENT MONITOR'S RESPONSE TO RAND'S SECOND ANNUAL EVALUATION REPORT: POLICE-COMMUNITY RELATIONS IN CINCINNATI

I. Purpose of the RAND Report

The Collaborative Agreement was developed "to resolve social conflict, to improve community-police relationships, to reduce crime and disorder…and to foster an atmosphere throughout the community of mutual respect among community members including the police" (CA ¶10). One important aspect of the Agreement is its requirement that the parties implement a system of evaluation to track whether the goals of the Collaborative Agreement are being achieved.

The Collaborative Agreement provisions call for a broad and comprehensive approach to evaluation. The RAND Corporation was brought in as a national expert in research, law enforcement and evaluation. The efforts undertaken by RAND in the Evaluation Protocol provide valuable information and lessons learned, that now need to be used to improve police-community relations and advance the goals of the Collaborative Agreement.

The Collaborative Agreement requires that the Parties meet with the Monitor "to study the results of the evaluation instruments and determine what changes, if any, in the Agreement or in their actions should be pursued in light of the evaluation results" (CA ¶30). Paragraph 46 of the Agreement also states that "measurement of the success of the mutual accountability process" will be based on whether the evaluation data was "fully and fairly used to assess progress toward attaining the goals" of the Collaborative Agreement, and whether the data was used "to adjust City, police and community strategies to address problems, reduce police and citizen use of force and improve police/community interaction."

Now that we are in our final year of both the Collaborative Agreement and the Memorandum of Agreement with the Department of Justice, it is even more crucial that the Parties and the larger Cincinnati community "fully and fairly" put this data to use.

II. Results of RAND Report

RAND's Second Annual Report repeats many of the findings of its 2005 First Year Report. Blacks and whites in Cincinnati experience "substantively different types of policing" (xxiii). Black residents are more likely than whites to live in neighborhoods characterized by crime and disorder, and residents in high-crime neighborhoods in Cincinnati

are more likely to see "proactive policing" such as aggressive traffic enforcement, pedestrian stops, and officers patting down individuals on the street corner. Calls for service, reported crime, arrests and police use of force are geographically clustered in particular neighborhoods – including Over-The-Rhine, the Central Business District/Riverfront, Avondale, and Pendleton. Because of where black and white residents live in the city, and because of police decisions on deployment and crime control strategies, some might even say that there is a *Tale of Two Cities* in how blacks and whites experience policing in Cincinnati.

On average, black residents in Cincinnati experience traffic stops that are longer, are more likely to involve searches for drugs, weapons and contraband, and more likely to involve investigation of all of the vehicle's passengers. Black residents are also more likely than whites to be stopped for equipment violations. In addition, 75 percent of those arrested by the CPD in Cincinnati are black, and 77 percent of the incidents involving CPD use of force involve black subjects.

More than anything else, the Monitor is struck by the statistics from the Over-the-Rhine (OTR) neighborhood.

- In 2005, the CPD made 9,076 arrests in OTR, representing 18 percent of all of the arrests the CPD made in the City. The reported number of crimes in OTR was seven percent of the City total.
- OTR accounted for 22 percent of incidents involving a CPD use of force.
- OTR saw a 25 percent jump in the number of arrests in 2005 from 2004, even with a five percent drop in the number of reported crimes.
- Based on increased enforcement in early 2006, ORT is on track for nearly 11,000 arrests in 2006, a 44 percent increase from 2004.
- There were more traffic stops in OTR than in any other neighborhood in Cincinnati, other than on Interstate I75. Traffic stops in OTR represented eight percent of all stops of blacks in Cincinnati.

It is important to note that much of the difference in policing can be attributed to the fact that high levels of reported crime and calls for police service are concentrated in several black neighborhoods, and thus may not be due to racial bias in policing.

RAND's review of traffic stops found no clear statistical evidence of racial bias in the decision to stop. It also found that officers searched

black and "matched" nonblack drivers at nearly the same rates in situations where officers have discretion whether or not to search. (Although blacks are searched at a higher rate than nonblacks in Cincinnati, when factors such as the location of the stop, time of the stop, and reason for the stop are taken into account, blacks and whites are searched at similar rates.) Most of the differences between the features of stops of black and nonblack drivers involved differences in stop locations, or drivers who had invalid licenses. The one subset of searches where RAND found a difference among matched drivers was in searches for weapons, where black drivers were about three times more likely than matched nonblack drivers to undergo a high-discretion weapons search.

RAND also compared the stops of 133 officers who made more than 100 traffic stops in 2005. It compared the racial percentages of stops of each officer to the stops of other officers made in the same neighborhoods and at similar times. Five of the 133 officers stopped black drivers at substantially higher rates than did other similarly-situated officers.

As in the First Year Report, RAND's research and analysis included a review of 325 randomly sampled video recordings of Cincinnati traffic stops. In reviewing stops of black drivers by white and black officers and stops of white drivers by white and black officers, RAND reports three key findings. First, black drivers were more likely to be pulled over for registration or equipment violations, and also more likely to experience proactive or intensive policing during the stop. Stops of black drivers took longer and were more likely to involve multiple officers, and black drivers were more likely to be asked whether they were carrying drugs or weapons, be searched, have a passenger searched, have the car searched, or have their passengers required to provide identification. Second, several of these differences between the stops of white and black drivers were largely when the officer was white. Third, white drivers' communications quality was more positive than that of black drivers – white drivers generally were more cooperative, courteous and apologetic. The fact that the differences in the stops of black and white drivers appeared to depend to a significant extent on the officer's race raised concerns for RAND. As RAND notes, "even if racial bias does not explain this pattern, the fact that blacks are more likely to experience longer, more-invasive traffic stops when white officers stop them should be expected to contribute to more-negative attitudes within the black community" (xvii).

Perception of bias leads to distrust of the police, and also provides an explanation for why black motorists have negative communications with CPD officers. "If police have different enforcement policies or a

greater presence in those neighborhoods with a large number of black residents, it will likely appear racially biased to those residents even if individuals in those neighborhoods are actually being stopped without regard to their race. Perceptions of racial inequality in treatment drive attitudes and community relations, regardless of whether the true cause of that inequality is racial profiling, neighborhood profiling, enforcement priorities or other factors" (xix).

At the same time, RAND's survey of officers showed that they are very committed to their jobs and believe that informal interactions with citizens are an important method for solving problems and addressing crime. Ninety percent of the officers who responded to the survey indicated that residents' input is critical to solving neighborhood problems [p. 70].

III. Monitor's Response

We are convinced that the RAND's First Year Report and Second Year Report reinforce and validate the Collaborative Agreement's approach that problem solving must be the principal strategy for addressing crime and disorder in Cincinnati. RAND "underscored a point from last year's report: The city needs to avoid the assumption that effective law enforcement and good community relations are mutually exclusive goals and to work to find policies that can maximize both outcomes" [p. 92].

The RAND First Year Report demonstrated a wide gap in perceptions between whites and blacks in Cincinnati that must be addressed. Similar findings were made in the NCCJ surveys in 2006. These gaps must be reduced in future years for the Collaborative Agreement to be successful and its goals to be achieved. Central to this issue is the impact on the black community of decisions about police strategy. The right police strategy is one that effectively reduces crime, makes people feel safer, and reduces perceptions of police unfairness and bias. As noted by RAND, police research has shown that traditional reactive policing can create frustration and distrust of the police, and its effectiveness is questionable. This is why the Collaborative Agreement emphasizes problem solving and problem-oriented policing. Research shows that CPOP is effective policing.

In the RAND 2005 Report and in our earlier Monitor's Reports, we set out several recommendations for actions that the Parties and the Cincinnati community should take. The CPD will need to increase the level of community dialogue to build trust with the African American community, and to restore trust with the communities that have been

disillusioned. With RAND's 2006 Annual Report, we believe these steps need to be taken without delay.

A. Improved Communications in Traffic Stop Encounters

One area that has a significant prospect for improvement in police-citizen relations is communications in traffic stop encounters. As RAND states in the 2006 Report, the Department should "pay special attention to maintaining and improving, where needed, the tenor and tone of these interactions" (xxii).

In the Monitor's comments on RAND's First Year Report, we called on the CPD to incorporate into their training additional opportunities for improving communications skills.

> Officers should be alerted to the fact that drivers' behavior is highly dependent on their own: when a driver is upset, disrespectful, unapologetic, this behavior could be a reaction to the officer's communications, and that the driver's behavior is most likely to improve if he or she is treated with respect and courtesy. … The Monitor also endorses RAND's suggestion that police training that improves officer's listening skills may reduce the negative interracial interactions that RAND observed.

This call for additional training is consistent with the Collaborative Agreement's requirement for ongoing training regarding professional traffic stops and bias-free policing (CA¶52). In October through early December 2006, the CPD's Academy presented a two-hour training module entitled "Cross Cultural Communication" during management training for all supervisors. The module will be presented for all officers in January through early April 2007. We encourage all of the parties to participate in and expand this training.

The Monitor and RAND have also called for additional efforts to involve community members, particularly black residents of Cincinnati, in improving police community relations. As RAND notes in this Second Annual Report, "[w]hile negative communications by black drivers may be an understandable reaction to the more proactive policing they have experienced, it is likely to be counterproductive" [p. 66]. Public education efforts are one way to accomplish this objective. In their March 2006 Collaborative Agreement Status Report, all of the Parties stated that training on proper conduct during traffic stops should be developed for the community.

> The RAND report provides substantial support for the need to expedite the development of a plan by the Parties to the CA, in

> conjunction with the [Partnering Center], to prepare and disseminate training modules and public service announcements for presentation to the entire community, through the schools, churches, community councils, CitiCable and the media. This endeavor would encourage respectful and bias-free conduct and dialogue on the part of citizens during traffic stops and other policing efforts.

It is time to make this commitment real.

A third, very targeted, recommendation that RAND makes in its 2006 Second Annual Report addresses the differences apparent in the MVR tape review in how white and black officers handle traffic stops of black drivers. RAND recommends that:

> specific guidelines be developed to determine when officers should run identification checks on vehicle passengers who have not violated any traffic law. We also suggest that these guidelines reflect the inconvenience to law-abiding passengers that result from an identification check, as well as the low proportion of arrests that can be attributed to these checks. Similarly we suggest that CPD communicate clear traffic enforcement priorities to officers. White officers working in areas with a high percentage of black drivers appear to be pursuing technical violations at a greater rate than do black officers in the same situation. Clear tasking and enforcement priorities may reduce this discrepancy [p 66].

This recommendation needs to be implemented, including exploring why black and white officers handle these enforcement issues differently.

B. Dialogue on Policing in Black Neighborhoods

In both its First Year Report and this Second Annual Report, RAND has called for a larger dialogue about how black neighborhoods are policed.

> Black citizens in Cincinnati, by virtue of the neighborhoods in which they live and generally higher rates of crime in those neighborhoods, are more likely than nonblacks to experience proactive policing strategies such as increased law enforcement presence and aggressive traffic enforcement. Such strategies place a greater burden on law-abiding residents living in the areas where the enforcement occurs (xxii).
>
> . . .

> [I]t may be possible to make improvements in relations between CPD and the black community by rethinking how black neighborhoods are policed. The proactive policing of motor vehicles that occur in these communities (longer stops, more searches) is likely to put a high burden on law-abiding members of these communities, and it may not match these communities' policing priorities [p. 66].

In our comments on RAND's First Year Report, and in our Twelfth, Thirteen and Fourteenth Reports, we too urged this dialogue. The dialogue would include an examination of how and where arrests are made and how they correlate to reported crime; discussions regarding incorporating problem solving and CPOP into hot spot and saturation patrol efforts; and the role of aggressive traffic enforcement and other "proactive" policing efforts, and how they fit in with the Collaborative Agreement. For example, aggressive traffic enforcement may engender greater distrust, and may not be effective in reducing crime or improving traffic safety. Similarly, if the City is going to continue its saturation patrol efforts with Operation Vortex, is should be able to demonstrate that it sought input from, and coordinated closely with, community groups affected in the specific locations that are targeted. Detailed analysis is also required both on the front end of any deployment, and in assessing the outcomes of the operation (and not just the activity of the unit) after the deployment.

Whether the evaluation protocol was "fully and fairly used" to assess progress towards attaining the goals of the Collaborative Agreement depends on the actions taken to address these areas.

PLAINTIFF APPENDIX TO YEAR TWO RAND REPORT

The ACLU Foundation of Ohio, class representative of the plaintiffs in *In re Cincinnati Policing*, commends RAND for a thorough report. This report challenges the parties to increase our efforts to improve relations between the CPD and the black community. All previous studies show that a very large percentage of black citizens do not trust the police. We are not making sufficient progress on this important issue of trust. This report states that black citizens in Cincinnati endure longer traffic stops than white citizens and that black citizens are more likely than whites to experience proactive policing strategies. This disparate policing is largely due to the fact that black citizens live in neighborhoods with high rates of crime. Apparently there are a few officers that do not police the black community on an equal basis with similarly situated white citizens and those officers must be identified and corrected. White officers conduct 2/3 of the stops of black citizens. The video analysis shows that blacks are more likely to experience longer, more-intrusive traffic stops when stopped by white officers. The video analysis, as in year one, also shows more hostility by black citizens than white citizens during traffic stops.

The agreed statements of the parties issued after the Year One RAND Report remain appropriate:

1. The Community Satisfaction Survey shows a significant amount of community support for the police, and satisfaction with the quality of police service.

2. Problem Solving and CPOP efforts help in improving police-community relations; they are also effective in addressing crime and disorder problems.

3. The report states that there is no evidence of systemic racial profiling on the part of Cincinnati Police Department (CPD) officers in the decision to stop motorists. The report notes, however, that there is a difference in the length of stops experienced by African-American drivers and White drivers and suggests a number of possible reasons for the difference.

4. The study shows that African-Americans in Cincinnati have less satisfaction with police service, have less trust in the police, and are more likely than Whites to believe that race played a factor in police decisions.

5. The problems of police community relations, including the perceptions of bias and the lack of trust, should not be placed at the foot of the individual officer or the individual citizen. RAND's report indicates that the difference in citizens' perceptions, and the differences in what happens when African-Americans and Whites interact with the police are based in large measure on differences in:

a. Where those interactions occur; demographics of high crime neighborhoods and police deployment within those neighborhoods

b. The types of strategies that police use to address crime in certain neighborhoods, including what RAND describes as "proactive" policing

6. All Parties agree that RAND's report shows that much more needs to be done to improve the view of the police within the African-American community

What should we do to use these RAND reports and the facts they reveal to help improve police community relations? The attached letters dated November 6, 2006 to Saul Green and November 9, 2006 to the City Manager set out many proposals by plaintiffs to accomplish just this task. We urge the parties and the larger Cincinnati community to join us in implementing these proposals.

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November 9, 2006

City Manager Milton R. Dohoney
City of Cincinnati
801 Plum Street
Cincinnati, OH 45202

RE: Improving Police Community Relations
Letter of Nov. 6, 2006 (attached)

Dear Mr. Dohoney

You want to know specifics for city action re my letter of November 6. Here they are with proposed deadlines:

1. Lend full support to Out of the Crossfire. That means designating persons in City Government, at the Partnering Center/Friends, and leveraging necessary resources to substantially help Dr. Williams serve the patients she has identified for intervention.

2. Lend full support to Operation CeaseFire. Clarify rules of engagement with subjects who are on parole, Post release control or probation. The City should be much more helpful in uniting the governments and agencies working on this program.

These two items are important alternatives/supplements to VORTEX and deserve very high priority.

Nov 30. Five seasonal positions for laborers or unskilled workers for appropriately screened gunshot patients – provide paying job on release from hospital. 90 day duration. During that time a full time job will be secured. 1 year commitment for slots. Permanent funding secured in interim.

Jan 1. Five caseworkers or funding for same. Connect gunshot patients and CeaseFire clients to supportive services, including Job training, therapy drug treatment, mentoring. Work closely with these folks. 1 year commitment for positions. Permanent funding secured in interim.

November 9, 2006
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Ongoing. Use Mayor and City Manager Office to help create priority slots for job training, drug treatment, therapy etc for the clients in the program. Also - one on one meetings with government and social service agencies needed as partners.

Nov 30. Legal research on whether casework can be funded through hospital levy. Plaintiffs will help advocate for that result with county and hospital. Rita agreed.

Immediate. Legal Research. Determine rules of engagement with citizens of postrelease control, probation, etc. Request has been pending from Biehl for months. Rita agreed.

Immediate. Streicher needs to commit CPD to allow officers to use authority and coordinate efforts with other agencies. There should be real interest in the model given rejection of jail tax and new county commission.

3. Apply problem solving principles to Vortex and similar efforts. Properly assess the impact to date of the program and engage in a public discussion of that impact.

Direct that CPD engage in public broader dialogue on its use of aggressive enforcement. Direct that assessment information be provided. Consult with monitoring team for assessment. Direct that we work with CCA or another group to serve as a forum. Plaintiffs and FOP will participate and help design effort.

4. Develop a plan to reach out to the dissatisfied folks at the street level. Apply problem solving principles to this effort.

Plaintiffs will help with each of these items.

City Manager to engage black clergy and other access points to AA community. Meet with ministers gathered through MARCC. Plaintiffs will supplement list by November with clergy who agree to be active (we will contact first). Will start with Avondale. Will include folks from CAA, Drop Inn Center, Free Store, OJPC, Talbert House, etc

City Manager to speak out on Black talk radio, column in the Herald re efforts underway to meet needs of community.

City Manager to walk the core areas; plaintiffs to help identify those areas and accompany on walk. Will report on walks through AA media.

Regina Livers. Plaintiffs will work with consultant.

November 9, 2006
Page Three

NAACP Outreach. Secure institutional commitment from NAACP and people power to help with forums on Vortex, community engagement re CPOP, promoting out of crossfire and Ceasefire, assisting with the broader initiative now planned for Avondale.

5. Complete the integration of problem solving into the CPD. Address the issues noted by the Monitor in the 14th Report; amend the job descriptions, performance evaluations, daily activity reports, roll call to imbed problem solving in daily police life.

6. Integrate the Partnering Center into CPD policing strategy. Amend the strategic plan to include the Partnering Center and other key citizen organizations. Make sure staff is deployed to serve CPOP teams appropriately.

These just need leadership. VIP. CPD implementation of problem solving will dramatically improve police community relations and reduce reliance on Vortex. Citizens who normally only see enforcement will have police responding to identify and solve problems with their cooperation using strategies including but extending beyond arrest. Some problem solving is done directly with the citizens and some through the partnering center. It is the key to reducing crime through the smart deployment of resources. See 14th Monitor report. Direct that the tasks be done now. Commit to finalizing and implementing items in #5 by Jan 31, 2007.

7. Train officers and the community to achieve more positive cross racial contacts between police and community members. Use the MVR tapes creatively. Involve the community.

Plaintiffs will attend Nov 13 training session at Academy and offer ideas promptly afterwards.

Note - Don Hardin has been ill and we need the input and commitment of the FOP to fully move forward. We will be including him in this effort and hope to have an FOP response ASAP.

Sincerely,

Alphonse A. Gerhardstein

C: Saul Green, Richard Jerome
Greg Baker, Rita McNeil, Chief Streicher
Rick Siegel, Ken Glenn, Rick Biehl
Scott Greenwood, George Ellis, Iris Roley

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ROBERT F. LAUFMAN

November 6, 2006

Mr. Saul Green
Monitor, *In re Cincinnati Policing*
150 West Jefferson, Suite 2500
Detroit Michigan 48226

RE: All Party Meeting Nov 2006
Goals for Successful Transition from Court Enforcement

Dear Mr. Green:

This letter will respond to your draft agenda for the all party meeting this week. You have previously asked the parties to focus on those issues that need to be addressed in the last months before we end court enforcement of the Collaborative. This letter will also serve to reflect the position of the plaintiffs in that regard. We have met with Don Hardin and Greg Baker in developing our position and we hope that these goals are achievable by the parties.

In a nutshell the reforms achieved to date are an excellent start but have not yet made any significant difference to our core class members – the African American Community in Cincinnati. 40% of our clients continue to distrust the police. That must change. Our Collaborative goal is to increase trust between the community and the police. Our strategies must reduce crime and promote safety while increasing trust.

1. Outreach to the Core Black Community

We urge the City Manager and Mayor to lead an effort to reach out to the disaffected members of the community. The support they have shown for the CeaseFire initiative in Avondale and the Out of the Crossfire program at University Hospital is a good start. These initiatives are excellent efforts at increasing safety and increasing trust. On the other hand, Vortex and similar aggressive police strategies as employed in Cincinnati do not increase safety or trust long term.

The Mayor appropriately showcased the **Out of the Crossfire Program** in his 2006 State of the City Address. Since then Dr. Jennifer Williams has been appointed as Director.

She has interviewed and assessed more than 25 patients admitted to University Hospital for gunshot injuries. As expected she is finding that these citizens need a great deal of intervention. Though victims today, without positive intervention they will be shooters tomorrow. Dr. Williams needs to deliver effective services to her clients. She seeks to provide them with mentors, counseling services, job readiness services, jobs and ongoing support for a path away from drugs and crime. She has limited funds and must show early results to prove to funders that her program is effective at reducing gun violence. The City should help. At a minimum the City should offer the program temporary employment slots for selected patients upon hospital release so they have a steady path away from violence. The City and Social service agencies serving as Friends of the Collaborative should work closely with Dr. Williams to make sure she has everything possible to make the program succeed.

Operation CeaseFire initiated by the Partnering Center and the Avondale Community Council is also an excellent start. Like Out of the Crossfire, the audience for these services is those at risk of violence. An impressive coalition of service providers is working to prevent violence through this targeted outreach. Narrowly focused enforcement follows as a back up to positive inducements away from crime. These strategies build trust. The City has not decided whether it will use police power as authorized by state law to assist with enforcement of probation and parole terms. This is not acceptable. These types of decisions should be made early and the legal authority clarified.

The City could assist both these initiatives a great deal if it would loan some staff to them in this start-up period to help serve the subjects identified and ensure success.

Aggressive enforcement policing strategies with no-tolerance style enforcement creates the opposite impact. They focus on majority African American Communities and they approach all citizens as law breakers. Our study of the aggressive policing this past spring in Over the Rhine shows that many citizens arrested and swept up in the criminal justice system for very minor offenses. The Rand study shows that this strategy causes collateral damage on the issue of trust in the Black community. I attended a meeting last week at which the Avondale Council President stated directly that she did not want Vortex in her neighborhood. The City needs to listen to these voices. None of this should surprise us. We need only read the DOJ POP guide on the "Benefits and Consequences of Police Crackdowns."

Targeted problem solving is needed in the tough corners of the community. ACLU organizer Iris Roley alone or in partnership with the Streetworkers and others stand ready to help FOP and city leaders engage the people at street level to continue efforts to increase safety and build trust. We clearly must heed the concerns raised in your last monitor report on the poor quality of the problem solving done to date and make it right.

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Page Three

2. Institutional Reforms

We have created some great models in the Collaborative. Now we just need to make them work in practice.

a. Police Department

Problem Solving. The items achieved under the MOU are a real step forward. Yet to be accomplished is the thorough integration of problem solving into the city policing philosophy. This will be aided if roll call, police job descriptions, performance appraisals and daily activity reports and police leadership reinforce the roll of problem solving. This has been on our plate too long. Further, we must address the problems noted in the last monitoring report on the low quality of CPD problem solving.

Training. Rand's study of the MVR tapes makes clear that interactions between white officers and AA citizens are filled with friction. Citizens demonstrate the lack of trust. Officers are often curt and unhelpful. Let's fix this! Previous research on legitimacy of authority (police and courts) demonstrates that citizens will see the actions of authorities as legitimate, even if the outcome is not desirable to them, if they are given a voice in the process, it is communicated that they are heard, and they are informed that the information they provided was utilized when reaching the outcome.

We need to study these tapes together and develop the best model possible to overcome this dynamic. This is a training challenge that we must meet, The CPD met the challenge with the mental health response teams. With your help we can do the same for these cross-race contacts.

b. Partnering Center

The CPD strategic plan discusses problem solving but ignores the Partnering Center. This community based group must be embraced by the CPD as a true partner in developing strategies to promote safety that is not just enforcement based.

3. Next Steps

With this letter we are trying to set priorities for within the Collaborative Agreement for these last months. If we can accomplish the tasks set out here the Collaborative goals will be substantially achieved and we need not obsess about each subparagraph.

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In sum, Plaintiffs request that the parties proceed to:

1. Lend full support to Out of the Crossfire. That means designating persons in City Government, at the Partnering Center/Friends, and leveraging necessary resources to substantially help Dr. Williams serve the patients she has identified for intervention.

2. Lend full support to Operation CeaseFire. Clarify rules of engagement with subjects who are on parole, Post release control or probation. The City should be much more helpful in uniting the governments and agencies working on this program.

3. Apply problem solving principles to Vortex and similar efforts. Properly assess the impact to date of the program and engage in a public discussion of that impact.

4. Develop a plan to reach out to the dissatisfied folks at the street level. Apply problem solving principles to this effort.

5. Complete the integration of problem solving into the CPD. Address the issues noted by the Monitor in the 14th Report; amend the job descriptions, performance evaluations, daily activity reports, roll call to imbed problem solving in daily police life.

6. Integrate the Partnering Center into CPD policing strategy. Amend the strategic plan to include the Partnering Center and other key citizen organizations. Make sure staff is deployed to serve CPOP teams appropriately.

7. Train officers and the community to achieve more positive cross racial contacts between police and community members. Use the MVR tapes creatively. Involve the community.

With the help of the monitoring team we believe the parties can achieve these goals by August 5, 2007.

Sincerely,

Alphonse A. Gerhardstein

C: City Manager Milton R. Dohoney
Don Hardin, Greg Baker
Rita McNeil, Richard Biehl
Dr. Jennifer Williams
George Ellis, Scott Greenwood, Iris Roley

Cincinnati Police Department's Response to RAND's Year Two Evaluation

As with the results presented in RAND's Year One Evaluation, we are pleased with the assessment of progress toward the goals of the Collaborative Agreement. While this year's report did not measure citizen's satisfaction, several important points show continued movement toward goal attainment. Primarily, our officers clearly want citizen participation in problem solving and the analysis of use of force data and traffic stop data indicate no systemic racial bias by our Department.

RAND reported improvement in the quality of data provided to RAND for analysis for this second report. We welcome analysis of our actions because it is via this transparency that we gain community trust. As RAND indicated, this 2005 data was collected prior to release of the Year One Report where they addressed issues with data quality and therefore indicative of our efforts toward continuous improvement.

Analysis continues to show that crime, calls for service, arrests, and use of force by police are geographically clustered in Cincinnati. While the analysis of 2005 data seems to indicate that increased arrests reduced crime in Over-the-Rhine, the reduction was the result of community partnerships to address the many problems facing this area; not just crime, but deeper quality of life issues. Partners in this endeavor included Keep Cincinnati Beautiful, various City departments responsible for infrastructure and code enforcement, the Cincinnati Human Relations Commission, local developers, social service agencies, area schools, community groups, and citizen volunteers of all ages, just to name a few. This effort is truly Community Problem Oriented Policing in action.

We are encouraged in the drop in the rate of use of force during arrest situations from 20 incidents per 1000 to 14 incidents per 1000 arrests in 2005. RAND also noted our efforts to continue to focus on this important issue through implementation of a Use of Force Review Board; a measure undertaken for broader review of certain use of force incidents so as to provide for enhanced training of our officers and comprehensive policy development.

While the analysis of traffic stop data again found no evidence of racial bias on either the officer's decision to stop or search patterns post stop, the subjective analysis of video tapes of traffic stops shows there are some interracial issues requiring attention. Our efforts during 2006 to improve communication during these interactions centered on training all our officers on conducting professional traffic stops.

As a result of information presented in the Year One report regarding individual officers lying outside the expected norm on traffic stops, we requested assistance from RAND in order to develop the in-house ability to perform in-depth analysis of traffic stop data at an individual officer level. This issue is again addressed in the Year Two report; however, to date it has remained beyond the Department's technical and analytical capabilities. We will continue to work with RAND researchers this year in effort to gain this expertise.

While our officers attested to a high commitment to their profession and embrace the ideals of Community Problem Oriented Policing, their skepticism as to the community's willingness to assist in solving problems was somewhat borne out in the results of last year's citizen survey conducted by RAND. We encourage the parties to assist us in our efforts to garner greater participation in problem solving efforts by engaging citizens to take on a more active role.

Again, we are encouraged by the results of our efforts to attain the Collaborative Agreement goals during 2005 and are hopeful that analysis of data from 2006 for the Year Three report will show continued progress toward building the necessary relationships with the citizens we serve, to make our community a safer, better place to live, work, and grow.

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