PROFILING AND CONSENT: STOPS, SEARCHES, AND SEIZURES AFTER SOTO*

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| INT | RODUCTION | 18 |
|-----|--|------|
| I. | FEDERAL INTERVENTIONS IN LOCAL LAW ENFORCEMENT UNDER | ER |
| | SECTION 14141 | 23 |
| | A. Federal Litigation as a Strategy for Institutional Reform | 23 |
| | B. Racial Profiling in New Jersey and the 1999 Consent Decre | ee26 |
| | C. The End of Profiling? | 29 |
| Π. | THEORY AND RESEARCH ON RACE AND SELECTIVE | |
| | ENFORCEMENT | 31 |
| | A. Social and Legal Definitions of "Racial Profiling" | 31 |
| | B. Discrimination During and After the Consent Decree | 34 |
| Ш. | DATA AND METHODS | 36 |
| IV. | RESULTS | 37 |
| | A. Descriptive Statistics | |
| | B. Race and Searches | |
| | C. Hit Rates and the Search for Racial Equilibrium | 46 |
| V. | DISCUSSION | |
| | A. Implications | |
| | B. Responding to Ingrained Bias: Decision-Based Training | |
| Co | NCLUSION | |
| | | |

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Following Soto v. State (1999), New Jersey was the first state to enter into a Consent Decree with the U.S. Department of Justice to end racially selective enforcement on the state's highways. The Consent Decree led to extensive reforms in the training and supervision of state police troopers, and the design of information technology to monitor the activities of the State Police. Compliance was assessed in part on the State's progress toward the elimination of racial disparities in the patterns of highway stops and searches. We assess compliance by analyzing data on 257,000 vehicle stops on the New Jersey Turnpike by the state police from 2005-2007, the final months of the Consent Decree. Specifically, we exploit heterogeneity of officer and driver race to identify disparities in the probability that stops lead to a search. We assume a crime-minimizing or welfarist rationale for stops, under which race-neutral factors are equally likely to motivate stops, regardless of driver or passenger race. We also test a Fairness Presumption by comparing search patterns between driver-officer pairs where the driver and officer are different races, and a set of race-neutral benchmarks where the driver and officer are the same race. Results of fixed effects logistic regressions show that Black and Hispanic drivers, when stopped, are more than twice as likely as White drivers to be searched, regardless of officer race. The results also suggest that search patterns vary significantly by officer race: Black officers are less likely to conduct a search in the course of a stop than are White drivers. We also see significant interactions between the race of officers and that of the drivers they stop: Black drivers are significantly more likely to be searched by White officers than they are by Black officers; on the other hand, Hispanic drivers are significantly less likely to be searched by either Black or White officers than they are by Hispanic officers. Racial disparities in the selection of stopped drivers for search and in the rates of seizure of contraband suggest that despite institutional reforms under the Consent Decree in management and professionalization of patrol officers, there were no tangible gains in distributional equity. We review the design of the Consent Decree and the accompanying oversight mechanisms to identify structural weaknesses in external monitoring and institutional design in the oversight of the State Police that compromised the pursuit of equality goals.

INTRODUCTION

FOLLOWING State v. Soto (1999),¹ the U.S. Department of Justice (DOJ) and the State of New Jersey entered into a consent decree to settle complaints filed by the DOJ under 42 U.S.C. § 14141 and 42 U.S.C. § 3789d(c), alleging claims of racial profiling by the troopers of the New Jersey State Police (hereafter, NJSP).² The Consent Decree required that state troopers not rely on the race or national origin of drivers except when they have been given a particular description of a driver that included race or national origin, and required documentation of stops and managerial review to ensure compliance.³ Since the State Police patrol both the interstate and other state highways, the requirement had effects that would reach a large segment of the driving population in a state that has a widespread "car culture" with significant exposure of citizens to the state police.

Congress had authorized the Department of Justice in 1994 to investigate and possibly litigate cases involving a "pattern and practice of conduct by law enforcement officers" that violate constitutional or federal rights.⁴ New Jersey was the first state to enter into a comprehensive and far-reaching Consent Decree with the U.S. Department of Justice. Prior to the New Jersey agreement, Consent Decrees were obtained with municipal police departments in Pittsburgh and Steubenville (Ohio) in 1997.⁵ Litigation could result in a court order to address the institu-

¹ State v. Soto, 734 A.2d 350, 351 (N.J. Super. Ct. Law Div. 1996) (published after the State withdrew its appeal in 1999) concluded that "unrebutted statistical evidence of disproportionate traffic stops against African-American motorists established de facto policy of targeting blacks for investigation and arrest and thus established selective enforcement violating the equal protection and due process clauses." In *Soto*, efforts by the State to suppress evidence obtained through race-based stops led to revelations that New Jersey State Police falsified information to hide pervasive racial profiling and the admission by the State that police engaged in profiling. *Id.*; David Kocieniewski, *Trenton Charges 2 Troopers with Faking Drivers' Race*, N.Y. TIMES, Apr. 20, 1999, at B1 ("Two state police supervisors said it was common practice for troopers on the turnpike to jot down the license plate number of white motorists who were not stopped and use them on the reports of blacks who were pulled over.").

² See Consent Decree, United States v. New Jersey, Civ. No. 99-5970-MLC (D.N.J., Dec. 31, 1999), https://www.justice.gov/crt/us-v-new-jersey-joint-application-entry-consent-decree-and-consent-decree.

 $^{^{3}}$ Id. at provisions 1–5.

⁴ 42 U.S.C. § 14141(a) (1994).

⁵ U.S. Dep't of Just., Civ. Rts. Div., The Civil Rights Division's Pattern and Practice Police Reform Work: 1994–Present (2017), https://www.justice.gov/crt/file/922421/download.

tional sources of systemic police misconduct. But parties could reach a settlement and enter into a Consent Decree, under federal court supervision, that would commit government actors to undertake measurable steps with specific benchmarks to remedy the violations. By January 2017, the Civil Rights Division had opened sixty-nine investigations, and entered into forty "total reform agreements" in policing cases.⁶

⁶ Id. Examples of litigation from 1995 to 2016 that concluded in settlements include: Daniels v. City of New York, No. 99 Civ. 1695 SAS, 2001 WL 62893 (S.D.N.Y. Jan. 25, 2001) (certifying class alleging that the Street Crimes Unit of the New York City Police Department stopped and frisked tens of thousands of predominantly minority New Yorkers without reasonable suspicion); Wilkins v. Maryland State Police, Civ. No. MJG-93-468 (D. Md. Jan. 5, 1995), https://www.clearinghouse.net/chDocs/public/PN-MD-0003-0012.pdf ment agreement creating a consent decree that required a halt to an alleged practice of racial profiling on I-95 and data collection in all traffic stops). For the text of the consent decrees, see, e.g., Floyd et al. v. City of New York, 770 F.3d 1051 (2d Cir. 2014); Consent Decree, Illinois v. City of Chicago, Civ. No. 17cv-6260 (N.D. III. Jan. 31, 2019), http://chicagopoliceconsentdecree.org/wpcontent/uploads/2019/02/FINAL-CONSENT-DECREE-SIGNED-BY-JUDGE-DOW.pdf; Consent Decree, United States v. City of New Orleans, Civ. No. 12-CV-01924 (E.D. La. Oct. 2018), https://nola.gov/getattachment/NOPD/NOPD-Consent-Decree/Consent-Decree.pdf/; Consent Decree, United States v. Police Dept. of Baltimore City, Civ No. 00099-JKB (D. Md. Jan. 12, 2017), https://www.justice.gov/opa/file/925056/download; Consent Decree, United States v. City of Newark, Civ. No. 2:16-cv-01731-MCA-MAH (D.N.J. May 5, 2016), https://www.justice.gov/usao-nj/file/849316/download; Consent Decree, United States v. City of Ferguson, Civ. No. 4:216-CV-000180-CDP (E.D. Mo. Mar. 17, 2016), https://www.justice.gov/opa/file/833431/download; Consent Decree, United States v. City of Cleveland, Civ. No. 01046 (N.D. Ohio, May 26, 2015). https://www.justice.gov/sites/default/files/crt/legacy/2015/05/27/cleveland agre ement 5-26-15.pdf; Consent Decree, United States v. City of Albuquerque, Civ. No. 14-CV-1025 (D.N.M. Nov. 10, 2014), http://documents.cabq.gov/justicedepartment/settlement-agreement.pdf; Consent Decree, United States v. City of Seattle. Civ. No. 12-CV-1282 (W.D. Wash. July 27, https://static1.squarespace.com/static/5425b9f0e4b0d66352331e0e/t/542d82a2e 4b0e604b756e932/1412268706512/DOJ Settlement Agreement.pdf; Collaborative Agreement, In re Cincinnati Policing, Civ No. C-1-99-317 (S.D. Ohio Apr. 11, 2012), https://www.clearinghouse.net/chDocs/public/PN-OH-0005-0008.pdf; Consent Decree, United States v. Town of East Haven, Civ No. 3:12-CV-1652-AWT (D. Conn. Dec. 21, 2012), https://www.clearinghouse.net/chDocs/public/PN-CT-0001-0004.pdf; Consent Decree, Bailey v. City of Philadelphia, Civ. No. 10-5952 (E.D. Pa. June 21, https://www.clearinghouse.net/chDocs/public/PN-PA-0013-0002.pdf; Consent Decree, United States v. City of Detroit, Civ. No. 03-72258 (E.D. Mich. June 12, 2003), https://www.clearinghouse.net/chDocs/public/PN-MI-0001-0005.pdf; Consent Decree, United States v. City of Los Angeles, Civ No. 11769-GAF-RC (C.D. Cal. June 15, 2001),

Twenty of those were court-enforced consent decrees, and the other twenty were memoranda of agreement between the U.S. and the local jurisdiction.⁷ Other investigations led nowhere.⁸

The legal claim and Consent Decree against the State and the NJSP came at a time when public and political awareness of racial profiling had begun to saturate public policy debates on race and policing. The consent decrees were designed to remedy problems of excessive force, unreasonable stops and searches, arrests without warrants or sufficient cause, or of retaliation for exercising free speech rights, and to end discrimination based on race, ethnicity, gender, religion, and sexual orientation. They typically identified a set of policies and procedures that would identify and remedy weaknesses in the underlying institutional structures for police supervision and training. Their goal was nothing

https://www.justice.gov/crt/file/826956/download; United States v. City of Steubenville, 97-966 Ohio 2, 1997). No. C2(S.D. Aug. http://www.usdoj.gov/crt/split/documents/steubensa.htm; United States v. City Pittsburgh, No. 97-0354 (W.D. Pa. Feb. 26. 1997). http://www.usdoj.gov/crt/split/documents/pittssa.htm. For a comprehensive repository of civil rights litigation on policing, see generally CIV. RTS. CLEARINGHOUSE, U. MICH. SCHOOL OF L., http://www.clearinghouse.net/ (last visited May 4, 2020).

⁷ Civ. Rts. Div., supra note 5.

⁸ See, e.g., Chavez v. Illinois State Police, 251 F.3d 612, 655 (N.D. Ill. 1999) (dismissing case alleging that thousands of traffic stops throughout Illinois were motivated by race).

⁹ See Jerome Skolnick & Abigail Caplovitz, Guns, Drugs and Profiling: Ways to Target Guns and Minimize Racial Profiling, 43 ARIZ. L. REV. 413, 419 n. 36 (2001) (reporting that the term "racial profiling" first appeared in the American press in 1987, followed by a small number of mentions through 1993, then 31 in 1994 and 1995, 63 in 1996 and 1997, 187 in 1998, over 1,000 in 1999, and more than 1,000 again in 2000). A decade earlier, Sheri Lynn Johnson noted the fact of racially selective pedestrian and traffic enforcement. See Sheri L. Johnson, Race and the Decision to Detain a Suspect, 93 YALE L.J. 214, 236 (1983) ("There is substantial evidence that many police officers believe that minority race indicates a general propensity to commit crime"). By 1999, nearly six Americans in ten (59%) agreed that "racial profiling is widespread." Nearly four in ten (39%) agreed that Blacks were "treated less fairly than Whites in dealings with the police." See Jack Ludwig, Americans See Racial Profiling as Widespread, (May 2003), GALLUP http://www.gallup.com/poll/8389/americans-see-racial-profilingwidespread.aspx.

¹⁰ Civ. Rts. Div., supra note 5, at 3.

¹¹ Brandon Garrett, Standing While Black: Distinguishing Lyons in Racial Profiling Cases, 100 COLUM. L. REV. 1815 (2000); Debra Livingston, Police Reform and the Department of Justice: An Essay on Accountability, 2 BUFF. CRIM. L. REV. 815, 817 (1999). See also Myriam E. Gilles, Reinventing Structural Reform Litigation: Deputizing Private Citizens in the Enforcement of Civil Rights, 100 COLUM. L. REV. 1384, 1388 (2000) (proposing that a law be passed

less than to bring new police technologies into harmony with the constitutional conditions of democratic policing, and to promote police accountability at a time of social conflict and deep distrust between police and minority citizens. ¹² Accordingly, the *Soto* consent decree came at a time of great hopes across the country for the reform of policing practices through both constitutional remedies and newly energized political oversight.

The New Jersey consent decree was signed during a period of passion and anger over a series of highly publicized incidents in that state and elsewhere in which African Americans had been subject to egregious incidents of discrimination and police violence. Racial profiling by police on the streets and highways became a prominent feature in the popular and political discourse on policing, rivaling the celebration of the "new policing" that had brought lower crime rates in several cities. This became, then, a moment that promised political accounta-

permitting the Justice Department to deputize private suits against police departments for unconstitutional patterns or practices).

¹² See Brandon Garrett, Remedying Racial Profiling, 33 COLUM. HUM. RTS. L. REV. 41 (2001); Debra Livingston, Police Discretion and the Quality of Life in Public Places: Courts, Communities, and the New Policing, 97 COLUM. L. REV. 551, 551–672 (1997); David A. Sklansky, Is the Exclusionary Rule Obsolete?, 5 Ohio St. J. Crim. L. 567 (2008). But see Samuel R. Gross & Debra Livingston, Racial Profiling Under Attack, 102 COLUM. L. REV. 1413 (2002).

¹³ Michael Cooper, Officers in Bronx Fire 41 Shots, And an Unarmed Man is Killed, N.Y. TIMES, Feb. 5, 1999, at A1 ("An unarmed West African immigrant with no criminal record was killed early yesterday by four New York City police officers who fired 41 shots at him in the doorway of his Bronx apartment building, the police said."); John Kifner, Van Shooting Revives Charges of Racial Profiling by Police, N.Y. TIMES, May 10, 1998 at 33 (describing incident in which two New Jersey State Police officers fired eleven shots during a traffic stop into a van with four non-White males on their way to a basketball event, wounding three males); David Kocieniewski, Injured Man Says Brooklyn Officers Tortured Him in Custody, N.Y. TIMES, Aug. 13, 1997, at B1 ("Prosecutors are investigating allegations that police officers beat and tortured a man while he was in custody at a Brooklyn station house."); Violence Erupts Again in Cincinnati, Officers break up protest over police shooting of black man, L.A. TIMES, Apr. 11, 2001, at A4, https://www.latimes.com/archives/la-xpm-2001apr-11-mn-49580-story.html ("The confrontations came four days after Timothy Thomas, nineteen, was fatally shot as he ran from a police officer trying to arrest him on fourteen warrants.").

¹⁴ Philip B. Heymann, *The New Policing*, 28 FORDHAM URB. L.J. 407 (2000). These new strategic and institutional designs in policing developed simultaneously with awareness of the prominence of race in policing. *See*, *e.g.*, Jeffrey Goldberg, *The Color of Suspicion*, N.Y. TIMES MAG., June 20, 1999 at 51. *See also* Washington v. Lambert, 98 F.3d 1181, 1188 (9th Cir. 1996) ("There's a moving violation that many African Americans know as D.W.B.: Driving While Black.") (quoting Henry L. Gates, Jr., *Thirteen Ways of Looking at a Black Man*, NEW YORKER, Oct. 23, 1995 at 59); Sean Hecker, *Race and Pre-*

bility and institutional change in law enforcement. Several states initiated data collection procedures that created an empirical foundation for more extensive analysis of police-citizen interactions, and the Justice Department promoted local data collection efforts, particularly on highway stops and searches, as a way to create dialogue and bring about changes in policy.¹⁵ In the past decade, private and university-based organizations have also begun to amass data on pedestrian and vehicle stops by police.¹⁶ State and local actors investigated local police practices, with an eye toward possible constitutional violations.¹⁷ The U.S. Justice Department created a module in its National Crime Victimization Survey to develop national population estimates of police-citizen contacts and their outcomes.¹⁸

In the wake of these and other incidents, Consent Decrees and other instruments designed to bring about institutional reform proliferated despite little empirical evidence of the types of changes that these agreements could most effectively bring about.¹⁹ Because of *Soto's* im-

textual Traffic Stops: An Expanded Role for Civilian Review Board, 28 COLUM. HUM. RTS. L. REV. 551, 551–55 (1997) (discussing the abundance of accounts of racial profiling: "From the New Jersey Turnpike to the I-95 corridor between Delaware and Florida, empirical studies suggest that police single out minority, particularly African-American, motorists for traffic stops.").

¹⁵ LORIE FRIDELL, Executive Summary of RACIALLY BIASED POLICING: GUIDANCE FOR ANALYZING DATA FROM VEHICLE STOPS (2005), https://permanent.access.gpo.gov/lps71886/open.pdf; Deborah Ramirez, Jack McDevitt, & Amy Farrell, U.S. Dep't of Just., A Resource Guide on Racial Profiling Data Collection Systems: Promising Practices and Lessons Learned 55 (2000), https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=184768.

¹⁶ See, e.g., CENTER FOR POLICING EQUITY, https://policingequity.org/ (last visited Apr. 13, 2020); STANFORD OPEN POLICING PROJECT, https://openpolicing.stanford.edu/ (last visited Apr. 13, 2020).

¹⁷ ELIOT SPITZER, OFFICE OF THE N.Y. STATE ATT'Y GENERAL, THE NEW YORK CITY POLICE DEPARTMENT'S 'STOP AND FRISK' PRACTICES, https://ag.ny.gov/sites/default/files/pdfs/bureaus/civil_rights/stp_frsk.pdf (results of investigation of 175,000 *Terry* stops in New York City, January 1998–April 1999, conducted as part of New York Police Department "Stop and Frisk" practices).

¹⁸ See, e.g., BUREAU OF JUST. STAT., U.S. DEP'T OF JUST., CONTACTS BETWEEN POLICE AND THE PUBLIC, 2005, http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=653. This is the most recent report from the Police-Public Contact Surveys that were conducted every three years from 1996–2005, generating epidemiological estimates of the likelihood of a driver being pulled over in a traffic stop and the percentage of all contacts that involve the use of force by police based on a nationally representative sample of more than 60,000 residents, age 16. Information includes the reason for and outcome of the contact.

¹⁹ Joshua Chanin, Police Reform Through an Administrative Lens: Revisiting the Justice Department's Pattern or Practice Initiative, 39 ADMIN. THEORY & PRAXIS 257–74 (2017); Stephen Rushin, Structural Reform Litigation in

portant place in this history and the broad and deep reach of its remedies, an analysis of the changes that it did and did not produce opens a unique window to understand the promises and limitations of legal regulation and constitutionalized remedies for racially disparate enforcement by police. Accordingly, we present evidence of race-specific patterns of enforcement in New Jersey a full eight years after the *Soto* Consent Decree was signed, and at a moment when the State claimed success and moved successfully to end federal oversight. We also locate this analysis in the broader scholarly work—legal and empirical—on selective enforcement that has grown over the past decade in lockstep with the growth in court supervision of local law enforcement. Looking ahead, this is a cautionary tale about the design of judicial oversight and monitoring, but also of the resilience of race-based preferences and practices in everyday policing despite the umbrella of oversight and deep institutional changes in the design of policing.

I. FEDERAL INTERVENTIONS IN LOCAL LAW ENFORCEMENT UNDER SECTION 14141

A. Federal Litigation as a Strategy for Institutional Reform

The Violent Crime Control and Law Enforcement Act of 1994 was the primary litigation tool to pursue remedies for law enforcement violations of citizens' rights.²⁰ The Act, passed in the wake of the 1992 Rodney King Riots in Los Angeles,²¹ authorized the Department of Justice to seek injunctions to halt any "pattern or practice of conduct by law enforcement officials" that deprives persons of "rights, privileges, or immunities secured or protected by the Constitution or laws of the United States."²² The act was not limited to racial discrimination, but could also include police brutality or other types of misconduct. At the time when it was enacted, §14141 was a potentially powerful weapon that permitted the Justice Department to eliminate a wide range of police misconduct—any "pattern or practice of conduct by law enforcement officials" that deprives persons of "rights, privileges, or immunities se-

American Police Departments, 99 MINN. L. REV. 1343 (2015); Charles F. Sabel & William H. Simont, *The Duty for Responsible Administration and the Problem of Police Accountability*, 33 YALE J. ON REG. 165, 169 (2016).

²⁰ 42 U.S.C. § 14141(a) (1994).

²¹ Brandon Patterson, *Rodney King and the LA Riots Changed Policing. Now Jeff Sessions Wants to Turn Back the Clock.*, MOTHER JONES (Apr. 27 2017), https://www.motherjones.com/politics/2017/04/rodney-king-jeff-sessions-consent-decrees-policing/.

²² Private litigation and litigation to pursue civil rights claims, § 1983 actions, and other claims follow separate courses, and are not discussed here. *See, e.g.*, Alexander A. Reinert, *Measuring the Success of Bivens Litigation and its Consequences for the Individual Liability Model*, 62 STAN. L. REV. 809 (2010).

cured or protected by the Constitution or laws of the United States."²³ Beginning in the mid-1990s, the Department, under §14141, crafted consent decrees that became the leading model not only for remedying racial profiling, but for the larger project of institutional reform of the police.²⁴ As of December 31, 2016, forty of sixty-nine formal investigations of law enforcement agencies launched by the Special Litigation Section had reached some kind of formal outcome.²⁵ No investigation has gone to trial. The complaints under §14141 typically include excessive use of force and racially biased policing.²⁶

Monitoring was almost always built into MOAs and Consent Decrees, but not Investigative Letters, nor into "stipulated settlements" that result from private litigation.²⁷ Other private litigation has resulted in a trial and a finding of civil rights violations, leading to court-ordered reforms overseen by a monitor appointed and supervised by the federal court.²⁸ Monitors typically are individuals, firms or *ad hoc* teams of professional consultants. Rarely, courts will monitor directly rather than retain a professional or independent monitor.²⁹ Monitors generally have

²³ *Id*.

²⁴ Garrett, supra note 12 at 19–100. See also Rachel Harmon, Promoting Civil Rights Through Proactive Policing Reform, 62 STAN. L. REV. 1, 15–19 (2009).

²⁵ Civ. Rts. Div., *supra* note 5, at 41. An updated count can be found here: *Special Litigation Section Cases and Matters*, U.S. DEP'T OF JUST., CIV. RTS. DIV., https://www.justice.gov/crt/special-litigation-section-cases-and-matters/download#police (last visited May 4, 2020). For closed cases: *Special Litigation Section Archives*, U.S. DEP'T OF JUSTICE, CIV. RTS. DIV., https://www.justice.gov/crt/special-litigation-section-archives-0 (last visited May 4, 2020).

²⁶ The Bush administration favored Investigative Findings Letters over other tools, and a quick audit of the Civil Rights Division website shows a virtual cessation of investigations of law enforcement agencies starting in 2001. For details of the two investigations launched during the Bush administration, see Samuel Walker & Morgan MacDonald, *An Alternative Remedy for Police Misconduct: A Model State "Pattern or Practice" Statute*, 19 GEO. MASON CIV. RTS. L.J. 479, 503 and fn. 140 (2008–2009).

See, e.g., Daniels v. City of New York, 99 Civ. 1695-SAS (S.D.N.Y. Jan. 31, 2000), http://ccrjustice.org/files/Daniels StipulationOfSettlement 12 03 0.pdf.

²⁸ Kathleen Horan and Kate Hinds, *Judge Rules NYPD Stop-and-Frisk Unconstitutional*, WNYC NEWS (Aug. 12, 2013), https://www.wnyc.org/story/311311-stop-and-frisk-decision-comes-down/.

²⁹ For example, in a Consent Decree between the Department of Justice and the Los Angeles County Sheriff's Department, an independent monitoring team oversees the implementation of the reforms and monitors compliance. *See* Press Release, Dep't of Justice, Justice Department and the Los Angeles County Sheriff's Department Agree to Policing Reforms and Settlement of Police-Related Fair Housing Claims in the Antelope Valley (Apr. 28, 2015)

prior experience in law enforcement management, in relevant litigation, or in oversight of similar institutional reforms in either public or private domains.³⁰ Monitors typically review evidence of compliance provided by the state or municipality, and issue reports to the Court and/or to the public on progress toward achieving compliance. They usually work through the termination of the Consent Decree or the MOA. This tenure can be critical when compliance is partial (or worse), since there usually is no obligation attached to either a Consent Decree or a MOA to institutionalize or make permanent any external oversight of the agency. Monitors also are usually restricted to the terms and conditions articulated in the Consent Decree, and cannot exert any jurisdiction or authority if they become aware of other problems such as employment discrimination or corruption.³¹

The duration of monitoring in the first wave of Consent Decrees and MOAs before 2001 was usually set at five years, though several were extended based on evidence of either noncompliance or limited compliance.³² New Jersey's, as we discuss below, was scheduled to expire after seven years, but was extended to 2009 while transitional activities took place.³³ The monitoring function can be terminated early if a Court terminates a Consent Decree before its scheduled expiration.³⁴

The design of monitoring in many of the first wave of Consent Decrees and MOAs placed heavy responsibility on the monitors, and were quite optimistic about their capacity to work as change agents to bring about institutional reform. Their roles varied and overlapped, including collaborators, technical advisors, auditors, "police" to the police, shaming agents, analysts, or stern parents. Their reports, often containing detailed descriptions of the internal design and workings of a law enforcement agency, had the ancillary benefit of shining light on what often are insular if not closed agencies that resisted any outside inquiry

https://www.justice.gov/opa/pr/justice-department-and-los-angeles-county-sheriffs-department-agree-policing-reforms-and.

³⁰ See Walker & MacDonald, supra note 26 at 511.

³¹ *Id*.

³² See, e.g., Josh Kleinbaum, Judge Extends Federal Consent Decree for Three Years, Los Angeles Daily News (May 15, 2006), https://www.dailynews.com/2006/05/15/judge-extends-federal-consent-decree-for-three-years/ ("A federal judge today extended his oversight of the Los Angeles Police Department for three years, saying the agency has made great strides . . . but that more work needs to be done.").

³³ See infra Section II.B.

³⁴ For example, the Memorandum of Agreement between the City and the U.S. Department of Justice terminated on April 12, 2007, with the Police Department being in full compliance with 93% of the terms and conditions. *See* Department of Justice Agreement, CITY OF CINCINNATI POLICE, https://www.cincinnati-oh.gov/police/department-references/department-of-justice-agreement/ (last visited Apr. 13, 2020).

about policy and procedure.³⁵ They also served to advance the metagoal of enhancing accountability that was at the heart of both the passage of §14141 and of the early consent decrees.³⁶ By opening police agencies to new forms of democratic oversight, the intervention of federal monitors had the aspiration that consent decrees would transcend their formal procedural aims to penetrate the informal organizational cultures that shape officers' everyday conduct on the streets and highways.³⁷

B. Racial Profiling in New Jersey and the 1999 Consent Decree

In December 1999, the U.S. Department of Justice and the State of New Jersey entered into a consent decree to oversee and monitor the enforcement activity of the New Jersey State Police in its actions on the state's highways.³⁸ The consent decree followed the holding in *Soto v*. *State* that the New Jersey State Police had engaged in a pattern and practice of racially selective enforcement on the New Jersey Turnpike.³⁹ Other claims of constitutional violations, including excessive use of force, took a back seat to the claims of racially selective enforcement by NJSP troopers in the selection of vehicles to be stopped and in the subsequent selection of vehicles to be searched.⁴⁰

³⁵ See, e.g., JEROME SKOLNICK AND JAMES J. FYFE, ABOVE THE LAW: POLICE AND THE EXCESSIVE USE OF FORCE (1994); Harmon, *supra* note 24, at 66 ("But departments for which adopting the reforms would be most expensive—perhaps because they are most structurally deficient or institutionally resistant to change—would be the least likely to reform as a result of such a funding program.").

³⁶ Livingston, *supra* note 11 at 845–46 ("Section 14141 litigation may play an analogous role in the area of police accountability by prompting local departments first to compare their existing practices with regard to training, supervision, and discipline with those outlined in the Department's consent decrees and then to institute reforms, where needed.").

³⁷ See, e.g., Barbara Armacost, Organizational Culture and Police Misconduct, 72 GEO. WASH. L. REV. 453, 476 (2004) (noting the distinction between procedures aimed at "rotten apples" and those aimed at "rotten barrels").

³⁸ See Consent Decree, United States v. New Jersey, supra note 2.

³⁹ State v. Soto, 734 A.2d 350, 351 (N.J. Super. Ct. Law Div. 1996) (approved for publication after withdrawal and dismissal of the State's appeal on April 22, 1999) ("[U]nrebutted statistical evidence of disproportionate traffic stops against African-American motorists established de facto policy of targeting blacks for investigation and arrest and thus established selective enforcement violating the equal protection and due process clauses.").

⁴⁰ The *Soto* court had found that the State and the NJSP troopers were engaged in racial profiling to the extent that they were stopping African American motorists on the New Jersey Turnpike at higher rates than Whites for speeding violations. *Id.*; PETER VERNIERO, INTERIM REPORT OF THE STATE POLICE REVIEW TEAM REGARDING ALLEGATIONS OF RACIAL PROFILING, 27 (1999) (stating that four of ten stops were of minorities and eight of ten searches, "the overwhelming majority," were of minorities). *See also* David A. Harris, *The*

The *Soto* consent decree was unique among the early consent decrees enacted in the U.S. in the 1990s. Other consent decrees signed in that decade involved claims of civil rights violations against municipalities whose police departments were accused of systematic patterns of excessive force and other wrongdoing. New Jersey was the first to name a state agency, the New Jersey State Police. It put into place a detailed plan for institutional reform in the recruitment, training, and supervision of NJSP troopers. The Consent Decree also required the design and implementation of a management information system to compile data on the patterns of enforcement and the outcomes of vehicle stops and searches.

The Consent Decree required that the NJSP implement new policies and extensive reforms in the training and supervision of NJSP troopers, and implemented careful external monitoring of compliance with both procedural and substantive reforms. Compliance also was determined by progress toward the elimination of racial disparities in the patterns of NJSP vehicle stops and searches on the New Jersey Turnpike that animated the *Soto* litigation. The court-appointed Monitor overseeing the Consent Decree for the U.S. District Court published a series of sixteen reports between October 2000 and August 2007 documenting the State's compliance with the stipulations of the agreement. Report No. 16, the penultimate report issued in August 2007, stated that the State and NJSP had made substantial progress in reducing racial disparities in the conduct of vehicle stops, and that the State and the NJSP were in full compliance with the terms, conditions, policies, procedures, standards and benchmarks of the Consent Decree.

The State was so confident that its compliance record would persuade the Court to end its supervision that it began planning for the post-Consent Decree institutional design of the reformed State Police even before the Monitor's sixteenth report in August 2007.⁴⁴ In public hear-

Stories, the Statistics, and the Law: Why "Driving While Black" Matters, 84 MINN. L. REV. 265, 277–89 (1999) (reviewing the first comprehensive statistical analysis of police stops and race in New Jersey, Maryland and Ohio).

⁴¹ Garrett, *supra* note 12; Livingston, *supra* note 11.

⁴² For details on the specific conditions and requirements set forth in the consent decree, see Consent Decree, United States v. New Jersey, *supra* note 2.

MONITOR'S SIXTEENTH INDEPENDENT REPORT, LONG-TERM COMPLIANCE AUDIT (Public Management Resources, 2007), http://www.state.nj.us/lps/monitors-report-16.pdf ("Compliance requirements in all areas are now at 100 percent levels. Policy, training, supervision, inspections and audits . . . are fully staffed, fully functioning, and, in the opinion of the monitors, fully capable of self-monitoring and self-adaptation.").

⁴⁴ An expert report commissioned by the New Jersey State Attorney General and submitted eleven months before the Monitor's August 2007 report foresaw the Monitors' conclusions on compliance, and issued recommendations that post-Consent Decree monitoring of the NJSP practices be assigned to the State Attorney General. *See* Samuel Walker, Memorandum to the Attorney General,

ings in September 2007⁴⁵ and in the Monitor's August 2007 report, ⁴⁶ the State claimed that the time had come to lift the burden of federal oversight from the New Jersey State Police. A bipartisan Governor's Advisory Committee on Police Standards and Practices agreed, and echoed the conclusion of the Monitor in its final report in December 2007.⁴⁷ The state's law enforcement institutions reported to the Advisory Committee, quoting the Monitor, that the State had the political will and the infrastructure to assume responsibility for ongoing oversight and monitoring of the practices of the NJSP. 48 In the seventeenth and final report before the state was released from the consent decree, dated April 2009, the Monitor reiterated the claim from its penultimate report that "the State Police had become 'self-monitoring' and that as [sic] agency it possessed the ability to 'analyze and correct' problematic law enforcement procedures on a 'real time' basis." The legislature passed the Law Enforcement Professional Standards Act of 2009,50 transferring monitoring and oversight of the NJSP to the Office of State Police Affairs within the Office of the State Attorney General. The parties to the Consent Decree, the State of New Jersey and the Civil Rights Division of the U.S. Department of Justice, filed a joint motion in August 2009 to dissolve the order.⁵¹ On September 20, 2009, Judge Mary L. Cooper of the U.S. District Court in Newark signed an order dissolving the Consent Decree. 52

State of New Jersey, "Post-Consent Decree Oversight of the New Jersey State Police" (Sept. 16, 2006), https://www.nj.gov/acps/home/hearings/pdf/061121_swalker.pdf (concluding that "[t]he NJSP is to be commended for successfully implementing the terms of the Consent Decree in a timely fashion.").

- ⁴⁵ Public Hearing Morning Session Before the Advisory Committee on Police Standards, 212 Leg., 2d Sess. (N.J. 2007).
- ⁴⁶ MONITOR'S SIXTEENTH INDEPENDENT REPORT, *supra* note 43, at iv. In its sixteenth and penultimate report, the Monitor noted that the State Police had become "self-monitoring" and that as an agency it possessed the ability to "analyze and correct" problematic law enforcement procedures on a "real time" basis. This was seen by the Advisory Committee in its December 2007 Final Report as reliable evidence that the state had created an infrastructure that was capable of internalizing the oversight responsibilities that had, under the Consent Decree, been assigned to the court-appointed Monitor.
- ⁴⁷ REPORT AND RECOMMENDATIONS TO GOVERNOR JON S. CORZINE PURSUANT TO EXECUTIVE ORDER No. 29, (New Jersey Advisory Committee on Police Standards, 2007) (recommending that "the State join in the motion to dismiss the Consent Decree.").
 - ⁴⁸ *Id*.
- ⁴⁹ Monitor's Seventeenth Independent Report, Long-Term Compliance Audit (Public Management Resources, 2009).
 - ⁵⁰ N.J.S.A. 52:17B-222, et. seq. (2009).
- ⁵¹ Oversight of New Jersey State Police is Ended, N.Y. TIMES (Sept. 21, 2009), http://www.nytimes.com/2009/09/22/nyregion/22profile.html.

 52 *Id*.

C. The End of Profiling?

The independent Monitor, as well as the Attorney General's expert, focused their reports on policy, procedure and practice, rather than addressing the central issue in *Soto*: whether NJSP troopers engaged in race-based selection of vehicles and drivers for stops and potentially searches.⁵³ When the Monitor last visited the question of race-specific

⁵³ Neither the Monitor's reports nor the Attorney General's Expert Memorandum addressed the basic "supply-side" question that was litigated in *Soto* and that animated the Consent Decree: the racially disparate practice of selection of motorists for stops by NJSP troopers on the southern portion of the Turnpike. In fact, none of the monitoring reports addressed the claims of racial disproportionality in the selection of vehicles for stops, the primary concern that animated the *Soto* case and the Consent Decree.

Yet others did, and offered credible evidence of racial disparities in the selection of vehicles for stops, relative to estimates of the base rate of moving violations. See JOHN C. LAMBERTH & JOSEPH B. KADANE, IN THE MATTER OF THE STUDY OF STATE POLICE STOP ACTIVITY AT THE SOUTHERN END OF THE NEW JERSEY TURNPIKE (2001) [hereinafter LK REPORT). The LK REPORT focused on vehicle stops on the section of the New Jersey Turnpike patrolled by the Moorestown Station, between Exits 1 and 7A, the area that was the focus of the Soto opinion. The LK REPORT analyzed motor vehicle stops by New Jersey State Police ("NJSP") troopers on the southern end of the New Jersey Turnpike in August and September 2005. Lamberth and Kadane estimated the distribution of the racial and ethnic identity of drivers who exceeded the speed limit, and compared this distribution to the distribution of drivers who were stopped by New Jersey State Police troopers in the same sections of the New Jersey Turnpike. The LK REPORT concluded that NJSP troopers were more likely to take enforcement action against Black violators than they were against White violators. Using two different measurement methods, they estimated that between 18.5 and 19.0 percent of African-American motorists committed speeding violations between Exits 1 and 7A of the Turnpike and were eligible for stops. Their analysis of NJSP data on vehicle stops for speeding in the same area showed that 30.5 percent of those stopped for speeding were African American. Tests showed that these differences were statistically significant. See also John Lamberth & Joseph B. Kadane, Are blacks egregious speeding violators at extraordinary rates in New Jersey?, 8 L., PROBABILITY & RISK 69 (2009).

The LK REPORT was independently reviewed in 2007 at the request of the Governor's Advisory Commission. Jeffrey Fagan et al., Memorandum to James E. Johnson, Lamberth-Kadane Report on New Jersey State Police Stop Activity on the Southern End of the New Jersey Turnpike (Apr. 10, 2007) (on file at: http://www.state.nj.us/acps/home/hearings/pdf/dpny_22440631_v1_peerreviewt eam.pdf). The Panel also examined data on stops and searches during 2005, and included a second window in 2005 (March–April) as a validity check against seasonality. The Panel reported that there was no social science basis to reject the LK REPORT, and that the conclusion that racial disparities were present in the selection of drivers for stops by NJSP troopers was valid. While the Panel questioned the level of the disparity between Black and White stop rates reported in the LK REPORT, it affirmed the likelihood that a racial disparity existed.

patterns of enforcement in Report No. 16,⁵⁴ he estimated the extent of racial disparities in the outcomes of stops: searches, deployment of canine units, and arrests. The analysis was based on a sample of 269 "critical event" stops made by NJSP Troops B and E in the second half of 2006.⁵⁵ No information was given on the definition of a "critical event" stop, the method for selecting these cases, or how these cases stacked up against the full universe of over 12,200 stops during that time period.⁵⁶ Nor did the sample of 269 cases have the statistical power to support any conclusions on racial disparities.

Nevertheless, Report No. 16 was cited by the State and the Governor's Advisory Committee as evidence of compliance in its recommendation to seek termination of the Consent Decree. The report concluded that there was no evidence of racial disparity in the conduct of NJSP troopers pursuant to stops, despite showing statistically significant differences in the rates at which drivers were asked to consent to searches⁵⁷ and the rates at which canine units were deployed for vehicle searches.⁵⁸ The Monitor minimized the importance of racial disparities in post-stop decisions by citing "qualitative" factors that may explain the differences.⁵⁹ Qualitative factors were defined as "levels of discretion" which in turn were equated with reasons for the stop or the nature of the violation. These were categorized as "high," "median" [sic] or "low" discretion events. The Monitor used these categories to classify cases, and then re-analyzed the data on post-stop outcomes to determine the extent of racial disparities conditional on these factors. These additional categories further diluted the statistical power of the comparisons.

The panel concluded that after taking into account any limitations in design and measurement introducing uncertainty in the estimates computed by the LK REPORT, the confidence intervals around the estimates of moving violation rates by Blacks would still suggest that stop rates for Blacks are disproportionate to their violation rates and disproportionate to the rates for drivers of other races.

⁵⁴ MONITOR'S SIXTEENTH INDEPENDENT REPORT, supra note 43, at 8.

⁵⁵ *Id.* Troop B patrols state highways in a broad area of northern New Jersey, which encompasses primarily rural areas to the north and west of those population centers. Troop E patrols include three substations whose patrol areas include portions of the New Jersey Turnpike. The Moorestown Station, which was the focus of the *Soto* litigation, was not included in the Monitor's analysis.

⁵⁶ Based on data made available to the authors by the Office of the Attorney General of New Jersey. We used G*Power to estimate the power of a sample of 269 cases and an effect size of .25 for two of the three groups. Power is less than .85.

⁵⁷ MONITOR'S SIXTEENTH INDEPENDENT REPORT, *supra* note 43, at 14–16.

⁵⁸ *Id.* at 16.

⁵⁹ *Id.* at 20–21.

II. THEORY AND RESEARCH ON RACE AND SELECTIVE ENFORCEMENT

A. Social and Legal Definitions of "Racial Profiling"

The term "racial profiling" is a broad descriptive category that encompasses a range of linked practices by police and other legal actors. It may include the use of race as a single or dominant factor in the decision to stop a person or car, and once stopped, to frisk a citizen, to conduct a search of her person or vehicle or passengers in the vehicle, to use noxious and intrusive methods for search such as canine deployments, or to use physical force or weapons to prevent escalation or aggressive reactions by citizens who have been stopped or detained. So, understanding the role of race in these encounters requires that we consider the role of race not just in the initial encounter, but in judgments on whether and how to proceed beyond the initial encounter.

Police engage in racial profiling when they select persons of a specific race for attention because they assume that those persons are more likely to commit or have committed a targeted crime or crime generally than a White or other majority person. ⁶⁰ The decision to stop a person, then, reflects an a priori probabilistic assessment by police officers that members of a specific race are more likely than "similarly situated" members of another race to be engaged in criminal activity. ⁶¹ But the decision to proceed further may also reflect

⁶⁰ Skolnick and Caplovitz reduce profiling to its core racial component: the selection of individuals for heightened scrutiny based on the color of their skin. Skolnick & Caplovitz, *supra* note 9 at 417. Fagan et al. show the probability of selection by police for heightened attention (e.g., stop, frisk, search) is conditional on both race and neighborhood. *See* Jeffrey Fagan et al., *Street Stops and Broken Windows Revisited: Race and Order Maintenance Policing in a Safe and Changing City, in* EXPLORING RACE, ETHNICITY AND POLICING: ESSENTIAL READINGS (S. Rice & M. White, eds., 2010). *See e.g.*, Gross & Livingston, *su-pra* note 12 at 1415 ("As we use the term, 'racial profiling' occurs whenever a law enforcement officer questions, stops, arrests, searches, or otherwise investigates a person because the officer believes that members of that person's racial or ethnic group are more likely than the population at large to commit the sort of crime the officer is investigating.").

⁶¹ Whether racial profiling includes stops resulting from race-based suspect descriptions is controversial. Several others carefully distinguish such stops from stops based on discretionary judgments about suspicion. David Cole & John Marcello, Symposium, *Opposing Views of Racial Profiling*, 15 INSIGHT ON NEWS 24 (1999); Steven N. Durlauf, *Assessing Racial Profiling*, 116 ECON. J. 402 (2006); Samuel R. Gross & Katherine Y. Barnes, *Road Work: Racial Profiling And Drug Interdiction On The Highway*, 101 MICH. L. REV. 651 (2002); David Rudovsky, *Law Enforcement by Stereotypes and Serendipity: Racial Profiling and Stops and Searches Without Cause*, 3 U. PA. J. CONST. L. 296 (2001); Jeffrey Fagan, *Race and the New Policing*, 83 (Colum. L. Scholarship Archive, Working

probabilistic judgments about race, or about other factors conditional on suspect race.

Evidence of racial disparity in post-stop outcomes suggests that these probabilistic assessments are hardly limited to the first stage of an encounter, when an individual is initially selected for attention. Racial profiling can occur "when a police officer stops, arrests, questions, searches or otherwise investigates a person because the officer believes that members of that person's racial or ethnic group are more likely than the population at large to commit the sort of crime that the officer is investigating."62 So, there may be racebased probabilistic assessments inherent in the decision to frisk a person stopped on the street or to search a vehicle once that vehicle has been selected. Perhaps the indicia of suspicion and their algebra change from one stage to the next: some indicia that are present in selection for the initial encounter are no longer relevant in the decision to proceed further, while other indicia that were not factors in the initial decision to launch an encounter enter into the decision logic in later stages. For example, speeding may strongly influence the decision to stop a vehicle, but the speeding may have less (if not nothing) to do with the decision to search a vehicle. 63 Yet race may

https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3059&context =faculty scholarship. Case law also distinguishes racial profiling from police stops motivated by race-based suspect descriptions. See, e.g., Brown v. City of Oneonta, 221 F.3d 329 (2d Cir. 1999). But see R. Richard Banks, Race-Based Suspect Selection and Colorblind Equal Protection Doctrine and Disclosure, 48 UCLA L. REV. 1075 (2001) (showing that by virtue of the similarity of racebased suspect descriptions and race-based profiles, both offend the principles of colorblindness in the Equal Protection Clause in that they disproportionately burden racial minorities, and both should be subject to strict scrutiny within the Fourteenth Amendment). Banks cites four weaknesses in victim-supplied suspect descriptions that reduce the targeting of suspects to the same probabilistic (and therefore flawed) determination as in a broader race-based profile: (1) the fallacy of appearances of a category of people who resemble the suspect, (2) the unreliability of victim descriptions, (3) the overly broad application of the suspect description, and (4) the excessive weighting of race in a "multiple factors" suspect description.

⁶² Gross & Livingston, *supra* note 12; *see also* Gross & Barnes, *supra* note 61.

⁶³ Similarly, in a pedestrian stop, the decision to stop a suspect may reflect subjective judgments about behaviors or other indicia that are correlated with crime, but the decision to search that suspect may be driven by other factors. However, the constitutional regulation of the street stop versus the vehicle stop are quite different. Stephen Rushin & Griffin Sims Edwards, *An Empirical Assessment of Pretextual Stops and Racial Profiling*, 73 STAN. L. REV. (forthcoming 2021), http://dx.doi.org/10.2139/ssrn.3506876 (quoting Whren v. United States, 517 U.S. 806, 819 (1996)) (noting that the standard for a vehicle stop is an objective violation of a traffic law, in contrast to the reasonable suspicion or probable cause standards that regulate pedestrian stops).

infect both the decision to stop the vehicle and to proceed further to a search. Demeanor also may signal suspicion, and the subjective interpretation of demeanor as "suspicious" or masking illegality or signaling culpability may itself be subject to racialized interpretations. As Professor Jerome Skolnick first recognized in his fieldwork with police in the 1960s, police have connected race with the "symbolic assailant," an archetypal crime symbol. 65

The linkage between these two probabilistic assessments shows that race and suspicion are linked and interact across the stag-

⁶⁴ See generally R. Richard Banks, Beyond Profiling: Race, Policing, and the Drug War, 56 STAN. L. REV. 571 (2003); Jennifer L. Eberhardt et al., Seeing Black: Race, Crime, and Visual Processing, 87 J. Personality & Soc. PSYCHOL. 876, 890 (2004) ("With their eyes, perceivers may tie individual Black targets to a group-based suspicion—and sadly, Black people who appear highly stereotypically Black may be the most likely of all to feel the tug."); Jeffrey Fagan & Amanda Geller, Following the Script: Narratives of Suspicion in Terry Stops in Street Policing, 82 U. CHI. L. REV. 51, 55-61 (2015); Rachel D. Godsil & L. Song Richardson, Racial Anxiety, 102 IOWA L. REV. 2235, 2250 (2017); Sandra Graham & Brian S. Lowery, Priming Unconscious Racial Stereotypes About Adolescent Offenders, 28 LAW & HUM. BEHAV. 483 (2004); Ben Grunwald & Jeffrey Fagan, The End of Intuition-Based High-Crime Areas, 107 CALIF. L. REV. 345, 388–89 (2019) (showing that the racial composition of an area predicts whether an officer will call it a "high crime area" net of the local crime rate); L. Song Richardson, Implicit Racial Bias and Racial Anxiety: Implications for Stops and Frisks, 15 OHIO ST. J. CRIM. L. 73, 84 (2017) (relating development of Terry decision to modern racial bias); L. Song Richardson & Phillip Atiba Goff, Implicit Racial Bias in Public Defender Triage, 122 YALE L. J. 2626 (2013) (explaining the well-known issue of implicit and unconscious bias in police treatment of Black suspects); Adam M. Samaha, Regulation for the Sake of Appearance, 125 HARV. L. REV. 1563, 1620-34 (2012) (describing New York City's stop-and-frisk regime as appearance-based regulation based on perceptions of disorderly places or people); Robert J. Sampson, When Things Aren't What They Seem: Context and Cognition in Appearance-Based Regulation, 125 HARV. L. REV. F. 97, 99-102 (2012) ("Race is particularly salientwhites see disorder as more of a problem than blacks, Latinos, and Asians, even when living in the same environment."); Rick J. Trinkner, Erin M. Kerrison & Phillip Atiba Goff, The Force of Fear: Police Stereotype Threat, Self-Legitimacy, and Support for Excessive Force, 43 LAW & HUM. BEHAV. 421, 432 (2019) ("These results raise the possibility of a particularly vicious cycle of stereotype threat, police force, and public trust.").

⁶⁵ JEROME SKOLNICK, JUSTICE WITHOUT TRIAL: LAW ENFORCEMENT IN DEMOCRATIC SOCIETY 42 (Quid Pro Books, 4th ed. 2011) ("Police officers, because their work requires them to be occupied continually with potential violence, develop a perceptual shorthand to identify certain kinds of people as symbolic assailants."). See also Geoffrey P. Alpert, John M. MacDonald & Roger G. Dunham, Police Suspicion and Discretionary Decision-Making During Citizen Stops, 43 CRIMINOLOGY 407, 422–23 (2005) (showing that whether a suspect is Black influences officers' decisions to form suspicion based on nonbehavioral cues versus behavioral cues).

es of an event. These interactions are events, and each decision in an event is conditional on the preceding one, yet linked by race and perhaps other factors. While that linkage may vary from one stage to the next, the evidence of racial disparities both in the selection of cases and what happens following selection suggests the persistent infusion of race in the sequence of police-citizen interactions.

Yet researchers studying racial profiling or racially selective enforcement have consistently disaggregated this selectivity into two stages of the police-citizen interaction: the initial selection of individuals, and the ensuing stages of interaction where police may decide to end an encounter or go on to further and more intrusive interdictions. Compare, for example, the analysis by Andrew Gelman and colleagues on the racial distribution of pedestrian stops in New York City⁶⁶ with the analysis by John Knowles, Nicola Persico and Petra Todd of searches and "hit rates" pursuant to vehicle stops Maryland. 67 Gelman and colleagues analyze pedestrian stop rates in New York City by neighborhood, taking into account the crime conditions and racial composition of the area, and find racial disparities in stop rates. Although they acknowledge that these disparities may persist in post-stop outcomes, they don't engage the question of how race links from one stage to the next. Knowles and colleagues do not engage the question of the production of stops eligible for search.

B. Discrimination During and After the Consent Decree

How then are we to understand the Monitor's evidence and interpret the claims that NJSP officers no longer discriminate? In his sixteenth report, the Monitor concludes that there are significantly higher rates of searches and canine deployments for African Americans who were stopped, but minimizes their importance by citing "qualitative" factors that may explain the differences. The Monitor avoids a conventional test that uses a common metric for identifying disparate treatment of persons in a protected group—comparison of their outcomes with the outcomes of persons who are "similarly situated" but in a different group—to assess whether non-Whites selected for stops by police are subject to equal probabilities of selection for further interactions. ⁶⁸

⁶⁶ Andrew Gelman, Jeffrey Fagan, & Alex Kiss, *An Analysis of the New York City Police Department's "Stop-and-Frisk" Policy in the Context of Claims of Racial Bias*, 102 J. Am. Stat. Ass'n 813, (2007), http://www.stat.columbia.edu/~gelman/research/published/frisk9.pdf.

⁶⁷ John Knowles, Nicola Persico, & Petra Todd, *Racial Bias in Motor Vehicle Searches: Theory and Evidence*, 109 J. Pol. Econ. 203–99 (2001).

⁶⁸ For an illustration, see IAN AYRES & JONATHAN BOROWSKY, A STUDY OF RACIALLY DISPARATE OUTCOMES IN THE LOS ANGELES POLICE DEPARTMENT (2008), https://www.aclusocal.org/sites/default/files/wp-content/uploads/2015/09/11837125-LAPD-Racial-Profiling-Report-ACLU.pdf.

Consider the following example, from Griggs v. Duke Power Co., an employment discrimination case. 69 In a disparate treatment claim, one could test whether the use of a high school diploma requirement biases the hiring process since African American job applicants may be less likely to have obtained a high school diploma. Had this racecorrelated control been introduced, it would likely have reduced the racial disparity in the hiring rates for the simple reason that minority applicants at that time were less likely to have obtained a high school diploma. Should a statistical test control for whether or not an applicant had a high school diploma? As Ian Ayres points out, 70 in a disparate treatment case, the answer is ves. Under a disparate treatment theory, the critical question is whether an applicant's race was the cause of being denied employment. If applicants were rejected because the employer chose not to hire diploma-less applicants, the applicants' race would not be a "motivating factor" in the employer's decision. The goal in specifying these models is to identify the effects of race on outcomes after simultaneously considering factors that may be relevant to race.⁷¹

We conduct precisely such an analysis in this paper. We conduct a series of tests on the likelihood of a search or a seizure of contraband pursuant to a search. We include observables based on characteristics of the vehicle and the driver, as well as the nature of the violation. We make no assumptions about preferences or tastes for discrimination, only that there is heterogeneity in that preference among officers. Following Close and Mason⁷² and Anwar and Fang, ⁷³ we assume that crime minimization is the motivation for policing, but that unobservables make it difficult to attribute differentials in searches to a preference for discrimination. Similar to others estimating taste-based discrimination, ⁷⁴ we ex-

⁶⁹ Griggs v. Duke Power Co., 401 U.S. 424 (1971). Ian Ayres uses this case to illustrate the difference between a disparate impact claim, which has limited value in an employment discrimination claim, and disparate treatment. See Ian Ayres, Testing for Discrimination and the Problem of 'Included Variable Bias' (2010),

https://ianayres.yale.edu/sites/default/files/files/Testing%20 for%20 Discrimination.pdf.

⁷⁰ See AYRES & BOROWSKY, supra note 68, at 5.

⁷¹ See, e.g., Ayres, supra note 69, at 13. See also Ian Ayres, Three Tests for Measuring Unjustified Disparate Impacts in Organ Transplantation: The Problem of 'Included Variable' Bias, 48 PERSP. BIOLOGY & MED. 68 (2005).

⁷² Billy R. Close & Patrick L. Mason, Searching for Efficient Enforcement: Officer Characteristics and Racially Biased Policing, 3 Rev. L. & Econ. 263, 263–321 (2007).

⁷³ Shamena Anwar & Hanming Fang, *An Alternative Test of Racial Prejudice in Motor Vehicle Searches: Theory and Evidence*, 96 AM. ECON. REV. 127, 127–51 (2006).

⁷⁴ *Id.*; Close & Mason, *supra* note 72; David Bjerk, *Racial Profiling, Statistical Discrimination, and the Effect of a Colorblind Policy on the Crime Rate*, 9 J. Pub. Econ. Theory 521 (2007).

ploit the observed heterogeneity in police officer race to establish search and success rates of suspects of different races across officers of different races. Since the tests are sensitive to assumptions about the purpose of the search—crime minimization versus punishment maximization, for example—we focus our analyses on the decision to search conditional on a stop.⁷⁵ We then proceed to test for differences in search outcomes or seizures, following the logic of the crime minimization rationale.

This analytic strategy also makes sense in light of the institutional contexts in New Jersey, where there was "smoking gun" evidence of a preference to discriminate. To estimate the influences of local NJSP contexts and cultures, given these institutional preferences, we extend our estimates to take into account the unique effects of each organizational unit of the NJSP, focusing on the Moorestown Barracks, a focal point of the concerns over racial profiling by the state police.

III. DATA AND METHODS

We test for racial bias in motor vehicle searches conducted by the New Jersey State Police over an eighteen-month period from 2005 through 2007, the final years of the 1999 *Soto* consent decree. We adopt an analytic framework based on recent work by Close and Mason that exploits heterogeneity in officer and suspect race. We test the null hypothesis that neither an officer's nor a suspect's race predicts the probability of a search or seizure, and in turn that no combination of officer and suspect race predicts a search.

The NJSP provided incident-level records on 257,059 stops, searches and seizures on the New Jersey Turnpike from October 31, 2005 through March 31, 2007. The data were issued on request of the Advisory Committee, as part of its ongoing assessment of compliance by

⁷⁵ Dominitz and Knowles, for example, note that assumptions of equilibriums or equal search success rates provide a better fit when the goals of enforcement are punishment maximization instead of crime minimization. Jeff Dominitz & John Knowles, *Crime Minimization and Racial Bias: What Can We Learn from Police Search Data?*, 116 ECON. J., ROYAL ECON. SOCIETY F368, F368–84 (2006). But given unobservables, the decision about how to model becomes a probabilistic notion with unknown contingencies. At the same time, a finding of equal search rates doesn't necessarily rule out either motivation, nor does it rule out the existence of racial prejudice.

⁷⁶ See State v. Soto, 734 A.2d 350, 351 (N.J. Super. Ct. Law Div. 1996); S.J. Res. 43, 210th Leg., (N.J. 2002), ftp://www.njleg.state.nj.us/20022003/AR/43_I1.HTM (adopting articles of impeachment against then-Attorney General Peter Verniero and documenting that he suppressed evidence of similarities in the statistical patterns of racially selective enforcement by the Maryland State Police and the New Jersey State Police, and generally engaging in a pattern of "misleading and untruthful" statements to the state Senate Judiciary Committee in 1999 during the DOJ investigation of the New Jersey State Police) (hereinafter Verniero Memo).

⁷⁷ Close & Mason, *supra* note 72.

the NJSP with the terms of the consent decree. The data were part of the MAPPS⁷⁸ system developed as one of the obligations of the consent decree. MAPPS records data generated by troopers pursuant to each stop. Elements included demographics of the driver (but not passengers), information about the vehicle stopped, the reason for the stop (moving or non-moving violation), and all post-stop interactions (searches, arrests, use of force). The data were collected for each trooper, including the trooper's demographics, years of service, rank, and unit of deployment.

IV. RESULTS

A. Descriptive Statistics

Our analysis sample includes the 218,364 stops with complete data recorded (85% of the full sample). Table 1 shows descriptive statistics for the stops. This is a universe of all stops by the NJSP from October 1, 2005 through March 31, 2007. Recall that the final Monitor's Report (Report No. 16) was issued in August 2007, and included an analysis of data from an overlapping period in 2006–2007. Most drivers stopped were White (57.4%). Blacks and Hispanics were smaller minorities.

Table 1 shows that most officers making stops were White and male, and had been serving in the NJSP for more than six years. Based on data on the race and ethnicity of officers, the NJSP appears to be a racially homogeneous policing institution. More than four in five stops were made by White officers. Black and Hispanic officers made approximately 13% of all stops, and Asian and other ethnicity officers made fewer than 3% of all stops. 80

⁷⁸ This is an acronym for "Management Awareness of Personnel Performance." *See* Consent Decree, United States v. New Jersey, *supra* note 2, at § 40-56.

⁷⁹ A linear probability model indicates that stops were more significantly likely to be included in the analysis sample if they were of cars from outside of New Jersey, involved an American Indian or Asian (non-Indian) driver than a White driver, or the driver's race was recorded with error. Stops were significantly less likely to be included if the driver was Black or Latino than if the driver was White. However, these marginal differences were small in magnitude, in most cases less than a single percentage point. Results available from the authors.

⁸⁰ Note that the officer race measure is not a census of officers; many of these stops could be repeat stops by the same officer. Instead, this is in effect an exposure model, where drivers of various races are "exposed" to the same officer among a group of heterogeneous officers whose population parameters are unknown.

Table 1. Descriptive Statistics (Mean or %, SD)

| Race (%) | Drivers | | Ттоорег | rs |
|----------------------|---------|--------|---------|-------|
| White | 57.4 | | 84.6 | |
| Black | 20.5 | | 4.4 | |
| Hispanic | 13.8 | | 8.6 | |
| Asian | 4.9 | | 1.1 | |
| American Indian | 0.8 | | 1.3 | |
| Asian/Indian | 2.7 | | 0.0 | |
| Unknown | 0.0 | | 0.0 | |
| Gender (%) | | | | |
| Male | 76.2 | | 97.2 | |
| Female or Unknown | 23.8 | | 2.8 | |
| Age | 35.3 | (12.7) | | |
| Years of Service | | | 6.3 | (4.6) |
| Vehicle Registration | | | | |
| New Jersey | 62.3 | | | |
| New York | 14.9 | | | |
| Pennsylvania | 6.0 | | | |
| Other Out-of-State | 16.8 | | | |
| Missing | 0.0 | | | |
| Reason for Stop | | | | |
| Moving Violation | 90.3 | | | |
| Non-Moving Violation | 8.8 | | | |
| Other | 0.9 | | | |
| N | 218,364 | | | |

Most (62.3%) of the vehicles stopped were from New Jersey or New York (14.9%). There were few stops made of vehicles registered in Pennsylvania (6.0%). Stops made of vehicles registered in other states along the Interstate 95 corridor⁸¹ were 10.7% of all stops, mostly from Virginia (2.2%) and Maryland (3.4%). Whether this is selection or a weighted population estimate given geographical proximity is hard to

⁸¹ Including Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, Delaware, Maryland, Washington, DC, and Virginia.

say.⁸² Moreover, it is no coincidence that New Jersey and Maryland are connected by this corridor, by their participation in the DEA Pipeline training, and by their investigations and consent decrees early in the life of the DOJ Special Litigation Section's work.⁸³

Tables 2 and 3 show the distribution of stops and searches by vehicle registration and driver race. Black and Hispanic drivers were searched at far higher rates per stop than were White or Other Race drivers. The orders of magnitude are high: Blacks are searched at nearly three times the rate of White drivers, and Hispanics at more than twice the rate. Other race drivers, predominantly Asians or Native Americans, are searched less often than are White drivers. Vehicle searches by state reflect the distribution of stops, with exception of cases where the vehicle registration is omitted. Out-of-state plates from the other non-adjacent states are searched in proportion to the frequency with which they are stopped.

Table 2. Stops and Searches by Driver Race, New Jersey State Police, 2005-2007

| | | Driver Race | | | | | | |
|--------------------------|---------|-------------|--------|----------|--------|--|--|--|
| | Total | White | Black | Hispanic | Other | | | |
| Number of stops | 218,364 | 125,415 | 44,661 | 30,067 | 18,221 | | | |
| Percent of All Stops | 100 | 57.43 | 20.45 | 13.77 | 8.34 | | | |
| Total number of searches | 9,016 | 3,556 | 3,311 | 1,870 | 279 | | | |
| Percent Searched | 4.13 | 2.84 | 7.41 | 6.22 | 1.53 | | | |

Table 3. Stops and Searches by Vehicle Characteristics and Stop Factors, New Jersey State
Police, 2005-2007

| | | Vehicle Registration | | | | | | | |
|--------------------------|---------|----------------------|----------|--------------|--------|--|--|--|--|
| | Total | New Jersey | New York | Pennsylvania | Other | | | | |
| Number of stops | 218,364 | 135,937 | 32,602 | 13,069 | 36,756 | | | | |
| Percent of All Stops | 100 | 62.3 | 14.9 | 6.0 | 16.8 | | | | |
| Total number of searches | 9,016 | 6,256 | 784 | 619 | 1357 | | | | |
| Percent Searched | 4.1 | 4.6 | 2.4 | 4.7 | 3.7 | | | | |

⁸² In 1984, the Federal Drug Enforcement Administration initiated a program named Operation Pipeline, "a nationwide highway interdiction program that focuses on private motor vehicles," as part of which, "[e]ach year, state and local highway officers conduct dozens of training schools across the country, attended by other highway officers." MICHAEL D. LYMAN, PRACTICAL DRUG ENFORCEMENT 291 (2nd ed. 2002). *See also* Drug Enforcement Agency, *Drug Enforcement Administration 1980–1985*, 1, 51 (1984), https://www.hsdl.org/?view&did=804371. Both the New Jersey State Police and the Maryland State Police participated in the program. Gross & Barnes, *supra* note 61 at 671.

⁸³ See Wilkins v. Maryland State Police, Civ. No. MJG-93-468 (D. Md. Jan. 5, 1995), https://www.clearinghouse.net/chDocs/public/PN-MD-0003-0012.pdf; United States v. New Jersey, Civ. No. 99-5970-MLC (D.N.J., Dec. 31, 1999); Verniero Memo, *supra* note 76.

Figure 1 shows the division of the state into trooper stations. We focus on the Moorestown station in portions of this analysis. NJSP troopers assigned to the Moorestown Station patrol the southernmost portion of the Turnpike, from exits 1 to 3. Readers unfamiliar with the state can note that the state's population centers are in the northern portion of the state, from Exit 10 in New Brunswick north to Exit 18 near the intersection with Interstate 80, the highway that leads to the George Washington Bridge that connects to New York City. Traffic on that portion of the Turnpike is predominantly within-state, or within the "tristate" region of New York, New Jersey and Connecticut.

In the Southern portion of the state, both the population and the traffic are less dense, and vehicles more likely to be transients coming and going from out-of-state. However, the Mooretown Barracks patrols the portion of I-95 that is the entry into New Jersey for vehicles traveling north from Virginia, Washington D.C., Maryland and Delaware. If officers were alerted by their training to be aware of potential drug couriers traveling north into New Jersey, the initial point of interception of those vehicles naturally would be in that sector of the NJSP jurisdiction. Accordingly, beyond any demographic mismatch of local drivers in this region with the surrounding population, the focus of stops in this portion of the Turnpike on out-of-state vehicles is consistent with DEA guidelines and other New Jersey institutional preferences on the indicia of ve-

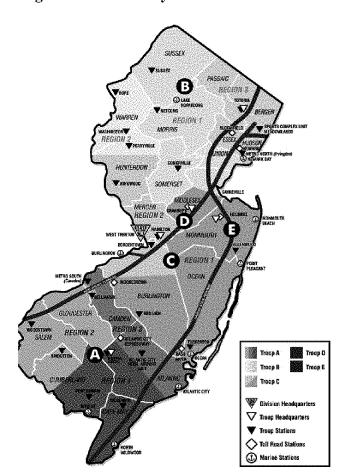
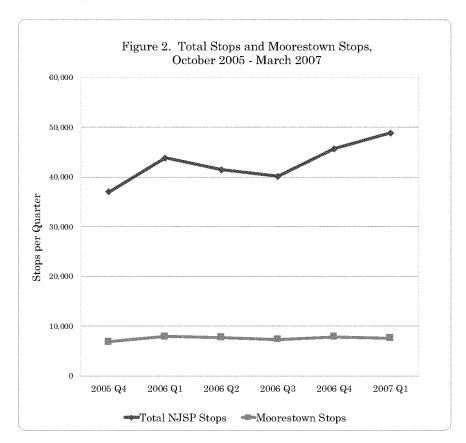


Figure 1. New Jersey State Police Patrol Sector

hicles and their drivers who were potentially trafficking in drugs or other contraband. In fact, Moorestown station stops of vehicles registered in non-adjacent states along the I-95 corridor were 27.8% of all Moorestown stops, compared to fewer than 10% of the total stops. Maryland registrations alone accounted for 10.9% of Moorestown stops, compared to 3.23% statewide.

Figure 2 shows that the frequency of stops statewide and in Moorestown varies over time, but show a steady growth statewide from approximately 37,000 to 50,000 stops over the six calendar quarters that we examined. Stops in Moorestown rose and fell over the six quarters, twice peaking at over 7,800 stops per quarter before falling again in the next quarter. Overall, across the six quarters, Moorestown stops rose from about 6,900 to 7,700.



⁸⁴ See, e.g., United States v. Laymon, 730 F. Supp. 332, 334–37 (D. Colo. 1990) (noting that officers were trained by the DEA to use drug courier profiles, and that "being Black or Hispanic was and is a factor in their drug courier profile on which they decide who to stop and search"); Donald Tomaskovic-Devey & Patricia Warren, *Explaining and Eliminating Racial Profiling*, 8 CONTEXTS 34, 35 (2009) ("The modern story of racially biased policing begins with the Drug Enforcement Agency's (DEA) Operation Pipeline, which starting in 1984 trained 25,000 state and local police officers in 48 states to recognize, stop, and search potential drug couriers."); Gross & Barnes, *supra* note 61 at 671.

Figure 3 shows the regional map of the states adjacent to New Jersey through which the I-95 corridor passes. Tables 1 and 3 show the extent of stops that were made of license plates that span this region. Among the "other" states in Table 3 are stops of cars with Maryland and Virginia license plates, part of the regional training focus of the DEA in developing Operation Pipeline. These regional interdependencies were highlighted in the documents prepared by the office of then-Attorney General Peter Verniero for the State Judiciary Committee in 1999.

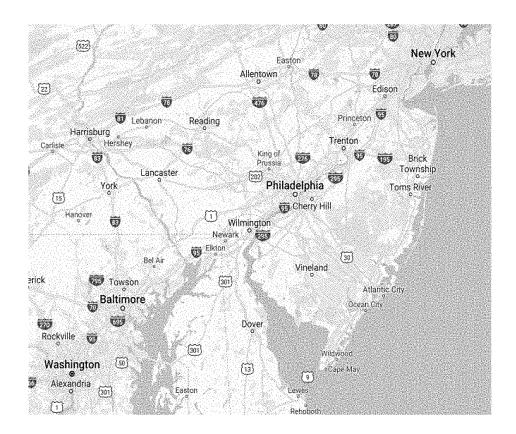


Figure 3. I-95 State Routes

⁸⁵ See, e.g., Drug Enforcement Administration, Operation Pipeline Training: Law Enforcement Training Course, (Sept. 2019) https://www.dea.gov/events/2019/09/10/operation-pipeline-training-course-3-day (a curriculum for a 2019 Operation Pipeline training for local and state police in Virginia).

⁸⁶ Verniero Memo, *supra* note 76.

B. Race and Searches

We estimated a series of multiple logistic regression models to identify the contributions of race of both driver and officer to the probability of being searched.⁸⁷ Models were estimated for the statewide set of cases and also for the Moorestown subset. The tables show the odds ratio (the exponentiated logit coefficient) for ease of interpretation, together with the standard error for the unexponentiated parameter estimate.

 $Table\ 4.\ Logistic\ Regression\ of\ Search\ Probability\ by\ Driver\ Race,\ Trooper\ Characteristics,\ Stop\ Characteristics,\ and\ Vehicle$

| Model | (1) |) | (2 | 2) | (| 3) | (4 | 1) |
|------------------------------|---------------------|--------------------|-------------------------|---------------------|--------------------------------|---------------------|---------------------|----------------------|
| | Driver Ra | ce Only | Driver, Car, Charact | | Race M | ismatch | Driver Rac Misn | e and Race natch |
| Predictors | Odds Ratio | Odds Ratio | Odds Ratio | Odds Ratio | Odds Ratio | Odds Ratio | Odds Ratio | Odds Ratio |
| Driver - Black | 2.744 (0.068)*** | 2.904 (0.075)** | 2.719 (0.070)** | 2.805 (0.074)*** | | | 2.792 (0.105)** | 2.818 (0.111)*** |
| Driver - Hispanic | 2.273 (0.067)*** | 2.459 (0.074)** | 2.127 (0.064)** | 2.282 (0.071)*** | | | 2.178 (0.086)** | 2.293 (0.095)*** |
| Driver - Other Race | 0.533 (0.033)*** | 0.549 (0.035)** | 0.584 (0.037)** | 0.597 (0.038)*** | | | 0.601 (0.041)** | 0.600 (0.042)*** |
| Driver-Officer Race Mismatch | 1 | | | | 1.748 (0.040)* | 1.823 (0.043)** | , , | 0.994 (0.037) |
| Trooper Years of Service | | | 0.922 (0.003)** | 0.946 (0.003)*** | 0.922 (0.003)* | 0.945 (0.003)** | | 0.946 (0.003)*** |
| Stop - Non-moving Violation | | | 2.468 (0.071)** | 2.648 (0.079)*** | 2.598 (0.074) ³ | 2.821 (0.083)** | | 2.652 (0.079)*** |
| Stop - Other Reason | | | 14.796 (0.774)** | 13.069 (0.725)*** | 15.933 (0.806) ³ | 14.184 (0.760)** | 14.813 (0.774)** | 13.070 (0.726)*** |
| Trooper - Black | | | 0.822 (0.047)** | 0.829 (0.048)*** | | | | |
| Trooper - Hispanic | | | 0.900 (0.035)** | 0.966 (0.039) | | | | |
| Trooper - Other | 2.000 | 0.004 | 1.001 (0.066) | 0.993 (0.067) | 0.047 | 0.000 | 0.010 | 0.000 |
| Constant | 0.029 (0.000)*** | 0.031 (0.000)** | 0.044 (0.001)** | 0.037 (0.002)*** | 0.045 (0.001) ³ | 0.039 (0.002)** | 0.043 (0.001)** | 0.036 (0.001)*** |
| Observations | 218,364 | 217,276 | 218,364 | 217,276 | 218,364 | 217,276 | 218,364 | 217,276 |
| Unit FE? | No | Yes | No | Yes | No | Yes | No | Yes |

Significance: *=p < .05, **=p < .01, ***=p < .001Note: Changes in sample size in FE models driven by perfect determination within units. (e.g., In Unit 4, no stops led to searches; the 2 observations from Unit 4 were therefore dropped from FE estimation). Models controlled for state of vehicle registration.

Driver race alone predicts the probability of a search. We omitted the White driver category for reference. The results are substantively the same with and without fixed effects for organizational unit, though the coefficients are slightly higher. In models 1 and 2, Black drivers are more than 2.7 times more likely to be searched than White drivers. Latino drivers are over 2.1 times more likely to be searched than White driv-

⁸⁷ For a discussion of this estimation method and its appropriateness for the outcome measures in this and later analyses, see DAVID W. HOSMER JR., STANLEY LEMESHOW & RODNEY X. STURDIVANT, APPLIED LOGISTIC REGRESSION 35-43 (3d ed. 2013).

ers. Drivers of other races, primarily Asians, are significantly less likely than Whites to be searched. When we add in covariates for the characteristics of the vehicle and the officer, including officer race, these results remain substantively the same. There is a slight decline in the odds ratio for Latino drivers, but it remains significant. There is a slight increase in the odds ratio for Black drivers once we control for officer race and other factors.

Stops for reasons other than moving violations are far more likely to lead to searches. The vague category of "other reasons" leads to searches nearly fifteen times more than stops for moving violations, suggesting that these stops may in fact be pretexts to conduct a search absent some other codified reason for the stop.

The results for officer race in Table 4 are significant only for Black officers, and the odds ratio (controlling for unit fixed effects) is .829. This suggests that Black officers are nearly 20% less likely to conduct a search given a stop, compared to their White counterparts. Other officer races were not significant. One way to interpret this effect is simply that Black officers have a higher threshold of "suspicion" when making a stop and deciding whether to conduct a search, or they may have equal suspicion to White officers but are more temperate in their exercise of discretion.

Table 5. Logistic Regression of Race-Specific Search Probability by Trooper Characteristics, Stop Characteristics, and Vehicle Characteristics (Odds Ratio, SE)

| Model | (1) | (2) | (3) | (4) | (5) | (6) | (5) | (6) |
|----------------------------|------------|------------|-----------|------------|------------|------------|--------------------|------------|
| Predictors | White Dr | rivers | Black D | rivers | Hispanic I | Orivers | Other Race Driv | |
| Trooper Years of Service | 0.932 | 0.958 | 0.915 | 0.932 | 0.921 | 0.950 | 0.886 | 0.894 |
| | (0.003)*** | (0.005)*** | (0.005)** | (0.006)*** | (0.007) | (0.007)*** | (0.017)* | (0.019)*** |
| Stop - Non-moving Violatio | 2.315 | 2.633 | 3.076 | 3.087 | 1.847 | 2.046 | 2.713 | 3.247 |
| | (0.111)*** | (0.131)*** | (0.142)** | (0.146)*** | (0.117) | (0.135)*** | (0.493)* | (0.582)*** |
| Stop - Other Reason | 18.713 | 16.290 | 11.709 | 10.287 | 11.357 | 10.437 | 27.950 | 25.641 |
| | (1.371)*** | (1.285)*** | (1.084)** | (1.000)*** | (1.239) | (1.237)*** | (8.102)* | (8.556)*** |
| Vehicle - New York | 0.578 | 0.600 | 0.445 | 0.455 | 0.824 | 0.585 | 0.548 | 0.481 |
| | (0.037)*** | (0.038)*** | (0.030)** | (0.032)*** | (0.065) | (0.063)** | (0.098)* | (0.089)*** |
| Vehicle - Pennsylvania | 0.986 | 1.096 | 0.855 | 0.918 | 1.758 | 1.672 | 0.568 | 0.628 |
| | (0.073) | (0.082) | (0.067)* | (0.073) | (0.147) | (0.144)*** | (0.172) | (0.199) |
| Vehicle - Other Non-NJ | 0.624 | 0.777 | 0.620 | 0.678 | 1.096 | 1.111 | 0.737 | 0.844 |
| | (0.037)*** | (0.049)*** | (0.030)** | (0.035)*** | (0.070) | (0.078) | (0.128) | (0.157) |
| Trooper - Black | 0.838 | 0.895 | 0.885 | 0.899 | 0.774 | 0.714 | 0.429 | 0.442 |
| | (0.080) | (0.087) | (0.079) | (0.082) | (0.097)1 | (0.091)** | (0.164)* | (0.173)* |
| Trooper - Hispanic | 0.953 | 1.067 | 0.869 | 0.925 | 0.959 | 0.964 | 0.339 | 0.338 |
| | (0.059) | (0.068) | (0.058)* | (0.062) | (0.078) | (0.082) | (0.111)* | (0.115)*** |
| Trooper - Other | 0.789 | 0.812 | 1.278 | 1.245 | 0.895 | 0.848 | 0.713 | 0.826 |
| | (0.096) | (0.101) | (0.126)* | (0.125) | (0.132) | (0.128) | (0.287) | (0.336) |
| Constant | 0.042 | 0.035 | 0.126 | 0.102 | 0.086 | 0.090 | 0.034 | 0.035 |
| | (0.001)*** | (0.002) | (0.005) | (0.007)*** | (0.005) | -0.007 | (0.004)* | (0.007)*** |
| Observations | 125,415 | 121,151 | 44,661 | 43,372 | 30,067 | 28,711 | 18,221 | 14,214 |
| Unit FE? | No | Yes | No | Yes | No | Yes | No | Yes |

Significance: * = p < .05, ** = p < .01, *** = p < .001

Note: Changes in sample size in FE models driven by perfect determination within units. (e.g., In Unit 4, no stops led to searches; the 2 observations from Unit 4 were therefore dropped from FE estimation). Models controlled for state of vehicle registration.

So far, then, there is fairly strong evidence that Black and Latino drivers are searched more often other drivers. Table 5 shows results of specific models for each driver race, which begins the process of identifying specific officer-driver race combinations that might produce differences in search probabilities. The models are specified both with and without fixed effects for organizational unit and calendar quarter.

White drivers are no more or less likely to be searched based on

the race of the officer who stopped them. Overall, Black officers are significantly less likely than their White counterparts to search drivers (as shown in Table 4). The race specific models in Table 5, and odds ratios consistently below 1.0, suggest that this is the case regardless of driver race, though these associations are only statistically significant for stops of Latino and Other Race drivers.

All drivers, regardless of race, are far more likely to be searched if stopped for the vague category of "other stop reasons," and less likely to be searched if their vehicle is registered in New York. Finally, troopers with fewer years of service are more likely to conduct searches of all drivers, suggesting that discretion may come with experience. Perhaps experience also lessens the types of enforcement that are statusenhancing in the eyes of their professional peers.

Table 6 shows that the pattern of searches pursuant to stops made by officers assigned to the Moorestown station are nearly identical to stops made elsewhere. Whatever the Consent Decree may or may not have accomplished, it did produce consistency between this unit and the others in the state. Unfortunately, the pattern of results in Table 6 suggests that Moorestown stops continue the pattern of racial discrimination that was evident before the Consent Decree, and the rest of the NJSP troopers appear now to engage in similar patterns of racially selective enforcement.

Table 6. Logistic Regression of Search Probability by Driver Race, Trooper Characteristics, Stop Characteristics, and Vehicle Characteristics: Moorestown Unit (Odds Ratio, SE)

| Model | (1) | (2) | (3) | (4) | (5) | (6) |
|----------------------------|-------------|-------------|-----------|-----------|-----------|-------------|
| |] | Driver Race | | | | |
| | Driver Race | with | White | Black | Hispanic | Other Race |
| Predictors | Only | Controls | Drivers | Drivers | Drivers | Drivers |
| Driver - Black | 3.019 | 3.182 | | | | |
| | (0.185)*** | (0.200)*** | | | | |
| Driver - Hispanic | 3.034 | 3.083 | | | | |
| - | (0.229)*** | (0.238)*** | | | | |
| Driver - Other Race | 0.561 | 0.628 | | | | |
| | (0.085)*** | (0.095)** | | | | |
| Trooper Years of Service | | 0.904 | 0.949 | 0.881 | 0.920 | 0.692 |
| | | (0.010)** | (0.017)** | (0.015)** | (0.021)** | (0.056)*** |
| Stop - Non-moving Violatio | n | 2.391 | 2.094 | 2.440 | 2.869 | 0.982 |
| | | (0.196)** | (0.316)** | (0.298)** | (0.503)** | (0.714) |
| Stop - Other Reason | | 16.863 | 31.096 | 8.997 | 23.304 | 37.087 |
| | | (2.274)** | (6.736)** | (1.726)** | (6.367)** | (26.123)*** |
| Trooper - Black | | 0.593 | 0.773 | 0.565 | 0.261 | 1.209 |
| | | (0.088)** | (0.195) | (0.116)** | (0.140)* | (0.703) |
| Trooper - Hispanic | | 0.944 | 1.022 | 0.913 | 1.114 | - |
| | | (0.103) | (0.195) | (0.142) | (0.265) | - |
| Trooper - Other | | 1.183 | 0.767 | 1.529 | 0.889 | 1.957 |
| | | (0.117) | (0.179) | (0.196)** | (0.221) | (0.949) |
| Constant | 0.024 | 0.038 | 0.031 | 0.139 | 0.101 | 0.071 |
| | (0.001)*** | (0.003)** | (0.003)** | (0.013)** | (0.015)** | (0.023)*** |
| Observations | 38,702 | 38,702 | 17,934 | 12,203 | 4,858 | 3,571 |

Significance: * = p < .05, ** = p < .01

Note: Changes in sample size in FE models driven by perfect determination within units. (e.g., In Unit 4, no stops led to searches; the 2 observations from Unit 4 were therefore dropped from FE estimation). Models controlled for state of vehicle registration.

Comparing the odds ratios, searches of Black drivers were three to five times more likely than searches of White drivers. Officer race did not modify the race-specific search odds. Searches of Latino drivers were also far more likely than searches of White drivers, ranging from about twice as likely for Black officers to more than three times more likely for Latino officers.

C. Hit Rates and the Search for Racial Equilibrium

We use a discrimination test that adopts the view of taste-based discrimination suggested by Gary Becker, 88 a view that has informed research on racial profiling for nearly three decades. 99 This view relies on outcome tests to discover evidence of racial preferences for searches. Put simply, drivers will adjust their propensity to traffic contraband based on their perceived risk of detection. Each racial or ethnic group will adjust in this way until there is an equilibrium achieved, where the detection rates upon police search are similar if not identical, even if the contact or search rates vary. In that case, we may infer that police are not discriminating but simply trying to maximize the returns of their stop and search activity. However, if seizure rates are lower for one group that may be stopped more often, this suggests a preference for searching drivers in that group beyond the level necessary to achieve that equilibrium. 90 In those instances, drivers endure stops on the basis of a pre-

⁸⁸ Gary S. Becker, The Economics of Discrimination 16 (1957) ("[I]f someone has a 'taste for discrimination,' he must act as if he were willing to forfeit income in order to avoid certain transactions".) In this study, officers seem too willing to forfeit some productive searches of drivers of all races to conduct a pattern of unproductive searches of Black drivers. *See infra* Section V. C.

⁸⁹ William A. Brock, Jane Cooley, Steven N. Durlauf, and Salvador Navarro, *On the Observational Implications of Taste-Based Discrimination in Racial Profiling*, 166 J. Econometrics 66, 66–67 (2012) (developing a statistical model to test for discrimination based on observable driver or pedestrian characteristics including race and ethnicity). *See also* Dominitz & Knowles, *supra* note 75; Knowles, Persico & Todd, *supra* note 67.

⁹⁰ This perspective is not without its critics, however. The differential in stop rates may have social welfare and utilitarian value for the state, but it ignores the indignities that result from marginally more frequent intrusions on drivers in the more frequently stopped group, usually racial or ethnic minorities. I. Bennet Capers, *Policing, Race and Place*, 44 HARV. C.R.-C.L L. REV. 43, 68 (2009) (stating a similar claim in terms of "public shaming"); William Stuntz, Terry *'s Impossibility*, 72 St. John's L. REV. 1343 (1998) (discussing the indignities of involuntary stops and searches by police on persons accused of possible crimes but having done none); Ekow N. Yankah, *Policing Ourselves: A Republican Theory of Citizenship, Dignity and Policing—A Comment on Fagan* (Cardozo Legal Studies, Research Paper No. 400, 2013), http://ssrn.com/abstract=2258048; Durlauf, *supra* note 61. *See* Bernard E.

textual traffic violation when the actual goal is suspicion of drug selling. Those stops often are noxious experiences, especially if the driver is innocent.⁹¹

As in the test for discrimination in searches, we conduct the test for seizures as an outcome test, similar to the Knowles, Persico and Todd test. 92 Outcome tests can be constructed as quasi-experiments, with race as a treatment, to identify the role of race in the selection of citizens for searches. 93 In this instance, we construct a disparate outcome quasiexperiment to identify the role of race in police searches by comparing the preferences of officers of different races to search motorists, controlling for the motorist's race. 94 We use both an outcomes-based nonparametric (quasi-experimental) analysis within a standard benchmarking parametric (regression) approach, and assess the propensity of officers to search African American and Latino drivers by comparing the outcomes of those searches.⁹⁵ We do this for both the full NJSP sample of stops and also for the important Moorestown Barracks activity. White drivers are the omitted category, so that results are expressed as each group relative to White drivers. We do the same to estimate trooper race effects.

Table 7 shows the results of a series of regressions that test for "hit" rates (seizure rates) by driver and officer race combinations. The results are shown as odds ratios again, with on "OR" of 1.0 indicating

Harcourt, *Unconstitutional Police Searches and Collective Responsibility*, 3 CRIMINOLOGY & PUB. POL'Y 1201 (2004) (describing a humiliating public strip search by police of a suspect accused of possessing drugs when he actually did not); Harris, *supra* note 40 at 270 n.18 (emphasizing that "'driving while black' is not only an experience of the young black male, or those at the bottom of the socio-economic ladder. All blacks confront the issue directly, regardless of age, dress, occupation, or social station").

⁹¹ Harris, *supra* note 40 (describing the 1992 pre-dawn stop of Robert Wilkins and his family on the Maryland Turnpike); Charles F. Manski & Daniel S. Nagin, *Assessing the Benefits, Costs and Disparate Racial Impacts of Confrontational Proactive Policing*, 114 PROC. NAT'L ACAD. SCI. 9308, 9308 (2017) (discussing the high rates of stops of non-White persons in an aggressive policing regime that uncover no wrongdoing but create anxiety and anger toward police).

⁹² Supra note 67.

⁹³ Ian Ayres, Outcome Tests of Racial Disparities in Police Practices, 4 J. Just. Res. & Stat. Ass'n 131 (2002); Jeffrey Fagan, Law, Social Science, and Racial Profiling, 4 Just. Res. and Pol'y 104 (2002); Greg Ridgeway & John MacDonald, Methods for Assessing Racially Biased Policing, in Exploring Race, Ethnicity and Policing: Essential Readings 180 (S. Rice & M. White, eds., 2010).

⁹⁴ Kate L. Antonovics & Brian G. Knight, *A New Look at Racial Profiling: Evidence from the Boston Police Department*, 91 REV. OF ECON. & STAT. 163–177 (2009); Close & Mason, *supra* note 72 at 263–321. *See generally* Bjerk, *supra* note 74 at 543–67.

⁵⁵ Antonovics & Knight, supra note 94.

comparable odds. Models 1 and 2 are baseline models that include only driver race. Model 1 is estimated without controls for the unit location, and Model 2 includes fixed effects that control for the unit (barracks) differences. Overall, stops of Black drivers have significantly higher hit rates, but that effect disappears when we control for unit. Hit rates are significantly higher for Hispanic drivers only in Model 2. Hit rates are significantly higher for other race drivers in both models.

Table 7. Logit Regression of Seizure Probability for Vehicles Searched by Driver Race, Trooper Characteristics, Stop Characteristics, and Vehicle Characteristics (Odds Ratio, SE)

| Model | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|--------------------------------------|-------------|-------------|------------|------------|------------|------------|-------------|-------------|
| | | | Driver and | Driver and | | | Driver Race | Driver Race |
| | Driver Race | Driver Race | Trooper | Trooper | Race | Race | and Race | and Race |
| Predictors | Only | Only | Race | Race | Mismatch | Mismatch | Mismatch | Mismatch |
| Driver - Black | 1.205 | 1.003 | 1.059 | 0.947 | | | 0.889 | 0.825 |
| | (0.087)** | (0.077) | (0.080) | (0.075) | | | (0.097) | (0.089) |
| Driver - Hispanic | 0.857 | 0.681 | 0.712 | 0.607 | | | 0.611 | 0.542 |
| | (0.079) | (0.066)*** | (0.068)*** | (0.060)*** | | | (0.074)*** | (0.065)*** |
| Driver - Other Race | 0.455 | 0.420 | 0.389 | 0.385 | | | 0.333 | 0.343 |
| | (0.120)** | (0.114)*** | (0.104)*** | (0.105)*** | | | (0.094)*** | (0.097)*** |
| Trooper Years of Service | | | 0.931 | 0.932 | 0.933 | 0.932 | 0.933 | 0.931 |
| - | | | (0.010)*** | (0.012)*** | (0.010)*** | (0.012)*** | (0.010)*** | (0.012)*** |
| Stop - Non-moving Violation | | | 1.242 | 1.161 | 1.249 | 1.172 | 1.238 | 1.160 |
| - | | | (0.105)** | (0.102) | (0.105)** | (0.101) | (0.105)* | (0.101) |
| Stop - Other Reason | | | 1.079 | 0.970 | 1.075 | 0.958 | 1.083 | 0.969 |
| | | | (0.137) | (0.131) | (0.135) | (0.128) | (0.137) | (0.130) |
| Driver-Officer Race Mismato | eh | | | | 0.990 | 0.903 | 1.225 | 1.186 |
| | | | | | (0.069) | (0.066) | (0.128) | (0.124) |
| Trooper - Black | | | 0.520 | 0.462 | | | | |
| - | | | (0.110)** | (0.098)*** | | | | |
| Γrooper - Hispanic | | | 0.886 | 0.854 | | | | |
| • | | | (0.105) | (0.104) | | | | |
| Trooper - Other | | | 0.688 | 0.522 | | | | |
| - | | | (0.141) | (0.129) | | | | |
| Constant | 0.134 | 0.195 | 0.149 | 0.182 | 0.135 | 0.155 | 0.139 | 0.166 |
| | (0.007)*** | (0.019)*** | (0.012)*** | (0.023)*** | (0.011)*** | (0.019)*** | (0.011)*** | (0.021)*** |
| Observations | 9,016 | 8,739 | 9,016 | 8,739 | 9,016 | 8,739 | | |
| Unit FE? | No | Yes | No | Yes | No | Yes | No | Yes |
| Significance: $* = p < .05$. $** =$ | n < 01 | | | | | | | |

Note: Changes in sample size in FE models driven by perfect determination within units. (e.g., In Unit 4, no stops led to searches; the 2 observations from Unit 4 were therefore dropped from FE estimation). Models controlled for state of vehicle registration.

The effect for Black drivers is consistent in the other models: the absence of significant differences suggests no discrimination in hit rates overall. For Hispanic drivers, hit rates are significantly lower when we include trooper characteristics. That is, the odds ratios are well below 1.0, and the results are significant.

Three trooper effects stand out in Table 7. First, in Models 3–8, there is an inverse relationship of trooper years of service to hit rates: troopers with more years of service have approximately 7% lower hit rates (1.0–0.93), across all specifications. Second, in Models 3 and 4, Black troopers also have lower seizure rates, at about half the rates of White troopers. But we also saw in Table 6 that Black troopers had lower search rates. These two effects together suggest that Black troopers are more judicious in their stop activity, but less efficient at the same time.

Third, Models 5 and 6 show that in the instances of driver-trooper race mismatch, seizure rates are higher for non-moving violations (e.g., equipment, registration or driver's license violations) than moving violations (the reference category). In Models 7 and 8, where we include driver race and driver-officer race mismatch, we find significant-

ly lower hit rates for Hispanic drivers compared to Whites. This suggests a pattern of discriminatory stops of Hispanic drivers by troopers of non-Hispanic ethnicity or race. Although hit rates for Black drivers similarly suggest discrimination in the form of unproductive stops, the results are not statistically significant.

To test for evidence of discrimination in a more granular manner that reveals interaction effects between driver race and other features of stops, we examine patterns for each driver race or ethnicity separately. These models are estimated both with and without controls (fixed effects) for the individual NJSP barracks. Table 8 shows the results. As in Table 7, officers with more years of service—most likely older officers—have significantly lower hit rates for White, Black and Hispanic drivers. Hit rates are higher on non-moving violations for White and Hispanic drivers, but not for others. Black troopers have significantly lower hit rates for Black drivers, a finding that is different from the other analyses that contrast driver and officer race. 96

| Table 8. Logistic Regression of Race-S | pacific Saizura Probability by Troo | per Characteristics Stop Characteristic | and Vahicle Characteristics |
|--|-------------------------------------|--|--------------------------------|
| Table 6. Logistic Regression of Race-2 | pecific beignie frobability by 1100 | per Characteristics, busp Characteristic | s, and venicle characteristics |

| Model | (1) | (2) | (3) | (4) | (5) | (6) | (5) | (6) |
|-----------------------------|--------------------------------|--------------------------------|--------------------|---------------------|---------------------|--------------------|--------------------------------|----------------------|
| Predictors | White D | rivers | Black Di | rivers | Hispanic I | Orivers | Other Race Driv | |
| Trooper Years of Service | 0.940 (0.017)** | 0.941 (0.019)** | 0.932 | 0.935 (0.021)** | 0.918 (0.022)*** | 0.943 (0.025)* | 0.972 (0.098) | 0.975 (0.208) |
| Stop - Non-moving Violation | 1.347 (0.189)* | 1.232 (0.180) | 0.949 (0.124) | 0.910 (0.126) | 1.788 (0.343)** | 1.730 (0.364)** | 2.329 (1.784) | 6.413 (6.291) |
| Stop - Other Reason | 1.150 (0.213) | 1.101 (0.209) | 0.586 (0.148)* | 0.479 (0.134)** | 1.899 (0.496)* | 1.743 (0.498) | 5.960 (4.906)* | 9.934 (14.270) |
| Trooper - Black | 1.042 (0.303) | 0.912 (0.273) | 0.393 (0.131)** | 0.389 (0.128)** | - | - | - | - |
| Trooper - Hispanic | 0.934 (0.179) | 0.858 (0.172) | 1.013 | 1.035 (0.192) | 0.580 (0.175) | 0.530 (0.170)* | 3.064 (3.215) | 3.499 (3.680) |
| Trooper - Other | 1.223 (0.387) | 0.954 (0.314) | 0.462 -0.146 | 0.455 (0.146)* | 0.297 (0.209) | 0.214 (0.156)* | 9.832 | 86.829 (157.715)* |
| Constant | (0.367) 0.128 (0.016)**: | (0.314) 0.158 (0.031)*** | 0.177 (0.020)** | 0.183 (0.034)*** | 0.121 (0.019)*** | 0.139 | (8.820)* 0.036 (0.016)** | 0.017 |
| Observations Unit FE? | 3,556 No | 3,367 Yes | 3,311 No | 3,160 Yes | 1,798 No | 1,690 Yes | 272 No | 197 Yes |

Significance: * = p < .05, ** = p < .01

Note: Changes in sample size in FE models driven by perfect determination within units. (e.g., In Unit 4, no stops led to searches; the 2 observations from Unit 4 were therefore dropped from FE estimation). Models controlled for state of vehicle registration.

Finally, we return to the search probabilities to compare search patterns by officer-driver race patterns with the results in Tables 7 and 8 for seizures, or hits in stops that produce contraband. Tables 7 and 8 show limited evidence of racial disparity in hit rates, and overall, the odds ratios suggest fairly low hit rates. But we know from the results in Tables 4 and 6 that Black drivers are more often searched. What those tables cannot show is whether these disparities are generalized patterns or whether they can be explained by asymmetrical biases directed toward non-White drivers by officers of specific racial or ethnic groups. If there are differences, for example, in the rate or incidence of stops of Black suspects by White officers compared to Black officers, we might conclude preferences for discrimination. We can make similar inferences looking across search probabilities of each officer-driver race dyad.

We focus on the natural experiment available to us to assess discrimination by comparing search rates for each driver-race combination.

⁹⁶ Antonovics & Knight, *supra* note 94; Close & Mason, *supra* note 72.

In Tables 9a and 9b, we examine search rates using specific driver-officer race combinations to identify the specific circumstances of stops that give rise to those disparities. We use the White Officer-White Driver dyad as the benchmark against which to compare the search rates of the other dyads. We include the same controls as in the search and seizure models in the previous tables, and results are again reported as odds ratios.

In this way, we elaborate on the normative question of the distribution of benefits and burdens in the decision to search by identifying the context and circumstances of the search. If we find that White troopers are discriminating toward non-White drivers, we would expect a higher rate of searches for one group than another with no substantial differences in crime detection. Outcome tests for racial profiling often overlook this question, focusing instead on the probabilities of finding contraband regardless of either stop or search differences. Here, we ask whether in the context of a pattern of low seizure yields, the burdens of a search are distributed equitably across driver race groups by officers of each racial or ethnic group. Given the importance of the Moorestown Barracks, we conduct an analysis specific to that unit in addition to the full sample. Looking back, we find that troopers of all racial or ethnic groups search minority drivers at higher rates than their White counterparts, but there are either lesser or no differences in seizure rates.

Table 9a. Logistic Regression of Search by Driver/Officer Race and Ethnicity
Combinations (Odds Ratio, SE)

| | | | Driver l | Race | |
|--------------|----------|---------|-----------|-----------|-----------|
| | · : | White | Black | Hispanic | Other |
| | White | ** | 2.790 *** | 2.296 *** | 0.653 *** |
| | | | (0.080) | (0.077) | (0.044) |
| | Black | 0.869 | 2.449 *** | 1.715 *** | 0.296 *** |
| Officer Race | | (0.083) | (0.220) | (0.215) | (0.111) |
| | Hispanic | 1.042 | 2.575 *** | 2.310 *** | 0.237 *** |
| | | (0.066) | (0.171) | (0.191) | (0.076) |
| | Other | 0.785 * | 3.595 *** | 2.026 *** | 0.469 |
| | | (0.096) | (0.358) | -(.304) | -0.183 |

N = 217,276

Log Likelihood = - 334

Pseudo $R^2 = .109$

Significance: * = p < .05, ** = p < .01, *** = p < .000

Estimates controlled for vehicle state license plate, trooper years of service, reason for stop and unit fixed effects. Model for White Driver/White Officer is reference.

Table 9b. Logistic Regression of Search by Driver/Officer Race and Ethnicity Combinations, Moorestown Only (Odds Ratio, SE)

| | Driver Race | | | | | | | |
|--------------|-------------|------------|-----------|-----------|-----------|--|--|--|
| | | White | Black | Hispanic | Other | | | |
| | White | E . | 3.052 *** | 3.100 *** | 0.587 *** | | | |
| | | | (0.211) | (0.261) | (0.098) | | | |
| | Black | 0.727 | 1.753 ** | 0.824 | 0.872 | | | |
| | | (0.182) | (0.368) | (0.428) | (0.458) | | | |
| Officer Race | Hispanic | 1.008 | 2.686 *** | 3.506 *** | | | | |
| | | (0.194) | (0.436) | (0.806) | | | | |
| | Other | 0.701 | 4.862 *** | 2.681 *** | 1.057 | | | |
| | | (0.162) | (0.651) | (0.655) | (0.485) | | | |

Significance: *** = p < .000, ** = p < .01, * = p < .05

N = 38,556 stops

Log Likelihood = -6062

Pseudo $R^2 = .096$

Estimates controlled for vehicle state license plate, trooper years of service, and reason for stop. White Driver/White Officer is reference. Hispanic Officer/Other Race Driver omitted due to lack of variation.

The results in Table 9a show that for Black and Hispanic drivers, there were significant differences in the search rates of non-White drivers compared to White driver/White officer stops on the New Jersey Turnpike, regardless of trooper race. Only for other race drivers were search rates likely to be lower. But the magnitude and direction of searches were similar for drivers regardless of trooper race. If there is a pattern and practice observable in these data, it is that the policies of racial preferences for searching vehicles reflect a systemic practice rather than the individual race-specific preferences of NJSP troopers. The burdens of search in the context of low seizure rates for all racial and ethnic groups are borne by Black and Hispanic drivers.

Table 9b suggests the same for the Moorestown Barracks. White drivers are no more likely to be searched by White officers than are drivers of any other race or ethnic group. Although the results are not significant, the odds ratios suggest that White drivers are less likely to be searched, once stopped. With one exception, Hispanic drivers are more likely to be searched by officers of any race than are White drivers stopped by White officers.

Again, the burdens of search in the context of low seizure rates for all racial and ethnic groups are borne by Black and Hispanic drivers, with no appreciable differences in seizures. The results also suggest that the Moorestown Barracks, the focus of the federal investigation of the New Jersey State Police, were no different in their patterns of discrimination than were other NJSP Barracks.

V. DISCUSSION

A. Implications

We estimated the extent to which there was differential treatment of drivers of different races by the New Jersey State Police in the closing months of a lengthy period of federal oversight and monitoring of its activities. The court-ordered oversight and data collection followed a finding of racial discrimination by state police in their enforcement of traffic laws on the New Jersey Turnpike and other state highways. ⁹⁷ Using an outcomes test to identify disparate treatment of drivers by race and ethnicity, we applied conventional metrics of discrimination based on returns from search (conditional on being stopped). We exploited the heterogeneity of officer-driver race combinations to identify the magnitude of any observed differences.

One theory of discrimination in highway stops suggests that over time, drivers or their passengers would adjust their rates over time of their propensity for drugs or other contraband relative to the risks of being caught. Given the limited time window in this study, relative to the decades-long practice of disparate treatment in stops and search by the state police, identifying a dynamic change in either officer search propensity or driver propensity for crime was not possible. Despite the short window, we developed consistent evidence of racially selective decisions to search drivers, with Blacks and Latinos more likely to be searched compared to White drivers, but with little evidence of higher seizures to justify the added burden of search.

Exploiting the natural experiment of officer/driver race pairings, we found that officer race search rates vary according to the specification, but in general, White officers have a greater propensity to stop and search non-White drivers compared to White drivers. These results were robust to several different specifications, including tests that included factors related to the vehicle and controlling for the officer's length of service (and therefore, maturity and experience). But the seizure results suggested that no equilibrium was reached, and with either no effects or negative effects (lower seizures) for minority drivers.

We verified these results using two forms of pairwise tests: one test that examined the likelihood of a search given permutations of officer-driver race combinations, and a second that tested each of these permutations against each other. In both instances, we observe significantly higher search probabilities for Black and Latino drivers regardless of the race of the officer. Conversely, we found significantly lower rates of search requests for White drivers, regardless of officer race. Assuming that same-race officer-driver combinations were the least biased condition, every other condition tested the marginal effect of driver race in

⁹⁷ State v. Soto, 734 A.2d 350, 351 (N.J. Super. Ct. Law Div. 1996).

⁹⁸ See, e.g., Knowles, Persico & Todd, supra note 67.

predicting a search.⁹⁹ Thus, while at the means, White officers are more inclined to request searches than Black officers, these effects disappear at the margins when we control for officer-driver race combinations and directly compare them to determine relative risk. These results also were robust to several covariates.

Of course, these differentials may reflect unobservables attendant to either the stop itself (e.g., whether the driver is an "egregious" speeder who exceed the speed limit by more than fifteen miles per hour) or to observables (but not quantifiables) during the stop, such as driver or passenger's demeanor, the condition of the automobile, markers of "hard driving" emphasized by the DEA as part of its Operation Pipeline training, 100 or other factors that may be correlated with race. Inchoate suspicion may be hidden or signaled but not defined in a way that a trooper can categorize. But explicit differentials in suspicion may also be signaled, for example, by the racial disparities in the use of canines in vehicle searches, or warrantless searches of vehicles incident to an arrest in the face of a court ruling prohibiting them. ¹⁰¹ To some extent, biases producing these outcomes are reinforced and legitimized by broad acceptance of stereotypes that themselves are racialized. As Professor Jerome Skolnick first recognized in his fieldwork with Oakland, California police in the 1960s, police consistently have connected race with the "symbolic assailant," an archetypal crime symbol. 102 It is the failure to attend specifically to race in the New Jersey consent decree that may have weakened its effects and allowed the very disparities that animated the court intervention a decade earlier to persist through to its end.

B. Responding to Ingrained Bias: Decision-Based Training

The challenge in any effort for institutional reform of policing is the design of procedures and policies that can effectively manage police discretion. This requires measures that minimize both "rotten apples"

 $^{^{99}}$ Results of marginal effects tests are not shown here, but are available from the authors.

¹⁰⁰ Gary Webb, *Driving While Black*, ESQUIRE (Jan. 29, 2007), https://www.esquire.com/news-politics/a1223/driving-while-black-0499/ (describing indicators used in training including: fast food wrappers on the floor as a sign of "hard travel" or a desire not to leave the drug load unattended to get a sit-down meal, as well as pillows and blankets on the floor to avoid stopping for sleep).

State v. Eckel, 863 A.2d 1044 (N.J. Super. Ct. App. Div. 2004) (holding that police may not conduct a warrantless search of an automobile as incident to an arrest). *See* MONITOR'S SIXTEENTH INDEPENDENT REPORT, *supra* note 43.

¹⁰² SKOLNICK, *supra* note 65 at 42. *See generally* CTR. FOR RESEARCH ON CRIME & JUST., THE IRON FIST AND THE VELVET GLOVE (1975) (tracing history of modern professional police forces and describing mixture of force and pacification employed to maintain order).

and replace the institutional environment that produced them.¹⁰³ The design of *Soto* and other consent decrees suggests that even if discretion can be more effectively managed with rules and procedures, there is a residual component of discretion that is beyond the reach of training, oversight, institutional design and professionalization. The challenge for leadership, court monitors, and empirical scientists is to identify the moving parts of racially biased policing that evade institutional reform.

Structural reform litigation¹⁰⁴ has had difficulty in shifting both the internal views of citizens and the behaviors of police.¹⁰⁵ One analysis of reform efforts under §14141 litigation suggests that the short-term impacts of these consent decrees is an uptick in crime, while our analysis suggests no drop-off in racial disparity and disparate treatment. Another analysis suggested great success at internal reform but with short-term limited impacts on crime and bias.¹⁰⁶ These outcomes are quite the opposite of what was intended in the individual cases or in the architecture of the federal program.¹⁰⁷

We suggest that the "unreachable" component of police institutional reform efforts is culture, and the central place of race in those cultures. One reason for the limited success of the efforts is the focus on police organization and management at the expense of recognition of the role of race in the creation and persistence of the targeted constitutional problems. Even efforts to collect data routinely on the race of persons stopped, whether on the street or in vehicles, have been weak in both the past and current landscape of police structural litigation reform. The

¹⁰³ David A. Sklansky, Seeing Blue: Police Reform, Occupational Culture, and Cognitive Burn-In, in Police Occupational Culture: New Debates And Directions 19 (M. O'Neill, M. Marks & A. Singh eds., 2007); Jason R. Ingram, William Terrill & Eugene A. Paoline III, Police Culture and Officer Behavior: Application of a Multilevel Framework, 56 Criminology 780 (2018); Peter K. Manning, Performance Rituals, 2 Policing 284 (2008); John Van Maanen, Observations on the Making of Policemen, 32 Hum. Org. 407 (1973) (examining development of culture among police recruits); Seth Stoughton, Commentary, Law Enforcement's "Warrior" Problem, 128 HARV. L. REV. F. 225, 226–29 (2015) (describing systemic indoctrination of "warrior mentality" into officers accomplished via training, trade media, and peers' attitudes).

¹⁰⁴ Harmon, *supra* note 24.

¹⁰⁵ John M. MacDonald, et al., *Race, Neighborhood Context and Perceptions of Injustice by the Police in Cincinnati*, 44 URB. STUD. 2567 (2007).

¹⁰⁶ Elliot H. Schatmeier, *Reforming Police Use-of-Force Practices: A Case Study of the Cincinnati Police Department*, 46 COLUM. J. LAW & SOC. PROBLEMS 539, 541–42 (2013).

¹⁰⁷ Stephen Rushin & Griffin Sims Edwards, *De-Policing*, 102 CORNELL L. REV., 721, 764–68 (2017).

¹⁰⁸ For an example of this, see the recent federal mandate that police departments collect additional data on race and police behavior. Emily Badger, *Why It's So Hard To Study Racial Profiling by Police*, WASH. POST (Apr. 30, 2014), https://www.washingtonpost.com/news/wonk/wp/2014/04/30/it-is-

surprisingly diminished role of race in police consent decrees extends to research on the changes that these consent decrees have effected. While training is central to each of the consent decrees implemented since 1997, the degree to which race and decisions that instantiate racial bias are incorporated into training is uneven. Apart from institutional design considerations, there remain residual and culturally embedded biases in police agencies and cultures that shape perceptions of criminal propensity, risk, and necessary actions. Ultures shape officers' often mistrustful or contemptuous views of citizens. Cultures also shape affinities among groups of officers based on shared views and trust.

If accumulated patterns of bias in police decisions to stop a vehicle and search it are the basis for the claims of misconduct that animate court intervention, then revising and expanding training to focus on decision-making and "mistakes" is critical to strengthening the curriculum to have a wider impact on racial disparities. This suggests a need to reframe training curricula to be incident-centered, where officers can examine their decisions to understand how bias enters their perceptions and actions. This reframing would also tackle sensitive issues of race in supervision to detect both types of decision processes that lead to mistakes in hit rates, and the types of actions that lead to inappropriate stops and searches.

exceptionally-hard-to-get-good-data-on-racial-bias-in-policing/ (explaining how the Justice Department announced plans to collect data on race and police stops, searches, arrests, and case outcomes).

- ¹⁰⁹ See, e.g., Rushin, supra note 19 (incorporating only brief mentions of race and bias training in an otherwise detailed and important review of the structure and impacts of police structural reform litigation).
- 110 See generally Jennifer Carlson, Police Warriors and Police Guardians: Race, Masculinity, and the Construction of Gun Violence, 67 Soc. Probs. (2019), https://doi.org/10.1093/socpro/spz020; Richardson & Goff, supra note 64 (explaining the well-known issue of implicit and unconscious bias in police treatment of Black suspects can also affect decisions of public defenders, leading to disparate outcomes in criminal court for Black and Latinx defendants).
- Stephen D. Mastrofski, Controlling Street-Level Police Discretion, 593 Annals Am. Acad. Pol. & Soc. Sci. 100 (2004); Jerome H. Skolnick, Reaction Essay, Racial Profiling—Then and Now, 6 Criminology & Pub. Pol'y 65 (2007); Van Maanen, supra note 103 (examining development of culture among police recruits); Robert E. Worden, Police Officers' Belief Systems: A Framework for Analysis, 14 Am. J. Police, 49, 66 (1995) (describing some officers' belief that the "public is uncooperative and even hostile").
- 112 George Wood, Daria Roithmayr & Andrew V. Papachristos, *The Network Structure of Police Misconduct*, Socius, 1, 3 (2019). *See, e.g.*, Jeffrey Abramson, Editorial, *A Story the Jury Never Heard*, N.Y. TIMES, Feb. 26, 2000, at Al5 (explaining the acquittal of officers who shot Amadou Diallo by contending that, to a jury, "it seems reasonable for police officers to jump quickly to the conclusion that a black man reaching for something in his pocket must be reaching for a gun").

Such training would add a processual component to contemporary police training that focuses on disparities arising in decisions in individual cases, and in the aggregate patterns of those decisions. Our data in this study suggest that there are features (e.g., race) of each incident that prime officers to see greater risk or criminal wrong-doing in a civilian encounter, potentially leading to a search. In other words, training needs to be focused on the decisions and actions in specific circumstances, and on the role of race in those events. Unpacking those decisions and identifying where mistakes were made in perception and judgment—and how race infused those decisions—would be critical to reducing disparities.

What would race-conscious training or policy look like? Training to reduce implicit bias presents several hurdles. Bias reflects bad habits of mind, which are not easily broken by a dose of training. Even effective training seems to decay over time. 114 Neither implicit bias interventions nor explicit bias interventions produced significant differences that evaded decay. 115 Biases are not easily extinguished through low-dose, single-day training sessions—training that seems to be typical of the interventions reviewed by Professor Patrick Forscher and colleagues. 116

For such training to be effective, race-conscious content is needed to be developed consistent with what we understand about both explicit and implicit bias and that these features of police shootings be incorporated into the ongoing "root cause analysis" training models that allow for debriefing and analysis of the sources of errors and mistakes. Questioning the decisions of officers with attention to perceptions of race and threat, as well as interaction dynamics and perceptions, can have two benefits. One benefit will be to signal that race matters when police agencies diagnose how a fatal encounter unfolds. The second benefit, achieved by incorporating race-conscious content into the RCA process and into routine training on police stops and the use of force, signals throughout the police department that race matters. A final thought is

¹¹³ For example, a law student who was a former police officer said to one of us (Fagan) in a policing seminar that he was trained at the police academy on "how to make a stop" but not "when to make a stop." Later training never returned to this question, nor was there analysis of the interactions and outcomes of his later civilian encounters.

¹¹⁴ Patrick S. Forscher et al., *A Meta-Analysis of Procedures to Change Implicit Measures*, 117 J. Personality & Soc. Psychol. 522, 542 (2019) (noting recent study suggesting that interventions that reduced biases showed little to no lasting impact).

 $^{^{1\}bar{1}5}$ Id. at 540 fig.9 (depicting funnel plots of effect sizes for studies on implicit, explicit, and behavioral measures).

¹¹⁶ *Id.* at 542 (stating that only 3% of samples used procedures that took longer than one session to complete). *See* Florian Arendt, *Dose-Dependent Media Priming Effects of Stereotypic Newspaper Articles on Implicit and Explicit Stereotypes*, 63 J. COMM. 830, 844 (2013) (finding that total effect on stereotypes was nearly the same in low-dose conditions as in higher-dose conditions).

that experimentation matters, and another signal is sent throughout networks of police officers when agencies undertake new measures to reduce disparities.

CONCLUSION

Two decades of experience with consent decrees highlights the importance of the *Soto* experience as a case study on legal regulation of policing. It is unique in its statewide focus, and its unusual design presents specific challenges to generalize this experience beyond the challenges of local interventions. Still, strategies that have both failed and succeeded elsewhere point to the critical importance of democratic regulation, scientific as well as professional oversight, the use of social framework models to inform reform and experimentation, and most essentially, taking seriously the notion of race and racial disparities in structural institutional reform.