

CURRICULUM VITAE

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PROFESSIONAL EXPERIENCE:

2011 - present:	Isidor and Seville Sulzbacher Professor of Law, Columbia Law School
2001-2011:	Professor, Columbia Law School
2010-11:	Fellow, Straus Institute for the Advanced Study of Law and Justice, New York
	University School of Law
2010-present:	Senior Research Scholar, Yale Law School
2009-10:	Visiting Professor, Yale Law School
2004-present:	Director, Center for Crime, Community and Law, Columbia Law School
2001-2006	Director, Doctor of Juridical Science in Law (JSD) Program, Columbia Law School
2008 - present:	Faculty Fellow, Columbia Population Research Center
1999-present	Faculty Fellow, Institute for Social and Economic Research and Policy, Columbia University
1998-2001:	Visiting Professor, Columbia Law School
1996-present:	Professor, Department of Epidemiology, Mailman School of Public Health,
	Columbia University
1995-2002:	Founding Director, Center for Violence Research and Prevention, Mailman
	School of Public Health, Columbia University
1989-1996:	Associate Professor to Professor, School of Criminal Justice, Rutgers-The State
	University of New Jersey
1988-1989:	Associate Professor, Department of Law and Police Science, John Jay College of Criminal Justice, City University of New York; Associate Professor, Doctoral Program in Criminal Justice, City University of New York Graduate Center; Associate Director for Research, Criminal Justice Center, John Jay College of Criminal Justice, City University of New York
1986-1988:	Senior Research Fellow, New York City Criminal Justice Agency.
1977-1986:	Director, Center for Law and Social Policy, URSA Institute, San Francisco.
1975-1976:	Research Director, Northern California Service League, San Francisco, California.
1974-1975:	Associate Research Analyst, Office of Criminal Justice Planning, Oakland, California.
1970-1974:	Director, College of Urban Studies, State University of New York at Buffalo.
1969-1971:	Teaching Assistant and Research Associate, Department of Psychology, State University of New York at Buffalo

EDUCATION:

- PhD, 1975, Policy Science, Department of Civil Engineering, State University of New York at Buffalo. Dissertation: "A Predictive Model of Success in Criminal Justice Employment Programs."
- MS, 1971, Human Factors Engineering, Department of Industrial Engineering, State University

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of New York at Buffalo.

BE, 1968, Industrial Engineering, New York University.

AWARDS AND HONORS:

Fellow, American Society of Criminology, elected April 2002
National Associate, National Research Council and Institute of Medicine, 2011 - present
Senior Justice Fellow, Open Society Institute, 2005-6
Health Policy Scholar Award, Robert Wood Johnson Foundation, 2002-2004
Book Award, "Best Book on Adolescence and Social Policy" for Changing Borders of Juvenile
Justice (with F. Zimring), Society for Research on Adolescence, 2002
Public Interest Achievement Award, Public Interest Law Foundation of Columbia University,
Spring 2001
Bruce Smith Senior Award, Academy for Criminal Justice Sciences, March 2000.
Lecturer, Hoffinger Colloquium, Profiling and Consent: The Trouble with Police Consent
Decrees, New York University School of Law, April 2011
Lecturer, Fortunoff Colloquium, Social Contagion of Violence. New York University School of
Law, April 1999
Fellow, Earl Warren Legal Institute, School of Law, University of California-Berkeley, 1999-
present
University Faculty Merit Award, Rutgers University, 1990-94
Lecturer in Colloquium on Race, Ethnicity and Poverty Workshop, Center for the Study of Urban
Inequality, University of Chicago, June 1992
External Examiner, Department of Sociology, University of Toronto, 1992
University Research Council Grantee, Rutgers University, 1989-90
Lecturer, Fortunoff Colloquium, Preventive Detention and the Validity of Judicial Predictions of
Dangerousness. New York University School of Law, October, 1988
Delegate Optimized Light 101 1 1 D.1 of the D. 1 D. 1 A. D. 1

Delegate, Criminal Justice and Criminology Delegation to the People's Republic of China, Eisenhower Foundation, 1985

NDEA Title IV Fellowship, Department of Industrial Engineering, State University of New York at Buffalo, June 1968-June 1971

PUBLICATIONS:

Books:

- Tyler, T., A. Braga, J. Fagan, et al. (eds.), *Legitimacy, Criminal Justice, and the State in Comparative Perspective.* New York: Russell Sage Foundation Press (2008).
- J. Fagan and F.E. Zimring (eds). *The Changing Borders of Juvenile Justice: Waiver of Adolescents to the Criminal Court.* Chicago: University of Chicago Press (2000). (Received Society for Research on Adolescence Award for "Best Book on Adolescence and Social Policy," 2002).
- D. Baskin, I. Sommers, and J. Fagan, *Workin' Hard for the Money: The Social and Economic Lives of Women Drug Dealers.* Huntington NY: Nova Science Press (2000).

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Refereed Journal Articles and Chapters:

- Davies, G., and Fagan, J., "Crime and Enforcement in Immigrant Neighborhoods: Evidence from New York City." Annals of the American Society of Political and Social Science (2012, forthcoming).
- Fagan, J., and A. Kupchik, "Juvenile Incarceration and the Pains of Imprisonment," *Duke Forum* for Law and Social Change (2011, forthcoming)
- Papachristos, A., Meares, T., and Fagan, J. "Why Do Criminals Obey the Law? The Influence of Legitimacy and Social Networks on Active Offenders," *Journal of Criminal Law and Criminology* (2012, forthcoming)
- Fagan, J. "The Contradictions of Juvenile Crime and Punishment." Daedalus (August 2010)
- Geller, A.B., and Fagan, J. "Pot as Pretext: Marijuana, Race and the New Disorder in New York City Street Policing." 7 Journal of Empirical Legal Studies 591(2010)
- Zimring, F.E., Fagan, J. & Johnson, D. T. "Executions, Deterrence and Homicide: A Tale of Two Cities." 7 Journal of Empirical Legal Studies 1 (2010).
- Mulvey, E.P., Steinberg, L., Piquero, A., Fagan, Jeffrey, et al., "Trajectories of Desistance and Continuity in Antisocial Behavior Following Court Adjudication Among Serious Adolescent Offenders," 22 Development and Psychopathology 453–475 (2010)
- Loughran, T., Piquero, A., Fagan, J., and Mulvey, E.P. "Differential Deterrence: Studying Heterogeneity and Changes in Perceptual Deterrence among Serious Youthful Offenders." *Crime & Delinquency* (2010, forthcoming)
- Cohen-Cole, E., S. Durlauf, S.D., Fagan, J., and Nagin, J. "Model Uncertainty and the Deterrent Effect of Capital Punishment." 11 American Law & Economics Review 335-369 (2009)
- Loughran, T.A., Mulvey, E.P., Schubert, C.A., Fagan, J., Piquero, A.R., & Losoya, S.H.
 "Estimating a Dose-Response Relationship between Length of Stay and Future Recidivism in Serious Juvenile Offenders," 47 Criminology 699-740 (2009)
- Fagan, J., "Crime and Neighborhood Change," Pp. 81-126 in Understanding Crime Trends (A. Goldberger and R. Rosenfeld, eds.), National Academy of Sciences, National Academies Press (2008)
- Fagan, J., "Juvenile Crime and Criminal Justice: Resolving Border Disputes." 6 Future of Children 81 (2008)
- Fagan, J., and Meares, T. "Punishment, Deterrence and Social Control: The Paradox of Punishment in Minority Communities." 6 Ohio State Journal of Criminal Law 173-229 (2008). Also published in Public Law and Legal Theory Working Paper Program, Legal Scholarship Network, <u>http://papers.ssrn.com/paper.taf?abstract_id=223148</u>.
- Fagan, J. "Legitimacy and Criminal Justice: Introduction to the Symposium," Ohio State Journal of Criminal Law 123-140 (2008).
- Tyler, T., and J. Fagan, "Legitimacy, Compliance and Cooperation: Procedural Justice and Citizen Ties to the Law, 6 *Ohio State Journal of Criminal Law* 231-275 (2008).
- Fagan, J., and Bahkshi, M., "McClesky at 20: New Frameworks for Racial Equality in the Criminal Law", 39 Columbia Human Rights Law Review 1 (2007).
- Fagan, J., and A. Piquero, "Rational Choice and Developmental Influences on Recidivism among Adolescent Felony Offenders," 4 Journal of Empirical Legal Studies 715-48 (December 2007).
- Fagan, J. "End Natural Life Sentences for Juveniles," 6 Criminology and Public Policy 735–746 (November 2007).
- Gelman, A., J. Fagan, and A. Kiss, "An Analysis of the NYPD's Stop-and-Frisk Policy in the Context of Claims of Racial Bias," 102 Journal of the American Statistical Association 813-823 (2007)

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Fagan, J., "Death and Deterrence Redux: Science, Law and Causal Reasoning on Capital Punishment," 4 Ohio State Journal of Criminal Law 255 (2006). Reprinted in J. Acker et al. eds., America's Experiment with Capital Punishment: Reflections on the Past, Present, and Future of the Ultimate Penal Sanction (2nd ed.), Carolina Academic Press (2008).

Papachristos, A.V., T.L. Meares, and J.Fagan, "Attention Felons: Evaluating Project Safe Neighborhoods in Chicago." 4 Journal of Empirical Legal Studies 223-272 (July, 2007)

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- Fagan, J., and Davies, G., "Street Stops and Broken Windows: <u>Terry</u>, Race and Disorder in New York City," *Fordham Urban Law Journal* 28: 457-504 (2000).
- Pole, N., Best, S. R., Weiss, D. S., Metzler, T., Liberman, A. M., Fagan, J., & Marmar, C. R., "Effects of Gender and Ethnicity on Duty-related Posttraumatic Stress Symptoms among Urban Police Officers." *Journal of Nervous and Mental Disease*, 189: 442-448 (2000).

Zimring, F.E., and Fagan, J. "The Search for Causes in an Era of Crime Declines: Some Lessons from the Study of New York City Homicide." Crime and Delinquency 46: 446-456 (2000).

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Magdol, L., T.E. Moffitt, A. Caspi, D.M. Newman, J. Fagan, and P.A. Silva. "Gender Differences In Partner Violence In A Birth Cohort Of 21 Year Olds: Bridging The Gap Between Clinical And Epidemiological Research." Journal of Consulting and Clinical Psychology 65 (1): 68-78, 1997.

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Fagan, J., and M. Forst. "Risks, Fixers and Zeal: Treatment Innovation and Implementation For

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Sommers, I., D. Baskin, and J. Fagan, "The Structural Relationship between Drug Use, Drug Dealing, And Other Income Support Activities Among Women Drug Sellers." Journal of Drug Issues, 26(4): 975-1006, 1996.

Johnson, B.D., Golub, A., & Fagan, J.A. "Careers in crack, drug use, distribution and non-drug criminality." Crime and Delinquency 34 (3): 251-279, 1995.

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Fagan, J.A., and A. Browne. "Violence Toward Spouses And Intimates: Physical Aggression Between Men And Women In Intimate Relationships." Pp. 115-292 in Understanding and Preventing Violence, Volume 3, edited by Albert J. Reiss, Jr., & Jeffrey A. Roth. Washington DC: National Research Council, National Academy Press, 1994.

Sommers, I., D. Baskin, and J. Fagan. "Getting Out of The Life: Crime Desistance Among Female Street Offenders." Deviant Behavior 15(2): 125-149. (Reprinted in: Constructions of Deviance: Social Power, Context, and Interaction, 2nd edition, edited by Peter Adler and Patricia Adler. Boston: Wadsworth (1996).

Fagan, J. "Women and drugs revisited: Female participation in the cocaine economy." Journal of Drug Issues 24 (2): 179-226 (1994).

Belenko, S., Fagan, J., and Dumarovsky, T. "The impact of special drug courts on recidivism of felony drug offenders. *Justice System Journal* 17 (1): 53-82 (1994).

Sommers, I., J. Fagan, and D.Baskin, "The influence of acculturation and familism on Puerto Rican delinquency." Justice Quarterly 11(4): 207-28, 1994.

Dembo, R., L. Williams, J. Fagan, and J. Schmeidler. "Development and assessment of a classification of high risk youths." *Journal of Drug Issues* 24 (2): 25-54, 1994.

Chin, K., and J. Fagan. "Social order and the formation of Chinese youth gangs." Advances in Criminological Theory 6: 149-62, 1994.

Kelly, R.J., K. Chin, and J. Fagan "The activity, structure, and control of Chinese gangs: Law enforcement perspectives. *Journal of Contemporary Criminal Justice* 9(4): 221-39, 1993.

Fagan, J. "Interactions among drugs, alcohol, and violence: Dilemmas and frameworks for public health policy." *Health Affairs* 12(4) 65-79, 1993.

Baskin, D., I. Sommers, and J. Fagan. "The political economy of female violent street crime: Contextual influences in the onset of assault by women." Fordham Urban Law Journal 20(3): 401-417, 1993.

Dembo, R., L. Williams, J. Fagan, and J. Schmeidler. "The relationships of substance involvement and other delinquency over time in a sample of juvenile detainees." Criminal Behavior and Mental Health 3:158-197, 1993.

Sommers, I., J. Fagan, and D. Baskin. "Sociocultural explanations of delinquency and drug use among Puerto Rican adolescents." *Hispanic Journal of Behavioral Science*, 15: 36-62, 1993.

Chin, K., J. Fagan, and R. Kelly. "Methodological issues in studying Chinese gang extortion." *The Gang Journal*, 1 (3): 25-36, 1993.

Kelly, R., K. Chin, and J. Fagan. "The dragon breathes fire: Chinese organized crime in New York City." Crime, Law and Social Change, 19 (2): 245-269, 1993.

Chin, K., J. Fagan, and R. Kelly. "Patterns of organized crime activity by Chinese youth gangs." Justice Quarterly, 9 (4): 625-646, 1992.

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Fagan, J.A. "Community-based treatment of mentally-disordered juvenile offenders." Journal of Clinical Child Psychology 20 (1): 42-50, 1991.

Fagan, J.A., and K. Chin. "Social processes of initiation into crack cocaine." Journal of Drug

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Paternoster, Raymond, Thomas Loughran, Alex Piquero, and Jeffrey Fagan, "A Good Man Knows His Limitations: The Role of Overconfidence in Criminal Offending."

Fagan, J., and Geller, A.B. "Profiling and Consent: Stops, Searches and Seizures after Soto," <u>http://ssrn.com/abstract=1641326</u>

Fagan, J., Carlis, A., and Davies, G. "Race and Selective Enforcement in Public Housing," (workshop presentations at University of Virginia, Yale Law School, Vanderbilt Law School, Conference on Empirical Legal Studies)

Fagan, J. "The Criminology of Race, Crime and Law," 40 Crime & Justice (2012, forthcoming)

- Fagan, J., Ellias, J., Kairys, D., and Levin, E.B. "Measuring A Fair Cross-Section of Jury Composition: A Case Study of the Southern District of New York," To be submitted to a law review.
- Fagan, J., Geller, A.B., and Zimring, F.E. "Race, Political Economy, and the Supply of Capital Cases." To be submitted to the *Journal of Criminal Law and Criminology*.
- Fagan, J., Pfaff, J., and Cohen-Cole, E., "Model Uncertainty and the Effect of Incarceration on Crime: A Bayesian Analysis", to be submitted to *American Law & Economics Review* or another peer-reviewed law & economics journal.

Book Reviews:

- Exploring the Underground Economy: Studies of Illegal And Unreported Activity, edited by S.Pozo (W.E. Upjohn Institute for Employment Research, 1996). *Contemporary Sociology* 27:69-70, 1998.
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- "Race and Selective Enforcement in Public Housing," (with G. Davies and A. Carlis), Presented at the Annual Meeting of the Association for Public Policy and Management, Washington DC, November 2009; the Annual Meeting of the American Society of Criminology, Philadelphia PA, November 2009; Law and Economics Workshop, University of Virginia, March 2010; Seventh Annual Conference on Empirical Legal Studies, Northwestern Law School, November 2011
- "Social Context and Proportionality in Capital Punishment in Georgia" (with R. Paternoster), Presented at the Annual Meeting of the American Society of Criminology, San Francisco, November 2010
- "Profiling and Consent: Stops and Searches in New Jersey after Soto" (with A. Geller), Presented at the Sixth Annual Conference on Empirical Legal Studies, New Haven CT, November 2010

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- "Doubling Down on Pot: Marijuana, Race and the New Disorder in New York City Street Policing" (with A. Geller), Presented at the Fifth Conference on Empirical Legal Studies, Los Angeles CA, November 2009
- "Crime, Conflict and the Racialization of Criminal Law," Presented at the Annual Meeting of the European Society of Criminology, Ljubljana, Slovenia, September 2009
- "Street Stops and Broken Windows Revisited: The Demography and Logic of Proactive Policing in a Safe and Changing City," (with A. Geller, G. Davies and V. West). Presented at the Annual Meeting of the Association for Public Policy and Management, Los Angeles, November 2008. Also presented at the Annual Meeting of the American Society of Criminology, St. Louis, November 2008.
- "Desistance and Legitimacy: Effect Heterogeneity in a Field Experiment on High Risk Groups," (with A. Papachristos, D. Wallace, and T. Meares), presented at the Annual Meeting of the American Society of Criminology, St. Louis, November, 2008.
- "Legitimacy, Compliance and Cooperation: Procedural Justice and Citizen Ties to the Law" (with T. Tyler). Presented at the Second Conference on Empirical Legal Studies, Cornell Law School, October 2008.
- "Measuring A Fair Cross-Section of Jury Composition: A Case Study of the Southern District of New York," (with A. Gelman, D.E. Epstein, and J. Ellias). Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, April 4, 2008
- "Race, Legality and Quality of Life Enforcement in New York City, 2006," John Jay College of Criminal Justice, New York, February 28, 2008
- "Be Careful What You Wish For: The Comparative Impacts of Juvenile and Criminal Court Sanctions on Adolescent Felony Offenders," Presented at Annual Conference on Empirical Legal Studies, New York, November 19, 2007
- "The Common Thread: Crime, Law and Urban Violence in Paris and the U.S.," Presented at the Conference on "Poverty, Inequality, and Race: Forty Years after the Kerner Commission Report and Twenty Years after the Scarman Commission Report," University of Paris IX (Sorbonne), July 2007
- "Race, Political Economy, and the Supply of Capital-Eligible Cases," Presented at the Annual Meeting of the American Society of Criminology, Atlanta GA, November 2007.
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- "Crime and Neighborhood Change." Presented at the National Research Council, Committee on Law and Justice, Washington DC, April 2007.
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- "The Diffusion of Homicides from Illegal Gun Markets: A Test of Social Contagion Theories of Violence, Presented at the Annual Meeting of the American Society of Criminology, Toronto, Ontario, November 14, 2005 (with G. Davies).
- "Attention Felons: Evaluating Project Safe Neighborhoods in Chicago" (November 2005). U Chicago Law & Economics, Olin Working Paper No. 269 <u>http://ssrn.com/abstract=860685</u>, presented at the Annual Meeting of the American Society of Criminology, Toronto, November 2005 (with A. Papachristos and T.L. Meares)

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- "Science, Ideology and the Death Penalty: The Illusion of Deterrence." The Walter Reckless Lecture, delivered at the Moritz School of Law and the Criminal Justice Research Center, The Ohio State University, Columbus, OH, April 2005.
- "Crime Currents and the Co-Production of Security in New York City." Presented at the Colloquium on the Urban Age, London School of Economics, February 2005.
- "The Effects of Drug Enforcement on the Rise and Fall of Violence in New York City, 1985-2000," Presented at the *Workshop on Behavioral and Economic Research* National Institute on Drug Abuse, Bethesda MD, October 2004 (with G. Davies).
- "Police, Order Maintenance and Legitimacy," Presented at the Conference on Dilemmas of Contemporary Criminal Justice: Policing in Central and Eastern Europe, University of Maribor, Ljubljana, Slovenia, September 2004 (with Tom R. Tyler)
- "The Bustle of Horses on a Ship: Drug Control in Public Housing," Presented at Workshop on Crime in Public Housing, National Consortium on Violence Research, John F. Kennedy School of Government, Harvard University, April 2004.
- "Neighborhood Patterns of Violence among Latinos," Presented at Workshop on *Beyond Racial Dichotomies of Violence: Immigrants, Race and Ethnicity,* UCLA Center for Population Studies, Los Angeles, November 2003 (with G. Davies).
- "Neighborhood Effects on Violence Against Women: A Panel Study," Presented at the Annual Meeting of the American Society of Criminology, Denver, November 2003 (with G. Davies).
- "Reciprocal Effects of Crime and Incarceration in New York City Neighborhoods," Presented at the Russell Sage Foundation, New York, December 2002 (with V. West and J. Holland).
- "The Effects of Drug Enforcement on the Rise and Fall of Homicides in New York City, 1985-1996," Presented at the Annual Meeting of the American Society of Criminology, Chicago, November 2002 (with G. Davies).
- "Age-Specific Sanctions for Juvenile Offenders: Crime Control and the Exclusion of Adolescent from the Juvenile Court," Presented at the Symposium for the 10th Anniversary of the Netherlands Institute for the Study of Crime and Law Enforcement, Leiden, The Netherlands, September 2002.
- "New Measures for Assessing Perceptions of Legitimacy and Deterrence among Juvenile Offenders," Presented at the Annual Meeting of the American Society of Criminology, Chicago, November 2002 (with A. Piquero).
- "Community, Courts, and Legitimacy," Fordham University Law School Symposium on Problem-Solving Courts, New York, February 2002 (with V. Malkin).
- "Specific Deterrent Effects of Jurisdictional Transfer of Adolescent Felony Offenders," American Society of Criminology, Atlanta, November 2001 (with A. Kupchik).
- "Assessing the Theoretical and Empirical Status of 'Broken Windows' Policing," Faculty of Law, University of Cambridge, Cambridge UK, October 2001.
- "Social Contagion of Youth Violence," Grand Rounds Lecture, Johns Hopkins University School of Medicine, Baltimore MD, March 2001.
- "Street Stops and Broken Windows: Terry, Race and Disorder in New York City," Presented at the Annual Meeting of the American Society of Criminology, San Francisco, CA, November 2000.
- "Social and Legal Consequences of Judicial Waiver of Adolescents: Human Rights Implications," Presented at the Annual Meeting of the American Association for the Advancement of Science, Washington DC, February 2000.
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"Consequences of Waiver: Recidivism and Adolescent Development." Presented at the Symposium on The Juvenile Justice Counter-Reformation: Children and Adolescents as Adult Criminals, Quinnipiac College School of Law, Hamden CT, September 17-18, 1998.

- "Drugs and Youth Violence: The Tripartite Framework Revisited." Presented at the Annual Meeting of the American Society of Criminology, San Diego, November 1997.
- "The Criminalization of Delinquency and the Politics of Juvenile Justice." Presented at the Annual Meeting of the National Conference of State Legislatures, Philadelphia PA, August 1997.
- "Crack in Context: Myths And Realities From America's Latest Drug Epidemic." Presented at the NIJ/NIDA Conference on *The Crack Decade: Research Perspectives and Lessons Learned*. Baltimore MD: June 1997.
- "Alcohol and Violent Events." Presented at the Annual Meeting of the American Society of Criminology, Chicago, November 1996 (with D.L. Wilkinson).
- "Crime and Public Housing: Conceptual and Research Issues." Presented at the Joint Conference on Research in Public Housing, National Institute of Justice and Department of Housing and Urban Development, Washington DC, July 1997.
- "The Functions of Adolescent Violence." Presented at the Bi-National Forum on Youth Violence, The French American Foundation, United Nations, New York, October 1996.
- "Mirror Images of Violence: The Historical Socialization of Willie Bosket." Author-Meets-Critic Panel on *All God's Children*, by Fox Butterfield. Presented at the Annual Meeting of the American Society of Criminology, Boston, November 1995.
- "Crime and Work." Presented at the Annual Meeting of the American Society of Criminology, Boston, November 1995.
- "Drugs and Violence: Lessons from Three Epidemics." Presented at a joint session of the Annual Meetings of the American Sociological Association and the Society for the Study of Social Problems, Washington DC, August 1995.
- "Social and Legal Control of Spouse Assault: Ironies in the Effectiveness of Punishment for Wife Beating." Presented at the Conference on Research and Evaluation, National Institute of Justice, Washington DC, July 1995.
- "Cocaine and Federal Sentencing Policy." Testimony before the Subcommittee on Crime, Committee on the Judiciary, U.S. House of Representatives, Washington DC, June 29, 1995.
- "Gangs, Youth, Drugs, and Violence." Presented to the Drugs-Violence Task Force of the U.S. Sentencing Commission, Washington DC, May 1995.
- "Community Risk Factors in Workplace Violence." Presented at the Symposium on Violence in the Workplace, New York Academy of Medicine, New York, March 1995.
- "Situational Contexts of Gun Use among Young Males." Presented at the Annual Meeting of the American Association for the Advancement of Science, Atlanta, February 1995, and at the

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Annual Meeting of the American Society of Criminology, Miami, November 1994. "The Social Control of Violence among Intimates: Neighborhood Influences on the Deterrent Effects of Arrest for Spouse Assault" (with J. Garner & C. Maxwell). Presented at the Annual Meeting of the American Society of Criminology, Miami, November 1994.

"Crime, Drugs and Neighborhood Change: the Effects of Deindustrialization on Social Control in Inner Cities." Presented at the Annual Meeting of the American Association for the Advancement of Science, San Francisco, February 1994.

"The Social Context of Deterrence." Plenary paper presented at the Annual Meeting of the American Society of Criminology, Phoenix, October 1993.

"Doubling Up: Careers in Legal and Illegal Work." Presented at the Annual Meeting of the American Society of Criminology, Phoenix, October 1993.

"Promises and Lies: The False Criminology of "Islands in the Street." Presented at the Annual Meeting of the American Sociological Association, Miami, August 1993.

"Deindustrialization and the Emergence of Youth Gangs in American Cities." Colloquium at the Institute of Politics, University of Pittsburgh, April 1993.

"Women and Drugs Revisited: Female Participation in the Crack Economy." Colloquium at the Research Institute on the Addictions, State of New York, March 1993.

"Neighborhood Effects on Gangs and Ganging: Ethnicity, Political Economy and Urban Change." Presented at the Annual Meeting of the American Society of Criminology, New Orleans, November 1992.

"Enterprise and Ethnicity: Cultural and Economic Influence on Social Networks of Chinese Youth Gangs" (with K. Chin). Presented at the Annual Meeting of the American Society of Criminology, New Orleans, November 1992.

"The Specific Deterrent Effects of Criminal Sanctions for Drug and Non-Drug Offenders." Presented at the Annual Meeting of the Law & Society Association, Philadelphia, May 1992.

"The Changing Contexts of Drug-Violence Relationships for Adolescents and Adults." Presented at the Annual Meeting of the American Academy for the Advancement of Science, Washington DC, February 1991.

"Youth Gangs as Social Networks." Presented at the Annual Meeting of the American Society of Criminology, Baltimore MD, November 1990.

"Context and Contingency in Drug-Related Violence." Presented at the Annual Meeting of the American Psychological Association, Boston MA, August 1990.

"The Dragon Breathes Fire: Chinese Organized Crime in New York City" (R. Kelly, K. Chin, and J. Fagan). Presented to the Political Sociology Faculty of the University of Florence, Firenze, Italy, May 1990.

"The Political Economy of Drug Use and Drug Dealing among Urban Gangs (J. Fagan and A. Hamid). Presented at the Annual Meeting of the American Society of Criminology, Reno NV, November 1989.

"The Comparative Impacts of Juvenile and Criminal Court Sanctions for Adolescent Felony Offenders" (J. Fagan and M. Schiff). Presented at the Annual Meeting of the American Society of Criminology, Reno NV, November 1989.

"Symbolic and Substantive Effects of Waiver Legislation in New Jersey" (M. Schiff and J. Fagan). Presented at the Annual Meeting of the Law and Society Association, Vail CO, June, 1988.

"The Predictive Validity of Judicial Determinations of Dangerousness: Preventive Detention of Juvenile Offenders in the Schall v. Martin Case" (J. Fagan and M. Guggenheim). Presented at the Annual Meeting of the American Society of Criminology, Montreal, Quebec, November, 1987; and, at the Fortunoff Colloquium Series, New York Unversity School of Law, November, 1988.

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"The Comparative Effects of Legal and Social Sanctions in the Recurrence of Wife Abuse" (J. Fagan and S. Wexler). Presented at the Third National Conference on Family Violence Research, University of New Hampshire, Durham, NH, July, 1987

- "The Stability of Delinquency Correlates in Eight High Crime Neighborhoods" (J. Deslonde and J. Fagan). Presented at the 1986 Annual Conference of Blacks in Criminal Justice, Washington DC, March 1986
- "Complex Behaviors and Simple Measures: Understanding Violence in Families" (J. Fagan and S. Wexler). Presented at the Annual Meeting of the American Society of Criminology, San Diego, November, 1985
- "Social Ecology of Violent Delinquency" (J. Fagan, P. Kelly and M. Jang). Presented at Annual Meeting of the Academy of Criminal Justice Sciences, Chicago, IL, March, 1984.
- "Delinquent Careers of Chronically Violent Juvenile Offenders" (E. Hartstone, J. Fagan and M. Jang). Presented at Pacific Sociological Association, San Jose, CA, April 1983.
- "Parens Patriae and Juvenile Parole." Presented at the National Conference on Criminal Justice Evaluation, Washington, DC, November 1978.
- "Indigenous Justice: The San Francisco Community Board Program" (J. Fagan). Presented at the Annual Meeting of the American Society of Criminology, November 1977, Atlanta, Georgia.
- "An Assessment of the Impact of Treatment and Other Factors on Successful Completion of a Pretrial Intervention Program" (J. Fagan). Presented at the National Conference on Criminal Justice Evaluation, February 1977.

EXPERT TESTIMONY:

- David Floyd, et al. v. City of New York, et al., U.S. District Court, Southern District of New York, No. 08 Civ. 1034 (S.D.N.Y.)
- State v. Raheem Moore, Circuit Court # 08CF05160, State of Wisconsin, Criminal Division, Milwaukee County
- Connecticut v Arnold Bell, Docket # CR02-0005839, District Court of Connecticut, New Haven
- Jessica Gonzales v. United States, Petition No. 1490-05, Inter Am. C.H.R., Report No. 52/07, OEA/Ser.L./V/II.128, doc. 19 (2007)
- U.S. v. Joseph Brown and Jose Lavandier, U.S. District Court for the District of Vermont, Docket No. 2:06-CR-82-2
- United States v. Khalid Barnes, 04 Cr. 186 (SCR), U.S. District Court for the Southern District of New York

Loggins v.State, 771 So. 2d 1070 (Ala. Crim. App. 1999)

Truman-Smith v. Bryco Firearms et al. (02-30239 (JBW)), and Johnson v. Bryco Firearms et al. (03-2582 (JBW)), Eastern District of New York

U.S. v. Alan Quinones, S3 00 Cr. 761 (JSR), Southern District of New York

National Association for the Advancement of Colored People (NAACP) and National Spinal Cord Injury Association (NSCIA) v. American Arms Corporation, Accusport Corporation, et. al., Eastern District of New York, 99 CV 3999 (JBW), 99 CV7037 (JBW)

- U.S. v. Durrell Caldwell, J-2045-00; J-2250-00, Family Division, Juvenile Branch, Superior Court of the District of Columbia
- Nixon v. Commonwealth of Pennsylvania, Department of Public Welfare, 839 A.2d 277 (Pa. 2003)

National Congress of Puerto Rican Rights v. City of New York, 99 Civ. 1695 (SAS) (HBP) State of Wisconsin v. Rodolfo Flores, 99-CF-2866, Circuit Branch 28 (Hon. Thomas R. Cooper) State of Wisconsin v. Rolando Zavala, 97-CF-547, Circuit Branch 3 (Hon. Bruce E. Shroeder)

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OTHER PRESENTATIONS:

- "Guns, Social Contagion, and Youth Violence." Presented at the Annual Conference of the Cuyahoga County Mental Health Institute, Case Western Reserve University, Cleveland, May 1998.
- "The Future of the Criminal Law on Domestic Violence." Presented to the Governor's Criminal Justice Conference, Albany, New York, October 1996.

"Women, Law and Violence: Legal and Social Control of Domestic Violence." Presented at the 29th Semi-Annual Research Conference of the Institute for Law and Psychiatry, School of Law, University of Virginia, Charlottesville VA, November 1995.

"Punishment versus Treatment of Juvenile Offenders: Therapeutic Integrity and the Politics of Punishment," Delaware Council on Criminal Justice, Wilmington DE, October 1995.

Keynote Speaker, "The Criminalization of Domestic Violence: Promises and Limitations," National Conference on Criminal Justice Evaluation, National Institute of Justice, Washington DC, July 1995.

"Limits and Promises of New Jersey's Prevention of Domestic Abuse Act," Institute of Continuing Legal Education, Bar Association of the State of New Jersey, New Brunswick, July 1993.

"Technical Review on Alcohol and Violence," National Institute on Alcoholism and Alcohol Abuse, Rockville MD: May 1992.

Plenary Speaker, "Race and Class Conflicts in Juvenile Justice," Annual Meeting of the Juvenile Justice Advisory Groups, Washington DC, April 1991

Plenary Speaker, "Punishing Spouse Assault: Implications, Limitations and Ironies of Recent Experiments on Arrest Policies," Annual Meeting of the Society for the Study of Social Problems, Washington DC, August 1990.

"Drug Use, Drug Selling and Violence in the Inner City," Joint Center for Political Studies, Washington DC: November 1989.

- "Technical Review on Drugs and Violence," National Institute on Drug Abuse, Rockville MD: September, 1989.
- Carnegie Council on Adolescent Development, "Workshop on Adolescent Violence." Washington DC: May 1989.
- "National Symposium on Families in Courts." National Judicial College, National Center for State Courts, and the American Bar Association (joint conveners). Reno NV, May 1989.
- Plenary Panelist, "Delinquency Research in the 1990's." Annual Meeting of the Western Society of Criminology, Anaheim CA, February 1989.
- Keynote Speaker, Philadelphia Coalition for Children and Youth, Juvenile Justice Conference, June, 1988

Ohio Governor's Task Force on Juvenile Violence, Statewide Conference on Gangs, May, 1988 OJJDP State Advisory Groups, Regional Workshops, 1982, 1987

Michigan Commission on Juvenile Justice, Symposium on Contemporary Programs in Rehabilitation of Serious Juvenile Offenders, 1986

- Interagency Panel on Research and Development on Children and Adolescents, National Institute of Education, 1985, 1987
- Symposium on Addressing the Mental Health Needs of the Juvenile Justice Population, National Institute of Mental Health, 1985
- OJJDP/ADAMHA Joint Task Force on Serious Juvenile Offenders with Drug and Alcohol Abuse and Mental Health Problems, National Institute on Drug Abuse, 1984

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National Conference on Family Violence as a Crime Problem, National Institute of Justice, 1984 Governor's Task Force on Juvenile Sex Offenders, California Youth Authority, Sacramento, CA,

- 1984
- Los Angeles County Medical Association, Los Angeles, California: Family Violence and Public Policy, 1983
- Minority Research Workshop, National Institute of Law Enforcement and Criminal Justice, LEAA, Department of Justice, 1979

TECHNICAL REPORTS (SELECTED):

- Project Safe Neighborhoods in Chicago: Three Year Evaluation and Analysis of Neighborhood Level Crime Indicators, Final Technical Report (J. Fagan, A. Papachristos, T.L. Meares), Grant # 2004-GP-CX-0578, Bureau of Justice Assistance, U.S. Department of Justice (2006).
- Social and Ecological Risks of Domestic and Non-Domestic Violence against Women in New York City (J. Fagan, J. Medina-Ariza, and S.A. Wilt). Final Report, Grant 1999-WT-VW-0005, National Institute of Justice, U.S. Department of Justice (2003).
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- Drug Control in Public Housing: The Impact of New York City's Drug Elimination Program on Drugs and Crime (J. Fagan, J. Holland, T. Dumanovsky, and G. Davies). Final Report, Grant No. 034898, Substance Abuse Policy Research Program, Robert Wood Johnson Foundation (2003).
- The Effects of Drug Enforcement on the Rise and Fall of Homicides in New York City, 1985-95 (J. Fagan). Final Report, Grant No. 031675, Substance Abuse Policy Research Program, Robert Wood Johnson Foundation (2002).
- Getting to Death: Fairness and Efficiency in the Processing and Conclusion of Death Penalty Cases after Furman (J. Fagan, J. Liebman, A. Gelman, V. West, A. Kiss, and G. Davies). Final Technical Report, Grant 2000-IJ-CX-0035, National Institute of Justice (2002).
- Analysis of NYPD AStop and Frisk Practices" (J. Fagan, T.Dumanovsky, and A. Gelman). Office of the Attorney General, New York State, 1999 (contributed chapters and data analyses).
- Situational Contexts of Gun Use by Young Males in Inner Cities (J. Fagan and D.L.Wilkinson). Final Technical Report, Grant SBR 9515327, National Science Foundation; Grant 96-IJ-CX-0021, National Institute of Justice; Grant R49/CCR211614, Centers for Disease Control and Prevention (NIH), 1999.
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- Gangs and Social Order in Chinatown: Extortion, Ethnicity and Enterprise (K. Chin, J.Fagan, R. Kelly). Final Report, Grant 89-IJ-CX-0021 (S1), National Institute of Justice, U.S.

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Final Report of the Violent Juvenile Offender Research and Development Program, Grant 85-MU-AX-C001, U.S. Office of Juvenile Justice and Delinquency Prevention:

- Volume I: Innovation and Experimentation in Juvenile Corrections: Implementing a Community Reintegration Model for Violent Juvenile Offenders (J. Fagan and E. Hartstone), 1986.
- Volume II: Separating the Men from the Boys: The Transfer of Violent Delinquents to Criminal Court (J. Fagan and M. Forst), 1987.
- Volume III: Rehabilitation and Reintegration of Violent Juvenile Offenders: Experimental Results (J. Fagan, M. Forst and T. Scott Vivona), 1988.
- Drug and Alcohol Use, Violent Delinquency, and Social Bonding: Implications for Policy and Intervention (J. Fagan, J.G. Weis, J. Watters, M. Jang, and Y. Cheng), Grant 85-IJ-CX-0056, National Institute of Justice, 1987.
- Minority Offenders and the Administration of Juvenile Justice in Colorado (E. Slaughter, E. Hartstone, and J. Fagan). Denver: Colorado Division of Criminal Justice, 1986.
- Final Report: The Impact of Intensive Probation Supervision on Violent Juvenile Offenders in the Transition Phase Adolescence to Adulthood (J. Fagan and C. Reinarman), Grant 82-IJ-CX-K008, National Institute of Justice, 1986.
- Final Report: National Family Violence Evaluation (J. Fagan, E. Friedman, and S. Wexler), Grant 80-JN-AX-0004, Office of Juvenile Justice and Delinquency Prevention, 1984. (Also, three interim reports: History and Development, Process Analysis, Client and Program Characteristics.)
- A Resident Mobilization Strategy for Prevention of Violent Juvenile Crime (J. Deslonde, J. Fagan, P. Kelly, and D. Broussard). San Francisco: The URSA Institute, 1983.
- Background Paper for the Violent Juvenile Offender Research and Development Program (J. Fagan, S. Jones, E. Hartstone, & C. Rudman), Washington, DC: Office of Juvenile Justice and Delinquency Prevention, April 1981.

EDITORIAL:

Senior Editor, Criminology and Public Policy, 2001 - present

Advisory Board, Family and Child Law Abstracts, Legal Scholarship Network, 1999-present

Editorial Advisory Board, Journal of Criminal Law and Criminology, 1996-present

Editorial Board, Criminology, 1997-2001

Editorial Board, Journal of Quantitative Criminology, 2001-present

Editorial Board, Crime and Justice: A Review of Research, 1998-present

Editorial Board, Journal of Research in Crime and Delinquency, 1997-present

Editor, Journal of Research in Crime and Delinquency, 1990 - 1995

Editor, Contemporary Drug Problems, Special Issues on Crack (Winter 1989, Spring 1990)

Co-Editor, Oxford Readers in Crime and Justice (w. Michael Tonry), Oxford University Press, 1994-95

ADVISORY BOARDS AND COMMITTEES:

Research Advisory Board, The Innocence Project (2009 - present)

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 Committee on Law and Justice, National Academy of Sciences (2000-2006) (Vice Chair, 2004-6) Member, Committee to Review Research on Police Policy and Practices, National Research Council, National Research Council (2001-2003) Working Group on Law, Legitimacy and the Production of Justice, Russell Sage Foundation (2000-present)
Working Group on Incarceration, Russell Sage Foundation (2000-2006) Academic Advisory Council, National Campaign Against Youth Violence (The White House) (1999-2001)
Fellow, Aspen Roundtable on Race and Community Revitalization (1999 - 2001)
renow, Earl warren Legal Institute. University of California School of Law (1008
Research Network on Adolescent Development and Juvenile Justice, MacArthur Foundation (1996-2006)
(1770-2000)
National Consortium on Violence Research, Carnegie Mellon University (NSF) (1996-present) Committee on the Assessment of Family Violence Interventions, National Research Council,
National Academy of Sciences (1994-1998)
Advisory Board, Evaluation of the Comprehensive Gang Intervention Program, University of Chicago (1997-present)
Committee on Opportunities in Drug Abuse Research, Institute of Medicine, National Academy
or sciences (special Consultant) (1995 - 1996)
Initial Review Group, Violence and Traumatic Stress Research Branch, National Institute of Mental Health, National Institute of Health (1994-1998)
Chair Working Group on the Foolers of G in the Jack Street Street
Chair, Working Group on the Ecology of Crime in Inner Cities, Committee for Research on the Urban Underclass, Social Science Research Council (1989-1994)
Advisory Board, Evaluation of the Jobs Corps, U.S. Department of Labor (1903, present)
Auvisory Duard, National Service Action Corns, Robert F. Kennedy Momenial (1002, 1002)
(1993-1994)
Scientific Core Group, Program on Human Development and Criminal Behavior, MacArthur Foundation (1991-1992)
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Injury Control Panel on Violence Prevention, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services (1990-1991)
Princeton Working Group on Alternatives to Drug Prohibition, Woodrow Wilson School of Public and International Affairs, Princeton University (1990-1994)
Racial Disparities in Juvenile Justice, Pennsylvania Juvenile Court Judges Commission (1001.00)
Racial Disparities III Juvenile Justice, Missoilri Department of Law and Dublic Cafety (1000, 01)
Conditions of Confinement of Juveniles, National Institute for Juvenile Justice and Delinquency Prevention (1990-1992)
Research Program on "Linking Lifetimes Intergenerational Mentoring for Youths at Disk and
Young Offenders," Temple University (1989-91) Research Program on Juvenile Court Sanctions for Family Violence, National Council of Juvenile and Family Court Judges, Purges of Juvenile
and Family Court Judges, Bureau of Justice Assistance, U.S. Department of Justice (1987- 1988)
School Crime Research and Development Program. Office of Invenile Justice and Delinguages
Research and Development Project on Sexually Exploited Children, Tufts University, New
England Medical Center Hospital, Boston, MA (1980-83)
Administration of Justice Program, National Urban League, New York, NY (1982-1987)

PROFESSIONAL ASSOCIATIONS:

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American Society of Criminology American Sociological Association Law and Society Association American Association for the Advancement of Science American Public Health Association

RESEARCH GRANTS:

Street Stops and Police Legitimacy, Grant 2010-IJ-CX-0025 from the National Institute of Justice, U.S. Department of Justice, subcontract from New York University, 2011 – present

Principal Investigator, "Evaluation of Project Safe Neighborhoods in Chicago," May 2004 – September 2010, Grant # 2004-GP-CX-0578, Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice.

Principal Investigator, "Capital Sentencing of Adolescent Murder Defendants," March – December 2004, Grant #20012433 from the Open Society Institute. Additional support from the Wallace Global Fund.

Principal Investigator, "Legitimacy, Accountability, and Social Order: Majority and Minority Community Perspectives on the Law and Legal Authorities," September 2002 - August 2003, Russell Sage Foundation.

Principal Investigator, "Social Contagion of Violence," Investigator Awards in Health Policy Program, Robert Wood Johnson Foundation, September 2002 – June 2004

 Principal Investigator, "Getting to Death: Fairness and Efficiency in the Processing and Conclusion of Death Penalty Cases after Furman," Grant #2000-IJ-CX-0035, September 2000 - August 2001, National Institute of Justice, U.S. Department of Justice.

Co-Principal Investigator, "Columbia Center for the Study and Prevention of Youth Violence," Grant R49-CCR218598, October 1, 2000 - September 30, 2005, Centers for Disease Control, U.S. Department of Health and Human Services.

Principal Investigator, "Neighborhood Effects on Legal Socialization of Adolescents," John D. and Catherine T. MacArthur Foundation, October 1, 2000 - September, 30, 2002.

Principal Investigator, "Violence Prevention through Legal Socialization," 1 R01-HD-40084-01,
October 1, 2000 - September 30, 2003, National Institute of Child and Human Development,
U.S. Department of Health and Human Services.

Principal Investigator, "The Effects Of Incarceration On Crime And Work In New York City: Individual And Neighborhood Impacts," Russell Sage Foundation, Grant 85-00-11, September 2000 - August 2002.

Principal Investigator, "Community Courts And Community Ecology: A Study of The Red Hook Community Justice Center," Grant 2000-MU-AX-0006, June 1, 2000 - December 31, 2002, National Institute of Justice, U.S. Department of Justice.

Principal Investigator, "Age, Crime and Sanction: The Effect of Juvenile Versus Adult Court Jurisdiction on Age-specific Crime Rates of Adolescent Offenders," Grant JR-VX-0002, June 1999 - August 2000, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice.

Principal Investigator, "Social and Ecological Risks of Domestic and Non-domestic Violence Against Women in New York City," Grant WT-VX-0005, April 1999 - December 2000, National Institute of Justice, U.S. Department of Justice.

Principal Investigator, "Drug Control in Public Housing: An Evaluation of the Drug Elimination Program of the New York City Public Housing Authority," September 1998 - August 2001, Robert Wood Johnson Foundation.

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Principal Investigator, "The Criminalization of Delinquency: Comparative Impacts of Juvenile and Criminal Court Sanctions on Adolescent Felony Offenders," March 1997 - September 2000, Office of Juvenile Justice and Delinquency Prevention, Annie E. Casey Foundation, Open Society Institute.

Co-Principal Investigator, "Post-Traumatic Stress Among Police," October 1997 - April 2000, National Institute of Mental Health, 1 R01 MH56350-01, National Institute of Health (subcontract from University of California at San Francisco).

Principal Investigator, "The Rise and Fall of Drug-Related Homicides in New York City: 1985-95," July 1997 - June 2000, Robert Wood Johnson Foundation.

Principal Investigator, "Lethal and Non-Lethal Violence: Individual, Social and Neighborhood Risk Factors," October 1996 - September 1999, Centers for Disease Control and Prevention, National Institute of Health, R49/CCR212753-01; National Institute of Justice, 97-IJ-CX-0013.

Principal Investigator, "The Situational Context of Gun Use by Young Males," October 1995 -January 1998, National Science Foundation, SBR-9515327; National Institute of Justice, 96-IJ-CX-0021; Centers for Disease Control and Prevention (NIH) R49/CCR211614.

Principal Investigator, "The Situational Context of Gun Use by Young Males in Inner Cities," February 1995 - August 1996, The Harry Frank Guggenheim Foundation.

Principal Investigator, "Reducing Injuries to Women from Spouse Assault," September 1994 -February 1996, Centers for Disease Control and Prevention, National Institute of Health, R49/CCR210534-01.

Co-Principal Investigator, "Crime Commission Rates of Incarcerated Prisoners: Estimates from the Second Generation of Inmate Surveys," June 1994 - February 1995, National Institute of Justice, 94-IJ-CX-0017.

Principal Investigator, "Impacts of Arrest on the Social Control of Violence Among Intimates," October 1993 - June 1994, National Institute of Justice, 93-IJ-CX-0021.

Principal Investigator, "The Role of Legal and Social Controls in Controlling Violence among Intimates," July 1993 - December 1994, The Harry Frank Guggenheim Foundation.

Co-Principal Investigator, "Measuring the Use of Force by Police," September 1993 - August 1994, National Institute of Justice, 92-IJ-CX-K028.

Co-Principal Investigator, "Female Participation in Drug Selling," September 1992 - August 1994, National Science Foundation, SES-92-07761. Also supported by the Rockefeller Foundation.

Principal Investigator, "Civil and Criminal Sanctions for Domestic Violence," June 1992 -September 1994 Administrative Office of the Courts, State of New Jersey.

Co-Principal Investigator, "Careers in Crack, Drug Use and Distribution, and Non-Drug Crime," February 1991 - January 1993, National Institute on Drug Abuse, National Institute of Health, 1R01-DA-06615-01.

Principal Investigator, "Patterns of Organized Crime Activities among Asian Businesses in the New York Metropolitan Area," October 1989 - March 1991, National Institute of Justice, 89-IJ-CX-0021.

Principal Investigator, "Desistance from Family Violence," July 1990 - January 1992, The Harry Frank Guggenheim Foundation.

Principal Investigator, "Pipeline Study for a Field Experiment on Drug Testing in Community Corrections," June-December, 1990, National Institute of Justice, 90-IJ-R-026

Principal Investigator, "Changing Patterns of Drug Abuse and Criminality among Crack Users," December 1987 - September 1989, National Institute of Justice, 87-IJ-CX-0064-S1.

Principal Investigator, "The Comparative Impacts of Criminal and Juvenile Sanctions for Adolescent Felony Offenders," October 1987 - September 1989, National Institute of Justice, 87-IJ-CX-4044.

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- Principal Investigator, "Drug Abuse and Delinquency among Dropouts and Gang Members: A Secondary Analysis," October 1987 - December 1988, National Institute for Juvenile Justice and Delinquency Prevention, 87-JN-CX-0012.
- Principal Investigator, "Drug and Alcohol Use, Violent Delinquency, and Social Bonding," October 1985 - December 1986, National Institute of Justice, 85-IJ-CX-0056.
- Principal Investigator, "Violent Juvenile Offender Research and Development Program," November 1980 - June 1987, National Institute for Juvenile Justice and Delinquency Prevention, 80-JN-AX-0012, 85-MU-CX-0001.
- Principal Investigator, Preventive Detention and the Prediction of Dangerousness Among Juveniles: Pretrial Crime and Criminal Careers in the *Schall v. Martin* Cohort, New York City Criminal Justice Agency.
- Principal Investigator, "AIDS Community Education Effectiveness Study," January 1986 June 1987, California Department of Health, Grant D0056-86.
- Principal Investigator, "Longitudinal Evaluation of Intensive Probation Supervision for Violent Offenders," October 1982 June 1985, National Institute of Justice, 82-IJ-CX-K008.
- Principal Investigator, National Evaluation of the LEAA Family Violence Program," October 1978 - January 1984, National Institute for Juvenile Justice and Delinquency Prevention, 80-JN-AX-0003.

PEER REVIEW:

Scholarly Journals

Law and Society Review Journal of Contemporary Ethnography American Sociological Review Crime and Justice: An Annual Review of Research Sociological Methods and Research Justice Quarterly Violence and Victims Social Science Quarterly

University Presses

Rutgers University Press State University of New York Press Temple University Press University of Chicago Press

Other Presses

MacMillan Publishing St. Martins Press Social Problems American Journal of Sociology Journal of Drug Issues Journal of Quantitative Criminology Journal of Criminal Justice Alcohol Health and Research World Criminal Justice Ethics Contemporary Drug Problems

Cambridge University Press Oxford University Press Princeton University Press

Greenwood Publications Sage Publications

Research Grant Reviews

National Institute on Mental Health, Violence and Traumatic Stress Branch
Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, USPHS
Law and Social Science Program, National Science Foundation
Sociology Program, National Science Foundation
National Institute on Drug Abuse, Prevention Branch
National Institute on Drug Abuse, Epidemiology Branch
National Institute of Justice

Jeffrey Fagan Page 24

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Office of Juvenile Justice and Delinquency Prevention The Carnegie Corporation of New York The W.T. Grant Foundation

COURSES TAUGHT:

Seminar on Incarceration Seminar on Policing Criminal Law Capital Punishment Empirical Analysis of Law Juvenile Justice Pro-Seminar on Race, Crime and Law Pro-Seminar on Community Justice and Problem-Solving Courts Seminar on Regulation in the Criminal Law Law and Social Science Seminar on Criminology Foundations of Scholarship Seminar on Violent Behavior Seminar on Drugs, Law and Policy Seminar on Communities and Crime Research Methods in Criminal Justice and Criminology Advanced Research Methods Qualitative Research Methods Criminal Justice Policy Analysis Administration of Juvenile Corrections **Research Methods** Seminar on Deterrence and Crime Control Theory

CONSULTATIONS:

New Jersey Commission on Law Enforcement Standards and Practices, 2006-7 London School of Economics, Urban Age Colloquium, 2005 Inter-American Development Bank, Urban Security and Community Development, 2002-3 Trans.Cité (Paris, France), Security in Public Transportation, 2002 Institute for Scientific Analysis, Domestic Violence and Pregnancy Project, 1995-96 Department of Psychology, University of Wisconsin (Professor Terrie Moffitt), 1995-1999 National Funding Collaborative for Violence Prevention (Consortium of foundations), 1995 National Council on Crime and Delinquency, 1989-94 Victim Services Agency, City of New York, 1994-2000 National Conference of State Legislatures, 1994-2001 U.S. Department of Labor, 1994 City of Pittsburgh, Office of the Mayor, 1994 Center for the Study and Prevention of Violence, Colorado University, 1993 - 2000 Washington (State) Department of Health and Rehabilitative Services, 1993 National Council of Juvenile and Family Court Judges, 1993 Case 1:08-cv-01034-SAS -HBP Document 189-1 Filed 02/03/12 Page 26 of 27

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Center for Research on Crime and Delinquency, Ohio State University, 1992, 1993 New York City Criminal Justice Agency, 1992, 1993 Violence Prevention Network, Carnegie Corporation, 1992-3 Research Triangle Institute, 1993 National Institute of Corrections, 1992, 1993 Colorado Division of Criminal Justice, 1991 Juvenile Delinquency Commission, State of New Jersey, 1991 University of South Florida, Dept. of Criminology, 1991-92 Florida Mental Health Institute, 1991 Rand Corporation, 1991-92 Juvenile Corrections Leadership Forum, 1990 Texas Youth Commission, 1990 California State Advisory Group on Juvenile Justice, 1989 New York State Division of Criminal Justice Services, Family Court Study, 1989 Juvenile Law Center, Philadelphia, 1988 American Correctional Association, 1988 Institute for Court Management, National Center for State Courts, 1987-present Correctional Association of New York, 1987 Eisenhower Foundation, Washington DC, 1987-1990 New York City Department of Juvenile Justice, 1987-1990 Juvenile Justice and Delinquency Prevention Council, Colorado Division of Criminal Justice, 1983-87 Office of Criminal Justice Services, State of Ohio, 1983 Utah Youth Corrections Division, Salt Lake City, Utah, 1982 Office of Criminal Justice, State of Michigan, 1982,1986 National Center for the Prevention and Control of Rape, NIMH, 1980

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SERVICE:

Columbia University

University Senate, Mailman School of Public Health, 2003-present Director, JSD Program, Columbia Law School, 2001-present

Professional

Chair, Sutherland Award Committee, American Society of Criminology, 2006-7 Chair, National Policy Committee, American Society of Criminology, 2002-2003 Delegate from the American Society of Criminology to the American Association for the Advancement of Science, 1995-1999

Executive Counselor, American Society of Criminology, 1994-97 Chair, Nominations Committee, American Society of Criminology, 1995-96. Counsel, Crime, Law and Deviance Section, American Sociological Association, 1993-94 Nominations Committee, American Society of Criminology, 1993-94 Site Selection Committee, American Society of Criminology, 1992 Program Committee, American Society of Criminology, 1988, 1990, 2000 Awards Committee, Western Society of Criminology, 1988

Public

Domestic Violence Working Group, New Jersey Administrative Office of the Courts, 1991-1998 Prevention Task Force, New Jersey Governor's Commission on Drug and Alcohol Abuse, 1990

State Judicial Conference, State of New Jersey, Administrative Office of the Courts, 1990 Task Force on Youth Gangs, State of New York, Division for Youth, 1989-90

EXHIBIT B

Other (Scars, Tatbos, Elc.) Did Officer Explain If No, Explain: Presson For Stop Presson For Stopped/ II Yes Pressioned/Fisker? If Yes, List Prt. Serial Nos. Questioned/Fisker? Indicate Type: Hands on Suspect Indicate Type: Suspect On Ground Bation Suspect Against Wall/Car Indicate Type: Handcuffing Suspect Interst No. Suspect Against Wall/Car Offiense Was Summors Issued? Offiense Yes No Ves No Officer In Uniform? If No, How Identified? II Shield Yes No	Address Apt. No. Tel. No. Identification: I Verbal Photo I.D. I Chber (Specify) Sec.II Male Refused Sec.II Male Resc.II White II Black II Write Hispanic Black Hispanic II Female II Asian/Pacific Istander II American Infien/Alaskan Nathe Age Height Weight Hair Eyes Build	Inside ITransit Type Of Location Outside Housing Describe: Specify Which Felony/P.L. Misdemeanor Suspected Duration Of Stop What Were Circumstances Which Led To Stop? Canning Objects in Plain View In Commission Of Chine Used in Commission Of Chine In Drug Transaction. In Commission Of Chine In Drug Transaction. e.g. Skin Finity Bar, etc. In Fits Description. In Commission Of Chine In Drug Transaction. Actions Indicative Of Casing In Actions Indicative Of Engaging In View In Drug Transaction. In View In Drug Transaction. Actions Indicative Of Casing In Actions Indicative Of Engaging In View In Drug Transaction. In View In Drug Transaction. Actions Indicative Of Casing In Actions Indicative Of Engaging In View In Drug Transaction. Actions Indicative Of Casing In View In Commonly Used In Commonly Used In Commonly Used In Commonly Used In Commission Of Chine. Disploious Bulge/Object (Describe) Commission Of Chine. Date Of Birth Ofter Reasonable Suspidem Of Criminal Activity (Specify) Date Of Birth	STOP, QUESTION AND FRISK PCCMPTLET E ALL CAPTIONS) REPORT WORKSHEET PCL Serial No. PCL Serial No. PD344-151A (Rev. 11-02) Date Pct. Of Occ. Time Of Stop Period Of Observation Radio Run/Sprint # Address/Intersection Or Cross Streets Of Stop Radio Run/Sprint #		
Was Person Frisked? Yes I No IF YES, MUST CHECK AT LEAST ONE BOX Inappropriate Attire - Possibly Concealing Weapon Furtive Movements Refusal To Comply With Officer's Direction(s) Verbal Threats Of Violence By Suspect Actions indicative Of Leading To Reasonable Fear For Safety Knowledge Of Suspects Prior Criminal Engaging In Violent Violent Crimes Suspected Violent Crimes Suspected Other Reasonable Suspicion of Weapons (Specify) Crimes Suspicious Bulge/Object (Describe) Was Person Searched? Yes I No IF YES, MUST CHECK AT LEAST ONE BOX Hard Object Admission Of Weapons Possession Outline Of Weapon If Yes, Describe: Pistol/Revolver Rifle/Shotgun Assault Weapon I Knife/Cutting Instrument Machine Gun Other (Describe) If Yes, Describe: Pistol/Revolver Rifle/Shotgun Assault Weapon I Knife/Cutting Instrument					
Was Other Contraband Found? Yes I No if Yes, Describe Contraband And Location Demeanor Of Person After Being Stopped					
Pct. Serial No Additional Reports Prepared: Complaint Rpt.No Juvenile Rpt. No Alded Rpt. No Other Rpt. (Specify)					
REPORTED BY: Rank, Name (Last, First, M.I.) Print	Tax#	REVIEWED BY: Renk, Name (Lest, First, M.I.) Print	Tex#		
Signature	Commend	Signature	Command		

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EXHIBIT C







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JOURNAL OF EMPIRICAL LEGAL STUDIES



Journal of Empirical Legal Studies Volume 7, Issue 4, 591–633, December 2010

Pot as Pretext: Marijuana, Race, and the New Disorder in New York City Street Policing

Amanda Geller and Jeffrey Fagan*

Although possession of small quantities of marijuana has been decriminalized in New York State since the late 1970s, arrests for marijuana possession in New York City have increased more than tenfold since the mid-1990s, and remain high more than 10 years later. This rise has been a notable component of the city's "Order Maintenance Policing" strategy, designed to aggressively target low-level offenses, usually through street interdictions known as "stop, question, and frisk" activity. We analyze data on 2.2 million stops and arrests carried out from 2004 to 2008, and identify significant racial disparities in the implementation of marijuana enforcement. These disparities, present in both stops and arrests, are robust to controls for social structure, local crime conditions, and stop levels more broadly. The racial imbalance in marijuana enforcement in black neighborhoods suggests a "doubling down" of street-level policing in places already subject to heightened scrutiny in the search for weapons, a link suggesting that the policing of marijuana may be a pretext in the search for guns. Despite these ties, however, we show no significant relationship between marijuana enforcement activity and the likelihood of seizing firearms or other weapons. We also show that a large proportion of marijuana enforcement lacks constitutional justification under either federal or New York law. Marijuana stops are more prevalent in precincts where "other" and "high-crime area" justifications are more likely to be reported, two factors that are constitutionally insufficient to justify a street stop. The racial skew, questionable constitutionality, and limited efficiency of marijuana enforcement in detecting serious crimes suggest that nonwhite New Yorkers bear a racial tax from contemporary policing strategy, a social cost not offset by any substantial observed benefits to public safety.

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The authors are grateful to the New York Civil Liberties Union for pursuing the litigation that resulted in public disclosure of data on stops and frisks conducted by the New York City Police Department. The New York State Division of Criminal Justice Services generously provided detailed data on crime- and race-specific arrests in New York City. Thanks to James Quinn for his heroic efforts to geocode unruly data on stop locations. Stephen H. Clarke provided truly outstanding research assistance. Robert MacCoun and Paul Heaton provided valuable feedback on earlier versions of this article, as did seminar participants at the Columbia University School of Social Work and an anonymous reviewer. Support for this research was provided in part by the City Council of the City of New York and by Columbia Law School. All opinions, conclusions, or errors are those of the authors alone.

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I. INTRODUCTION

Police enforcement of marijuana offenses in New York City has grown dramatically over the past half-century, and has intensified in recent years. Marijuana arrests have nearly doubled since the mid-1990s despite the decriminalization of marijuana possession (in small quantities) in 1977 by the New York State Legislature (Golub, Johnson & Dunlap 2006, 2007; Levine & Small 2008). This new focus on marijuana was one of the key components of then-Mayor Giuliani's strategy of Order Maintenance Policing (OMP) in New York City (Livingston 1997; Spitzer 1999; Harcourt 2001; Golub et al. 2007; Harcourt & Ludwig 2007). As part of OMP, police began targeting individuals "possessing, selling, or smoking even small amounts of marijuana" as part of their efforts to intensively enforce "quality of life" crimes and other minor misdemeanors (Flynn 1998). The central tactic in this search for marijuana was the use of aggressive "stop, question, and frisk" (SQF) tactics to identify would-be offenders (Harcourt 2001; Waldeck 2000; Fagan & Davies 2000; Levine & Small 2008).

Figure 1 shows that marijuana possession arrests skyrocketed with the advent of "quality of life" enforcement in 1994. By 2000, marijuana arrests accounted for 15 percent of all adult arrests in the city, more than any nondrug misdemeanor charge (Levine & Small 2008; Golub et al. 2007). By 2006, rates were nearly 500 percent greater than a decade earlier. In fact, New York City's four largest boroughs rank in the top five U.S. counties in per-capita marijuana arrest rates (King & Mauer 2006; Levine & Small 2008).





SOURCE: Levine and Small (2008).

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The bulk of marijuana possession enforcement in New York City has fallen on the city's black and Hispanic residents (cf. Dwyer 2009), a skew at odds with the racial and ethnic patterns of marijuana use observed in local and national survey data. The Monitoring the Future Survey, an annual survey of substance use among high school seniors and eighth graders, shows that teenage marijuana use since 1990 is higher among whites than other racial or ethnic groups (Johnston et al. 2005). In a study of 43 urban and suburban neighborhoods, Saxe et al. (2001) show that blacks and Hispanics reported lower rates of drug use than their white counterparts. The National Survey of Drug Use and Health (SAMHSA 2007) showed very small differences in marijuana use rates between black and white teenagers, and lower rates among Hispanics. Yet marijuana arrest rates across the United States have been far higher for non-Hispanic blacks and Hispanics (King & Mauer 2006). In New York City, ground zero for marijuana enforcement nationally (King & Mauer 2006; Levine & Small 2008), youth are less like to report having used marijuana than their counterparts nationwide, and white youth are more likely to have tried illegal substances (including marijuana as well as other drugs) than blacks or Hispanics (New York City Department of Health and Mental Hygiene 2007).

The racial disparity in marijuana arrests may be explained by the availability of marijuana smokers and sellers in minority communities. Saxe et al. (2001) note that since visible drug sales are more prevalent in minority neighborhoods, police can simply choose efficiency over distributive concerns by focusing on the "low hanging fruit" of visible marijuana use. However, that choice has produced large racial disparities in misdemeanor marijuana arrest rates relative to race-specific rates of marijuana possession or use, and only tells part of the story of enforcement patterns in New York City.

Operationally, the majority of marijuana arrests in New York City stem from "stop, question, and frisk" activity (SQF), the tactical engine of OMP (Levine & Small 2008). Street stops are conducted predominantly in poor neighborhoods with high concentrations of black and Hispanic residents, at levels that exceed even what local disorder and crime conditions would predict (Spitzer 1999; Fagan & Davies 2000; Gelman et al. 2007; Fagan et al. 2010), and marijuana arrests are clustered in many of the same neighborhoods where SQF is carried out with the highest intensity (Harcourt & Ludwig 2007; Levine & Small 2008).

In this article, we examine the role that marijuana enforcement plays in the broader tactical landscape of OMP, with several tests of the links between SQF activity and marijuana enforcement. We identify racial disparities in marijuana stop and arrest patterns at both the individual and precinct levels. We also test whether any observed concentration of marijuana enforcement in minority precincts is driven by crime patterns or enforcement patterns more broadly, and how the police pursuit of marijuana ties into the primary goal of OMP, the pursuit of weapons. Next, we use the stated rationales recorded for each stop to examine the documented circumstances of these marijuana stops in order to assess the constitutional legality of this police behavior. Finally, we assess the efficiency of marijuana stops in detecting both marijuana possession and other illegal activities. To the extent that marijuana enforcement is grounded in OMP principles and practices, it raises the same constitutional and public safety concerns. These concerns are the focus of this analysis.
II. CONSTITUTIONAL AND CRIMINOLOGICAL BACKGROUND

A. Doubling Down on Pot: A Brief History of Order Maintenance Policing

Following the election of Rudolph Giuliani as mayor in 1993, newly appointed NYPD Commissioner William Bratton implemented a regime he called Order Maintenance Policing (OMP), which—together with other management reforms and innovations such as CompStat¹ crime mapping and accounting—dramatically and suddenly changed both the strategy and tactics of policing across the city (Bratton & Knobler 1998; Silverman 1999). The new strategy was grounded in "broken windows" theory (Wilson & Kelling 1982; Kelling & Coles 1996) and focused on the connection between physical and social disorder and violent crime (Greene 1999; Livingston 1997; Spitzer 1999; Sampson & Raudenbush 1999; Duneier & Molotch 1999; Waldeck 2000; Fagan & Davies 2000; Taylor 2001; Harcourt 2001; Garnett 2005; Fagan et al. 2010).

The broken windows theory suggested that the police "take care of the little things," such as physical and social disorder, to prevent the onset of more serious crime (Wilson & Kelling 1982). The chief architect of the OMP strategy, Jack Maple, suggested that these "little things" be taken care of through the aggressive interdiction of individuals engaged in disorderly activity, reasoning that disorderly individuals were likely to be carrying weapons or other contraband, or be on their way to or from robberies or other violent crimes (Maple & Mitchell 1999). To stop them, police were to preemptively and aggressively engage them and, if necessary, frisk and search them for weapons and contraband (Kelling & Coles 1996; Bratton & Knobler 1998; Silverman 1999; Maple & Mitchell 1999). These aggressive "stop, question, and frisk" (SQF) tactics were designed to reduce violence and weapons (especially firearms) possession (Spitzer 1999; Waldeck 2000; Fagan & Davies 2000; Harcourt 2001).

Accordingly, Police Strategy No. 5, *Reclaiming the Public Spaces of New York*, articulated a reconstructed version of broken windows theory as the driving force in the development of policing policy. It stated that the NYPD would apply its enforcement efforts to "reclaim the streets" by systematically and aggressively enforcing laws against low-level *social* disorder: graffiti, aggressive panhandling, fare beating, public drunkenness, unlicensed vending, public drinking, public urination, and other low-level misdemeanor offenses. Applying Maple's ideas, the strategy of targeting low-level offenders was thought to leverage the prevention of more serious crime as well because individuals stopped for minor offenses might also be carrying weapons, or have outstanding warrants for more serious crimes (Kelling & Coles 1996). While the shift to marijuana was not explicitly stated in any of the policy memoranda or public pronouncements that launched OMP, marijuana and serious crime have been linked rhetorically, if not scientifically, since the early 20th century

¹CompStat combines real-time (or nearly real-time) crime accounting with strategic analysis. CompStat generates data for systematic analysis of location-specific crime trends and problems, allocation of police resources to respond to those trends, and identification of performance measures for individual officers and their commanders based on responses of crime trends to their data. CompStat meetings, where the performance of local commanders is reviewed regularly and publicly, provide a dramatic forum where institutional norms of accountability are efficiently communicated through direct language and action such as police administrators to either reward or punish, sometimes with public shaming or humiliation, performance as measured against quantitative indicia based on crime analysis (see also Silverman 1999; Bratton & Knoebler 1998; Weisburd et al. 2004).

(Bonnie & Whitebread 1970). As OMP implementation progressed in New York City, marijuana possession quickly became a targeted offense.²

B. Race, Crime, and Order Maintenance Policing

The role of race in OMP has been highly contested. Critics of OMP point out not only the disproportionate stop levels faced by minority citizens and neighborhoods, but significant racial differences in poststop outcomes (cf. Dwyer 2009). Although the OMP strategy was designed as a place-based intervention, targeting areas characterized by disorder and high crime levels, the burden of its implementation has predominantly been felt by the city's minority residents and communities (Spitzer 1999; Kocieniewski 1999; Roane 1999; Jackson 2000; Fagan & Davies 2000). In a 15-month period from January 1998 through March 1999, non-Hispanic black, Hispanic black, and Hispanic white New Yorkers were three times more likely than their white counterparts to be stopped and frisked on suspicion of weapons or violent crimes relative to each group's participation in each of those two types of crimes (Gelman et al. 2007). Moreover, OMP was concentrated in predominantly minority neighborhoods at rates that far exceeded what local levels of crime and disorder would predict (Gelman et al. 2007; Fagan et al. 2010).

Street stop outcomes also suggest racial disparities: particularly in the late 1990s, stops of black citizens had significantly lower hit rates than those of whites, and these disparities persist at the neighborhood level, suggesting that residents of black neighborhoods are subject to a lower threshold of suspicion than their white counterparts (Gelman et al. 2007; Fagan et al. 2010). Poststop outcomes differ by race in other ways as well: blacks and Hispanics are more likely to be searched or frisked than whites, and more likely to be subjected to physical force (Ridgeway 2007).

Proponents of SQF practices point out that ethnic minorities are more likely to be victims of crime than their white counterparts, and that crime rates are higher in minority neighborhoods (Bratton & Knobler 1998; Smith & Purtell 2008). They justify excess stops of black citizens by claiming that the racial distribution of stops reflects the racial distribution of crime suspects (Ridgeway 2007; MacDonald 2009). However, only about 20 percent of all stops are based on a specific suspect description, leaving this justification irrelevant to the remaining 80 percent (Spitzer 1999; Fagan et al. 2010). Proponents also claim that

²The origins of the formal connection between OMP and marijuana enforcement may lie in Operation Condor, one of the core crime control initiatives that drove the increase in marijuana arrests since the mid-1990s. Condor was a Giuliani Administration initiative that began in 1999 as an aggressive narcotics enforcement program targeting low-level drug transactions, and later expanding to include quality of life violations. Condor flooded high-crime areas with additional officers and, at its peak, cost more than \$100 million a year in overtime costs, bringing officers in to work additional shifts on their days off to pursue drug crimes, especially marijuana (Rashbaum 2003). Condor officers were involved in the killing of Patrick Dorismond, who struggled with police officers after refusing their efforts to entice him to buy marijuana in a reverse sting (Flynn 2000). At its peak, Condor was credited with placing an additional 1,000 officers per day on patrol (Rashbaum 2002). Condor was criticized by detectives and police union officials for its aggressive tactics, such as suspicionless searches and targeting minority youths (Flynn 2000), and was, after 2004, replaced by Operation Impact, which targeted specific neighborhoods that were identified through both CompStat analysis and local intelligence, with rookie police officers. One precinct commander referred to it as "pinpoint precision bombing" (Dawan 2003).

racial disparities in stop practices are grounded in the targeting of high crime areas, rather than resulting from explicit racial targeting. In this account, the fact that those areas are populated by black New Yorkers is incidental to the pattern of stops.

The empirical support most often cited by proponents of OMP is the drastic reduction in New York City crime rates throughout the 1990s, which they credit to SQF practices (Smith & Purtell 2008; MacDonald 2009). However, the effectiveness of OMP in preventing or interdicting crime is also a topic of contentious debate. The yield of firearms and other weapons seized, perhaps the primary rationale for aggressive stops under OMP (Bratton & Knobler 1998; Spitzer 1999; Maple & Mitchell 1999), is low. In 2003, a total of 633 firearms were seized pursuant to stops, a rate of 3.9 seizures per 1,000 stops. By 2006, following a 300 percent increase in the number of stops, the seizure rate fell to 1.4 per 1,000 stops (Fagan et al. 2010). The rate of arrests pursuant to street stops also declined with rising stop rates, from 15.4 percent in approximately 125,000 street stops in 1998 (Spitzer 1999; Gelman et al. 2007) to less than 5 percent in about 500,000 stops in 2006 (Fagan et al. 2010). Proponents of SQF suggest that these low "hit rates" reflect the success of OMP in mounting a deterrent threat, leading to the withdrawal of would-be offenders from crime. However, significant crime declines in many other large cities suggest that larger secular processes may be as influential in the ongoing crime decline as city-specific processes (cf. Harcourt & Ludwig 2006; Rosenfeld et al. 2005).

C. Constitutional Regulation

Just as OMP, which was based on theories of social and physical disorder (Livingston 1997; Harcourt 1998; Waldeck 2000; Fagan & Davies 2000),³ gave rise to equal protection concerns because of its racial and spatial concentration, marijuana enforcement runs similar risks based on its shared policy and tactical foundations. Likewise, since stops under OMP have raised Fourth Amendment concerns (Spitzer 1999; Gould & Mastrofski 2004; Harcourt & Meares 2010), it is reasonable to extend those concerns to the legal justifications of marijuana enforcement. The potential for legal ambiguity is greatest in "high discretion-low suspicion" stops (Spitzer 1999; Harcourt 2001), and it is clear from the New York State statute that marijuana enforcement may fall into this category. New York Penal Law Section 221, detailed in part in Appendix A, distinguishes between "unlawful possession of marijuana," which is a violation not punishable by arrest, and "plain-view" marijuana offenses, and each of these from higher grades of simple possession, which typically require observation or an act of purchase as the justifying suspicion.

The legal standard in New York that regulates the constitutionality of police conduct in citizen stops was set forth in *People v. De Bour* (1976), which expands on the *Terry v. Ohio* (1968) standard in federal case law. While *Terry* assumes that police-civilian encounters, even suspicionless ones, are consensual and could be terminated by the suspect, *De Bour* forbids inquiries "based on mere whim, caprice, or idle curiosity" (Carlis 2009). Whether

³At its implementation in 1994, OMP also was based on concerted efforts to reduce violence and, specifically, to detect and remove illegal weapons. See Spitzer (1999) and Fagan et al. (2010). See also Bratton and Knobler (1998) and Silverman (1999).

the suspicion of marijuana possession is sufficient to prompt a stop, and on which charge, is frequently a matter of officer discretion (Levine & Small 2008). In New York, the court of appeals set forth a four-tiered scheme in which invasive police actions, ranging from accusatory questions to frisks and searches, must be justified by progressively elevated levels of suspicion (see Appendix B).

The elasticity of the rules established by Terry and De Bour and the soft boundaries set forth in subsequent cases created a wide space of discretion in which police craft could be justified to stop and frisk citizens at low levels of suspicion.⁴ The 1999 investigation of the NYPD's SQF tactics by the New York State Attorney General's Office demonstrated the limited constitutionality of police stops under OMP tactics (Spitzer 1999). Based on a review by a team of lawyers and social scientists of a sample of 5,000 textual narratives stating the rationale for police stops and frisks over a 15-month period beginning in January 1998, the Spitzer Report estimated that approximately 15 percent of all street stops were unjustified under Fourth Amendment law in effect at that time,⁵ and the constitutionality of more than one in three other stops (35.5 percent) was inconclusive. Civilians have also registered constitutional concerns about street stop activities; complaints to the Civilian Complaint Review Board increased 66 percent between 2002 and 2006, an increase concurrent with the rise in street stop activity (Clarke 2009). The substantiation rate of complaints related to frisks and searches more than doubled between 2002 and 2004, a period in which complaints related to other forms of improper police behavior saw little change in their substantiation rate (Clarke 2009).

D. This Study

The intersection of racial disparities and constitutional irregularities in police stops was the basis for litigation (*Daniels v. City of New York*, 2003) that led to a consent decree regulating

⁴Both state and federal courts have expanded the concept of "reasonable suspicion" to include location as well as individual behavior. This opens the door to stops where suspicion is conditioned on the place where it is observed. The Supreme Court has articulated and refined this "high crime area" doctrine, in cases from *Adams v. Williams* (1972) to *Illinois v. Wardlow* (2000) (Ferguson & Bernache 2008). This line of cases allows police to consider the character of a neighborhood as a factor that may elevate the suspicion generated by a given action, reducing the individualized factors required to justify a stop. In *Wardlow*, the Supreme Court noted that although an individual's presence in a "high crime area" does not meet the standard for a particularized suspicion of criminal activity, a location's characteristics are relevant to determining whether a behavior is sufficiently suspicious to warrant further investigation. Though *Wardlow* has not been fully embraced by the New York Court of Appeals, presence in a high crime area is one factor that has been shown to elevate suspicion and justify police intervention (Kamins 2009). The resulting expansion of police authority to justify stop and search activities conflates "high crime areas" with neighborhood racial makeup, placing minority neighborhoods and citizens at increased risk of more frequent police contact.

⁵After the publication of that report, the U.S. Supreme Court decided *Illinois v. Wardlow* (holding that an individual who suddenly and without provocation flees from identifiable police officers patrolling a high crime area creates reasonable suspicion under the Fourth Amendment for the police to stop him or her). In practice, the "high crime area" doctrine permits police officers to take location into account when determining whether they have sufficient justification to stop and question a suspect. Although being present in a high crime area alone is not sufficient to justify a stop, this factor in combination with other similarly insufficient factors to justify reasonable suspicion can combine to form reasonable suspicion. See Ferguson and Bernache (2008). One impact of *Wardlow* would be the likely reduction in the estimate in Spitzer (1999) of the number of constitutionally unjustified stops.

the conduct of street stops and prohibiting the use of race as a factor in the selection of citizens for stops and subsequent intrusions. The potential for similar irregularities in marijuana enforcement is a natural consequence and risk of OMP, but the extent to which these concerns apply is unknown.

Accordingly, in this analysis we test four hypotheses. First, the similarity in the patterns of street stops and marijuana arrests under OMP have led to characterizations of marijuana as the new "broken windows," a manifestation of underlying crime and disorder problems that justifies aggressive policing in minority neighborhoods (King & Mauer 2006; Harcourt & Ludwig 2007; Levine & Small 2008). If this is indeed the case, the prevalence of street stops for marijuana, and marijuana enforcement more broadly, should be greatest in the city's minority neighborhoods, the places where OMP activity is most heavily concentrated, and where crime rates are higher. However, if these stops represent excess enforcement, their prevalence should be predicted not only by overall stop activity or by various indicia of crime, but also by neighborhood demographic and socioeconomic characteristics, especially race.

Second, if the police focus on marijuana is an attempt to link marijuana enforcement to "quality of life" crimes, based on the broken windows theory that serious crime will fall as a result, then we would expect marijuana stops to be most prevalent in areas with an immediate history of violent crime and high levels of disorder complaints. If, on the other hand, marijuana enforcement is being used as a pretext to pursue a search for weapons, then we would expect to see more intense marijuana enforcement in areas where weapons are also heavily pursued.

Third, given the Fourth Amendment concerns raised about OMP more broadly, we examine the legal justifications provided for marijuana street stops, and test whether the stated rationales comply with the "reasonable suspicion" required for *Terry* (street) stops. We estimate the extent to which these justifications explain observed patterns of stop activity, anticipating, for example, that precincts where a large percentage of stop activity is justified by suspicion of a drug transaction would also have high levels of marijuana stops, and that the narratives of suspicion would explain a large portion of the variation in stop activity.

Finally, we examine whether marijuana stops contribute to broader public safety goals. If, as internal police strategy memoranda state, the strict enforcement of minor offenses such as misdemeanor marijuana possession has positive spill-over effects and prevents more serious crime, then stopping individuals on suspicion of marijuana possession might lead to the detection of weapons and other illegal activity as well. We test the extent to which this is the case.

III. METHODS

A. Data

1. Stop Activity

Our analysis is based on a unique and detailed data set from the New York City Police Department, made publicly available following a Freedom of Information Law (FOIL)

request and subsequent court order (New York Civil Liberties Union v. New York City Police Department 2008). The NYPD records information on a form known as the UF-250 each time a citizen is stopped by the police, according to procedures set forth in the NYPD Patrol Guide (2009). A copy of the UF-250 is in Appendix C. These records have been maintained in a digital database since 1998, when the state Attorney General began his investigation of the department's stop and frisk tactics (Spitzer 1999), and were updated following the litigation of Daniels v. City of New York (2003). In this analysis, we use data from 2004–2008.

The UF-250 form requires officers to record information regarding the suspect's demographic and physical characteristics, the location and time of day of the stop, the suspect's address, and information about the officer who made the stop and the supervisor who reviewed it. The form contains a free-response section where officers indicate the suspected offense that generated the stop. We identify those where the suspected crime was suspicion of marijuana possession.

Officers may use any number of phrases to describe stops based on suspicion of marijuana possession, but we use a few key and recurring terms to identify these "marijuana stops."⁶ We use similar procedures to identify stops for suspicion of carrying a concealed weapon (CPW), a primary focus of OMP policing (Spitzer 1999; Fagan et al. 2010), and other suspected crimes, including "index crimes,"⁷ other felonies and misdemeanors, and nonfingerprintable offenses.

The UF-250 data match each stop to its police precinct location, even if the stop was made by an officer in a command with cross-precinct patrol assignments.⁸ We aggregate the records of stops conducted from 2004–2008 into a precinct-year panel, separately identifying total stops, stops for marijuana, and stops for possession of a weapon, and disaggregating stops by suspect race or ethnicity. The total sample was approximately 2.2 million stops.

2. Stop Legality

The NYPD responded to the Attorney General's investigation and the subsequent *Daniels* litigation by modifying the UF-250 to limit the information that officers could use to justify

⁶Stops are identified as marijuana stops from the "crimsusp" (i.e., "crime suspected") field. A 30-character string, crimsusp is entered by the officers at the time of a stop, and can take on virtually any value, including typographical errors. The most common designation identifying the criminal possession of marijuana, "CPM," identifies 30,759 of the marijuana stops identified. At the other end of the spectrum, 1,328 marijuana stops are identified from "crime suspected" values that appear only once, such as "CPM MISD PSA#0243" or "POSSESSION OF MAR-JUINA." A complete list of the 1,738 crimsusp values used to identify marijuana stops is available from the authors upon request.

⁷Index offenses, collected by the Federal Bureau of Investigation, include murder and nonnegligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, and motor vehicle theft.

⁸New York City police precincts are numbered nonconsecutively from 1 to 123. Cross-precinct assignments refer to those such as those in public housing. For example, enforcement in public housing is assigned a housing bureau, which in turn is organized into eight police service areas (PSAs). Officers in each PSA area may work in a catchment area including several public housing developments that span precinct boundaries. Special anti-crime units similarly work across precinct boundaries. In addition, we drop 1,276 stops from the analysis because they were not reported with a valid precinct.

a street stop (Flynn 2001). Whereas officers previously recorded their stop justification in a narrative form, beginning in 2001 they were required to check one or more of 10 boxes that indicate the legal basis for the suspicion that led to the stop. The indicia of suspicion listed on the form reflect the legal framework established by both *Terry v. Ohio* (1968) and *People v. De Bour* (1976).

The UF-250 also includes 10 categories of "additional circumstances" that may condition the initial basis for the stop in instances where the separate indicia of suspicion are constitutionally insufficient to comply with constitutional standards. For example, while a person's "furtive movements" or "turning at the sight of an officer" may be insufficient alone to justify a stop, *Illinois v. Wardlow* (2000) grants that if these factors are present in a "high crime area," the stop may pass constitutional scrutiny under federal law. Appendix D lists the factors that are available to officers to justify a stop, and the "additional circumstances" that they also can record to modify the stop factors. For both the stop factors and additional circumstances, officers can check a box marked "Other" if the basis for the stop does not fit into the available categories. Should a stop proceed to a frisk or a search, the revised UF-250 form also includes checkboxes for the rationales to justify these poststop actions.⁹ The UF-250 database can thus be used to link officers' assessments of the indicia of suspicion to the characteristics of a suspect, the suspected crime, the location of the stop, and its outcome.

The UF-250s also allow a distinction between stops made in response to a previously reported crime or emergency (commonly referred to as "radio runs"), and stops initiated based on observed suspicious conduct, not previously reported. For example, an officer may, based on a radio run, stop a suspect because he or she fits the description provided by a witness during a 911 call. However, the data show that radio runs account for only 20 percent of the stops made between 2004 and 2008, and an even smaller portion (13 percent) of marijuana stops. Most stops were, instead, initiated by police officers, and require "reasonable and articulable" suspicion under *Terry* and *De Bour*.

3. Poststop Outcomes

In addition to providing officers an opportunity to mark whether a frisk or search was done, the UF-250 also includes boxes where officers can mark whether an arrest was made, contraband was seized, and, if a firearm was confiscated, the type of firearm. The UF-250

⁹As envisioned by *DeBour*, stops, frisks, and searches are governed by N.Y. Crim. Proc. Law § 140.50(1) (2007). However, "stops" and "frisks" are considered separately under New York statutes. A police officer may stop a suspect but not frisk the suspect given the circumstances. Frisks and searches are governed by N.Y. Crim. Proc. Law § 140.50(3), which requires a legitimate "stop" as a predicate to any frisk. In many cases, reasonable suspicion that a person is engaging in violent or dangerous crime (such as murder, burglary, assault, etc.) will justify both a stop *and* a frisk. A reasonable belief that the suspect has a weapon or that the officer is in danger of physical injury can also justify a frisk. A search is permissible as a Level 4 *DeBour* stop where there is probable cause that a crime has occurred and a search can be conducted either separately from or incident to an arrest. As with the initial stop, these factors alone may or may not justify further intervention, but when combined with these additional circumstances, the actions may pass constitutional scrutiny as Level 3 and Level 4 *DeBour* stops. In each of these levels of police intrusion, the presence of one of the "additional circumstances" can create constitutionally valid justification for a frisk or search if other marginal factors are present that alone would be insufficient to justify the further action.

includes places to mark down whether force was used and, if so, the type of force. Force categories range from the use of hands to drawing a weapon.

4. Precinct Socioeconomic Conditions

Precinct-level demographic data are drawn from 2006 projections of U.S. Census data (for details, see ESRI 2006). Projections of total population, race, ethnic, and age breakdowns, and unemployment are made at the tract level, and aggregated from tracts to police precincts. Because precincts do not, as a rule, share boundaries with Census tracts, we allocate tract populations to precincts based on the percent of each tract's area that falls into each precinct.¹⁰

Data on poverty and the concentration of foreign-born population are observed at the Public Use Microdata Area (PUMA) level from the 2005–2007 American Community Survey. This survey is conducted annually by the Census Bureau to develop mid-decade demographic and economic indicators for cities and counties. Data on physical disorder are observed at the subborough level in the 2005 New York City Housing and Vacancy Survey. These data are then allocated to the precincts that most closely fall within the boundaries of these larger administrative units.

5. Precinct Crime Conditions

Data on reported crimes by suspect race and precinct were obtained by one of the authors from the NYPD pursuant to litigation in *Floyd v. City of New York* (2008), and data on arrests were obtained from the New York State Division of Criminal Justice Services (DCJS). Both the NYPD and DCJS data identify the suspect race (where known) and alleged offense, though the categories used to classify offenses vary by reporting agency. Because the NYPD data do not include details on marijuana possession (instead classifying all controlled substance offenses as "dangerous drugs"), we base our estimates of marijuana possession arrests on DCJS data.

B. Model Specification

1. Descriptive Analysis

We begin by examining the extent to which the racial disparities observed by Golub et al. (2007) in marijuana possession arrests are also present in marijuana street stops. We compare the citywide demographic breakdown of stops for marijuana possession to the breakdown of arrests for marijuana offenses, all arrests, and the city more broadly. We also use the (X,Y) coordinates provided by the NYPD to geocode more than 75 percent of

¹⁰For example, if precinct A shares area with three Census tracts (A1, A2, and A3), the precinct population is estimated as:

[%] of A1 falling into precinct A * population of A1 +

[%] of A2 falling into precinct A * population of A2 +

[%] of A3 falling into precinct A * population of A3.

documented stops to the intersections at which they took place (or a greater level of detail), and examine the extent to which, as posited by Levine and Small (2008), marijuana street stops are concentrated in areas with high concentrations of black residents.

2. Modeling Approach: Marijuana Stop Prevalence

We next estimate a set of models to test whether any observed racial disparities in marijuana stop activity can be explained by precinct socioeconomic factors or citywide trends in policing.¹¹ We use generalized estimating equations (GEEs) with a negative binomial functional form to reflect the discrete nature of stop counts, and a population exposure variable to reflect the expectation of higher stop counts in more populated areas. GEEs are beneficial for nested data (such as years nested within precincts), as they allow the specification of within-subject correlations of observations (Hardin & Hilbe 2003; Ballinger 2004). We assume an AR(1) covariance of years within precincts to account for autocorrelation in rates of both the dependent variables and predictors in each precinct.

We begin by examining the extent to which stop counts vary by precinct racial composition, controlling for year fixed effects to account for citywide changes over time, and borough fixed effects to reflect organizational and social structural commonalities. Subsequent models use a similar form, with progressively more precinct controls. The second model adds controls for precinct socioeconomic conditions using the percent of the population that is foreign born, and a principal components factor to summarize the level of socioeconomic disadvantage.¹² The third model examines the extent to which marijuana stops, and their geographic distribution, vary with precinct crime conditions. Specifically, this model controls for violent crime complaints in the previous year, ¹³ anticipating that police resources might be allocated more heavily to high crime areas. The fourth model also includes a control for past-year marijuana arrests to test whether marijuana enforcement practices are stable over time.¹⁴ Finally, our fifth model adds a control for the total number of stops recorded in the precinct in the year, to account for the fact that marijuana stops are likely to be more prevalent in areas subject to more stops overall.

Following our models of marijuana stop prevalence, we again examine how stop and frisk activity fits into the NYPD's broader strategy of marijuana enforcement. Levine and Small (2008) posit that the majority of marijuana possession arrests begin as street stops, and our descriptive analysis examines whether this is the case, and whether the race disparities seen in arrests are mirrored in stop activity. We also define a measure of overall

¹¹The 22nd Precinct (Central Park) is omitted from these models, as it has no relevant demographic or socioeconomic data.

¹²Principal components factor analysis is commonly used to extract common thematic elements from several highly correlated variables (see, e.g., Sampson & Raudenbush 1999). The socioeconomic disadvantage factor loads heavily on precinct poverty levels, unemployment rate, and levels of physical disorder, as computed in Fagan et al. (2010).

¹³Crime complaints are measured by thousands, but substantive results are also robust to a control for logged crime complaints. "Violent crime" complaints refer to homicide, rape, robbery, assault, arson, and kidnapping.

¹⁴Marijuana arrests are measured by thousands, but substantive results are also robust to a control for logged arrests.

marijuana enforcement equal to the total of stops and arrests for marijuana,¹⁵ and replicate the stop models to test whether overall enforcement patterns follow the same patterns as marijuana stops. In this series, Models 1 through 3 examine levels of enforcement in each precinct and year, and Models 4 and 5, by controlling for past-year arrests, examine changes in enforcement patterns. Given that marijuana enforcement rose citywide from 2004–2008, coefficients in these models identify precincts in which enforcement increased more rapidly.

The next series of models examines how marijuana enforcement fits into the overall stop and frisk strategy, and the stated goals of Order Maintenance Policing. Although OMP cited the broken windows theory that the enforcement of minor crime would reduce more serious crime as well, SQF emphasized gun detection, and about one stop in five is based on suspicion of weapons possession. We test the links between marijuana stops and arrests and each of these goals by building on our marijuana enforcement models, beginning with an additional control for past-year disorder complaints.¹⁶ To the extent that marijuana stop activity ties into a broader policy of order maintenance, we anticipate that measures of prior disorder would significantly predict precinct stop levels. Next, we add an additional control for weapons focus, or the percent of stops in each precinct and year on suspicion of weapons possession. The extent to which marijuana stops are concentrated in precincts that prioritize weapons possession may raise concerns that marijuana enforcement is used as a pretext for a street stop in what is a de facto search for weapons.

3. Legality Analysis

We next we analyze the legality of marijuana stops, and their compliance with the *Terry* standard of "reasonable suspicion." The check-off recording system on the UF-250 is grounded in case law, though it also gives officers an option to select two types of "other" factors or circumstances that motivated the stop. This check-off method can generate more than 300 unique combinations of the constitutionalizing stop factors or justifications alone. When the *additional circumstances* options are considered, more than 9,000 unique combinations of stop factors and additional circumstances are available, plus more combinations when officers include "other" as a justification.¹⁷ For the 2.2 million stops, no single combination appears in more than 15 percent of stops, making a complete analysis of all factors listed nearly impossible.

To identify a set of cohesive and interpretable legal dimensions that reflect recurring patterns among the 9,000 combinations of stop factors and additional circumstances, we performed a principal components factor analysis with varimax rotation to extract the sets of individual factors that best capture the distinct and recurring legal narratives that officers

¹⁵Marijuana arrests recorded in the street stop database are subtracted from this total to avoid double counting.

¹⁶Disorder complaints include those for: offenses against public order and sensibility (comprises 99 percent of disorder complaints), alcoholic beverage control law, disorderly conduct, disruption of a religious service, fortune telling, gambling, loitering, loitering for drug purposes, loitering for deviate sex, and loitering for gambling.

¹⁷Narrative or text explanations of the meaning of "other" were extremely rare.

use to justify their stops. The principal components analysis yields a score that reflects the weight of each individual item. We apply those weights to each record to compute a score for each of the dimensions based on the combination of stop factors and additional circumstances that are checked off for that record. We then aggregate these legality scores for each precinct and year. These legality scores then are entered as predictors in the models predicting marijuana enforcement patterns.¹⁸

We use two different metrics to assess the extent to which these factors indicate reasonable suspicion. First, we assess the extent to which including them in models estimating enforcement patterns improves our model fit.¹⁹ A consistent narrative of suspicion for marijuana possession would suggest that the documented justifications would explain a nontrivial proportion of the variation in enforcement patterns. On the other hand, arbitrary stop behaviors, or randomness in how stop justifications are invoked, would do little to improve model fit. Next, we examine whether any of the separate legality dimensions are statistically significant predictors of enforcement patterns. For example, we examine whether a legality dimension that includes behaviors indicative of "casing" a location for a crime is a significant predictor of enforcement patterns. We anticipate, for example, that marijuana enforcement would be more prevalent in precincts where drug suspicion justifies a greater portion of stop patterns.

4. Stop Efficiency and Public Safety

Finally, we examine the public safety payoffs associated with street-level marijuana enforcement, particularly the extent to which marijuana stops are associated with the success of OMP objectives. In particular, the objectives of SQF center on crime detection and weapons seizures. Whatever the economic or social costs associated with marijuana stop tactics, to the extent that marijuana stops are linked to weapons detection (measured both by the rate at which weapons stops lead to arrests, and the rate that stops lead to weapons seizures), this relationship might reflect a positive spillover, and a public safety benefit, of marijuana policing. However, the converse would indicate a public safety tradeoff or compromise: if marijuana stops are negatively associated with weapons seizures or overall arrests, then the search for marijuana offenders comes at the cost of public safety.

IV. Results

A. Data Description

1. Average Precinct Characteristics

Table 1 presents descriptive statistics for the 375 precinct-year observations in our analysis, and underscores the diversity of New York City, in terms of not only race and socioeconomic

¹⁸Because the use of principal components analysis for binary variables has raised some reliability concerns, we also estimate models using several of the key binary variables themselves. Substantive results are similar.

¹⁹Model fit is measured using the marginal R^2 measure described in Ballinger (2004).

	Mean	SD	Minimum	Maximum
Marijuana possession stops	137.2	163.9	0	1.303
Marijuana possession arrests	419.9	445.9	7	2,472
Total marijuana enforcement	524.9	512.8	10	2,787
Total street stops	5,920.8	4,544.1	442	31,242
% Non-Hispanic white	30%	0.25	<1%	84%
% Non-Hispanic black	26%	0.26	<1%	89%
% Hispanic	30%	0.21	5%	79%
% Non-Hispanic other	14%	0.12	2%	70%
% Poverty	20%	0.11	5%	45%
% Unemployed	10%	0.05	3%	23%
Physical disorder (factor score)	0.06	1.66	-2.16	5.10
Violent crime (complaints)	651.0	333.1	66	1,937

Table 1: Precinct-Level Enforcement, Demographic, Socioeconomic, and Crime Characteristics (N = 375 Precinct-Year Observations)

NOTE: 22nd Precinct (Central Park) is excluded from calculations.

SOURCES: Street stop and crime complaints: NYPD, 2004–2008; Arrests: NY State DCJS, 2004–2008; Demographic and employment data: ESRI, 2006; Poverty data: American Community Survey, 2005–2007; Physical disorder, NYCHVS, 2005.

conditions, but crime and policing conditions as well. For example, while NYPD officers make an average of 137 stops per year on suspicion of marijuana possession in each precinct, there are some precincts where no marijuana possession stops are made in a given year, and others in which more than 1,000 such stops are made. Similar patterns are seen in stop activity more broadly: the highest-stop precinct-year had more than 70 times as many street stops made as in the lowest-stop observation.

Table 1 also suggests that while New York City is quite diverse, the city's police precincts are extremely segregated. On average, police precincts are 30 percent white and 26 percent black; however, there are precincts where virtually no whites live, and precincts where virtually no blacks live, and precincts where more than 80 percent of residents are a single race. Similar patterns emerge for Hispanics and for several aspects of socioeconomic disadvantage, as well as violent crime levels.

2. Marijuana, Order Maintenance Policing, and Race-Ethnic Disparities

Both SQF activity and marijuana possession arrests have been touted as part of the NYPD's OMP strategy. However, we find that street stops for marijuana and marijuana possession arrests are largely separate phenomena. Figure 2 shows that many of the precincts highest in marijuana arrests record the fewest stops on suspicion of marijuana possession. It is possible that differences between observed stop and arrest patterns are, at least in part, an artifact of reporting practices. Under *De Bour*, for example, the "reasonable suspicion" required for a street stop may be met and superseded by "probable cause" if marijuana is found, which would permit escalation by Level IV under *De Bour* (i.e., resulting in a "probable-cause" arrest). Although the NYPD Patrol Guide requires that street stops be documented using UF-250 forms regardless of whether an arrest results, officers may



Figure 2: Marijuana arrests and documented marijuana stop activity.

substitute arrest documentation when stops lead to arrest in place of the stop documentation. As a result, some of the arrest-producing stops are censored from the UF-250 database. The New York City Civilian Complaint Review Board (2002) and the U.S. Commission on Human Rights (2000) have both established that underfiling of UF-250 forms has historically been a problem. The inconsistency of stop documentation underscores the importance of examining race disparities in the totality of marijuana enforcement based not simply on documented stop totals or arrest totals, but considering a combination of the two.

Nonetheless, whether examining arrests or street stops, the majority of marijuana possession stops take place disproportionately in neighborhoods housing the city's minority population, both compared to their representation in the city's population, and their representation among marijuana arrestees. Accordingly, Table 2 shows that blacks are overrepresented in the NYPD's marijuana stop activity compared to their representation in the general population. For example, officers stop blacks on suspicion of marijuana possession at a rate of 14.83 per 1,000 population, while Hispanics are only stopped 5.41 times per 1,000 population, and whites are stopped only 1.96 times per 1,000 population. This pattern also holds for stop activity more broadly, with blacks stopped at a rate of 564 per 1,000 in the population and Hispanics stopped 269 times per 1,000, while whites are only stopped 93 times per 1,000.

Similar disparities exist for marijuana arrests, with 48 blacks arrested for marijuana possession for every 1,000 in the population, 24 Hispanics arrested per 1,000 population, and 6 whites arrested per 1,000 population. The targeting of enforcement efforts toward blacks and Hispanics is dramatically out of proportion to national statistics that suggest comparable usage rates across racial groups (SAMHSA 2007) or higher rates of marijuana use among whites (Saxe et al. 2001; Johnston et al. 2005).

Race/Ethnicity	Marijuana Stops	All Street Stops	Marijuana Arrests	Total Arrests	Estimated 2006 Population
Black	29,854	1,134,539	97,069	748,029	2,012,646
	(14.83)	(563.71)	(48.23)	(371.66)	·,· · · · · · ·
Hispanic	13,315	661,546	58,298	521,386	2,463,016
	(5.41)	(268.59)	(23.67)	(211.69)	_,,
White	4,931	233,179	15,168	181,545	2.512.415
	(1.96)	(92.81)	(6.04)	(72.26)	_,,
Other	3,604	191,025	2,886	56.487	1,282,782
	(2,80)	(148.91)	(2.25)	(44.03)	-,
Race unknown	57	3,859	1,536	15.834	N/A
Total N	51,761	2,224,148	174,957	1,523,281	8,270,859

Table 2: Population and NYPD Enforcement Activity by Race/Ethnicity (Rate per 1,000Population in Parentheses)

NOTE: Totals may not sum to 100 percent due to rounding.

SOURCES: Stop counts and percents extrapolated from 10 percent random sample of stops from UF-250 data. Arrest totals based on DCJS counts, 2004–2008. Population distribution based on citywide ESRI projections.

Disparities in marijuana enforcement can also be seen geographically. Figure 3 details the geocoded locations of marijuana stops made between 2004 and 2008, and shows substantial clustering in areas like the 73rd, 75th, and 79th Precincts. Figure 4 arrays these precincts by race. The places with the highest concentration of marijuana stops are predominantly black neighborhoods.

B. Modeling Results

1. Marijuana Stop Levels

Table 3 presents the estimates from negative binomial GEE models predicting marijuana stop levels by precinct and year. These models further quantify the disparities suggested in Figures 3 and 4: marijuana stop activity is significantly higher in neighborhoods with a greater concentration of black residents, and this relationship is not explained by differences in local socioeconomic conditions, or by historic crime levels, or by general enforcement patterns (past-year marijuana arrests, or current year stop totals). For Hispanics, the stop rates also are higher with higher population concentrations, but these effects are not significant once controls for neighborhood social and crime conditions are included. In Model 5, marijuana stops are negatively correlated with prior-year precinct crime rates and enforcement activity: there are fewer marijuana stops in precincts in which violent crime rates are higher, and where marijuana arrests in the past year were higher. Marijuana stops are predicted by the total number of stops concurrently in the precinct. In other words, there are fewer marijuana stops in places where marijuana arrests are greater, and more stops where violent crime is lower, and where the total number of stops is higher. Marijuana stops, in these places, seem to be a marginal enforcement activity-in effect, a luxury-that is pursued in predominantly black neighborhoods beyond other enforcement efforts.

The negative relationship between past-year marijuana arrests and current-year marijuana stops can be interpreted in two ways. One interpretation is that this is a reporting

Figure 3: New York City map of marijuana possession stops.



Police Precincts County, NY by Percent Black (2006) Legend: Percent Black, by Equal Interval Classification. Nassau County, NY 0 to 20% LOW 609 21 to 40% 41 to 60% 63 61 to 80% High 81 to 100% .00 Airports, Landfill Open Green Space 60 Police Precincts (n=76) 7. Map Scale: 1:206,000 1 inch the map = 3 miles on ground Atlantic Ocean E Miles dia 1983 North Am whi Long Isla Data Source: ESRI 2008 Census Trace De

Figure 4: New York City map, shading by tract percent black, overlaid with police precinct boundaries.

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	Model 1	Model 2	Model 3	Model 4	Model 5
Variables	Racial Composition	Including SES and Foreign Born	Including Past-Year Violent Crime	Including Past-Year Marijuana Arrests	Including Total Stops
% Non-Hispanic black	2.706**	2.583**	2.097**	2.279**	1.654*
	[0.450]	[0.674]	[0.721]	[0.678]	0.656
% Hispanic	1.255**	1.73	1.485	1.612	0.614
	[0.471]	[1.032]	[1.088]	[1.056]	[0:019]
% Other race	0.746	2.049	2.144	1.939	1.045
	[0.910]	[1.331]	[1.255]	[1.247]	[1.267]
Socioeconomic disadvantage		0.0819	0.0605	0.0444	0.016
		[0.156]	[0.178]	[0.171]	[0.164]
% Foreign born		-2.658*	-2.404	-2.134	-1.274
		[1.309]	[1.338]	[1.361]	[1.134]
Past-year violent crime (1,000 complaints)			0.299	0.532	-0.65*
			[0.334]	[0.346]	[0.302]
Past-year marijuana arrests (1,000s)				-0.387**	-0.312*
				[0.131]	[0.152]
1 otal stops (logged)					1.06^{**}
					[0.126]
Constant	-7.746^{**}	-7.191**	-7.122**	-7.271**	-15.16^{**}
	[0.349]	[0.459]	[0.511]	[0.506]	[1.186]
Observations	375	375	300	300	300
Number of pct	75	75	75	75	75
Marginal R^2	-0.01	0.23	0.32	0.31	0.46

anomaly and artifact: officers making marijuana stops that produce arrests are bypassing the stop documentation in favor of arrest documentation. Since marijuana arrest rates in these places are higher, there may be unrecorded stops that in fact are producing arrests. Or, it could be that marijuana arrests are produced by a different process than the process that produces stops. In New York's marijuana statutes, "plain-view" possession, such as smelling smoke or observing marijuana, is itself probable cause for an arrest, and detection of marijuana under those circumstances obviates the predicate or antecedent of the stop. Levine and Small (2008) question the legality of those stops, citing a long tradition of "dropsy" arrests that essentially entrap persons who are stopped into revealing that they possess marijuana by making them empty their pockets.

2. Totality of Enforcement

If marijuana stops and arrests are conjoined in a complex enforcement process that produces marijuana arrests but suppresses indicia of stops, then explaining the totality of marijuana enforcement requires that we view stops and arrests as two parts of an integrated tactic. Accordingly, we estimated models for the totality of marijuana enforcement: that is, the sum of marijuana stops and arrests within a precinct.²⁰ Table 4 shows that, as with total marijuana stops, total enforcement levels are significantly higher in precincts with large black populations, and this disparity is robust to controls for socioeconomic conditions, past-year crime complaints, and prior enforcement patterns. Examining total marijuana enforcement, the disparity for Hispanics also remains significant when other precinct characteristics are controlled. The totality of marijuana enforcement is concentrated in the city's minority communities.

Here, there are interesting and important differences compared to the results in Table 3 on stops alone. First, with due regard for the limitations of comparing R^2 s across models, model fits are much improved: the pseudo- R^2 in Model 5 in Table 4 is nearly 50 percent greater than in the comparable model in Table 3. Next, unlike models predicting stop activity alone, total marijuana enforcement is significantly and positively predicted by marijuana arrests in the previous year, further underscoring the importance of considering stop and arrest activity combined. Further, unlike stop activity alone, total marijuana enforcement is significantly predicted by violent crime in Models 3 and 4, though this relationship is diminished and statistically insignificant in Model 5 once total stop activity is controlled for. The insignificance of violent crime complaints in the face of overall stop activity suggests that marijuana stop and arrest activity may be a consequence of the broader stop and frisk targeted at high crime precincts. Moreover, the persistently higher enforcement levels in black and Hispanic neighborhoods suggest that the tactics used in these precincts are a disproportionate response to local crime conditions. As Fagan and Davies (2000) and Fagan et al. (2010) showed with stop activity more generally, marijuana enforcement seems to be focused not on violent crime, but on predominantly minority neighborhoods.

²⁰To avoid double counting stops that lead to an arrest and are documented in the UF-250 forms, we subtract the number of marijuana arrests documented in the UF-250 forms from the "stop plus arrest" totals.

	Model 1	Model 2	Model 3	Model 4	Model 5
Variables	Racial Combosition	Including SES and Foreien Barn	Including Past-Year Violent Crime	Including Past-Year Marinona Amete	Including Total State
		6		cicility munification	solute that a
70 INOR-HISPARIC DIACK	2.583**	2.387**	2.089**	1.986 * *	1.688 * *
	[0.337]	[0.455]	[0.466]	[0.446]	[0.466]
% Hispanic	2.230 * *	1.973**	1.968**	1.899**	1.580*
	[0.408]	[0.688]	[0.719]	[0.708]	[0.677]
% Other race	-0.602	-0.637	-0.365	-0.234	-0.624
	[0.684]	[0.936]	[0.846]	[0.853]	[0.814]
Socioeconomic disadvantage		0.0915	-0.0299	-0.0244	-0.0458
		[0.112]	[0.112]	[0.111]	[0.11]
% Foreign born		-0.221	-0.253	-0.475	-0.143
		[0.772]	[0.842]	[0.886]	[0.745]
Lag violent crime			0.665*	0.580*	0.131
Complaints (thousands)			[0.269]	[0.259]	[0.221]
Lag marijuana arrests (thousands)				0.192*	0.241**
:				[0.0757]	[0.0665]
l otal stops (logged)					0.454**
Constant	5 40044				0.0878
CONSTRAINT	-0.436**	-0.294**	-6.625**	-6.548**	-9.97**
	[0.396]	[0.445]	[0.426]	[0.426]	[0.794]
Observations	375	375	300	300	300
Number of pct	75	75	75	75	75
Marginal R ²	0.61	0.61	0.73	0.76	0.76

ú 4 É . Ê ż ć ĥ : Ň -Ę ų, . à Rin Necrotive Table 4:

3. Marijuana Enforcement and OMP

Table 5 examines the links between total marijuana enforcement and the two documented objectives of order maintenance: reduction of disorder and the search for weapons. Through programs such as Operation Condor,²¹ marijuana enforcement was an application of broken windows theory, where policing of minor crimes was instrumental in reducing rates of violent crime by reducing disorder. Weapons were a part of this focus. We estimate a series of models that include crime complaints for several disorder crimes, such as public drunkenness, loitering, and other offenses against public order, and the concentration of street stops for weapons.

Table 5:	Negative	Binomial	Regressions	Predicting	Total	Marijuana	Enforcement	bv
Demogra	phics, Crir	ne, Other	Enforcement	t, and OMP	Objec	tives		~)

	Model 1	Model 2	Model 3	Model 4
Variables	"Full Model" from Table 4, Model 5	Including Disorder Complaints	Including Weapons	Including Disorder and Weapons
% Non-Hispanic black	1.688**	1.669**	1.59**	1.573**
	[0.466]	[0.457]	[0.464]	[0.455]
% Hispanic	1.58*	1.491*	1.507*	1.421*
	[0.677]	[0.670]	[0.672]	[0.665]
% Other race	-0.624	-0.638	-0.562	-0.574
	[0.814]	[0.803]	[0.803]	[0.794]
SES disadvantage	-0.0458	-0.0738	-0.0676	-0.0962
	[0.110]	[0.107]	[0.106]	[0.103]
% Foreign born	-0.143	0.0446	-0.107	0.0782
	[0.745]	[0.788]	[0.726]	[0.769]
Lag violent crime	0.131	0.344	0.1	0.316
	[0.221]	[0.246]	[0.221]	[0.246]
Lag marijuana arrests	0.241**	0.243**	0.244**	0.246**
	[0.0665]	[0.0654]	[0.0670]	[0.0650]
Total stops (log)	0.454**	0.467**	0.473**	0.485**
	[0.0878]	[0.0881]	[0.0892]	[0.0898]
Lag disorder complaints		-0.479		-0.479
		[0.349]		[0.349]
% Weapons stops			0.598*	0.588*
			[0.241]	[0.245]
Constant	-9.97**	-10.03**	-10.19**	-10.24**
	[0.794]	[0.777]	[0.798]	[0.784]
Observations	300	300	300	300
Number of precincts	75	75	75	75
Marginal R ²	0.76	0.78	0.76	0.78

NOTE: Models estimated as GEEs with AR(1) covariance within precincts. All models include fixed effects for borough and year. Standard errors in brackets. Significance: **p < 0.01; *p < 0.05.

²¹Supra note 3.

Model 1 in Table 5 reproduces Model 5 from Table 4, examining the demographic, socioeconomic, violent crime, and general enforcement predictors of marijuana stop activity. This sets out a baseline to examine the influence of disorder in Model 2 in Table 5. Model 2 shows virtually no relationship between disorder complaints and marijuana street stops. The model fit is only slightly changed, and the parameter estimate for disorder is not significant. The racial disparity for the percent non-Hispanic black population and the percent Hispanic also is unaffected with the inclusion of disorder.

Model 3 of Table 5 tests the link between marijuana stop activity and the other principal goal of OMP, the search for weapons. We again find a strong and significant connection between marijuana enforcement and precinct stop activity (total stops), and also find a significant relationship between marijuana enforcement and the share of stops that are based on suspicion of weapons possession. Marijuana stops and arrests are more prevalent not only in precincts where overall stop activity is greater, but in precincts where, holding stop levels constant, a greater portion of stops are on suspicion of weapons possession. As in Model 1, marijuana enforcement is not predicted by violent crime, though prior-year marijuana arrests predict current-year activity, a sign of the stability of the pattern and practice over time.

In Model 4 of Table 5, which includes both disorder complaints and weapons focus as additional controls, the predictive power of weapons focus is virtually unchanged. Not only is enforcement disconnected from local crime conditions once overall stop patterns are controlled for, but it also is disconnected from the indicia of disorder that are central to the logic of OMP.

Marijuana enforcement activity is most active in precincts where overall enforcement is most focused on weapons detection, but with little connection to crime or disorder conditions in those places. This pattern raises unsettling concerns that officers use marijuana enforcement as a pretext for searching for weapons. It seems that marijuana enforcement is an adjunct to overall OMP enforcement, disconnected from local crime conditions but closely tied to the search for weapons. Total OMP enforcement, including the search for weapons, leads to more extensive marijuana enforcement, but the allocation logic is more closely tied to the racial and ethnic composition of the area than to crime conditions or social structure.

4. The Legality of Stops

The modifications of the UF-250 form following the Spitzer Report (1999) have enabled a more structured identification of the legal circumstances justifying a street stop; however, officers retain considerable flexibility in reporting stop circumstances. Table 6 presents factor loadings from a principal components factor analysis of the stop-level data, identifying consistencies in the cited stop rationales. Although these factors combine to explain only half the total variation in stop justification, several consistencies emerge.

The first factor suggests that stops justified by a suspect description are frequently also justified with a report by a victim, witness, or officer. This relationship is encouraging because it indicates that the descriptions used to justify stops have been obtained from

Table 6: Factor Loadings from Principal Components Analysis of Case-Level Stop Justifications (N = 2,224,148)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Stop Rationales							
Carrying suspicious object	-0.041	-0.085	0.014	-0.054	-0.113	-0.015	0.783
Fits a relevant description	0.818	-0.079	-0.094	-0.035	-0.082	-0.059	-0.040
Casing a victim or location	-0.142	0.015	0.152	0.723	-0.217	-0.244	-0.034
Acting as a lookout	-0.058	0.087	0.187	0.607	-0.184	0.034	-0.070
Wearing clothes commonly used in a crime	0.107	0.258	0.321	-0.112	0.015	-0.167	0.069
Actions indicative of a drug transaction	-0.083	0.050	0.026	-0.059	-0.100	0.817	-0.028
Furtive movements	-0.144	0.578	0.064	-0.162	-0.296	0.042	-0.090
Actions of engaging in a violent crime	0.116	0.482	0.102	0.115	0.135	-0.120	0.112
Suspicious bulge	-0.161	0.042	0.136	-0.573	-0.330	-0.326	-0.081
Other	-0.121	-0.158	0.037	-0.138	0.804	-0.046	-0.007
Additional Circumstances							
Report by victim/witness/officer	0.722	-0.045	-0.147	-0.007	-0.026	0.036	0.040
Ongoing investigation	0.159	0.254	0.393	0.200	0.026	-0.207	0.068
Proximity to scene of offense	0.558	0.049	0.280	-0.091	0.001	-0.064	-0.055
Evasive response to questioning	-0.040	0.692	-0.069	0.086	-0.025	0.069	0.018
Associating with known criminals	0.170	0.143	0.277	-0.011	0.104	0.433	0.021
Change direction at sight of officer	-0.100	0.651	-0.055	0.028	-0.158	0.079	-0.043
Area has high crime incidence	-0.204	-0.115	0.694	0.091	-0.030	0.113	0.002
Time of day fits crime incidence	-0.048	0.015	0.718	0.102	-0.019	-0.002	-0.011
Sights or sounds of criminal activity	0.013	0.124	-0.022	0.050	0.155	-0.014	0.639
Other	-0.005	0.051	-0.141	-0.022	0.569	-0.116	-0.091
Eigenvalue	2.170	1.701	1.533	1.225	1.174	1.123	1.047
Factor variance explained	0.1085	0.0851	0.0766	0.0613	0.0587	0.0561	0.0523
Cumulative variance explained	0.1085	0.1936	0.2702	0.3315	0.3902	0.4463	0.4986

NOTE: Factor loadings based on varimax rotation. "Thematic" stop justifications (with factor loading magnitudes greater than 0.6) are highlighted in **bold**.

legally sufficient sources,²² rather than from a vague profile unconnected to the case. The second factor identifies suspicion generated by the suspect changing direction at the sight of the officer and offering evasive responses when questioned. The third factor identifies suspicion generated by suspects in a "high crime area" at a time of day fitting the incidence of a crime.

The fourth factor identifies suspects who appear to be casing a victim or a location, or acting as a lookout in conjunction with a planned crime. The fifth factor identifies stops justified for "other" reasons, either as a stop justification alone or in conjunction with "other" as additional circumstances. The sixth factor identifies actions indicating a drug transaction, and the seventh identifies stops based on an individual carrying a "suspicious object." Although these factors explain only half the variance in the justifications for stop

²²People v. Benjamin (1980); People v. Schwing (2005).

activity, they form substantively meaningful narratives that may explain disparities in marijuana street stop practices.

Table 7 replicates the marijuana enforcement models from Table 4, including additional controls for the strongest individual items in each of the seven stop factors. We also estimated these models using only marijuana street stops, since only a portion of marijuana arrests result from undocumented marijuana stops. The results are the same for both sets of models, suggesting that legal narratives fit comparably in explaining both stops and total enforcement. For each model, we note changes in goodness of fit when the stop rationales are included.

In each of the models, several of the stop factors computed in Table 5 are indeed significant predictors of marijuana enforcement at the precinct level. In all models, marijuana stops are significantly more prevalent in precincts where stops are likely to be justified by suspicion of a drug transaction, suggesting that police officers are particularly sensitive to drug issues in these precincts. It is unlikely that the "drug transaction" factor simply reflects high levels of marijuana stops, since documented marijuana stops comprise fewer than 3 percent of the stops recorded in the city from 2004–2008. Instead, the factors are likely to reflect police enforcement priorities and narratives of suspicion in each precinct.

Marijuana stops are also more prevalent in precincts where large portions of street stops are justified by "other" rationales, and in some models, when stops take place in what officers deem a "high crime area" (which is correlated with "time of day"). These stop rationales are cause for concern, as neither of these factors, on its face, is constitutionally sufficient to justify a street stop, and is opaque with respect to the specific conditions that motivated the stop. While "high crime area" may justify a stop in conjunction with other factors, it is not legally sufficient in conjunction with "time of day." Finally, marijuana stops are less prevalent in precincts justifying a large portion of stops with suspect descriptions, or the suspicion of casing. Table 4 suggested that when considered in the context of overall stop patterns, marijuana enforcement was disconnected from crime conditions, and the negative influence of these crime-specific stop rationales seems to confirm that disconnect.

The bottom rows of Table 7 examine the goodness of fit of stop models, both with and without controls for precinct-level stop rationales. While Model 1 suggests that stop rationales explain more of the variation in stop patterns than does racial composition itself, these factors explain less than 5 percent more of the variance in enforcement activity. Moreover, as more controls are added for precinct socioeconomic conditions, crime levels, and more general enforcement patterns, models including stop justifications actually explain a smaller portion of total variance in enforcement. More detailed models with progressively more controls indicate that the stop rationales explain less and less of the variation in marijuana stop levels. These models suggest few systematic links between the rationales for street stop activity and the levels of marijuana enforcement realized. Instead, even with a full set of legal justifications, marijuana enforcement levels, rather than by crime conditions or social structure. Despite the inclusion of legal justifications and rationales for stops, marijuana enforcement is significantly higher in precincts with large black and

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	Model 1	Model 2	Model 3	Model 4	Model 5
Variables	Racial Composition Only	Including SES and Foreign Born	Including Past-Year Violent Crime	Including Past-Year Marijuana Arrests	Including Total Stops
% Non-Hispanic black	2.025**	1.832**	1.615**	1.512**	1.442**
	[0.371]	[0.427]	[0.455]	[0.451]	[0.426]
% Hispanic	1.94**	1.577**	1.81**	1.749**	1.635**
	[0.389]	[0.575]	[0.589]	[0.575]	[0.547]
% Other race	-0.371	-0.672	-0.177	0.0085	-0.151
	[0.672]	[0.847]	[0.747]	[0.726]	[0.687]
SES disadvantage		0.074	-0.0532	-0.0481	-0.0652
		[0.101]	[0.0981]	[0.0956]	[0.0966]
% Foreign born		0.307	0.0537	-0.247	-0.147
		[0.520]	[0.574]	[0.603]	[0.595]
Lag violent crime			0.686**	0.567*	0.234
			[0.238]	[0.221]	[0.204]
Lag marijuana arrests				0.265**	0.292**
				[0.0825]	[0.0821]
Total stops (logged)					0.400**
					[0.101]
Legal Justifications					
Fits relevant description	-0.973**	-0.988**	-0.968**	-0.994**	-0.469
-	[0.202]	[0.205]	[0.274]	[0.271]	[0.290]
Evasive response	0.411	0.417	0.399	0.379	0.428
-	[0.238]	[0.241]	[0.284]	[0.276]	[0.258]
High crime area	0.274	0.271	0.527*	0.528*	0.391
	[0.161]	[0.162]	[0.209]	[0.209]	[0.205]
Casing victim or location	-0.0944	-0.0894	-0.165	-0.124	-0.148
-	[0.195]	[0.196]	[0.199]	[0.199]	[0.193]
Other stop justification	0.406*	0.424*	0.731**	0.757**	0.83**
	[0.177]	[0.178]	[0.247]	[0.237]	[0.238]
Drug transaction	0.790**	0.786**	0.732**	0.782**	0.868**
	[0.175]	[0.179]	[0.204]	[0.205]	[0.208]
Carrying suspicious object	0.282	0.287	0.326	0.357	0.372
	[0.306]	[0.313]	[0.395]	[0.394]	[0.397]
Constant	-6.298**	-6.201**	-6.549**	-6.476**	-9.669**
	[0.392]	[0.435]	[0.445]	[0.443]	[0.809]
Observations	375	375	300	300	300
Number of precincts	75	75	75	500 75	500 75
Marginal $R^{\hat{2}}$ (no justifications)	0.61	0.61	0.73	0.76	0.76
Marginal R^2 (with justifications)	0.64	0.64	0.69	0.69	0.75

Table 7: Negative Binomial Regression of Total Marijuana Enforcement by PrecinctDemography, Socioeconomic Conditions, Crime, Enforcement, and Stop Justifications,2004–2008

Note: Total marijuana enforcement computed as: marijuana stops + marijuana arrests — marijuana arrests in stop documentation. Models structured as GEEs with AR(1) covariance within precincts. All models contain fixed effects for borough and year. Standard errors in brackets. Significance: **p < 0.01; *p < 0.05.

Hispanic populations. The persistent race disparities in marijuana enforcement activity suggest legality may simply be a cosmetic or post-hoc justification for overall marijuana enforcement.

5. Stop Efficacy and Public Safety

Given the emphasis of OMP on weapons detection and seizure, and the links between marijuana and weapons policing demonstrated in Table 5, we evaluate the public safety implications of marijuana enforcement based primarily on its role in weapons detection. Table 8 classifies the 2.2 million stops between 2004 and 2008 into four categories, based on the crimes suspected that are recorded for each stop: marijuana possession stops, weapons possession stops, violent crime stops, and "other" stops, encompassing property crimes, minor crimes such as trespass and quality of life offenses, other offenses, and stops with no suspected crime interpretable. The table suggests that street stops are highly unlikely to lead directly to weapon seizures—weapons are seized in fewer than 1 percent of stops. Even among stops driven by suspicion of weapons possession, seizure rates are less than 3 percent. Marijuana stops, despite a prevalence that covaries with weapons stops at the precinct level, lead to weapon seizures in only approximately one-half of 1 percent of stops. If marijuana enforcement is designed to stop more serious crime by catching criminals "on their day off" (Maple & Mitchell 1999), it is quite inefficient.

At the precinct level, the link between the tactic of marijuana street stops and success in the search for weapons is equally tenuous. Figure 5 shows that the average annual count of weapons seizures is indeed higher in precincts where police make more marijuana stops.²³ However, this relationship is likely spurious to other policing factors: weapons seizures are more often produced by stops unrelated to marijuana. Moreover, Figure 6 suggests that at high levels of marijuana stops within a precinct, the likelihood that *any* type of stop yields a weapon seizure declines. In other words, these additional marijuana stops have diminishing marginal returns in the search for weapons.

Crime Suspected	Number of Stops Made	Weapons Seizure Rate
Marijuana possession	52,018	0.49%
Weapons possession	442,552	2.37%
Violent crime	340,792	0.71%
Other offenses	1,388,786	0.43%
Total	2,224,148	0.86%

Table 8: Weapons Seizure Rates Associated with FourCategories of Street Stops, 2004–2008

NOTE: Weapons seizure rates based on seizures documented in UF-250 database, resulting from each type of stop.

²³This relationship is sensitive to measurement choice. Figures 5 and 6 demonstrate the relationship between enforcement and public safety using logarithmic transformation of both stops and seizures. When using raw counts of stops and seizures, the positive relationship between stops and seizures appears to be driven by a single high-stop observation (103rd Precinct, 2004), and the relationship between stops and seizure rates declines more rapidly.



Figure 5: Precinct-level weapon seizures and marijuana stop volume.

Figure 6: Precinct-level weapon seizure rate and marijuana stop volume, 2004-2008.



The negative relationship between marijuana stops and weapon seizures may, alternatively, reflect a deterrent effect in which citizens refrain from carrying weapons in anticipation of being stopped by the police. However, per-capita homicide rates declined by 2.7 percent across the country between 2004 and 2008, suggesting a nationwide decrease in the prevalence and use of firearms. The reduced prevalence of weapon possession in New York City is likely to reflect this secular trend, rather than a causal effect of local policing practices, and high levels of street stops are likely to be limited in their productivity.

We test this notion further in a series of models that examine the public safety benefits associated with marijuana stop activity. Table 9 presents the regression coefficients from four models, each with a negative binomial functional form predicting the number of weapons seizures made from street stops in a given precinct and year. The first two models in this table, like the stop and enforcement models in Tables 2–4 and 6, use a population exposure. The third and fourth models use precinct stop totals as an exposure for seizures, thereby approximating a model of the precinct seizure rate.²⁴

Models 1 and 2 of Table 9 suggest that weapon seizures are indeed higher in precincts and years with higher overall stop volumes; however, they suggest no significant relationship between marijuana enforcement and weapons detection above and beyond that associated with total stop volume. In other words, marijuana enforcement adds no public safety benefit to overall OMP efforts. Moreover, when considering the likelihood of each individual street stop to lead to a weapon seizure in Models 3 and 4, marijuana enforcement is not only unrelated to weapon seizures, the relationship between total stops and seizures per stop is significant and negative, suggesting that stop-and-frisk patterns may have diminishing returns in the search for weapons when conducted in conjunction with marijuana enforcement.

V. DISCUSSION

A. Epidemiology of Marijuana Enforcement

Since the mid-1990s, OMP strategies have leveraged the enforcement of social and physical disorder in attempts to identify more serious offenders, uncover weapons, and reduce crime opportunities. The result was the aggressive interdiction, temporary detention, and questioning of New Yorkers, an average of more than half a million times each year beginning in 2004, with about nine in ten resulting in no finding of wrongdoing (Fagan et al. 2010). The manifestation of disorder that attracted the most intensive police attention was the plain-view possession of marijuana (Levine & Small 2008; Golub et al. 2007; Harcourt & Ludwig 2007). Over the decade beginning in 1998, NYPD officers made more than 35,000 misdemeanor marijuana arrests per year (Levine & Small 2008), an effort that required a massive mobilization of police resources, and a substantial outlay of public dollars.

The NYPD's focus on low-level disorder, and on marijuana in particular, has raised recurring concerns related both to the racial distribution of enforcement patterns and to the disconnect with the crime control interests of criminal justice policy. We find that these concerns remain salient, and are well-grounded empirically. We show significant racial disparities in the implementation of marijuana enforcement activity; street stops for

²¹We estimated the risk of Type II error in identifying the effects of marijuana stops (or overall enforcement) on weapons seizures by conducting a power analysis. We use *G*Power 3* (Faul et al. 2007) to estimate power for varying effect sizes, using the Cohen (1988) convention of 0.2, 0.5, and 0.8 for small, medium, and large effect sizes. We find over 90 percent power to detect even small effects using two-tailed *t* tests at $\alpha = 0.05$ with 300 precinct-year observations.

Enforcement Activity and Covariat	
ns Seizures as a Function of Marijuana	
ial Regression of Weapor	
Table 9: Negative Binom	

	Model 1	Model 2	Model 3	Model 4
Vinidibles	Based on Marijuana Stop Volume,	Based on Marijuana Stops + Arrests,	Based on Marijuana Stop Volume, Total	Based on Marijuana Stops and Arrests,
	Population Exposure	Population Exposure	Stop Exposure	Total Stop Exposure
Marijuana stops (thousands)	0.406		0.264	
	[0.332]		[0.265]	
Total marijuana enforcement (thousand stops + arrests)		-0.0524		0.104
		[0.247]		[0.152]
% Non-Hispanic black	0.847*	0.911*	0.191	0.202
	[0.373]	[0.373]	[0.226]	[0.227]
% Hispanic	0.723	0.727	0.0167	0.000263
	[0.577]	[0.567]	[0.321]	[0.320]
% Other race	1.142	1.133	0.597	0.633
	[0.717]	[0.696]	[0.366]	[0.372]
SES disadvantage	0.0721	0.0704	-0.101	-0.0967
	[0.0994]	[0.104]	[0.0544]	[0.0552]
% Foreign born	-2.072**	-1.999**	-0.187	-0.212
	[0.682]	[0.677]	[0.360]	[0.359]
Total stops (thousands)	0.0547*	0.0648^{**}	-0.0572**	-0.0542**
	[0.0236]	[0.0231]	[0.0150]	[0.0128]
Lag violent crime (thousand complaints)	0.169	0.178	0.833 * *	0.799**
	[0.257]	[0.273]	[0.213]	[0.216]
Lag marijuana arrests (thousands)	-0.308*	-0.285	-0.142	-0.215
	[0.142]	[0.213]	[0.110]	[0.148]
Constant	-7.191 **	-7.23**	2.371**	2.39**
	[0.343]	[0.319]	[0.198]	[0.201]
Observations	300	300	300	300
Number of precincts	75	75	75	75
Pseudo-R ²	0.24	0.24	0.66	0.66

marijuana are more prevalent in precincts with large black populations, as are combined marijuana stop and arrest totals. This disparity holds up across neighborhoods after controlling for local crime and socioeconomic conditions. Moreover, stop patterns are disconnected from patterns of the social disorder complaints that are a central feature of Order Maintenance Policing. Instead, marijuana stops are higher in precincts with a greater focus on weapons enforcement.

1. The Reengineering of Broken Windows Theory

The disconnect between marijuana enforcement patterns and precinct disorder conditions underscores the divergence of OMP tactics from their underpinnings in the broken windows theory. In its pristine form, "broken windows" presented disorder as a signal that local guardianship was weak and that crime would be tolerated, inviting a criminal invasion (Wilson & Kelling 1982; Skogan 1990). In the development of OMP, Jack Maple saw this link as mystical, and dismissed the idea that murderers and other serious offenders would be affected by neighborhood conditions such as graffiti, abandoned cars, or trash-strewn vacant lots (Maple & Mitchell 1999). He was therefore far less concerned with the muchpublicized "squeegee men" who harassed motorists at the entrances to bridges and tunnels entering Manhattan, and more concerned with the idea that serious offenders, when not actively involved in violent crimes, were likely to be engaged in disorderly behavior such as public drinking or smoking marijuana. This meant that the disorderly were likely to be carrying weapons or other contraband, or to be on their way to or from robberies or other violent crimes. To stop them, police had to preemptively and aggressively engage them, question them, and, if necessary, frisk and search them for weapons or contraband.

The disconnect between marijuana enforcement and disorder complaints, and its close ties to weapons enforcement and precinct racial composition, suggests that street stops for marijuana possession may serve as a pretext for higher rates of citizen interdictions in pursuit of weapons in minority neighborhoods, rather than the regulation of low-level offenses or even enforcement of marijuana laws. In other words, police in New York are doubling down on weapons enforcement by also searching for marijuana.

2. Pot as Pretext

The legal rationales for marijuana enforcement also suggest both a racial skew and a pretextual nature of citizen stops and marijuana arrests. Despite recent litigation requiring police officers to specify the reasons for each stop, we find recurring patterns of stops that lack legal justification under both federal and New York law. The documented justifications for street stops suggest that marijuana stops are most prevalent not only where officers place a high priority on drug transactions, but also where stops are justified based on suspects' presence in a "high crime area" and "other" nonspecific circumstances, justifications that, on their face, are constitutionally insufficient to justify a street stop. Moreover, the legal narratives of suspicion provided for stop activity do little to explain the precinct-level variation in stop activity. Black and Hispanic precincts seem to be targeted for marijuana enforcement at levels above what legal justifications and other precinct characteristics would suggest are appropriate.

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B. Public Safety Implications

Marijuana enforcement is inefficient to a point where it may distract from other strategies to produce security. While weapons seizures are indeed more prevalent in areas with higher stop levels, each street stop made is associated with a lower probability of weapon seizures, suggesting diminishing returns to SQF activity. Although the detection of weapons is one of the overarching goals of OMP, and marijuana enforcement is one of the tactical engines of OMP, fewer than one half of 1 percent of marijuana stops lead to the seizure of a weapon, and marijuana enforcement is not significantly correlated with the detection of weapons.

The public safety rationale for marijuana enforcement is not well-grounded in criminological theory. Beyond the relative futility of marijuana stops, and street stops more generally, in the detection of firearms, the links between marijuana and more serious crime are tenuous. Given the doubts cast on the causal relationship between physical and social disorder and more serious crime (Sampson & Raudenbush 1999; Harcourt 1998, 2001; Taylor 2001), there is little reason to expect that the disruption of marijuana possession and use will reduce violent crime or any other crime.

Marijuana itself is also largely disconnected from dangerous behavior, particularly violent crime. As early as the 1930s, while lurid headlines across the country proclaimed that marijuana was a dangerous drug that caused crime, these claims were dismissed in a six-year scientific study at the New York Academy of Medicine (Mayor's Committee on Marihuana 1944). The NYAM scientists found that marijuana is neither addictive, nor a "determinating factor" in major crimes. Research beginning in the 1970s concluded much the same. The linkage of marijuana to crime is both contingent on contextual factors, and spurious to underlying personal characteristics (for reviews, see Watters et al. 1985; Fagan 1990, 1993; MacCoun et al. 2003).

In addition, contrary to "gateway" hypotheses, few users of marijuana progress to using harder drugs, and the causal paths are complex and mediated by both observed and unobserved personal characteristics. For example, Golub and Johnson (2001) dismiss dire predictions of future hard-drug abuse by youths who came of age in the 1990s. They examined several waves of the National Household Survey on Drug Abuse from 1979– 1997, and concluded that any increase in youthful marijuana use in the 1990s has been offset by lower rates of progression to hard-drug use among youths born in the 1970s. Connections between marijuana use and progression to other drugs is more likely to be produced through a correlation with (unobserved) personal characteristics rather than a causal path (van Ours 2003). Nor is there a connection through marijuana markets: several studies show that marijuana markets are segmented from cocaine and heroin markets, reducing the likelihood that disrupting marijuana buys will have any effects on the more violence-prone heroin and cocaine markets (for a review, see Caulkins & Reuter 1998).

In light of the empirical evidence documenting marijuana's equivocal relationship to both more serious forms of drug use and to other crimes, the city's dogged pursuit of marijuana use begs explanation. For a short time after the war on marijuana began in New York, the discourse on the escalation of marijuana enforcement focused on how marijuana

markets had replaced the waning street markets in cocaine and crack, how marijuana had become more potent and its users more behaviorally unpredictable, and that the violence of those markets had migrated to marijuana markets (Flynn 2001). However, the prediction of marijuana-fueled violence seems to have been a false alarm. Homicides reached a 45-year low of 466 in 2009, and overall crime is down by 35 percent since that discourse on marijuana was first advanced nearly a decade ago. Marijuana use rates among high school and college students across the nation have been relatively flat since 1999 (Johnston et al. 2005), yet the insistence on marijuana's dangers still translates into widespread and racially imbalanced misdemeanor marijuana arrests. Nor are the arrests brief and nonintrusive encounters: persons arrested on misdemeanor marijuana charges are routinely booked, strip searched, and detained for as long as 48 hours until they are arraigned on charges that are almost always dismissed (Golway 2000). Observing a sweep of six marijuana arrests at the outset of the current war on marijuana a decade ago, one detective lamented that rather than lowering crime, "[w]e're just ruining people's lives now" (Sargent 2001).

VI. CONCLUSION

The striking feature of the war on marijuana in New York City is not simply the racial imbalance in enforcement compared to the racial distribution of marijuana use (cf. Saxe et al. 2001; Johnston et al. 2005), nor its disconnect from crime conditions or the legality of marijuana stops, nor its diminishing returns in the chase for weapons; rather, the broad reach of marijuana enforcement, and of OMP more generally, deserves the greatest attention. In 2006, the NYPD made more than 32,000 arrests for marijuana possession, and over 506,000 stops, including 64,166 stops of black males between the ages of 15 and 19, or an average rate of 77 stops for every 100 such persons.²⁵ Of these stops, fewer than 4 percent resulted in an arrest, and fewer than one half of 1 percent revealed a weapon.²⁶

OMP practices have persisted through sharp criticism (Spitzer 1999; Greene 1999; Harcourt 2001; Levine & Small 2008) and civil rights litigation against the city. However, the intractability of racial disparities in police practices in the face of prior judicial efforts at constitutional oversight raise difficult questions about the prospects for either legal or democratic regulation of policing. The deep reach of OMP into the city's minority communities has serious social costs, undermining perceived police legitimacy, and potentially

²⁵ESRI projections suggest that approximately 6.6 million of the city's 8.3 million residents in 2006 were over the age of 15.

²⁶Street stops are hardly neutral with respect to the person stopped and found to be innocent of any wrongdoing. Stuntz (1998) notes four distinct harms that victims of unjustified and inaccurate stops might suffer. "The first is a harm to the victim's privacy—the injury suffered if some agent of the state rummages around in the victim's briefcase, or examines the contents of his jacket pockets. The second is . . . 'targeting harm,' the injury suffered by one who is singled out by the police and publicly treated like a criminal suspect. Third is the injury that flows from discrimination, the harm that flows from police violence, the physical injury and associated fear of physical injury that attends the improper police use of force."

leading to civilian withdrawal from the co-production of public safety (Tyler & Fagan 2008). The diminishing returns of street stops in the production of public safety suggests not only that the practice has an unjustified and disparate impact on the city's minority population, but that the broader enforcement strategy is misguided in its approach to crime control.

Marijuana enforcement consumes a great deal of police resources, and for the past decade has been a stable feature of the policing landscape in New York. The social and political objectification of marijuana through this time gave police institutions the opportunity to transform marijuana enforcement to a use virtually unrelated to their central aim of crime reduction. The purpose of the marijuana doctrine, instead, may be the expansion of the panoptical or intelligence-generating dimension of police work, enhancing the centrality of police organizations without the burden of distributional or efficiency concerns. As practiced, the lack of police discretion in marijuana enforcement signals indifference to those concerns, and threatens to instantiate among the policed a deeply rooted culture of permanent challenge to police authority. Whether policing without legitimacy is sustainable remains a worrisome question.

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APPENDIX A: NEW YORK STATE PENAL LAW

§ 221.05-221.30: Possession of Marihuana

§ 221.05 Unlawful possession of marihuana. A person is guilty of unlawful possession of marihuana when he knowingly and unlawfully possesses marihuana. Unlawful possession of marihuana is a violation punishable only by a fine of not more than one hundred dollars. However, where the defendant has previously been convicted of an offense defined in this article or article 220 of this chapter, committed within the three years immediately preceding such violation, it shall be punishable (a) only by a fine of not more than two hundred dollars, if the defendant was previously convicted of one such offense committed during such period, and (b) by a fine of not more than two hundred fifty dollars or a term of imprisonment not in excess of fifteen days or both, if the defendant was previously convicted of two such offenses committed during such period.

§ 221.10 Criminal possession of marihuana in the fifth degree. A person is guilty of criminal possession of marihuana in the fifth degree when he knowingly and unlawfully possesses: 1. marihuana in a public place, as defined in section 240.00 of this chapter, and such marihuana is burning or open to public view; or 2. one or more preparations, compounds, mixtures or substances containing marihuana and the preparations, compounds, mixtures or substances are of an aggregate weight of more than twenty-five grams. Criminal possession of marihuana in the fifth degree is a class B misdemeanor.

§ 221.15 Criminal possession of marihuana in the fourth degree. A person is guilty of criminal possession of marihuana in the fourth degree when he knowingly and unlawfully possesses one or more preparations, compounds, mixtures or substances containing marihuana and the preparations, compounds, mixtures or substances are of an aggregate weight of more than two ounces. Criminal possession of marihuana in the fourth degree is a class A misdemeanor.

§ 221.20 Criminal possession of marihuana in the third degree. A person is guilty of criminal possession of marihuana in the third degree when he knowingly and unlawfully possesses one or more preparations, compounds, mixtures or substances containing marihuana and the preparations, compounds, mixtures or substances are of an aggregate weight of more than eight ounces. Criminal possession of marihuana in the third degree is a class E felony.

§ 221.25 Criminal possession of marihuana in the second degree. A person is guilty of criminal possession of marihuana in the second degree when he knowingly and unlawfully possesses one or more preparations, compounds, mixtures or substances containing marihuana and the preparations, compounds, mixtures or substances are of an aggregate weight of more than sixteen ounces. Criminal possession of marihuana in the second degree is a class D felony.

§ 221.30 Criminal possession of marihuana in the first degree. A person is guilty of criminal possession of marihuana in the first degree when he knowingly and unlawfully
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possesses one or more preparations, compounds, mixtures or substances containing marihuana and the preparations, compounds, mixtures or substances are of an aggregate weight of more than ten pounds. Criminal possession of marihuana in the first degree is a class C felony.

Appendix B: Specific Police Conduct Permitted Under De Bour

1. What is a Stop?

Police stop and frisk procedures have been ruled constitutional under specific conditions articulated in *Terry v. Ohio* (1968). Under *Terry*, Fourth Amendment restrictions on unreasonable searches and seizures allow a police officer to stop a suspect on the street and search him or her without probable cause to arrest if the police officer has a reasonable suspicion that the person has committed, is committing, or is about to commit a crime. For their own protection, police may perform a quick surface search of the person's outer clothing for weapons if they have reasonable suspicion that the person stopped is armed. This reasonable suspicion must be based on "specific and articulable facts" and not merely upon an officer's hunch.

2. Permissible Behaviors

New York law regulates police conduct more thoroughly than does *Terry*. New York law articulates a four-step analysis articulated in *People v*. *De Bour* (1976) and *People v*. *Holmes* (1996). Stops are governed by N.Y. Criminal Procedure Law Section 140.50(1) (2007):

In addition to the authority provided by this article for making an arrest without a warrant, a police officer may stop a person in a public place located within the geographical area of such officer's employment when he reasonably suspects that such person is committing, has committed or is about to commit either (a) a felony or (b) a misdemeanor defined in the penal law, and may demand of him his name, address and an explanation of his conduct.

"Stops" and "frisks" are considered separately under New York statutes. A police officer may stop a suspect but not be permitted to frisk the suspect given the circumstances. Frisks and searches are governed by N.Y. Criminal Procedure Law Section 140.50(3), which requires a legitimate "stop" as a predicate to any frisk.²⁷ In many cases,

²⁷*When upon stopping a person under circumstances prescribed in subdivisions one and two a police officer or court officer, as the case may be, reasonably suspects that he is in danger of physical injury, he may search such person for a deadly weapon or any instrument, article or substance readily capable of causing serious physical injury and of a sort not ordinarily carried in public places by law-abiding persons. If he finds such a weapon or instrument, or any other property possession of which he reasonably believes may constitute the commission of a crime, he may take it and keep it until the completion of the questioning, at which time he shall either return it, if lawfully possessed, or arrest such person." N.Y. Crim. Proc. Law § 140.50(3).

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reasonable suspicion that a person is engaging in violent or dangerous crime (such as murder, burglary, assault, etc.) will justify both a stop *and* a frisk. Table B1 shows the circumstances that are necessary for a stop to escalate to a frisk and ultimately to an arrest. Table B2 shows the specific police actions that are permitted at each level of a *Terry/De Bour* stop in New York.

 Table B1:
 De Bour's Four Levels of Street Encounters^a

Predicate	Permissible Response	
Level 1	Objective credible reason approach to request information	
Level 2	Founded suspicion—common-law right of inquiry	
Level 3	Reasonable suspicion stop and (if fear of weapon) frisk	
Level 4	Probable-cause arrest and full search incident	

^aPeople v. De Bour, 40 N.Y.2d 210 (1976).

Table B2: Permissible Actions by Police Officers During Stops

Predicate	Permissible Response		
Level I	 PO can ask nonthreatening questions regarding name, address, destination, and, if person carrying something unusual, police officer can ask about that. Encounter should be brief and nonthreatening. There should be an absence of harassment and intimidation. PO can: say "STOP" (if not "forceful") approach a stopped car touch holster. 		
	PO cannot:		
	request permission to search cause people to reasonably believe they're suspected of crime, no matter how calm and polite the tone of the questions		
Level 2	PO can ask pointed questions that would reasonably lead one to believe that he/she is suspected of a crime. Questions can be more extended and accusatory. Focus on possible criminality.		
	PO can:		
	request permission to search		
	PO cannot:		
	pursue		
	forcibly detain		
Level 3	PO can:		
	forcibly detain		
	frisk for weapons if in fear		
	pull car out of traffic flow		
	order defendant to lie on the ground		
	handcuff (for good reason)		
	pursue		
Level 4	PO can arrest and search suspect		

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Appendix C: Replication of the NYPD's UF-250 Form

(((
		(COMPL	ETE /	ALL CAPTIONS)	
REPORT WOR	ON AND FRISH				
PD344-151A (Rev	. 11-02)	Date	ſ	Pct. Of Occ.	
Prior	d Of Observatio To Stop		Radi	o Run/Sprint #	
Address/Intersection C	r Cross Streets	Of Stop	A		
Inside Transi		cation			
Outside Description	ng Describe:	Ser Pilessa	·····	D	
				Duration Of Stop	
What Were Ci	rcumstance	s Which	Lec	To Stop?	
 Carrying Objects in Pla 	ST CHECK AT L ain View	LAST ONE	i BOX ns Indi) cative Of Engaging	
Used In Commission (In On	ug Trai	nsaction.	
e.g., Slim Jim/Pry Bar, Fits Description.	etc.	C Furth	e Mov	ements.	
Actions Indicative Of "	Casing*	In Vio	ient Cr	cative Of Engaging	
Victim Or Location.		🛛 Wear	ing Clo	thes/Disguises	
Lookout,	ung as a	Comr	nonly (Jsed In Of Crime.	
Suspicious Bulge/Obje	ct (Describe)			or oning.	
Other Reasonable Sus	picion Of Criminal	Activity (Spec	:ify)		
Name Of Person Stopp	ed Nicknan	ne/		Date Of Birth	
	Street N	ame			
Address		Apt.	No.	Tel. No.	
Identification: U V C Other (Specify)	erbal 🛛 P	hoto I.D.		Refused	
Sex: Male Race: W	nite 🗆 Black 🗆 V	Vhite Hisoa	nic 🗖	Black Hispania	
LI ASIAN/F	acific Islander] American	India	n/Alaskan Native	
Age Height	Weight		Eyes	Build	
Other (Scars, Tattoos, E	itc.)	L			
Did Officer Explain If Ne Reason For Stop	o, Explain:	//			
Were Other Persons Stopped/ Yes If Yes, List Pct. Serial Nos. Questioned/Frisked? No					
If Physical Force Was L	Ised, Indicate T			······	
Hands On Suspect		Drawing	Firearr	n	
Suspect On Ground Baton					
 Pointing Firearm At Sus Handcuffing Suspect 		Pepper S			
Anadouring Suspect Other (Describe) Suspect Against Wall/Car					
Was Suspect Arrested?	Offense		1.	roat Na	
□ Yes □ No				rest No.	
Was Summons Issued?	Offense		Su	mmons No.	
Officer In Uniform?	If No, How Ide	ntified?	Shiel	d DI.D. Card	
U Yes U No	Verbal				

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Appendix D: Stop Rationales and Additional Circumstances Listed on UF-250

Stop Rationales	Additional Circumstances	
Carrying suspicious object	Report by victim/witness/officer	
Fits a relevant description	Ongoing investigation	
Casing a victim or location	Proximity to scene of offense	
Acting as a lookout	Evasive response to questioning	
Wearing clothes commonly used in a crime	Associating with known criminals	
Actions indicative of a drug transaction	Change direction at sight of officer	
Furtive movements	Area has high crime incidence	
Actions of engaging in a violent crime	Time of day fits crime incident	
Suspicious bulge		
Other	Other	
Suspicious bulge Other	Sights or sounds of criminal activ	



An Analysis of the New York City Police Department's "Stop-and-Frisk" Policy in the Context of Claims of Racial Bias

Andrew GELMAN, Jeffrey FAGAN, and Alex KISS

Recent studies by police departments and researchers confirm that police stop persons of racial and ethnic minority groups more often than whites relative to their proportions in the population. However, it has been argued that stop rates more accurately reflect rates of crimes committed by each ethnic group, or that stop rates reflect elevated rates in specific social areas, such as neighborhoods or precincts. Most of the research on stop rates and police–citizen interactions has focused on traffic stops, and analyses of pedestrian stops are rare. In this article we analyze data from 125,000 pedestrian stops by the New York Police Department over a 15-month period. We disaggregate stops by police precinct and compare stop rates by racial and ethnic group, controlling for previous race-specific arrest rates. We use hierarchical multilevel models to adjust for precinct-level variability, thus directly addressing the question of geographic heterogeneity that arises in the analysis of pedestrian stops. We find that persons of African and Hispanic descent were stopped more frequently than whites, even after controlling for precinct variability and race-specific estimates of crime participation.

KEY WORDS: Criminology; Hierarchical model; Multilevel model; Overdispersed Poisson regression; Police stops; Racial bias.

1. BIAS IN POLICE STOPS?

In the late 1990s, popular, legal, and political concerns were raised across the United States about police harassment of minority groups in their everyday encounters with law enforcement. These concerns focused on the extent to which police were stopping people on the highways for "driving while black" (see Weitzer 2000; Harris 2002; Lundman and Kaufman 2003). Additional concerns were raised about racial bias in pedestrian stops of citizens by police predicated on "zero-tolerance" policies to control quality-of-life crimes and policing strategies concentrated in minority communities that targeted illegal gun possession and drug trafficking (see Fagan, Zimring, and Kim 1998; Greene 1999; Skolnick and Caplovitz 2001; Fagan and Davies 2000, 2003; Fagan 2002; Gould and Mastrofski 2004). These practices prompted angry reactions among minority citizens that widened the breach between different racial/ethnic groups in their trust in the police (Lundman and Kaufman 2003; Tyler and Huo 2003; Weitzer and Tuch 2002), provoking a crisis of legitimacy with legal, moral, and political dimensions (see Wang 2001; Russell 2002; Harris 2002).

In an era of declining crime rates, policy debates on policing strategies often pivot on the evaluation of New York City's policing strategy during the 1990s, a strategy involving aggressive stops and searches of pedestrians for a wide range of crimes (Eck and Maguire 2000; Skogan and Frydl 2004). The policy was based on the lawful practice of "temporarily detaining, questioning, and, at times, searching civilians on the street" (Spitzer 1999). The U.S. Supreme Court has ruled police stopand-frisk procedures to be constitutional under certain restrictions (Terry v. Ohio 1968). The approach of the New York City Police Department (NYPD) during the 1990s has been widely credited as a major source of the city's sharp crime decline (Zimring 2006).

But near the end of the decade there were repeated complaints of harassment of minority communities, especially by the elite Street Crimes Unit (Spitzer 1999). These complaints came in the context of the well-publicized assault by police of Abner Louima and the shootings of Amadou Diallo and Patrick Dorismond. Citizen complaints about aggressive "stop and frisk" tactics ultimately provoked civil litigation that alleged racial bias in the patterns of "stop and frisk," leading to a settlement that regulated the use of this tactic and established extensive monitoring requirements (Kelvin Daniels et al. v. City of New York 2004).

We address this dispute by estimating the extent of racially disparate impacts of what came to be known as the "New York strategy." We analyze the rates at which New Yorkers of different ethnic groups were stopped by the police on the city streets, to assess the central claim that race-specific stop rates reflect nothing more than race-specific crime rates. This study is based on work performed with the New York State Attorney General's Office (Spitzer 1999) and reviewed by the U.S. Commission on Civil Rights (2000). Key statistical issues are the baselines used to compare rates (recognized as a problem by Miller 2000; Walker 2001; Smith and Alpert 2002) and local variation in the intensity of policing, as performed by the Street Crimes Unit and implicitly recommended by Wilson and Kelling (1982) and others. We use multilevel modeling (see Raudenbush and Bryk 2002 for an overview and Sampson, Raudenbush, and Earls 1997; Sampson and Raudenbush 1999; Weidner, Frase, and Pardoe 2004 for examples in studies of crime) to adjust for local variation in comparing the rates of police stops of different ethnic groups in New York City.

Were the police disproportionately stopping ethnic minorities? We address this question in several different ways using data on police stops and conclude that members of minority groups were stopped more often than whites, both in comparison to their overall population and to the estimated rates of

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crime that they have committed. We do not necessarily conclude that the NYPD engaged in discriminatory practices, however. The summary statistics that we study here cannot directly address questions of harassment or discrimination, but rather reveal statistical patterns that are relevant to these questions.

Because this is a controversial topic that has been studied in various ways, we go into some detail in Sections 2 and 3 on the historical background and available data. We present our models and results in Sections 4 and 5, and provide some discussion in Section 6.

2. BACKGROUND

2.1 Race, Neighborhoods, and Police Stops

Nearly a century of legal and social trends has set the stage for the current debate on race and policing. Historically, close surveillance by police has been a part of everyday life for African-Americans and other minority groups (see, e.g., Musto 1973; Kennedy 1997). More recently, in Whren et al. v. U.S. (1996), the U.S. Supreme Court allowed the use of race as a basis for a police stop as long as there were other factors motivating the stop. In Brown v. Oneonta (2000), a federal district court permitted the use of race as a search criterion if there was an explicit racial description of the suspect.

The legal standard for police conduct in citizen stops derives from Terry v. Ohio (1968), which involved a pedestrian stop that set the parameters of the "reasonable suspicion" standard for police conduct in detaining citizens for search or arrest. Recently, the courts have expanded the concept of "reasonable suspicion" to include location as well as behavior. For example, the U.S. Supreme Court, in Illinois v. Wardlow (2000), noted that although a person's presence in a "high-crime area" does not meet the standard for a particularized suspicion of criminal activity, a location's characteristics are relevant to determining whether a behavior is sufficiently suspicious to warrant further investigation. Because "high-crime areas" often have high concentrations of minority citizens (Massey and Denton 1993), this logic places minority neighborhoods at risk for elevating the suspiciousness of their residents.

Early studies suggested that both the racial characteristics of the suspect and the racial composition of the suspect's neighborhood influence police decisions to stop, search, or arrest a suspect (Bittner 1970; Reiss 1971). Particularly in urban areas, suspect race interacts with neighborhood characteristics to animate the formation of suspicion among police officers (Thompson 1999; Smith, Makarios, and Alpert 2006). Alpert, MacDonald, and Dunham (2005) found that police are more likely to view a minority citizen as suspicious—leading to a police stop—based on nonbehavioral cues, while more often relying on behavioral cues to develop suspicion for white citizens.

But police also may substitute racial characteristics of communities for racial characteristics of individuals in their cognitive schema of suspicion, resulting in elevated stop rates in neighborhoods with high concentrations of minorities. For example, in a study of policing in three cities, Smith (1986) showed that suspects in poor neighborhoods were more likely to be arrested, in an analysis controlling for suspect behavior and type of crime. The suspect's race and the racial composition of the suspect's neighborhood were also significant predictors of police response. Coercive police responses may relate to the perception that poor neighborhoods may have limited capacity for social control and self-regulation. This strategy was formalized in the influential "broken windows" essay of Wilson and Kelling (1982), who argued that police responses to disorder were critical to communicate intolerance for crime and to halt its contagious spread. Others have disputed this claim, however (see Harcourt 1998, 2001; Sampson and Raudenbush 1999; Taylor 2000), arguing that race is often used as a substitute for neighborhood conditions as a marker of suspicion by police.

Police have defended racially disparate patterns of stops on the grounds that minorities commit disproportionately more crimes than whites (especially the types of crimes that capture the attention of police), and that the spatial concentration and disparate impacts of crimes committed by and against minorities justifies more aggressive enforcement in minority communities (MacDonald 2001). Police cite such differences in crime rates to justify racial imbalances even in situations where they have a wide range of possible targets or where suspicion of criminal activity would not otherwise justify a stop or search (Kennedy 1997; Harcourt 2001; Rudovsky 2001). Using this logic, police claim that the higher stop rates of African-Americans and other minorities simply represent reasonable and efficient police practice (see, e.g., Bratton and Knobler 1998; Goldberg 1999). Police often point to the high rates of seizures of contraband, weapons, and fugitives in such stops, and also to a reduction of crime, to justify such aggressive policing (Kelling and Cole 1996).

Whether racially disparate stop rates reflect disproportionate crime rates or intentional, racially biased targeting by police of minorities at rates beyond what any racial differences in crime rates might justify lies at the heart of the social and legal controversy on racial profiling and racial discrimination by police (Fagan 2002; Ayres 2002a; Harris 2002). This controversy has been the focus of public and private litigation (Rudovsky 2001), political mobilization, and self-scrutiny by several police departments (see Garrett 2001; Walker 2001; Skolnick and Caplovitz 2001; Gross and Livingston 2002).

2.2 Approaches to Studying Data on Police Stops

Recent evidence supports perceptions among minority citizens that police disproportionately stop African-American and Hispanic motorists, and that once stopped, these citizens are more likely to be searched or arrested (Cole 1999; Veneiro and Zoubeck 1999; Harris 1999; Zingraff et al. 2000; Gross and Barnes 2002). For example, two surveys with nationwide probability samples, completed in 1999 and in 2002, showed that African-Americans were far more likely than others to report being stopped on the highways by police (Langan, Greenfeld, Smith, Durose, and Levin 2001; Durose, Schmitt, and Langan 2005). Both surveys showed that minority drivers also were more likely to report being ticketed, arrested, handcuffed, or searched by police, and that they more often were threatened with force or had force used against them. These disparities exact social costs that, according to Loury (2002), animate culturally meaningful forms of stigma that reinforce racial inequalities, especially in the practice of law enforcement.

"Suspicious behavior" is the spark for both pedestrian and traffic stops (Alpert et al. 2005). Pedestrian stops are at the

very core of policing, used to enforce narcotics and weapons laws, to identify fugitives or other persons for whom warrants may be outstanding, to investigate reported crimes and "suspicious" behavior, and to improve community quality of life. For the NYPD, a "stop" intervention provides an occasion for the police to have contact with persons presumably involved in low-level criminality without having to effect a formal arrest, and under the lower constitutional standard of "reasonable suspicion" (Spitzer 1999). Indeed, because low-level "quality of life" and misdemeanor offenses were more likely to be committed in the open, the "reasonable suspicion" standard is more easily satisfied in these sorts of crimes (Rudovsky 2001).

However, in pedestrian and traffic violations, the range of suspicious behaviors in neighborhood policing is sufficiently broad to challenge efforts to identify an appropriate baseline against which to compare race-specific stop rates (see Miller 2000; Smith and Alpert 2002; Gould and Mastrofski 2004). Accordingly, attributing bias is difficult; causal claims about discrimination would require far more information about such baselines than the typical administrative (observational) datasets can supply. Research in situ that relies on direct observation of police behavior (e.g., Gould and Mastrofski 2004; Alpert et al. 2005) requires officers to articulate the reasons for their actions, a task that is vulnerable to numerous validity threats. Instead, reliable evidence of ethnic bias would require experimental designs that control for other factors so as to isolate differences in outcomes that could only be attributed to race or ethnicity. Such experiments are routinely used in tests of discrimination in housing and employment (see, e.g., Pager 2003). But observational studies that lack such controls are often embarrassed by omitted variable biases; few studies can control for all of the variables that police consider in deciding whether to stop or search someone.

Another approach to studying racial disparities bypasses the question of whether police intend to discriminate on the basis of ethnicity or race and instead focuses on disparate impacts of police stop strategies. In this approach, comparisons of "hit rates," or efficiencies in the proportion of stops that yield positive results, serve as evidence of disparate impacts of police stops. This approach can show when the racial disproportionality of a particular policy or decision making outcome is not justified by heightened institutional productivity. In the context of profiling, outcome tests assume that the ex post probability that a police search will uncover drugs or other contraband is a function of the degree of probable cause that police use in deciding to stop and search a suspect (Ayres 2002a). A finding that searches of minorities are less productive than searches of whites could be evidence that police have a lower threshold of probable cause when searching minorities. At the very least, it is a sign of differential treatment of minorities that in turn produces a disparate impact.

Knowles, Persico, and Todd (2001) considered this "hit rate" approach theoretically as well as empirically in a study finding that of the drivers on I-95 in Maryland stopped by police on suspicion of drug trafficking, African-Americans were as likely as whites to have drugs in their cars. The accompanying theoretical analysis posits a dynamic process that considers the behaviors of both police and citizens of different races and integrates their decisions in an equilibrium where police calibrate their

behavior to the probabilities of detecting illegal behavior and citizens in different racial groups adjust their propensities to accommodate the likelihood of detection. They concluded that the search for drugs was an efficient allocation of police resources, despite the disparate impacts of these stops on minority citizens (Lamberth 1997; Ayres 2002a,b; Gross and Barnes 2002).

However, this analysis omits several factors that might bias these claims, such as racial differences in the attributes that police consider when deciding which motorists to stop, search, or arrest (see, e.g., Alpert et al. 2005; Smith et al. 2006). Moreover, the randomizing equilibrium assumptions in the approach of Persico et al.-that both police and potential offenders adjust their behavior in response to the joint probabilities of carrying contraband and being stopped-tend to average across heterogeneous conditions both in police decision making and in offenders' propensities to crime (Dharmapala and Ross 2004), and discount the effects of race-specific sensitivities toward crime decisions under varying conditions of detection risk by police stop (Dominitz and Knowles 2005). Addressing these two concerns, Dharmapala and Ross (2004) identified different equilibria that lead to different conclusions about racial prejudice in police stops and searches.

We consider hit rates briefly (see Sec. 5.3), but our main analysis attempts to resolve these supply-side or omittedvariable problems by controlling for race-specific rates of the targeted behaviors in patrolled areas, assessing whether stop and search rates exceed what we would predict from knowledge of the crime rates of different racial groups. This approach indexes stop behavior to observables about the probability of crime or guilt among different racial groups. Moreover, by disaggregating data across neighborhoods, our probability estimates explicitly incorporate the externalities of neighborhood and race that historically have been observed in policing (Skogan and Frydl 2004). This approach requires estimates of the supply of individuals engaged in the targeted behaviors (see Miller 2000; Fagan and Davies 2000; Walker 2001; Smith and Alpert 2002).

To be sure, a finding that police are stopping and searching minorities at a higher rate than is justified by their participation in crime does not require inferring that police engaged in disparate treatment at a minimum, however, it does provide evidence that whatever criteria the police used produced an unjustified disparate impact.

3. DATA

3.1 "Stop and Frisk" in New York City

The NYPD has a policy of keeping records on stops (on "UF-250 Forms"). This information was collated for all stops (about 175,000 in total) from January 1998 through March 1999 (Spitzer 1999). The police are not required to fill out a form for every stop. Rather, there are certain conditions under which the police are required to fill out the form. These "mandated stops" represent 72% of the stops recorded, with the remaining reports being of stops for which reporting was optional. To address concerns about possible selection bias in the nonmandated stops, we repeated our main analyses (shown in Fig. 2) for the mandated stops only; the total rates of stops changed, but the relative rates for different ethnic groups remained essentially unchanged.

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The UF-250 form has a place for the police officer to record the "Factors which caused officer to reasonably suspect person stopped (include information from third persons and their identity, if known)." We examined these forms and the reasons for the stops for a citywide sample of 5,000 cases, along with 10,869 others, representing 50% of the cases in a nonrandom sample of 8 of the 75 police precincts, chosen to represent a spectrum of racial population characteristics, crime problems, and stop rates, guided by the policy questions in the original study (Spitzer 1999, p. 158). The following examples (from Spitzer 1999) illustrate the rules that motivated police decisions to stop suspects and demonstrate the social and behavioral factors that police apply in the process of forming reasonable suspicion:

- "At TPO [time and place of occurrence] male was with person who fit description of person wanted for GLA [grand larceny auto] in 072 pct. log... upon approach male discarded small coin roller which contained 5 bags of alleged crack."
- "At T/P/O R/O [reporting officer] did observe below named person along w/3 others looking into numerous parked vehicles. R/O did maintain surveillance on individuals for approx. 20 min. Subjects subsequently stopped to questioned [sic] w/ neg results."
- "Slashing occurred at Canal street; person fit description; person was running."
- "Several men getting in and out of a vehicle several times."
- "Def. Did have on a large bubble coat with a bulge in right pocket."
- "Person stopped did stop [sic] walking and reverse direction upon seeing police. Attempted to enter store as police approached; Frisked for safety."

Based on federal and state law, some of these reasons for stopping a person are constitutional and some are not. For example, courts have ruled that a bulge in the pocket is not sufficient reason for the police to stop a person without his or her consent (People v. DeBour 1976; People v. Holmes 1996), and that walking away from the police is not a sufficient cause to stop and frisk a person (Brown v. Texas 1979; but see Illinois v. Wardlow 2000). However, when the police observe illegal activity, weapons (including "waistband bulges"), a person who fits a description, or suspicious behavior in a crime area, then stops and frisks have been ruled constitutional (Spitzer 1999).

The New York State Attorney General's office used rules such as these to characterize the rationales for 61% of the stops in the sample as articulating a "reasonable suspicion" that would justify a lawful stop, 15% of the stops as not articulating a reasonable suspicion, and 24% as providing insufficient information on which to base a decision. For the controversial Street Crimes Unit, 23% of stops were judged to not articulate a reasonable suspicion. (There was no strong pattern by ethnicity here; the rate of stops judged to be unreasonable was about the same for all ethnic groups.) The stops judged to be without "reasonable suspicion" indeed seemed to be weaker, in that only 1 in 29 of these stops led to arrests, compared with 1 in 7 of the stops with reasonable suspicion.

3.2 Aggregate Rates of Stops for Each Ethnic Group

With this as background, we analyze the entire stop-andfrisk dataset to see to what extent different ethnic groups were stopped by the police. We focus on blacks (African-Americans), Hispanics (Latinos), and whites (European-Americans). The categories are as recorded by the police making the stops. We exclude members of other ethnic groups (approximately 4% of the stops) because of the likelihood of ambiguities in classifications. With such a low frequency of "other," even a small rate of misclassification can cause large distortions in the estimates for that group. For example, if only 4% of blacks, Hispanics, and whites were mistakenly labeled as "other," this would nearly double the estimates for the "other" category while having very little effects on the three major groups. (See Hemenway 1997 for an extended discussion of the problems that misclassifications can cause in estimates of a small fraction of the population.) To give a sense of the data, Figure 1 displays the number of stops for blacks, Hispanics, and whites over the 15-month period, separately showing stops associated with each of four types of offenses ("suspected charges" as characterized on the UF-250 form): violent crimes, weapons offenses, property crimes, and drug crimes.

In total, blacks and Hispanics represented 51% and 33% of the stops, despite being only 26% and 24%, of the city population based on the 1990 Census. The proportions change little if we use 1998 population estimates and count only males age 15-30, which is arguably a better baseline. For one of our supplementary analyses, we also use the population for each ethnic group within each precinct in the city. Population estimates for the police precincts with low residential populations but high daytime populations due to commercial and business activity were adjusted using the U.S. Census Bureau "journey file," provided by the New York City Department of City Planning (see Spitzer 1999, app. I, table 1.A.1a). The journey file uses algorithms based on time traveled to work and the distribution of job classifications to estimate the day and night populations of census tracts. Tracts were aggregated to their corresponding police precinct to construct day and night population estimates, and separate stop estimates were computed for daytime and nighttime intervals. For these analyses, we aggregated separate estimates of stops by day and night to compute total stop rates for each precinct.

Perhaps a more relevant comparison, however, is to the number of crimes committed by members of each ethnic group. For example, then New York City Police Commissioner Howard Safir stated (Safir 1999),

The racial/ethnic distribution of the subjects of "stop and frisk" reports reflects the demographics of known violent crime suspects as reported by crime victims. Similarly, the demographics of arrestees in violent crimes also correspond with the demographics of known violent crime suspects.

Data on actual crimes are not available, of course, so as a proxy we use the number of arrests within New York City in the previous year, 1997, as recorded by the Division of Criminal Justice Services (DCJS) of New York State and categorized by ethnic group and crime type. This was deemed to be the best available measure of local crime rates categorized by ethnicity and directly address concerns such as Safir's that stop rates be related to the ethnicity of crime suspects. We use the previous year's DCJS arrest rates to represent the frequency of



Figure 1. Number of police stops in each of 15 months, characterized by type of crime and ethnicity of person stopped (—, blacks; ---, Hispanics; \cdots , whites).

crimes that the police might suspect were committed by members of each ethnic group. When compared in that way, the ratio of stops to DCJS arrests was 1.24 for whites, 1.54 for blacks, and 1.72 for Hispanics; based on this comparison, blacks are stopped 23% more often than whites and Hispanics are stopped 39% more often than whites.

4. MODELS

The summaries given so far describe average rates for the whole city. But suppose that the police make more stops in high-crime areas but treat the different ethnic groups equally within any locality. Then the citywide ratios could show significant differences between ethnic groups even if stops were determined entirely by location rather than by ethnicity. To separate these two kinds of predictors, we performed multilevel analyses using the city's 75 precincts. Allowing precinct-level effects is consistent with theories of policing such as "broken windows" that emphasize local, neighborhood-level strategies (Wilson and Kelling 1982; Skogan 1990). Because it is possible that the patterns are systematically different in neighborhoods with different ethnic compositions, we divided the precincts into three categories in terms of their black population: precincts that were less than 10% black, 10-40% black, and more than 40% black. We also accounted for variation in stop rates between the precincts within each group. Each of the three categories represents roughly 1/3 of the precincts in the city, and we performed separate analyses for each set.

4.1 Hierarchical Poisson Regression Model

For each ethnic group e = 1, 2, 3 and precinct p, we modeled the number of stops, y_{ep} , using an overdispersed Poisson regression with indicators for ethnic groups, a hierarchical model for precincts, and n_{ep} , the number of DCJS arrests for that ethnic group in that precinct (multiplied by 15/12 to scale to a 15-month period), as a baseline or offset,

$$y_{ep} \sim \text{Poisson}\left(\frac{15}{12}n_{ep}e^{\mu+\alpha_e+\beta_p+\epsilon_{ep}}\right),$$

$$\beta_p \sim N(0, \sigma_{\beta}^2), \qquad (1)$$

$$\epsilon_{ep} \sim N(0, \sigma_{\gamma}^2).$$

where the coefficients α_e (which we constrained to sum to 0) control for ethnic groups, the β_p 's adjust for variation among precincts (with variance σ_β), and the ϵ_{ep} 's allow for overdispersion, that is, variation in the data beyond that explained by the Poisson model. We fit the model using Bayesian inference with a noninformative uniform prior distribution on the parameters μ , α , σ_β , and σ_ϵ .

In classical generalized linear modeling or generalized estimating equations, overdispersion can be estimated using a chisquared statistic, with standard errors inflated by the square root of the estimated overdispersion (McCullagh and Nelder 1989). In our analysis, we are already using Bayesian inference to model the variation among precincts, and so the overdispersion simply represents another variance component in the model; the resulting inferences indeed have larger standard errors than would be obtained from the nonoverdispersed regression (which would correspond to $\sigma_{\epsilon} = 0$), and these posterior standard errors can be checked using, for example, cross-validation of precincts.

Of most interest, however, are the exponentiated coefficients $exp(\alpha_e)$, which represent relative rates of stops compared with

arrests, after controlling for precinct. By comparing stop rates to arrest rates, we can also separately analyze stops associated with different types of crimes. We conducted separate comparisons for violent crimes, weapons offenses, property crimes, and drug crimes. For each, we modeled the number of stops y_{ep} by ethnic group *e* and precinct *p* for that crime type, using as a baseline the DCJS arrest count n_{ep} for that ethnic group, precinct, and crime type. (The subsetting by crime type is implicit in this notation; to keep notation simple, we did not introduce an additional subscript for the four categories of crime.)

We thus estimated model (1) for 12 separate subsets of the data, corresponding to the four crime types and the three categories of precincts (<10% black population, 10-40% black, and >40% black). Computations were easily performed using the Bayesian software BUGS (Spiegelhalter, Thomas, Best, Gilks, and Lunn 1994, 2003), which implements Markov chain Monte Carlo simulation from R (R Project 2000; Sturtz, Ligges, and Gelman 2005). For each fit, we simulated three several independent Markov chains from different starting points, stopping when the simulations from each chain alone were as variable as those from all of the chains mixed together (Gelman and Rubin 1992). We then gathered the last half of the simulated chains and used these to compute posterior estimates and standard errors. For the analyses reported in this article, 10,000 iterations were always sufficient for mixing of the sequences. We report inferences using posterior means and standard deviations, which are reasonable summaries given the large sample size (see, e.g., Gelman, Carlin, Stern, and Rubin 2003, chap. 4).

4.2 Alternative Model Specifications

In addition to fitting model (1) as described earlier, we consider two forms of alternative specifications: first, fitting the same model but changing the batching of precincts, and second, altering the role played in the model by the previous year's arrests. We compare the fits under these alternative models to assess sensitivity to details of model specification.

Modeling Variability Across Precincts. The batching of precincts into three categories is convenient and makes sense, because neighborhoods with different levels of minority populations differ in many ways, including policing strategies applied to each type (Fagan and Davies 2000). Thus, fitting the model separately to each group of precincts is a way to include contextual effects. However, there is an arbitrariness to this division. We explore this by partitioning the precincts into different numbers of categories and seeing how the model estimates change.

Another approach to controlling for systematic variation among precincts is to include precinct-level predictors, which can be included along with the individual precinct-level effects in the multilevel model (see, e.g., Raudenbush and Bryk 2002). As discussed earlier, the precinct-level information that is of greatest interest and also has the greatest potential to affect our results, is the ethnic breakdown of the population. Thus we consider as regression predictors the proportion of black and Hispanic in the precinct, replacing model (1) by

$$y_{ep} \sim \text{Poisson}\bigg(\frac{15}{12}n_{ep}e^{\mu + \alpha_e + \zeta_1 z_{1p} + \zeta_2 z_{2p} + \beta_p + \epsilon_{ep}}\bigg), \qquad (2)$$

where z_{1p} and z_{2p} represent the proportion of the population in precinct p that are black and Hispanic. We also consider variants of model (2) including the quadratic terms, z_{1p}^2 , z_{2p}^2 , and $z_{1p}z_{2p}$, to examine sensitivity to nonlinearity.

Modeling the Relation of Stops to Previous Year's Arrests. We also consider different ways of using the number of DCJS arrests n_{ep} in the previous year, which plays the role of a baseline (or offset, in generalized linear models terminology) in model (1). Including the past arrest rate as an offset makes sense because we are interested in the rate of stops per crime, and we are using past arrests as a proxy for crime rate and for police expectations about the demographics of perpetrators. Another option is to include the logarithm of the number of past arrests as a linear predictor instead,

$$y_{ep} \sim \text{Poisson}\left(\frac{15}{12}e^{\gamma \log n_{ep} + \mu + \alpha_e + \beta_p + \epsilon_{ep}}\right).$$
 (3)

Model (3) reduces to the offset model (1) if $\gamma = 1$. We thus can fit (3) and see whether the inferences for α_e change compared with the earlier model that implicitly fixes γ to 1.

We can take this idea further by modeling past arrests as a proxy of the actual crime rate. We attempt to do this in two ways, is each approach labeling the true crime rate for each ethnicity in each precinct as θ_{ep} , with separate hierarchical Poisson regressions for this year's stops and last year's arrests (as always, including the factor $\frac{15}{12}$ to account for our 15 months of stop data). In the first formulation, we model last year's arrests as Poisson distributed with mean θ ,

$$y_{ep} \sim \text{Poisson}\left(\frac{15}{12}\theta_{ep}e^{\mu + \alpha_e + \beta_p + \epsilon_{ep}}\right),$$

$$n_{ep} \sim \text{Poisson}(\theta_{ep}), \qquad (4)$$

$$\log \theta_{ep} = \log N_{ep} + \tilde{\alpha}_e + \tilde{\beta}_p + \tilde{\epsilon}_{ep}.$$

Here we are using N_{ep} , the population of ethnic group e in precinct p, as a baseline for the model of crime frequencies. The second-level error terms $\tilde{\beta}$ and $\tilde{\epsilon}$ are given normal hyperprior distributions as for model (1).

Our second two-stage model is similar to (4) but with the new error term $\tilde{\epsilon}$ moved to the model for n_{ep} ,

$$y_{ep} \sim \text{Poisson}\left(\frac{15}{12}\theta_{ep}e^{\mu + \alpha_e + \beta_p + \epsilon_{ep}}\right),$$

$$n_{ep} \sim \text{Poisson}(\theta_{ep}e^{\tilde{\epsilon}_{ep}}),$$

$$\log \theta_{ep} = \log N_{ep} + \tilde{\alpha}_e + \tilde{\beta}_p.$$
(5)

Under this model, arrest rates n_{ep} are equal to the underlying crime rates, θ_{ep} , on average, but with overdispersion compared with the Poisson error distribution.

5. RESULTS

5.1 Primary Regression Analysis

Table 1 shows the estimates from model (1) fit to each of four crime types in each of three categories of precinct. The random-effects standard deviations σ_{β} and σ_{ϵ} are substantial, indicating the relevance of hierarchical modeling for these data. [Recall that these effects are all on the logarithmic scale, so that an

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Table 1. Estimates and standard errors for the constant term μ , ethnicity parameters α_e , and the precinct-level and precinct-by-ethnicity-level
variance parameters σ_{β} and σ_{ϵ} , for the hierarchical Poisson regression model (1), fit separately to three categories
of precinct and four crime types

Proportion black		Crime type			
in precinct	Parameter	Violent	Weapons	Property	Drug
<10%	Intercept	85(.07)	.13(.07)		
	α_1 [blacks]	.40(.06)	.16(.05)	$58_{(.21)}$	$-1.62_{(.16)}$
	α_2 [Hispanics]	.13(.06)	.12(.04)	$32_{(.06)}$	08(.09
	α_3 [whites]	$53_{(.06)}$	$28_{(.05)}$.32(.06)	.17(.10
	σ_{β}	.33(.08)	28(.05)	.00(.06)	08 _{(.09}
	σ_{ϵ}	.30(.08)	.38(.08)	1.19(.20)	.87(.16)
0-40%		.50(.04)	.23(.04)	.32(.04)	.50(.07)
0 4070	Intercept	97 _(.07)	.42(.07)	$89_{(.16)}$	-1.87(.13)
	α_1 [blacks]	.38(.04)	$.24_{(.04)}$	16(.06)	$05_{(.05)}$
	α_2 [Hispanics]	$.08_{(.04)}$.13(.04)	.25(.06)	.12(.06)
	α_3 [whites]	$46_{(.04)}$	36(.04)	$08_{(.06)}$	$07_{(.05)}$
	$\sigma_{oldsymbol{eta}}$.49(.07)	.47(.07)	1.21(.17)	.07(.05)
	σ_ϵ	.24(.03)	.24(.03)	.38(.04)	.90(.13)
- 40%	Intercept	$-1.58_{(.10)}$	20	1.15	.32(.04)
	α ₁ [blacks]	.44(.06)	.29(.11)	$-1.15_{(.19)}$	$-2.62_{(.12)}$
	α_2 [Hispanics]	.11(.06)	.30(.07)	03(.07)	.09(.06)
	α_3 [whites]	- 55.00	.14(.07)	.04(.07)	$.09_{(.07)}$
	σ_{β}	$55_{(.08)}$	44(.08)	$01_{(.07)}$	$18_{(.09)}$
		.48(.10)	.47(.11)	.96(.18)	.54(.11)
OTE: The estimates of att the	σ_{ϵ}	.24(.05)	.37(.05)	.42(.07)	.28(.06)

NOTE: The estimates of $e^{\mu + \alpha_r}$ are displayed graphically in Figure 2, and alternative model specifications are shown in Table 3.



Figure 2. Estimated rates $e^{\mu + \alpha_e}$ at which people of different ethnic groups were stopped for different categories of crime, as estimated from hierarchical regressions (1) using previous year's arrests as a baseline and controlling for differences between precincts. Separate analyses were done for the precincts that had <10%, 10–40%, and >40% black population. For the most common stops—violent crimes and weapons offenses—blacks and Hispanics were stopped about twice as often as whites. Rates are plotted on a logarithmic scale. Numerical estimates and standard errors are given in Table 1.

effect of .3, for example, corresponds to a multiplicative effect of exp(.3) = 1.35, or a 35% increase in the probability of being stopped.]

The parameters of most interest are the rates of stops (compared with previous year's arrests) for each ethnic group, $e^{\mu+\alpha_r}$, for e = 1, 2, 3. We display these graphically in Figure 2. Stops for violent crimes and weapons offenses were the most controversial aspect of the stop-and-frisk policy (and represent more than two-thirds of the stops), but for completeness we display all four categories of crime here.

Figure 2 shows that for the most frequent categories of stops—those associated with violent crimes and weapons offenses—blacks and Hispanics were much more likely to be stopped than whites, in all categories of precincts. For violent crimes, blacks and Hispanics were stopped 2.5 times and 1.9 times as often as whites, and for weapons crimes, blacks and Hispanics were stopped 1.8 times and 1.6 times as often as whites. In the less common categories of stops, whites were slightly more often stopped for property crimes and more often stopped for drug crimes in proportion to their previous year's arrests in any given precinct.

5.2 Alternative Forms of the Model

Fitting the alternative models described in Section 4.2 yielded results similar to those of our main analysis. We discuss each alternative model in turn.

Figure 3 displays the estimated rates of stops for violent crimes compared with the previous year's arrests for each of the three ethnic groups, for analyses dividing the precincts into 5, 10, and 15 categories ordered by the percentage of black population in the precinct. For simplicity, we give results only for violent crimes; these are typical of the alternative analyses for all four crime types. For each of the three graphs in Figure 3, the model is estimated separately for each of the three groups of precincts, and these estimates are connected in a line for each ethnic group. Compared with the upper-left plot in Figure 2, which shows the results from dividing the precincts into three categories, we see that dividing into more groups adds noise to the estimation but does not change the overall pattern of differences among the groups.

Table 2 shows the results from model (2), which is fit to all 75 precincts but controls for the proportions of blacks and

Hispanics in precincts. The inferences are similar to those obtained from the main analysis discussed in Section 5.1. Including quadratic terms and interactions in the precinct-level model (2) and including the precinct-level predictors in the models fit to each of the three subsets of the data also had little effect on the parameters of interest, α_e .

Table 3 displays parameter estimates from the models that differently incorporate the previous year's arrest rates n_{ep} . For conciseness, results are displayed only for violent crimes, and for simplicity we include all 75 precincts in the models. (Similar results were obtained when fitting the model separately in each of three categories of precincts and for the other crime types.) The first two columns of Table 3 shows the result from our main model (1) and the alternative model (3), which includes log n_{ep} as a regression predictor. The two models differ only in that the first restricts γ to be 1, but as we can see, γ is estimated very close to 1 in the regression formulation, and the coefficients α_e remain essentially unchanged. (The intercept changes a bit because log n_{ep} does not have a mean of 0.)

The last two columns in Table 3 show the estimates from the two-stage regression models (4) and (5). The models differ in their estimates of the variance parameters σ_{β} and σ_{ϵ} , but the estimates of the key parameters α_e are essentially the same in the original model.

We also performed analyses including indicators for the month of arrest. These analyses did not add anything informative to the comparison of ethnic groups.

5.3 Hit Rates: Proportions of Stops That Led to Arrests

A different way to compare ethnic groups is to look at the fraction of stops on the street that lead to arrests. Most stops do not lead to arrests, and most arrests do not come from stops. In the analysis described earlier, we studied the rate at which the police stopped people of different groups. Now we look briefly at what happens with these stops.

In the period for which we have data, 1 in 7.9 whites stopped were arrested, compared with approximately 1 in 8.8 Hispanics and 1 in 9.5 blacks. These data are consistent with our general conclusion that the police are disproportionately stopping minorities; the stops of whites are more "efficient" and are more likely to lead to arrests, whereas those for blacks and Hispanics are more indiscriminate, and fewer of the persons stopped in



Figure 3. Estimated rates $e^{\mu + \alpha_e}$ at which people of different ethnic groups were stopped for violent crimes, as estimated from models dividing precincts into 5, 10, and 15 categories. For each graph, the top, middle, and lower lines correspond to blacks, Hispanics, and whites. These plots show the same general patterns as the model with three categories (the upper-left graph in Fig. 2) but with increasing levels of noise.

Table 2.	Estimates and standard errors for the parameters of model (2) that includes proportion black and
	Hispanic as precinct-level predictors, fit to all 75 precincts

		Crin	ne type	
Parameter	Violent	Weapons	Property	Drug
Intercept	$66_{(.08)}$.08(.11)	14(.24)	98(.17)
α_1 [blacks]	.41(.03)	.24(.03)	$19_{(04)}$	$02_{(.04)}$
α ₂ [Hispanics]	.10(.03)	.12(.03)	.23(.04)	.15(.04)
α ₃ [whites]	$51_{(.03)}$	$36_{(.03)}$	$05_{(.04)}$	$13_{(.04)}$
ζ_1 [coeff. for prop. black]	$-1.22_{(.18)}$	$.10_{(.19)}$	$-1.11_{(.45)}$	$-1.71_{(.31)}$
ζ ₂ [coeff. for prop. Hispanic]	$33_{(.23)}$.71(.27)	$-1.50_{(.57)}$	$-1.89_{(.41)}$
σ_{meta}	.40(.04)	.43(.04)	1.04(.09)	.68(.06)
σ_{ϵ}	.25(.02)	.27(.02)	.37(.03)	.37(.03)

NOTE: The results for the parameters of interest, α_r , are similar to those obtained by fitting the basic model separately to each of three categories of precincts, as displayed in Table 1 and Figure 2. As before, the model is fit separately to the data from four different crime types.

these broader sweeps are actually arrested. It is perfectly reasonable for the police to make many stops that do not lead to arrests; the issue here is the comparison between ethnic groups.

This can also be understood in terms of simple economic theory (following the reasoning of Knowles, Persico, and Todd 2001 for police stops for suspected drugs). It is reasonable to suppose a diminishing return for stops in the sense that at some point, little benefit will be gained by stopping additional people. If the gain is approximately summarized by arrests, then diminishing returns mean that the probability that a stop will lead to an arrest—in economic terms, the marginal gain from stopping one more person—will decrease as the number of persons stopped increases. The stops of blacks and Hispanics were less "efficient" than those of whites, suggesting that the police have been using less rigorous standards when stopping members of minority groups. We found similar results when separately analyzing daytime and nighttime stops.

But this "hit rate" analysis can be criticized as unfair to the police, who are "damned if they do, damned if they don't." Relatively few of the stops of minorities led to arrests, and thus we conclude that police were more willing to stop minority group members with less reason. But we could also make the argument the other way around: Because a relatively high rate of whites stopped were arrested, we conclude that the police are biased against whites in the sense of arresting them too often. Analyses that examined the validity of arrests by race—that is, the proportion of arrests that lead to convictions—would help clarify this question. Unfortunately, such data are not readily available. We do not believe this latter interpretation, but it is hard to rule it out based on these data alone.

That is why we consider this part of the study to provide only *supporting* evidence. Our main analysis found that blacks and Hispanics were stopped disproportionately often (compared with their population or their crime rate, as measured by their rate of valid arrests in the previous year), and the secondary analysis of the hit rates or "arrest efficiency" of these stops is consistent with that finding.

6. DISCUSSION AND CONCLUSIONS

In the period for which we had data, the NYPD's records indicate that they were stopping blacks and Hispanics more often than whites, in comparison to both the populations of these groups and the best estimates of the rate of crimes committed by each group. After controlling for precincts, this pattern still holds. More specifically, for violent crimes and weapons offenses, blacks and Hispanics are stopped about twice as often as whites. In contrast, for the less common stops for property and drug crimes, whites and Hispanics are stopped more often than blacks, in comparison to the arrest rate for each ethnic group.

A related piece of evidence is that stops of blacks and Hispanics were less likely than those of whites to lead to arrest,

Table 3. Estimates and standard errors for parameters under model (1) and three alternative specifications for the previous year's arrests n_{ep} : treating $\log(n_{ep})$ as a predictor in the Poisson regression model (3), and the two-stage models (4) and (5)

	Model for previous year's arrests			
Parameter	Offset (1)	Regression (3)	Two-stage (5)	Two-stage (4)
Intercept	$-1.08_{(.06)}$	94(.16)	-1.07(.06)	$-1.13_{(.07)}$
α_1 [blacks]	.40(.03)	.41(.03)	.40(.03)	.42(.08)
α_2 [Hispanics]	.10(.03)	.10(.03)	.10(.03)	$.14_{(.09)}$
α3 [whites]	$50_{(.03)}$	$51_{(.03)}$	$50_{(.03)}$	$56_{(.09)}$
γ [coeff. for log n_{ep}]	(103)	.97(.03)		50(.09)
σ_{meta}	.51(.05)	.51(.05)	.51(.05)	.27(.12)
σ_{ϵ}	.26(.02)	.26(.02)	.24(.02)	.67(.04)

NOTE: For simplicity, results are displayed for violent crimes only, for the model fit to all 75 precincts. The three α , parameters are nearly identical under all four models, with the specification affecting only the intercept.

suggesting that the standards were more relaxed for stopping minority group members. Two different scenarios might explain the lower "hit rates" for nonwhites, one that suggests targeting of minorities and another that suggests dynamics of racial stereotyping and a more passive form of racial preference. In the first scenario, police possibly used wider discretion and more relaxed constitutional standards in deciding to stop minority citizens. This explanation would conform to the scenario of "pretextual" stops discussed in several recent studies of motor vehicle stops (e.g., Lundman and Kaufman 2003) and suggests that the higher stop rates were intentional and purposive. Alternatively, police could simply form the perception of "suspicion" more often based on a broader interpretation of the social cues that capture police attention and evoke official reactions (Alpert et al. 2005). The latter explanation conforms more closely to a social-psychological process of racial stereotyping, where the attribution of suspicion is more readily attached to specific behaviors and contexts for minorities than it might be for whites (Thompson 1999; Richardson and Pittinsky 2005).

We did find evidence of stops that are best explained as "racial incongruity" stops: high rates of minority stops in predominantly white precincts. Indeed, being "out of place" is often a trigger for suspicion (Alpert et al. 2005; Gould and Mastrofski 2004). Racial incongruity stops are most prominent in racially homogeneous areas. For example, we observed high stop rates of African-Americans in the predominantly white 19th Precinct, a sign of race-based selection of citizens for police interdiction. We also observed high stop rates for whites in several precincts in the Bronx, especially for drug crimes, most likely evidence that white drug buyers were entering predominantly minority neighborhoods where street drug markets are common. Overall, however, these were relatively infrequent events that produced misleading stop rates due to the population skew in such precincts.

To briefly summarize our findings, blacks and Hispanics represented 51% and 33% of the stops while representing only 26% and 24% of the New York City population. Compared with the number of arrests of each group in the previous year (used as a proxy for the rate of criminal behavior), blacks were stopped 23% more often than whites and Hispanics were stopped 39% more often than whites. Controlling for precinct actually increased these discrepancies, with minorities between 1.5 and 2.5 times as often as whites (compared with the groups' previous arrest rates in the precincts where they were stopped) for the most common categories of stops (violent crimes and drug crimes), with smaller differences for property and drug crimes. The differences in stop rates among ethnic groups are real, substantial, and not explained by previous arrest rates or precincts.

Our findings do not necessarily imply that the NYPD was acting in an unfair or racist manner, however. It is quite reasonable to suppose that effective policing requires stopping and questioning many people to gather information about any given crime.

In the context of some difficult relations between the police and ethnic minority communities in New York City, it is useful to have some quantitative sense of the issues in dispute. Given that there have been complaints about the frequency with which the police have been stopping blacks and Hispanics, it is relevant to know that this is indeed a statistical pattern. The NYPD then has the opportunity to explain their policies to the affected communities.

In the years since this study was conducted, an extensive monitoring system was put into place that would accomplish two goals. First, procedures were developed and implemented that permitted monitoring of officers' compliance with the mandates of the NYPD Patrol Guide for accurate and comprehensive recording of all police stops. Second, the new forms were entered into databases that would permit continuous monitoring of the racial proportionality of stops and their outcomes (e.g., frisks, arrests). When coupled with accurate reporting on race-specific measures of crime and arrest, the new procedures and monitoring requirements will ensure that inquiries similar to this study can be institutionalized as part of a framework of accountability mechanisms.

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EXHIBIT F

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Street Stops and Broken Windows: Terry, Race, and Disorder in New York City

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Street Stops and Broken Windows: Terry, Race, and Disorder in New York City

Jeffrey Fagan and Garth Davies

Abstract

This article explores patterns of police "stop and frisk" activity across New York City neighborhoods. While "Broken Windows" theory may account for higher stop and frisk activity for "quality of life" crimes, the authors suggest neighborhood characteristics like racial composition, poverty levels, and extent of social disorganization are strong predictors of race- and crime-specific stops. The authors consider whether street-stops in various neighborhoods comply with the Terry standard of reasonable suspicion as insight into the social and strategic meaning of policing. Their empirical evidence suggests policing focuses on policing poor people in poor places. Their strategy departs from "Broken Windows" theory by concentrating on people and not disorder. They suggest racially disparate police targeting raises concern about legitimacy of law, weakens citizen cooperation with police, and undermines the social goals of policing.

KEYWORDS: stop and frisk, Terry search, Broken Windows theory, aggressive policing, minority neighborhoods, race-specific stop, crime-specific stop

STREET STOPS AND BROKEN WINDOWS: TERRY, RACE, AND DISORDER IN NEW YORK CITY

Jeffrey Fagan and Garth Davies*

Patterns of "stop and frisk" activity by police across New York City neighborhoods reflect competing theories of aggressive policing. "Broken Windows" theory¹ suggest that neighborhoods with greater concentration of physical and social disorder should evidence higher stop and frisk activity, especially for "quality of life" crimes.² However, although disorder theory informs quality of life policing strategies, patterns of stop and frisk activity suggest that neighborhood characteristics such as racial composition, poverty levels, and extent of social disorganization are stronger predictors of race- and crime-specific stops. Accordingly, neighborhood "street stop" activity reflects competing assumptions and meanings of policing strategy. Furthermore, looking at the rate at which street stops meet Terry standards of reasonable suspicion³ in various neighborhoods provides additional perspective on the social and strategic meanings of policing. Our empirical evidence suggests that policing is not about disorderly places, nor about improving the quality of life, but about policing poor people in poor places. This strategy contradicts the policy rationale derived from Broken Windows theory, and deviates from the original emphasis on communities by focusing on people. Racially disparate policing reinforces perceptions by citizens in minority neighborhoods that they are under non-particularized suspicion and are therefore targeted for aggressive stop and frisk policing. Such broad targeting raises concerns about the legitimacy of law, threatens to weaken citizen participation in the co-production of

^{*} Jeffrey Fagan is a professor at the Mailman School of Public Health, Columbia University, and a visiting professor at Columbia Law School. Garth Davies is a doctoral candidate, School of Criminal Justice, Rutgers University. All opinions are those of the authors. Peter K. Manning provided helpful comments on this article. Brandon Garrett provided timely and thorough research assistance.

^{1.} James Q. Wilson & George L. Kelling, *The Police and Neighborhood Safety:* Broken Windows, ATLANTIC MONTHLY, Mar. 1982, at 29-38 (using the analogy of a broken window to describe the relationship between disorder and crime).

^{2.} Id.

^{3.} Terry v. Ohio, 392 U.S. 1 (1968) (establishing *reasonable suspicion*, as opposed to the higher quantum of proof of *probable cause*, as the constitutional standard to govern stop and frisks).

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security, and undercuts the broader social norms goals of contemporary policing.

When it comes to debating theories of crime and law, some people pretend that race does not matter at all, while others accord it undue, if not determinative, significance.⁴ Unfortunately, recent events in policing seem to tip the balance of reality toward the latter view. There is now strong empirical evidence that individuals of color are more likely than white Americans to be stopped, questioned, searched, and arrested by police.⁵ This occurs in part because of their race, in part because of heightened law enforcement intensity in minority communities, in part because of the temptation among law enforcement officers to simply "play the base rates" by stopping minority suspects because minorities commit

^{4.} See generally RANDALL KENNEDY, RACE, CRIME, AND THE LAW (1997) (exploring the impact of race relations on criminal law and criminal justice); see also Kim Taylor-Thompson, *The Politics of Common Ground*, 111 HARV. L. REV. 1306 (1998) (emphasizing the role of race in criminal justice issues through a critical review of RACE, CRIME, AND THE LAW).

^{5.} United States v. New Jersey, No. 99-5970 (MLC) (D. N.J. Dec. 30, 1999) (consent decree) (establishing the state of New Jersey's consent to comply with various procedures and policies to remedy racial profiling by the state police), http:// www.usdoj.gov/crt/split/documents/jerseysa.htm; U.S. GEN. ACCOUNTING OFFICE, RACIAL PROFILING LIMITED DATA AVAILABLE ON MOTORIST STOPS, GAO-GGD-00-41, 7-13 (2000), available at http://www.gao.gov/AIndexFY00/title/tocR.htm; CIVIL RIGHTS BUREAU, OFFICE OF THE ATTORNEY GEN. OF THE STATE OF N.Y., THE NEW YORK CITY POLICE DEPARTMENT'S "STOP & FRISK" PRACTICES 89 (1999) [hereinafter OAG Report]; DAVID COLE, NO EQUAL JUSTICE: RACE AND CLASS IN THE AMERICAN CRIMINAL JUSTICE SYSTEM, 34-41 (1999) (describing the explicit use of race in criminal profiles by police departments in Maryland, Colorado, Louisiana, and New Jersey); Sean Hecker, Race and Pretextual Traffic Stops: An Expanded Role for Civilian Review Boards, 28 COLUM. HUM. RTS. L. REV. 551, 551 (1997); Kris Antonelli, State Police Deny Searches are Race-Based; ACLU Again Challenges I-95 Stops, BALT. SUN, Nov. 16, 1996, at 18B; David Kocieniewski & Robert Hanley, Racial Profiling Was The Routine, New Jersey Finds, N.Y. TIMES, Nov. 28, 2000, at A1; Barbara Whitaker, San Diego Police Found to Stop Black and Latino Drivers Most, N.Y. TIMES, Oct. 1, 2000, at A31; Jim Yardley, Studies Find Race Disparities in Texas Traffic Stops, N.Y. TIMES, Oct. 7, 2000, at A12. Similar patterns of stops, searches, and arrests of citizens have been observed in London. See generally DAVID SMITH ET AL., POLICE AND PEOPLE IN LONDON: VOLUME I: A SURVEY OF LONDONERS 89-119, tbl.IV.3 (1983) (showing racial disparity in police contacts with black citizens in London). The London survey was conducted in 1981-82, with a stratified random sample of 2420 Londoners ages fifteen and older. Minorities were over-sampled to ensure adequate representation in the study. Overall, 16% of Londoners were stopped in the twelve months preceding the survey. West Indians were slightly more likely to be stopped than whites (18% as compared with 14%), and Asians were least likely to be stopped (5%). The average number of stops was twice as high for West Indians (0.56) compared with whites (0.21) or Asians (0.8). The average number of arrests per person stopped was also far greater for West Indians (3.19) than for whites (1.46) or Asians (1.59). Id.

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more crimes, and in part because of the tacit approval of these practices given by their superiors.⁶

Whether the legal system should consider race in its every day decision-making is a hotly contested and much-litigated issue.⁷ Yet the modern practice of racial policing should surprise no one. Racial profiling is often defended as a useful means to detect criminal behavior.⁸ The legal system has long used race as a signal of increased risk of criminality. Examples include: immigration exclusion and other discrimination against Chinese immigrants in the 19th century;⁹ the racialization of the debate on the passage of the Harrison Narcotics Act;¹⁰ the internment of the Japanese during World War II;¹¹ border interdictions to halt illegal immigration;¹²

7. Brandon Garrett, Standing while Black: Distinguishing Lyons in Racial Profiling Cases, 100 COLUM. L. REV. 1815, 1816 n.5 (2000) (reviewing recent lawsuits and investigations of racial profiling). Consent decrees stemming from racial profiling have been signed in many cases. E.g., United States v. New Jersey, No. 99-5970 (MLC) (D. N.J. Dec. 30, 1999) (consent decree entered); Memorandum of Agreement, Between the United States Department of Justice, Montgomery County, Maryland, the Montgomery County Department of Police, and the Fraternal Order of Police, Montgomery County Lodge 35, Inc., Jan. 14, 2000, http://www.usdoj.gov/crt/ cor/Pubs/mcagrmt.htm; United States v. City of Pittsburgh, No. 97-0354 (W.D. Pa. Apr. 16, 1997) (consent decree entered); United States v. Čity of Steubenville, C2-97-966 (S.D. Ohio Sept. 3, 1997) (consent decree entered), http://usdoj.gov/cit/split/documents/steubensa.htm; United States v. City of Los Angeles, No. 00-11769 (C.D. Cal.) (consent decree entered). For reviews of consent decrees involving police departments generally, see Debra Livingston, Police Reform and the Department of Justice: An Essay on Accountability, 2 BUFF. CRIM. L. REV. 815 (1999); Myriam E. Gilles, Reinventing Structural Reform Litigation: Deputizing Private Citizens in the Enforcement of Civil Right, 100 COLUM. L. REV. 1384 (2000).

8. KENNEDY, *supra* note 4, at 145-46 (discussing race as a predictor of criminality). For a review of the historical uses of ethnic and racial exclusion in the United States based on attributions of greater danger to ethnic minorities, see generally SA-MUEL WALKER ET AL., THE COLOR OF JUSTICE: RACE, ETHNICITY AND CRIME IN AMERICA (2d ed. 2000).

9. Yick Wo v. Hopkins, 118 U.S. 356 (1886) (inferring intentional discrimination against Chinese citizens from disparate enforcement of an ordinance banning laundries).

10. Harrison Narcotics Act, ch. 1, 38 Stat. 785 (1914); see also DAVID F. MUSTO, THE AMERICAN DISEASE 65 (1973) ("Cocaine raised the specter of the Wild Negro, opium the devious Chinese").

11. Korematsu v. United States, 323 U.S. 214 (1944) (finding forced internment troubling but ultimately upholding its constitutionality).

^{6.} See generally STATE POLICE REVIEW TEAM, OFFICE OF THE ATTORNEY GEN. OF THE STATE OF N.J., INTERIM REPORT OF THE STATE POLICE REVIEW TEAM RE-GARDING ALLEGATIONS OF RACIAL PROFILING (1999) (admitting that New Jersey State Police officers engaged in racial profiling, but also that profiling is part of the culture of the State Police), available at http://www.state.nj.us/lps/intm_419.pdf (Apr. 20, 1999); see generally Jeffrey Goldberg, The Color of Suspicion, N.Y. TIMES MAG., June 20, 1999, at 51 (examining various perspectives on racial profiling).

racial components of drug courier profiling;¹³ and the so-called Carol Stuart stops in Boston.¹⁴

Generally, courts have refused to disallow the use of race as an indicia of criminality.¹⁵ Most courts have accepted this practice, so long as (1) race alone is not the rationale for the interdiction, and (2) it is not done for purposes of racial harassment.¹⁶ This practice has been reflected in case law as the sound exercise of "professional judgment" by police officers.¹⁷

14. MASS. ATTORNEY GEN.'S OFFICE, REPORT OF THE ATTORNEY GENERAL'S CIVIL RIGHTS DIVISION ON BOSTON POLICE DEPARTMENT PRACTICES (Dec. 18, 1990) (reporting results of an investigation into allegations that, in violation of constitutional mandates, the Boston Police Department "rounded up" African American men in the wake of the murder of Carol Stuart, a white woman).

Shortly before this article went to press, a sharply-divided United States Court of Appeals for the Second Circuit declined to reconsider its ruling upholding its dismissal of *Brown v. City of Oneonta*, 221 F.3d 329 (2000). The plaintiffs in *Brown* alleged that police unconstitutionally swept the 10,000-resident town and stopped and inspected the hands of black men after an elderly woman alleged she had been attacked in her home by a young black male who cut his hand during a struggle.

The panel reaches a grave conclusion by holding that the police act constitutionally under the Fourteenth Amendment when, based on a witness's predominantly racial description, they stop every young African American male in town to determine whether he can exclude himself from a vague class of potential suspects that has been defined in overwhelmingly racial terms.

Brown v. City of Oneonta, - F.3d - (2d Cir. 2000), available in 2000 WL 1855047.

15. See Whren v. United States, 517 U.S. 806 (1996). In Whren, the U.S. Supreme Court ruled that as long as an officer observes a traffic violation, a traffic stop is constitutional, even if the officer has no intention to enforce the law the driver violated. Even if purely pretextual, a racially-motivated stop is constitutional under the Fourth Amendment if also motivated by a second, non-racial factor. The Court did state, however, that a stop motivated by race alone would violate Fourteenth Amendment protections. *Id.* at 813. COLE, *supra* note 5, at 39-40 (citing the extraordinarily high concentration of minority complainants in unsuccessful federal appellate cases involving pretextual traffic stops). See also Harvey, 16 F.3d at 115 (Keith, J., dissenting); KENNEDY, *supra* note 4, at 14 ("Racist perceptions of blacks have given energy to policies and practices (such as racial exclusion in housing, impoverished schooling, and stingy social welfare programs) that have facilitated the growth of egregious crime-spawning conditions that millions of Americans face in urban slums and rural backwaters across the nation.") (citation omitted).

16. See Whren, 517 U.S. at 813.

17. Although courts may be reluctant explicitly to identify and endorse the use of race as a proxy for criminal behavior, the factual underpinnings of many cases reveal tacit judicial approval of racial profiling. *E.g.*, Papachristou v. City of Jacksonville, 405

^{12.} United States v. Martinez-Fuerte, 428 U.S. 543, 556-57 (1976) (affirming the U.S. Border Patrol's right to conduct checkpoint stops of vehicles near the Mexican border with or without reasonable suspicion).

^{13.} United States v. Harvey, 16 F.3d 109, 115 (6th Cir. 1994) (Keith, J., dissenting) ("African-Americans are more likely to be arrested because drug courier profiles reflect the erroneous assumption that one's race has a direct correlation to drug activity.").

Contemporary criminal justice theory and practice accord with this view, but substitute sociological language for the more formal legal endorsement of race-based practices. In New York City, law enforcement strategies emphasize the aggressive patrol of areas containing manifestations of physical and social disorder. Thus, police aggressively enforce laws on public drinking and loitering. They also actively patrol neighborhoods with empty lots, abandoned cars, and dilapidated buildings. Collectively, these strategies are based on the "Broken Windows" theory, named after the influential essay on the contagious effects of unchecked signs of disorder.¹⁸

Beginning in 1994, officials altered the police strategies in New York City to address low-level disorder problems that might invite more serious crime problems.¹⁹ These signs of disorder often are more prevalent in urban neighborhoods with elevated rates of pov-

The "professional judgment" of Detective McFadden provided the basis for his stop and search of the defendant in *Terry v. Ohio*, 392 U.S. 1, 28 (1968). What has been lost in the *Terry* discourse in the ensuing years is the explicit racial component of the events. Terry was African American, McFadden was white. McFadden's "professional judgment" concerning Terry was based on the racial incongruity of Terry being observed outside a storefront in a commercial district far from the areas of Cleveland where most African Americans lived. Anthony C. Thompson, *Stopping the Usual Suspects: Race and the Fourth Amendment*, 74 N.Y.U. L. REV. 956, 966 (1999). But see Terry, 392 U.S. at 5-7 (detailing the suspicious activity the Terry defendants engaged in after Detective McFadden, a thirty-nine year veteran of the police department, first observed them and felt "they didn't look right to [him] at the time").

In Illinois v. Wardlow, 528 U.S. 119, 124 (2000), the Court noted that although an individual's presence in a "high crime area" does not meet the standard for a particularized suspicion of criminal activity, a location's characteristics are relevant in determining whether an individual's behavior is sufficiently suspicious to warrant further investigation. Since "high crime areas" often are areas with concentrations of minority citizens, this logic places minority neighborhoods at risk for elevating the suspiciousness of its residents. See e.g., DOUGLAS S. MASSEY & NANCY A. DENTON, AMERICAN APARTHEID: SEGREGATION AND THE MAKING OF THE UNDERCLASS (1993).

18. Wilson & Kelling, *supra* note 1, at 31. See generally George L. Kelling & Catherine M. Coles, Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities (1996).

19. Bernard E. Harcourt, Reflecting on the Subject: A Critique of the Social Influence Conception of Deterrence, the Broken Windows Theory, and Order-Maintenance Policing New York Style, 97 MICH. L. REV. 291, 292 (1998); Debra Livingston, Police Discretion and the Quality of Life in Public Places: Courts, Communities, and the New Policing, 97 Colum. L. Rev. 551, 556 n.14 (1997); Sarah E. Waldeck, Cops, Community Policing, and the Social Norms Approach to Crime Control: Should One Make Us More Comfortable with the Others?, 34 GA. L. REV. 1273, 1273 (2000).

U.S. 156 (1972) (reviewing the enforcement of a vague vagrancy ordinance against two black men accompanied by two white females); Florida v. J.L., 529 U.S. 266 (2000) (reviewing the adequacy of a stop and frisk based on an anonymous informant's description of a "young black male" wearing a plaid shirt and carrying a gun).

erty and social fragmentation.²⁰ Accordingly, the implementation of Broken Windows policies was disproportionately concentrated in minority neighborhoods and conflated with poverty and other signs of socio-economic disadvantage. Thus, what was constructed as "order-maintenance policing" ("OMP") was widely perceived among minority citizens as racial policing, or racial profiling.²¹ The fact that its principle tactic was an aggressive form of stop and frisk policing involving intrusive *Terry* searches,²² and that at least two deaths of unarmed citizens of African descent were linked to OMP,²³ further intensified perceptions of racial animus.²⁴

21. OAG REPORT, supra note 5, at 74; David Kocieniewski, Success of Elite Police Unit Exacts a Toll on the Streets, N.Y. TIMES, Feb. 15, 1999, at A1 (discussing reactions of citizens to aggressive policing in New York City); Kit R. Roane, Minority Private-School Students Claim Police Harassment, N.Y. TIMES, Mar. 26, 1999, at B5 (citing complaints by minority students of indiscriminate and frequent police harassment).

22. There is an irony here about the use of such citizen detentions and searches as a crime fighting tool. The *Terry* decision itself located the frisk less as an investigative aid than as a protection for the patrolling officer: "The frisk . . . was essential to the proper performance of the officer's investigatory duties, for without it the answer to the police officer may be a bullet." Terry v. Ohio, 392 U.S. 1, 8 (1968) (citation omitted). That the stop and frisk engenders animosity was made explicit in the original *Terry* decision. The Supreme Court in *Terry* noted that a frisk "is a serious intrusion upon the sanctity of the person, which may inflict great indignity and arouse strong resentment, and is not to be undertaken lightly." *Id.* at 17. The Court also noted that *Terry* stops had the potential to inflict psychological harm: "Even a limited search . . . constitutes a severe, though brief, intrusion upon cherished personal security, and it must surely be an annoying, frightening, and perhaps humiliating experience." *Id.* at 24-25.

23. David Jackson, Winning War on Crime Has a Price Giuliani Alienates Many in New York City's Black and Hispanic Communities, DENVER POST, Apr. 20, 2000, at A23 (discussing the shootings by the New York City Police Department ("NYPD") of Amadou Diallo and Patrick Dorismond); Symposium, Is Our Drug Policy Effective? Are There Alternatives?, 28 FORDHAM URB. L.J. 3, 95 (2000) ("[A] team of undercover police approached a man [Patrick Dorismond] . . . even though they had no reason to believe that he was involved in any criminal activity.").

24. Citizens who are stopped and frisked based on a profiling or racial policing strategy understand that they have been singled out because of their race. These encounters have been termed "race-making situations." David R. James, *The Racial Ghetto as a Race-Making Situation: The Effects of Residential Segregation on Racial Inequalities and Racial Identity*, 19 Law & Soc. INQUIRY 407, 420-29 (1994). The outrage of many minority citizens over the NYPD's policing of aggressive stop and frisks reflects not only the emotional harm from being targeted because of one's race, but also the fear that such situations can escalate into dangerously violent encounters. See generally David A. Harris, *The Stories, the Statistics, and the Law: Why "Driving*

^{20.} WESLEY G. SKOGAN, DISORDER AND DECLINE: CRIME AND THE SPIRAL OF DECAY IN AMERICAN NEIGHBORHOODS 59 (1990); Robert J. Sampson & Stephen W. Raudenbush, Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods, 105 Am. J. SOCIOLOGY 603, 622-30 (1999); Stephen W. Raudenbush & Robert J. Sampson, Ecometrics: Toward a Science of Assessing Ecological Settings, with Application to the Systematic Social Observation of Neighborhoods, 29 SOCIOLOGICAL METHODOLOGY 1 (1999).

Moreover, by explicitly linking disorder to violence, OMP (as informed by Broken Windows theory) further focused police resources and efforts on the neighborhoods with the highest crime and violence rates.²⁵ That these were predominantly minority neighborhoods further reinforced the disproportionate exposure of New York City's minority citizens to policing. Thus, this construction of disorder broadened the concept to include places where violent and other serious crimes were most likely to occur. Those places tended to be ones with the highest concentrations of socially-disadvantaged minority populations.

In this paper, we assess empirical evidence designed to sort out these competing claims about the underlying theoretical basis for New York City's aggressive policing policy. We analyze patterns of stop and frisk activity to assess whether practice reflected the place-based strategies embodied in Broken Windows theory, or if instead, practice was focused on the social markers of race and disadvantage. We ask whether, after controlling for disorder, the city's stop and frisk policy is, in fact, a form of policing that disproportionately targets racial minorities. We begin by reviewing the history and evolution of these policies, showing the links between race, Broken Windows theory, and aggressive policing. In Part II, we review evidence of the racial skew in policing as reported in recent studies. In Part III, we offer the results of empirical tests of data conducted on trends and patterns of policing to resolve these competing claims about the motivating theories for the observed patterns. We find little evidence to support claims that policing targeted places and signs of physical disorder, and show instead that stops of citizens were more often concentrated in minority

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While Black" Matters, 84 MINN. L. REV. 265, 273 (1999). The shared danger of profiling encounters reflects the concept of "linked fate" among residents of minority neighborhoods. "Linked fate" refers to the empathy that people have with family and friends. It can also exist among strangers. In the African American community, linked fate has its foundation in the fact that the life chances of African Americans historically have been shaped by race. MICHAEL C. DAWSON, BEHIND THE MULE: RACE AND CLASS IN AFRICAN-AMERICAN POLITICS 77 (1994). Linked fate suggests that when race over-determines an individual's life chances, it is much more efficient for that individual to use the relative and absolute status of the group as a proxy for individual utility. The long history of race-based constraints on life chances among blacks generates a certain efficiency in evaluating policies that affect minority individuals. *Id.*

^{25.} OAG REPORT, *supra* note 5, at 53 (citing N.Y. CITY POLICE DEP'T, POLICE STRATEGY NO. 1: GETTING GUNS OFF THE STREETS OF NEW YORK (1994) (explicitly linking disorder to violence and rationalizing the concentration of order-maintenance policing ("OMP") strategies in the city's neighborhoods with the highest crime rates) [hereinafter POLICE STRATEGY NO.1].

neighborhoods characterized by poverty and social disadvantage. In Part IV, we conclude by returning to the theoretical arguments supporting current police policies. In this last section, we address claims about the positive link between aggressive policing and the prospects for creating social norms changes to restore social regulation of behavior. The counterfactual of crises in legitimacy provides the context for concluding remarks on race and policing in New York.

I. DISORDER AND AGGRESSIVE POLICING IN NEW YORK CITY

A. From Theory to Practice: Broken Windows and Order-Maintenance Policing

As stated, the policy of aggressive stop and frisk practices reflects theoretical and strategic innovations derived from what has become popularly known as Broken Windows theory.²⁶ The originators of the Broken Windows theory, James Q. Wilson and George L. Kelling, argued that police should address minor disorders to strengthen police-citizen interactions, and consequently, informal social control.²⁷ For Wilson and Kelling, signs of physical and social disorder invite criminal activity.²⁸ Disorder indicates to law-abiding citizens that their neighborhoods are dangerous places, leading to their withdrawal from informal social control and regulation.²⁹ The theory suggests that there is a tipping point at which disorder trumps order by defeating the willingness of citizens to interact with the police and with each other to co-produce security. Accordingly, disorder invites more disorder in a contagious process that progressively breaks down community standards and also sug-

^{26.} Wilson & Kelling, supra note 1, at 31. For excellent reviews, see Livingston, supra note 19, at 578 (discussing the relationship between Broken Windows theory and current policing practices); Harcourt, supra note 19, at 301-08 (critiquing Broken Windows theory and empirical research claiming to support the link between disorder and crime); Tracey L. Meares & Dan M. Kahan, Law and (Norms of) Order in the Inner City, 32 Law & Soc'Y REV. 805 (1998) (discussing the link between social norms theory and law enforcement policies).

^{27.} Wilson & Kelling, supra note 1, at 31; Livingston, supra note 19, at 576; Waldeck, supra note 19, at 1255.

^{28.} Wilson & Kelling, *supra* note 1, at 32. They define "minor" disorder to include such problems and crimes as littering, loitering, public drinking, panhandling, teenage fighting on street corners, and prostitution. They also mention signs of physical disorder, including abandoned cars—with broken windows, naturally—and dilapidated buildings, also with broken windows.

^{29.} Id. at 33 ("In response to fear, people avoid one another, weakening controls.").

gests to would-be criminals that crime will not be reported. Disorder ultimately invites criminal invasion.

Broken Windows theory comports well with social norms theories. In this framework, individuals form social norms through interactions with others in social spaces, creating norms of either legal or illegal behavior in their communities.³⁰ Wilson and Kelling argue that when police focus on repairing or removing these disorder problems, they combat crime by promoting the types of social interactions among law-abiding citizens that strengthen the dynamics of social regulation and produce security and social control.³¹ To restate this in terms of Broken Windows theory, disorder conveys a social message that there is no effective social regulation of behavior in a neighborhood with such visible and prevalent signs of disorder.32 In turn, disorder communicates the absence of restraints to others who may interpret this as either tolerance of, or an invitation to, criminal behavior. Thus, as both disorder and criminal behavior spread, they communicate a mutually reinforcing social norm regarding crime and social disorder, all the while communicating danger to those who would attempt to reinforce social norms that oppose crime and disorder.

Empirical support for Broken Windows and disorder theories of crime is reported by Wesley Skogan in an analysis of survey data collected in 1977 and 1983 in six cities.³³ Additional empirical support is reported by George L. Kelling and Catherine M. Coles.³⁴ Bernard Harcourt, however, reanalyzed Skogan's data and failed to replicate the results, citing numerous inconsistencies and errors in measurement.³⁵ Dan Kahan attributes New York City's crime decline in the 1990s to the adoption by its police department of a tactical strategy based on Broken Windows theory, although em-

^{30.} Meares & Kahan, supra note 26, at 805. For an illustration based on ethnographic research, see ELIJAH ANDERSON, CODE OF THE STREET (1999).

^{31.} Wilson & Kelling, supra note 1, at 35; ANDERSON, supra note 30, at 32; see also Harcourt, supra note 19, at 302-3. See generally Robert C. Ellickson, Controlling Chronic Misconduct in City Spaces: Of Panhandlers, Skid Rows, and Public-Space Zoning, 105 YALE L.J. 1165 (1996).

^{32.} See generally Lawrence Lessig, The Regulation of Social Meaning, 62 U. CHI. L. REV. 943 (1995) (discussing the construction of social meaning); Ellickson, supra note 31.

^{33.} SKOGAN, *supra* note 20. Surveys were conducted in Atlanta, Chicago, Houston, Newark, Philadelphia, and San Francisco. His basic model was a regression analysis predicting robbery rates from measures of social and physical disorder, controlling for characteristics of the cities derived from social disorganization theory: poverty, residential stability, and racial heterogeneity.

^{34.} See generally Kelling & Coles, supra note 18.

^{35.} Harcourt, *supra* note 19, at 312-39.

pirical and conceptual assessments of the crime decline contest that view.³⁶ Empirical work by Robert Sampson and Jacqueline Cohen provide indirect support for a Broken Windows model of policing by focusing on factors that influence perceptions of the tolerance of disorder, especially higher arrest ratios (relative to the crime rate).³⁷ Despite the implicit developmental and deontological underpinnings of Broken Windows theory (and corresponding social norms theories), none of the supportive studies included prospective tests of the effects of disorder on changes in crime rates in subsequent periods. In fact, all these studies rely on cross-sectional research that is unable to determine whether the observed relationships are temporally-ordered and therefore causally related, or if they are simply correlations whose causal order is unknown.³⁸

The most comprehensive empirical test of the underlying premise of Broken Windows theory—that disorder gives rise to higher crime rates—was a study of disorder in Chicago neighborhoods by Robert Sampson and Stephen Raudenbush.³⁹ Rather than rely on either official records or self-reports, the researchers constructed highly reliable measures of social disorder from a randomized schedule of videotaping of locations. They combined these disorder measures with reports of social control mechanisms from a random sample of 3864 residents in 343 neighborhoods, and both self-reported and official records of crime. Sampson and Raudenbush re-

^{36.} Dan M. Kahan, Between Economics and Sociology: The New Path of Deterrence, 95 MICH. L. REV. 2477, 2488 n.63, n.65 (1997). Kahan states that the decline in crime must be attributable to the new policing strategy: order-maintenance policing. Id. But see Jeffrey Fagan et al., Declining Homicide in New York City: A Tale of Two Trends, 88 J. CRIM. L. & CRIMINOLOGY 1277, 1285-86, 1289-91(1998) (claiming that changes in crime rates are actually predictable cyclical changes in violence rates, and that only gun crime rates have changed); ANDREW KARMEN, NEW YORK MURDER MYSTERY 13-24 (2000) (discussing competing causal claims for the decline in New York City's homicide rate from 1991-98, but finding insufficient evidence to support any single explanation).

^{37.} Robert J. Sampson & Jacqueline Cohen, Deterrent Effects of the Police on Crime: A Replication and Theoretical Extension, 22 Law & Soc. Rev. 163, 175-79 (1988) (reporting that more aggressive stop and frisk enforcement produces higher arrest ratios that, in turn, communicate a high punishment likelihood to would-be law violators).

^{38.} For a general discussion of this type of validity threat in cross-sectional, nonexperimental research designs, see generally Thomas D. Cook & Donald T. Camp-BELL, QUASI-EXPERIMENTATION DESIGN AND ANALYSIS ISSUES FOR FIELD SETTINGS (1979); KENNETH ROTHMAN, MODERN EPIDEMIOLOGY (1986); LEON ROBERTSON, INJURY EPIDEMIOLOGY (1992).

^{39.} Sampson & Raudenbush, *supra* note 20 (reporting results of an observational survey of physical and social disorder in Chicago neighborhoods and its weak association with crime rates).

ported that social interactions and social controls among neighbors are more closely related to crime than is disorder, while these social processes—which they term "collective efficacy"—are unrelated to disorder. Similar to Harcourt's re-analysis of the Skogan data, Sampson and Raudenbush also discredit the relationship between crime and disorder.⁴⁰

These empirical doubts about the efficacy of Broken Windows theory have not stopped its influence on American policing. The development of police strategies that operationalize Broken Windows theory proceeded apace in the past two decades.⁴¹ It was widely translated into a police strategy known as "order-maintenance policing," or OMP.⁴² At the same time, Broken Windows theory stimulated a body of academic writing on the subject of order maintenance.⁴³

Under OMP, police aggressively enforce laws against social disorder with "zero tolerance" that requires arrest for any law infraction.⁴⁴ Widely viewed as an adaptation of an earlier movement

43. E.g., George L. Kelling, Order Maintenance, the Quality of Urban Life, and Police: A Line of Argument, in POLICE LEADERSHIP IN AMERICA 296 (William A. Geller ed., 1985); Carl B. Klockars, Order Maintenance, the Quality of Urban Life, and Police: A Different Line of Argument, in POLICE LEADERSHIP, supra, at 309; Carl B. Klockars, Street Justice: Some Micro-Moral Reservations: Comment on Sykes, 3 JUST. Q. 513 (1986); Gary W. Sykes, Street Justice: A Moral Defense of Order Maintenance Policing, 3 JUST. Q. 497 (1986) [hereinafter Street Justice]; Gary W. Sykes, The Functional Nature of Police Reform: The "Myth" of Controlling the Police, 2 JUST. Q. 51 (1985). But see generally Jack R. Greene & Ralph B. Taylor, Community-Based Policing and Foot Patrol: Issues of Theory and Evaluation, in COMMUNITY POLICING: RHETORIC OR REALITY, 195, 201-03 (Jack R. Greene & Stephen D. Mastrofski eds., 1988) [hereinafter COMMUNITY POLICING].

44. Definitions of the crimes that constitute disorder vary, but generally include: unlicensed peddling and vending, public drunkenness and open drinking, vandalism (including graffiti), public urination, loitering, littering, panhandling, prostitution, and menacing misbehavior. The latter often is symbolized by "squeegee" men who solicit money in return for unsolicited cleaning of motorists' windshields at stop lights. Cracking down on squeegee men represents the type of OMP enforcement that most closely expressed popular conceptions of the policy. KELLING & COLES, *supra* note 18, at 14-15; Livingston, *supra* note 19, at 553-54; Harcourt, *supra* note 19, at 297; Wilson & Kelling, *supra* note 1; WILLIAM BRATTON & PETER KNOBLER, TURN-AROUND: HOW AMERICA'S TOP COP REVERSED THE CRIME EPIDEMIC 214 (1998) (discussing the NYPD's policy to rid the city of the squeegee people); William J. Brat-

^{40.} Id. at 603.

^{41.} For example, Commissioner William Bratton had earlier implemented an OMP strategy while head of the New York City Transit Police, called the Clean Car Program ("CCP"). The strategy focused on ridding New York City's subway cars of graffiti. Maryalice Sloan-Hewitt & George L. Kelling, Subway Graffiti in New York City: "Gettin' up" vs. "Meanin' it and Cleanin' it," in SITUATIONAL CRIME PREVENTION: SUCCESSFUL CASE STUDIES 242, 244-45 (Ronald V. Clarke, ed., 2d. ed. 1997).

^{42.} Livingston, supra note 19, at 632.

toward "community policing,"⁴⁵ OMP advocates active engagement with and arrest of law violators. In more traditional community policing, police pursued ameliorative measures that also were consistent with Broken Windows theory, but avoided coercive encounters with citizens on the street.⁴⁶ These ameliorative measures were consistent with Broken Windows tenets that police should focus equally on protecting communities as well as protecting individuals.⁴⁷ Although community policing and OMP both derive from a social norms basis, the implementation of OMP in New York moved in a very different direction, exchanging amelioration of physical disorder for interdiction of social disorder.

Sarah Waldeck claims that this exchange resolved a conflict that arose in the occupational subculture of policing with the advent of community policing.⁴⁸ In addressing non-crime problems, police were reluctant to adhere to a new set of markers for performance and competence based on social interactions with law-abiding citizens.⁴⁹ By emphasizing the aggressive pursuit of social disorder, or disorderly persons, police returned to the more comfortable performance indicators of stops and arrests, while restoring to the workplace their traditional cultural dichotomy of "disorderly people and law abiders."⁵⁰ Thus, for example, while New York City police identified only seventy-five "squeegee" people,⁵¹ the expanding definition of disorder meant that more and more people were disorderly and subject to aggressive police attention.

49. See id. at 1267.

50. Id. at 1268, 1278.

ton, The New York City Police Department's Civil Enforcement of Quality-of-Life Crimes, 3 J.L. & Pol'y 447, 447-48 (1995); N.Y. CITY Police Dep't, Police Strategy No. 5: Reclaiming the Public Spaces of New York 10-12 (1994) [hereinafter Police Strategy No. 5].

^{45.} Livingston, supra note 19, at 562-91. While OMP emphasizes arrest, other forms of community policing eschew arrest in favor of building community contacts. E.g., WESLEY G. SKOGAN & SUSAN M. HARTNETT, COMMUNITY POLICING, CHICAGO STYLE 8, 55-56 (1997).

^{46.} These include, for example, cleaning up trash-strewn lots, painting over graffiti, and assisting housing inspectors to address code violations. E.g., Livingston, supra note 19, at 584 (citation omitted); HERMAN GOLDSTEIN, PROBLEM-ORIENTED POLIC-ING 134 (1990); George L. Kelling & Mark H. Moore, From Political to Reform to Community: The Evolving Strategy of Police, in COMMUNITY POLICING, supra note 43, at 3 (Jack R. Greene & Stephen D. Mastrofski eds., 1988); Stephen D. Mastrofski, Community Policing as Reform: A Cautionary Tale, in COMMUNITY POLICING, supra note 43, at 47, 67.

^{47.} See Livingston, supra note 19, at 583 n.162.

^{48.} Waldeck, supra note 19, at 1267-69.

^{51.} BRATTON & KNOBLER, supra note 44, at 214.

It is important to remember that Wilson and Kelling's original social science construction of Broken Windows theory had little to do with social disorder, especially with the aggressive interdiction of disorderly persons. Thus, as we shall see next, the evolution of OMP in New York resulted in a policy and style of policing that violated the subtle connection that Wilson and Kelling drew between crime and disorder, and that deviated in many important ways from its underlying social norms paradigm. As we show below, the exchange of physical disorder for social disorder signified nothing less than a theoretical paradigm shift from the original construction of Broken Windows theory to the more traditional and problematic policing of social disorganization.

B. Violence, Disorder, and Order-Maintenance Policing in New York City

Many observers have noted that OMP in New York City has eschewed (what is for police) the more esoteric dimensions of community policing targeted at physical disorder, for an aggressive policy of arrest and other traditional law enforcement tactics aimed squarely at social disorder. While remaining true to the origins of Broken Windows theory, there were strategic and tactical reasons to reconstruct the Broken Windows theory in this way.

Whereas community policing implies a partnership between police and community, the interpretation of community needs is one of the wild cards of the theory.⁵² The partnership required that the parties respond both to a neighborhood's priorities regarding crime and to the more traditional police functions of detecting and deterring criminal behavior.⁵³ Community policing, then, often appeared to be a Solomonesque split between traditional police goals focusing on major crimes (e.g., murder and armed robbery) and the goals of community residents concerned with chronic low-level crimes and disorder problems.⁵⁴

However, in shifting from community policing to OMP, police strategy in New York City redirected its strategic focus from remedying physical disorder to policing social disorder. The rationale for this shift from physical to social disorder was the theory that low-level crime—social disorder—nurtures and facilitates more serious crime.⁵⁵ George L. Kelling and Catherine M. Cole conceptu-

^{52.} See Skogan & Hartnett, supra note 45, at 8.

^{53.} BRATTON & KNOBLER, supra note 44, at 94-95.

^{54.} See generally Goldstein, supra note 46.

^{55.} Wilson & Kelling, supra note 1, at 34.

alized OMP as a cooperative variant on community policing: the enforcement of standards of conduct jointly defined by citizens and police.⁵⁶ Even so, this strategic shift did not necessarily imply a tactical change toward aggressive policing. Moreover, this tactical shift departed sharply from the Wilson and Kelling and the Kelling and Coles models of Broken Windows, as well as most contemporary models of community policing.⁵⁷ As conceptualized by Kelling and Coles, OMP involved the enforcement of these standards "through non-arrest approaches—education, persuasion, counseling, and ordering—so that arrest would only be resorted to when other approaches failed."⁵⁸

The origins of the tactical shift are revealed in strategy documents issued by the New York City Police Department ("NYPD") in 1994.⁵⁹ According to the analysis by the Office of the Attorney General of the State of New York ("OAG Report"), these policies remain in effect today.⁶⁰ First, *Police Strategy No. 5*, *Reclaiming the Public Spaces of New York*,⁶¹ articulates a reconstructed version of Broken Windows theory as the driving force in the development of policing policy. It states that the NYPD would apply its enforcement efforts to "reclaim the streets" by systematically and aggressively enforcing laws against low-level *social* disorder: graffiti, aggressive panhandling, fare beating, public drunkenness, unlicensed vending, public drinking, public urination, and other lowlevel misdemeanor offenses.⁶²

Second, Police Strategy No. 1, Getting Guns Off the Streets of New York,⁶³ formalized the strategic focus on the eradication of gun violence through the tactical measure of intensifying efforts to seize illegal firearms. Homicide trends in New York City since 1985 provided strong empirical support for emphasizing gun violence in enforcement policy.⁶⁴ Nearly all the increases in homi-

^{56.} Kelling & Coles, supra note 18, at 22-23.

^{57.} See Skogan, supra note 20; Goldstein, supra note 46.

^{58.} Kelling & Coles, supra note 18 at 23.

^{59.} OAG REPORT, supra note 5.

^{60.} Id. at 56-59.

^{61.} POLICE STRATEGY No. 5, supra note 44.

^{62.} This aggressive approach to low-level disorder was "the linchpin of efforts now being undertaken by the New York City Police Department to reduce crime and fear in the city." *Id.*

^{63.} POLICE STRATEGY NO. 1, supra note 25.

^{64.} See ROBERT C. DAVIS & PEDRO MATEU-GELABERT, VERA INST. OF JUSTICE, RESPECTFUL AND EFFECTIVE POLICING: TWO EXAMPLES IN THE SOUTH BRONX 2, 3 fig.1a (1999) (charting "Homicides (Murder & Non-Negligent Manslaughter), 1978-1997") [hereinafter VERA REPORT].

cides, robberies, and assaults during this period were attributable to gun violence.⁶⁵ The political fallout of the homicide crisis lasted for several years more. The homicide crisis was a critical theme in the mayoral election campaign of 1993, and focused the attention of the incoming Giuliani administration's crime-control policy on gun violence.⁶⁶

These two policies, articulated within a relatively brief period in the first few months of the new administration, explicitly cemented the marriage of OMP and "gun-oriented policing"⁶⁷ within policy. The logic of this approach was articulated in a series of documents and statements. "By working systematically and assertively to reduce the level of disorder in the city, the NYPD will act to undercut the ground on which more serious crimes seem possible and even permissible."⁶⁸ These tactical shifts were intended to raise the stakes for criminals who carried guns: "Stopping people on minor infractions also made it riskier for criminals to carry guns in public."⁶⁹ The policy assumed, quite explicitly, that would-be offenders would be deterred from carrying guns since they would be more likely to be stopped for minor crimes or infractions.

The net effect of this marriage was that Broken Windows theory was implemented out of context. Not only was Broken Windows theory recast from physical to social disorder, but community policing and disorder policing both were separated from the theory, reinvented, and implemented with very different tactics.⁷⁰

First, the NYPD version of disorder policing rejected the emphasis on alternatives to arrest and prosecution—essential tenets of the original Broken Windows theory.⁷¹ Although correcting disorder was the focus of policing, the tactic to achieve it was arrest, the most traditional of law enforcement tools. People who committed disorder offenses were questioned and checked for outstanding

71. Waldeck, supra note 19, at 1274.

^{65.} Fagan et al., supra note 36, at 1289, 1298, 1304.

^{66.} See ELI SILVERMAN, NYPD BATTLES CRIME: INNOVATIVE STRATEGIES IN PO-LICING 95 (1999); BRATTON & KNOBLER, supra note 44, at 219-20. See generally KARMEN, supra note 36.

^{67.} Fagan et al., supra note 36, at 1322.

^{68.} POLICE STRATEGY NO. 5, supra note 44.

^{69.} VERA REPORT, supra note 64, at 1.

^{70.} Waldeck, *supra* note 19, at 1274-75 n.89; *see also* Bratton, *supra* note 44, at 463-64. This version of community policing eschewed social work functions antithetical to the traditional definition of policing. These tactics robbed rank-and-file police of the activities—searches and arrests—that not only were the staple of police productivity, but also the stepladder to status on the force and advancement within the department. Among police administrators, the emerging paradigm of community policing took away their primary method of keeping order.

warrants. Those without identification were taken to a precinct, and many were held until fingerprint checks were completed.⁷² In other words, disorder policing was used not to disrupt the developmental sequence of disorder and crime, but instead disorder offenses became opportunities to remove weapons and wanted criminals from the streets.

Second, community policing also was reinvented in this marriage. Community standards were no longer identified through structured and systematic interactions between police and community leaders. Instead, the NYPD turned to its sophisticated datadriven management accountability system-Compstat-to identify community needs. The result was that the locus of the standardsetting process shifted from police-community partnerships to precinct commanders.⁷³ Presumably, precinct commanders were still involved in their communities, developing plans and setting priorities for enforcement.⁷⁴ However, the precinct commanders, who continued to meet with community groups, were now accountable to the NYPD's operational hierarchy for both their successes and their failures to produce declining crime rates.75 As a result, precinct commanders set the crime-fighting priorities for that precinct and developed overall plans of action, based on meeting NYPD priorities, rather than the standards set in cooperation with communities.76

C. Disorganization and Disorder: Competing Theories of Place and Crime

For decades before Broken Windows, criminological theories emphasized the notion of "place."⁷⁷ In the 1920s, Clifford Shaw

77. "Place" in the criminological literature is an enduring concept that alternately refers to neighborhoods, larger sections of cities, or other aggregates of areas. See generally CLIFFORD R. SHAW & HENRY D. MCKAY, JUVENILE DELINQUENCY AND

^{72.} Id. at 1279. These tactics were developed and widely implemented in the transit police under Bratton's leadership in the early 1990s. BRATTON & KNOBLER, supra note 44, at 152.

^{73.} BRATTON & KNOBLER, supra note 44, at 233.

^{74.} See id.

^{75.} Id.

^{76.} OAG REPORT, *supra* note 5, at 54-56. According to the Report, accountability was implemented through Compstat meetings. Compstat ("comparison statistics") is a system of electronic computer mapping of weekly crime statistics within precincts and larger police commands. Monthly Compstat sessions focus on analysis of specific crime issues of any of the eight patrol boroughs. Each patrol bureau spans eight to ten precincts. Commanders are asked to explain, often on the spot and in front of an audience of the commissioner and other high ranking department personnel, changes in crime trends in their areas. *Id*.

and Henry McKay showed that high rates of juvenile crime were persistent in specific neighborhoods over time, despite changes in the racial and ethnic composition of the persons who lived there. Shaw and McKay concluded that place, not the characteristics of the persons who live there, is implicated in crime. Factors such as poverty rates, a downward skewed age distribution, racial and ethnic heterogeneity, and population turnover (residential mobility) explain variations in crime rates across neighborhoods. Shaw and McKay defined the conditions that produced persistently elevated juvenile crime rates as social disorganization.⁷⁸

Recent revisions to this theory emphasize the social organization—the actions of residents within neighborhoods to produce social control and realize their shared values—as protective against high crime rates. Robert Sampson, Stephen Raudenbush, and Felton Earls reported in a study of residents in 343 Chicago neighborhoods that social cohesion among neighbors is linked to lower levels of violence, net of poverty rates, demography, or other socioeconomic factors.⁷⁹ This dynamic conceptualization of neighborhood emphasizes social interactions among neighborhood residents, including:

(1) the strength and interdependence of social networks; (2) the efficacy of collective supervision that residents exercise; (3) the personal responsibility they assume in addressing neighborhood problems; and (4) the level of resident participation in formal and informal organization such as churches, block clubs, and

78. SHAW & MCKAY, supra note 77, at 383-87. Recent studies show that these factors are stable explanations over time of variations in crime and violence rates across cities and larger ecological aggregates. Kenneth Land et al., Structural Covariates of Homicide Rates: Are There any Invariances Across Time and Space?, 95 AM. J. Soc. 922 (1990).

79. Robert J. Sampson et al., Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy, SCIENCE, Aug. 15, 1997, at 918 (examining neighborhoods in a way that ensured diversity by race, ethnicity, and class).

URBAN AREAS: A STUDY OF RATES OF DELINQUENCY IN RELATION TO DIFFEREN-TIAL CHARACTERISTICS OF LOCAL COMMUNITIES IN AMERICAN CITIES (rev. ed. 1969) (presenting data on the stability of delinquency rates in Chicago neighborhoods across generations of residents of changing composition); ROBERT J. BURSIK JR. & HAROLD G. GRASMICK, NEIGHBORHOODS AND CRIME: THE DIMENSIONS OF EFFEC-TIVE COMMUNITY CONTROL (1993) (articulating a systemic theory of delinquency that includes elements of the physical attributes of neighborhoods, their social composition and demography, and the institutions that are influential for the people who live there); Robert J. Sampson & Janet Lauritsen, Violent victimization and offending: Individual-, Situational-, and Community-Level Risk Factors, in UNDERSTANDING AND PREVENTING VIOLENCE 1 (Albert J. Reiss Jr. & Jeffrey A. Roth, eds. 1994) (reviewing empirical studies that show a relationship between individuals and communities or neighborhoods and delinquency rates).
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PTAs. The idea is that community-level social processes such as the level of supervision of teenage peer groups, the prevalence of friendship networks, and the level of residential participation in formal organizations, mediate the link often noted between individual-level factors, such as race and socioeconomic status, and crime.⁸⁰

As Tracey Meares and others point out, the conditions that characterize poor, minority, inner-city communities generally conform to a place-based social organization model of crime. In urban areas, many poor people of color live in conditions of residential segregation, concentrated poverty, and unemployment that predict the breakdown of community social processes,⁸¹ which in turn predict elevated crime rates.⁸² For example, many poor African Americans live in the overwhelmingly poor communities marked by unemployment, family dislocation, and high residential turnover.⁸³ The challenges to social control in socially disorganized neighborhoods are greater for blacks and Hispanics than for whites.⁸⁴

Social disorganization also predicts social and physical disorder. Both theoretically and empirically, disorder and disorganization are confounded. In the study of Chicago neighborhoods by Sampson and colleagues, they included in regression models measures traditionally associated with social disorganization theory to predict disorder in census tracts.⁸⁵ Neighborhood characteristics including concentrated disadvantage⁸⁶ and weak social ties (collective efficacy) were significant predictors of the rates of disorder. Disorder, however, did not predict rates of homicide, and only

83. MASSEY & DENTON, *supra* note 17, at 166-67; William Julius Wilson, The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy 20-62 (1987); James Short, Poverty, Ethnicity and Violent Crime (1997).

84. Meares, supra note 80, at 673-74; Sampson & Wilson, supra note 80, at 42 ("[R]acial differences in poverty and family disruption are so strong that the 'worst' urban contexts in which whites reside are considerably better than the average context of black communities."). See generally Sampson et al., supra note 79.

85. Sampson & Raudenbush, supra note 20, at 633-36, and tbl.6.

86. Id. This measure included tract-level rates of poverty and unemployment, single parent households, and receipt of public assistance. Racial concentration of blacks was a moderate contributor to the empirical derivation of this construct.

^{80.} Tracey Meares, Place and Crime, 73 CHI.-KENT L. REV. 669, 673 (1998); see also Robert J. Sampson & William Julius Wilson, Toward a Theory of Race, Crime, and Urban Inequality, in CRIME AND INEQUALITY 37, 45-48 (John Hagan & Ruth D. Peterson eds., 1995); Sampson et al., supra note 79.

^{81.} MASSEY & DENTON, supra note 17, at 130-31.

^{82.} Sampson & Wilson, supra note 80; see also Robert J. Sampson, Urban Black Violence: The Effect of Male Joblessness and Family Disruption, 93 AM. J. SOCIOLOGY 348 (1987) (discussing the effect of family disruption on crime independent of joblessness and welfare receipt).

weakly predicted rates of robbery. After controlling for these neighborhood characteristics, the relationship between disorder and crime disappeared for four of their five empirical tests.⁸⁷

Accordingly, social disorganization predicts crime and disorder, but disorder does not predict crime after controlling statistically for the effects of social disorganization. Sampson and colleagues conclude that: "Contrary to the Broken Windows theory . . . the relationship between public disorder and crime is spurious" for most crimes, and is weakly associated only with the crime of robbery.88 Disorder is only a moderate predictor of robbery, and it co-varies with other neighborhood characteristics such as concentrated disadvantage. Disorder may have a cascading effect on antecedents of crime-encouraging business migration, for example-but it has very weak indirect effects on crime itself. Sampson and colleagues concluded that disorder takes a back seat to other factors, including structural disadvantage and social ties, in explaining crime rates. Controlling crime through disorder policing is, in their words, "simplistic and largely misplaced."89 Disorder policing, or OMP, leaves the causes of crime untouched.

II. AGGRESSIVE POLICING: OMP, STREET STOPS, AND RACE

Under the tactical shift to order-maintenance policing in New York City, patrol was reinvented to include pro-active interdiction of persons suspected of violating both minor and serious crimes.⁹⁰ The importance of stop and frisk interventions to crime fighting was never formally acknowledged in official documents, but has been discussed in detail by the policy's architects and theorists. Kelling and Coles claim that for OMP to be successful, patrol officers should intervene in observed or suspected low-level disorder.⁹¹

Critics claim that OMP tactics increased the opportunity for pretextual stops leading to searches and arrests.⁹² Stops for minor

92. Waldeck, *supra* note 19, at 1282 ("Nor is there any doubt that the police use quality-of-life offenses as excuses to fish for drugs, guns, or evidence of a more serious crime.").

^{87.} Id. at 637.

^{88.} Id. at 603, 636-37.

^{89.} Id. at 638.

^{90.} OAG REPORT, supra note 5, at 56-57.

^{91.} KELLING & COLES, supra note 18, at 243-48; OAG REPORT, supra note 5, at 57; Waldeck, supra note 19, at 1282-83; accord James Q. Wilson, Just Take Their Guns Away, N.Y. TIMES MAG., Mar. 20, 1994, at 47 (stating that police should make street stop and frisks in order to find persons carrying illegal weapons, without stating a legal or practical rationale for these stops).

crimes or infractions were easier to justify under a lower constitutional standard (i.e., "reasonable suspicion") than stops for more serious offenses. Accordingly, OMP stops provided opportunities for police to check for warrants, and, again under reasonable suspicion standards, search suspects for contraband or weapons, and make arrests. Many such offenses—such as public drinking or loitering—take place in public, making their observation easier and an encounter with the putatively offending citizen more likely.

The result was a vast increase in misdemeanor arrests, but also a sharp decline in their quality and sustainability in court. OMP has been activated through vast increases in misdemeanor arrests of adults, increasing from 129,404 in 1993 (the year prior to OMP implementation) to 181,736 in 1996, and 215,158 in 1998.93 But the evidentiary quality of arrests suffered as their number rose. As arrests increased under OMP, the rate at which prosecutors declined to pursue these cases rose dramatically. In 1998, prosecutors dismissed 18,000 of the 345,000 misdemeanor and felony arrests, approximately twice the number dismissed in 1993.94 Overall, more than 140,000 cases completed in 1998 ended in dismissals, an increase of 60% compared with 1993.95 Prosecutors say that refusals to prosecute as well as the high dismissal rate can indicate a decline in the quality of arrest.⁹⁶ Many of the declined cases, known as "declined prosecutions" or "D.P.s" in the court, came from predominantly minority neighborhoods, the focus of OMP efforts.⁹⁷ The punitive component of the D.P.s. and dismissed arrests-being taken into custody, handcuffed, transported, booked, often strip-searched, and jailed overnight-impregnates these events with its own social meaning quite different from the origins of Broken Windows theory.

^{93.} DIV. OF CRIMINAL JUSTICE SERVS., STATE OF N.Y., CRIMINAL JUSTICE IN-DICATORS: NEW YORK CITY, 1995-1999, at http://criminaljustice.state.ny.us/crimnet/ cjsa/areastat/areastat.htm (using search parameters: "Region: New York City," years 1995-1999) [hereinafter CJI: NEW YORK CITY].

^{94.} Ford Fessenden & David Rohde, Dismissed Before Reaching Court: Flawed Arrests Rise in New York, N.Y. TIMES, Aug. 23, 1999, at A1 (citing the sharp rise in the number of arrests that prosecutors declined to prosecute in 1998). The number of cases rejected by prosecutors rose by 41% in the Bronx and 23% in Manhattan, even as the crime rate declined sharply in the same year. Approximately fifty persons each day were arrested and booked, but then released—many spending a night in jail before their cases were dismissed. Id.

^{95.} Id.

^{96.} Id.

^{97.} Id.

Analyses of 1998 police stop and frisk reports—UF-250s showed that OMP policing had drifted from street stops in quality of life crimes to widespread stops of citizens in search of guns.⁹⁸ Stop and frisk actions became the primary method for removing illegal handguns from the street. The OAG Report showed that from January 1998 through March 1999, weapons possession was suspected in more than one-third of documented stop and frisk encounters.⁹⁹

The OAG Report also showed that the reconstructed OMP policy was implemented in a manner that was not race-neutral. The OAG Report showed that stops were disproportionately concentrated in the city's poorest neighborhoods, neighborhoods with high concentrations of racial minorities. Table 1 below shows the percentage of stops, according to the distribution of minority populations in the precincts. In precincts with the highest concentrations of minorities, stops of black and Hispanic suspects were highest (by percentage), as might be expected. However, in the thirteen precincts with the lowest minority populations,¹⁰⁰ stops of blacks and Hispanics were well above what their population percentage would predict. In those precincts, 30% of the persons "stopped" were black, more than ten times greater than their percentage of the overall population of those precincts.¹⁰¹ Hispanics comprised 23.4% of the persons "stopped," more than three times their population share. Whites make up 80% of the population of those precincts, but only 41.5% of the persons "stopped." Even in precincts where neighborhoods had the lowest minority concentration, whites were stopped less. The pattern invokes an enduring empirical fact in criminological research: police officers are more likely to treat as suspicious persons who seem out of place from their surroundings.¹⁰² To police officers, race serves as a marker of

^{98.} OAG REPORT, supra note 5, at tbl.I.B.3.

^{99.} Id. The Street Crime Unit was disproportionately responsible for the use of stop and frisk actions to search for guns. During the fifteen month study period in the OAG Report, the Street Crime Unit ("SCU") had a "particular emphasis on recovering illegal firearms." Its 435 officers (out of nearly 40,000 in the NYPD) effected more than 10% of all documented stop and frisk encounters citywide. Id. at 58-59.

^{100.} Id. at tbl.I.A.2.

^{101.} Id. The OAG Report established the population of each precinct, using census data for day and night populations. Id. at 96.

^{102.} JONATHAN RUBINSTEIN, CITY POLICE 225 (1973); John van Maanen, Working the Street: A Developmental View of Police Behavior, in The POTENTIAL FOR REFORM OF CRIMINAL JUSTICE 83, 118 (Herbert Jacobs, ed. 1974).

where people "belong," and racial incongruity as a marker of suspicion.¹⁰³

% Hispanic Population in Precinct	% BI	ack Population in 1	he Precinct
······	Over 40%	10% to 40%	Under 10%
Over 40%	57.0	38.0	17.1
	38.8	55.1	67.0
· ·	3.3	4.9	10.1
	(4)	(11)	(3)
20% to 40%	74.6	31.6	29.5
	19.2	52.0	40.8
	2.9	12.7	22.3
	(2)	(6)	(6)
10% to 20%	84.8	56.9	22.9
	11.0	- 22.2	40.1
	2.9	18.2	26.3
	(8)	(9)	(5)
Less than 10%	91.6	74.7	30.0
	4.6	8.0	23.4
	2.0	15.4	41.5
	(6)	(2)	(13)
	Legénd		% Black Suspects % Hispanic Suspects % White Suspects Number of Precincts)

TABLE 1. DISTRIBUTION OF STOPS BY RACE OF SUSPECT AND
RACIAL COMPOSITION OF PRECINCT (MANDATED REPORT
STOPS ONLY)104

Racial incongruity is one of several patterns observed in the OAG Report that depict the racial component of OMP in New York. The ratio of 9.5 stops of black citizens for each arrest made was 20% higher than the 7.9 ratio for whites.¹⁰⁵ Such higher stoparrest ratios suggest either that stops for blacks were pretextual and largely unfounded, or that police were less discriminating or skillful in assessing "suspicion" for minority citizens.

Stops, alone or in proportion to the population, tell only part of the story. The NYPD points out, for example, that the higher stop

105. Id. at tbl.I.B.2.

^{103.} Stephen Mastrofski et al., Race and Every-Day Policing: A Research Perspective, Presented at the 12th International Congress on Criminology, Seoul, Aug. 24-29, 1998. Anthony C. Thompson reminds us that racial incongruity was one of the markers that aroused the suspicion of Officer McFadden in the original Terry case. See generally Thompson, supra note 17, at 962-73 (discussing the racial dimensions of the original Terry case and the centrality of race to Fourth Amendment jurisprudence).

^{104.} OAG REPORT, supra note 5, at tbl.I.A.2.

rate for minorities reflects higher participation of blacks and Hispanics in crimes, especially in the city's highest crime neighborhoods. Using crime data on race- and crime-specific arrest rates within precincts, the OAG Report estimated the extent to which race- and crime-specific stops were predicted by crime, or whether actual stop rates exceeded the predicted stop rates. The results show that crime rates only partially explain stop rates overall, and fail to explain the rates at which minority citizens are "stopped" by the NYPD. After controlling for race- and crime-specific crime rates and the population composition of the precinct, the results showed that black and Hispanic citizens were significantly more likely to be stopped than were white citizens.¹⁰⁶ The overall differences between races were statistically significant, and were significant specifically for stops where the suspected crime was either violence or weapons possession.¹⁰⁷

Table 2 illustrates the exponentiated coefficients—or comparative odds—from these models, showing the magnitude of the differences for each race- and crime-specific stop rate. This table only includes stops where reports were mandated by NYPD policy. The results are divided into three sections, according to the precinct's black population. This display illustrates the importance of concentration effects. Each coefficient shows the stop-rate adjusted for the crime rate, disaggregated by race of suspect and suspected crime. In other words, each table shows the rate at which blacks, Hispanics, and whites were "stopped" in proportion to the rate at which they were arrested for each crime type. Comparing the coefficient by race illustrates the magnitude of the differences between races.

106. Id. at tbl.I.C.1. 107. Id.

TABLE 2. LOG ODDS OF RACE- AND CRIME-SPECIFIC STOP RATES, CONTROLLING FOR 1997 RACE- AND CRIME-SPECIFIC ARREST RATES, BY BLACK POPULATION IN PRECINCT (MANDATED REPORT STOPS ONLY)¹⁰⁸

	Blac	k Population in Pro Suspected	ecinct: Less Than 10 d Crime	%
Race of Suspect	Violent	Weapon	Property	Drug
Black	0.37	2.17	0.26	0.10
Hispanic	0.32	1.87	0.39	0.11
White	0.11	0.97	0.33	0.10
	Black	Population in Prec Suspected	inct: From 10% to 4 d Crime	40%
Race of Suspect	Violent	Weapon	Property	Drug
Black	0.36	2.12	0.25	0.09
Hispanic	0.31	1.83	0.38	0.10
White	0.17	0.95	0.32	0.10
	Black	Population in Preci Suspected	inct: Greater Than 4 I Crime	10%
Race of Suspect	Violent	Weapon	Property	Drug
Black	0.30	1.76	0.21	0.08
Hispanic	0.26	1.52	0.31	0.09
White	0.14	0.79	0.27	0.08

For example, Table 2 shows that in precincts where the black population was less than 10%, blacks were 2.17 times more likely to be stopped for weapons offenses compared to the arrest rate for blacks for that crime. Whites were 0.97 times more likely to be stopped compared to the arrest rate for whites for that crime. Comparing the coefficients, blacks were more than twice as likely (2.17/0.97) to be stopped as whites for weapons offenses, relative to their race-specific arrest rates for that crime.

The comparisons throughout this table show the elevated rates at which blacks and Hispanics were stopped for suspected violence and weapons offenses as compared to stop rates for whites. In precincts with more than 40% black population, the black-white ratios were still more than twice as high for violent crimes (0.3/0.14) and nearly three times higher (1.76/0.79) for weapons offenses. The Hispanic-white ratios in these precincts were comparably disproportionate for stops for violent crimes (0.26/0.14) and for weapons offenses (1.52/0.79). The disparities were confined to these two crime types. The coefficients were either comparable or lower for

^{108.} See id. at Appendix tbl.1.C.1.

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whites where stops related to alleged drug or property crimes, regardless of precinct demography.

The higher-than-predicted stop rates of minorities suggest that the police had cast suspicion more often—than would be predicted by their crime participation—on the city's minority population.¹⁰⁹ Although race may not be determinative in the decision to stop a suspect, race certainly appeared to be a motivating factor in the patterns of stop and frisk interventions. The prominence of race in the decision to stop citizens may not rise to the threshold of racial profiling, but it does seem to create a racial classification of "suspicion."

To assess whether that suspicion met *Terry* standards of "reasonable suspicion," the OAG Report examined the stop rationales articulated by police officers on the UF-250 stop report form. The researchers examined the reasons that police officers provided for "stopping" civilians, and estimated the rate at which the reasons, as stated, met Fourth Amendment standards of "reasonable suspicion." The narrative rationales for "stops" came from a citywide sample of 10,000 coded and analyzed UF-250 forms from eight precincts plus a supplemental sample of cases across all precincts.¹¹⁰ The narratives were coded into sixty-seven categories, and the OAG staff then determined whether the stated rationale in each category met *Terry* standards of "reasonable suspicion."¹¹¹ These codes were then collapsed into seven categories, or rationales, which were determined as either meeting or failing to meet *Terry* standards.¹¹²

Table 3, adopted from the OAG Report, shows that in nearly two-thirds of the stops, the articulated "reasonable suspicion" for the stop met *Terry* standards, and that racial disparities were small. However, stops of black suspects more often failed to meet *Terry*

111. Id. at 145, tbl.II.A.1.

^{109.} Id. at 126-27.

^{110.} Id. at 135-36. The researchers coded rationales for a citywide sample plus a supplemental sample of specifically chosen precincts. For the individual precinct sample, a purposive sample of eight precincts was selected—the 79th, 42nd, 30th, 43rd, 33rd, 107th, 72nd, and the 19th—based on variation in stop rates and population parameters. For each precinct, approximately half of the UF-250 forms were randomly sampled. In all, 4383 UF-250 forms were randomly sampled for the citywide analysis, including 3282 stops where reports were "mandated." Id. at 158-60.

^{112.} Id. at 135-60, tbl.II.A.2. Categories where rationales were sufficient to meet *Terry* standards were: (1) crime observed, (2) suspect fit description, (3) weapon observed, (4) suspicious activity plus other criterion behavior. Categories where rationales failed to meet *Terry* standards included: (1) suspicious activity and (2) suspect in wrong place. *Id.* at tbl.II.A.2.

standards (15.4%) than did stops of whites (11.3%). In contrast, there were only minimal differences between stops involving Hispanic and whites suspects.

TABLE 3. ASSESSMENT OF TERRY RATIONALES FOR STOPS BY RACE OF SUSPECT, CITYWIDE SAMPLE (MANDATED REPORT STOPS ONLY)¹¹³

Assessment of Reasonable Suspicion Standard		Race o	f Person Sta	opped	
	Black	Hispanic	White	Other	Total
Facts, as stated, articulate	1,172	690	192	60	2.114
reasonable suspicion	64.3%	65.4%	60.4%	69.8%	64.4%
Facts, as stated, do not articulate	281	133	36	9	459
reasonable suspicion	15.4%	12.6%	11.3%	10.5%	14.0%
Insufficient information	370	232	90	17	709
	20.3%	32.7%	28.3%	19.8%	21.6%
Total	1,823	1,055	318	86	3,282

The pattern of evidence in the OAG Report suggests that race evidently became a factor in "everyday policing" in New York City under OMP. Working within a legally permissible but lower standard of "reasonable" racial discrimination, where a second motivating factor (such as "reasonable suspicion") may be present, police over-stopped black and Hispanic citizens relative to their crime participation, well in excess of their white neighbors, and more often without constitutional justification. Black citizens in particular tend to generalize these experiences, with potentially toxic consequences for their perception of the legitimacy of the law.¹¹⁴ Disproportionate stops of black citizens is an important "race-making" factor,¹¹⁵ generalized through the sense of linked fate that many blacks share.¹¹⁶ It conveys social stigma and under-

^{113.} See id. at tbl.II.B.4.

^{114.} Tracey Maclin, Race and the Fourth Amendment, 51 VAND. L. REV. 333, 386 (1998) ("Blacks correctly see pretextual traffic stops as another sign that police officers view blacks, particularly black males, as criminals who deserve singular scrutiny and treatment as second class citizens."). See generally David A. Harris, "Driving While Black" and All Other Traffic Offenses: The Supreme Court and Pretextual Traffic Stops, 87 J. CRIM. L. & CRIMINOLOGY 544, 571 (1997).

^{115.} This term is borrowed from Professor David James, who has written of the ghetto as a "race-making situation." James, *supra* note 24, at 420-28.

^{116.} Dawson, supra note 24, at 77 (using the "linked fate" concept to explain the way that African Americans perceive what is in their individual self interest). Experiences such as "stop and frisk" encounters could easily undermine the social meaning of the OMP strategy. Id. at 80-84; see also JEFFREY FAGAN & TRACEY L. MEARES, PUNISHMENT, DETERRENCE AND SOCIAL CONTROL: THE PARADOX OF PUNISHMENT IN MINORITY COMMUNITIES (2000) (discussing how the perceived illegitimacy of the criminal justice system in the African American and Hispanic communities has kept

mines the perceived and attributed legitimacy of law and legal institutions necessary to promote compliance with the law. The harm to individuals stopped but not arrested cannot be discounted in a social framework where events and experiences are linked in this manner.¹¹⁷

III. RESOLVING COMPETING THEORETICAL CLAIMS ABOUT STOP AND FRISK ACTIVITY: EMPIRICAL RESULTS

Returning to OMP in New York City, then, we can ask whether the emphasis on disorder was, in fact, a strategy focused on policing poor people rather than disordered places. Of course, at the neighborhood level, race interacts with other neighborhood factors, ones that also correlate with social and physical disorder.¹¹⁸ In the reconstructed Broken Windows theory that informed OMP in New York City, social disorder, or person-focused tactics, replaced physical disorder, or place-based tactics. Empirical evidence shows that the epidemiology of stop and frisk actions in turn was concentrated among minority persons in poor neighborhoods.¹¹⁹ Accordingly, it appears that place was switched for race in the reality of OMP. Thus, what began as policing informed by a nuanced Broken Windows theory, in fact reflects criminological theories focused on social disorganization.

This raises two questions for understanding the racial patterns of policing. First, what are the net effects of race on patterns of policing after we control for disorder? If OMP was in fact targeted at disorder, race differences at the neighborhood level should disappear after we introduce measures of disorder. Unlike, for example, race-explicit drug-courier profiles, OMP should be racially and facially neutral once we control for the level of disorder in the neighborhood.

119. OAG REPORT, *supra* note 5, at 92-94 (citing New York City Police Commissioner Howard Safir's statement that minorities are more likely to be "stopped" because they live in high crime neighborhoods with an increased police presence).

crime rates steady despite harsher sentencing), http://papers2.ssrn.com/paper. taf?abstract-id=223148.

^{117.} William J. Stuntz, Terry's Impossibility, 72 ST. JOHN'S L. REV. 1213, 1218 (1998) (summarizing harms from encounters of innocent citizens with police, including violations of privacy, public shame at being singled out and treated like a criminal suspect, the emotional damage of discrimination, and the potential for police violence and physical injury).

^{118.} Sampson & Raudenbush, *supra* note 20. See generally Robert J. Bursik, Jr. & Harold Grasmick, Neighborhoods and Crime: The Dimensions of Effective Community Control (1993).

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Second, if disorder itself is predicted by neighborhood or ecological characteristics, factors that also are correlated with race, are these other factors significant predictors of stop and frisk patterns after we control for disorder? While some neighborhood characteristics are correlated with disorder, these factors also are part of competing theoretical explanations, explanations that are based on characteristics of persons, rather than places. Accordingly, we question whether OMP produces the dramatic racial disparities reported in the OAG Report because of the characteristics of people who live in the neighborhood, or whether these disparities reflect policing targeted in fact at disorder. Analytically, we can compare these two explanations to estimate the ecological locus of racial policing. The results of this competition follow, where we present findings of empirical tests designed to assess these competing claims about the theoretical meaning of OMP in New York City.

A. Social and Physical Disorder

Data on the social organization and physical characteristics of neighborhoods were obtained from the 1999 New York City Housing and Vacancy Survey ("HVS").¹²⁰ The HVS is sponsored by the New York City Department of Housing Preservation and Development ("HPD")¹²¹ to comply with New York State and New York City's rent regulation laws. It is conducted every three years with respondents in a stratified random sample of New York City housing units. The sample is based on housing units recorded in the decennial census, and updated every three years as part of the enumeration process preceding the HVS. The HVS emulates the population dimensions of the decennial census and generates measures of household and person characteristics for the city.¹²²

^{120.} U.S. CENSUS BUREAU, DEP'T OF COMMERCE, 1999 NEW YORK CITY HOUSING AND VACANCY SURVEY (1999), at http://www.census.gov/hhes/www/nychvs.html [hereinafter NYC HOUSING SURVEY].

^{121.} THE GREEN BOOK: OFFICIAL DIRECTORY OF THE CITY OF NEW YORK (2000) (providing names and contact information for HPD). The Department of Housing Preservation and Development is responsible for setting and administering housing policy in the city, including development of urban renewal programs, enforcement of civil codes for housing, management of city-owned properties, rehabilitation of abandoned buildings, and construction of low-income housing.

^{122.} NYC HOUSING SURVEY, supra note 120, at Overview, http://www.census.gov/ hhes/www/housing/nychvs/overview.html. Differences between the 1999 HVS and the 1990 census include interviewing procedures, staff experience and training, processing procedures, sample design, the sampling variability associated with the HVS and the sample data from the census, and the non-sampling errors associated with the HVS and the census.

The sample includes "vacant available for rent" units as well as occupied units. Both public and privately owned housing units, as well as in rem units,¹²³ are included. The public-use data set is made available by the U.S. Census Bureau, and includes weights to generate estimates of households and persons for the city. The response rate in the 1999 survey sample of 18,180 was 94%. Interviews were conducted between January and May, 1999 by "field representatives" hired by HPD.¹²⁴

Measures of physical disorder and social structure were aggregated from individual-level responses in the HVS to sub-boroughs. The residential location of each respondent is coded to the borough (county) and the *community district* ("CD"), or sub-borough. CD's are administrative units of each borough; there are fifty-five in the city. Members of the councils of each CD meet periodically to assist city agencies in zoning and other regulatory planning functions. Sub-boroughs include one or two police precincts.

Measures of physical disorder in the sub-borough were computed from responses to items regarding the physical condition of the dwelling and the neighborhood. Respondents were asked to report whether there was damage or disrepair in the exterior walls and windows, stairwells and stairways, and floors. Respondents also were asked to report generally on the condition of other dwellings in their neighborhood: the presence of broken or boarded up windows, and whether the building was "deteriorated" or "dilapidated."¹²⁵ Responses were aggregated to the sub-borough level to measure the percentage of housing units with these characteristics.

To avoid redundancy among the disorder variables, a principle components factor analysis with varimax rotation¹²⁶ was completed to reduce the variables to a single dimension. The model yielded

^{123.} In rem housing units are housing units that are acquired and owned by the City of New York following tax forfeitures or failure to pay other charges such as correcting violations of the housing codes. NYC HOUSING SURVEY, *supra* note 120, at H-2, Definitions of Rent Regulation Status, http://www.census.gov/hhes/www/hous-ing/nychvs/defin99.html.

^{124.} NYC HOUSING SURVEY, *supra* note 120, at Overview. Interviews were conducted to elicit information about the demographic characteristics of each household member, and the housing characteristics of the dwelling.

^{125.} NYC HOUSING SURVEY, *supra* note 120, at Glossary, http://www.census.gov/ hhes/www/housing/nychvs/gloss99.html. For vacant units, responses were recorded by the HPD field representatives.

^{126. &}quot;Varimax rotation" is a statistical procedure that permits the extraction of distinct factors or dimensions from a set of highly correlated variables, and assumes that the factors do not overlap statistically or conceptually. GERHARD ARMINGER ET AL., HANDBOOK OF STATISTICAL MODELING FOR THE SOCIAL AND BEHAVIORAL SCI-ENCES 205-6 (1995).

one factor explaining 85.9% of the variance. Factor coefficients ranged from 0.865 to 0.959, indicating uniform loading and high multicollinearity. Because of its conceptual clarity and importance to the construction of "physical disorder," we used the "broken windows" variable as the measure of disorder.¹²⁷

Measures of social disorganization were computed using similar procedures. Both household and person characteristics were constructed by aggregating individual responses to sub-boroughs. Means and variances for the measures are shown in Appendix A, infra. A principle components factor analysis with varimax rotation was again completed and yielded three factors that explained 74.0% of the variance. The first factor describes neighborhoods characterized by concentrations of persons with low education, persons under- or unemployed, households receiving public assistance, households with Hispanic residents, and female-headed households. These neighborhoods also were characterized by low white population. The second factor describes neighborhoods with high racial fragmentation (racial heterogeneity)¹²⁸ and high concentrations of male population. These neighborhoods also were characterized by low black population. The third factor describes neighborhoods characterized by high concentrations of immigrants and residential mobility.129

These three factors reflect the classic dimensions of social disorganization.¹³⁰ The variables within factors were highly correlated, again permitting selection of specific variables to represent each factor. For conceptual clarity and theoretical specificity, we chose specific variables as measures of social disorganization: the percent of households with one or more persons receiving public assistance, racial fragmentation, and residential mobility.¹³¹ Because of the importance of immigration to the social composition of New York City,¹³² we included as a predictor the percentage of house-

129. Id.

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132. I. M. Miyares & K. S. Gowen, Recreating Boundaries: The Geography of Latin American Immigrants to New York City, CLAG YEARBOOK 2431 (1998); see Arun Peter Lobo et al., *Immigration to the New York Metropolitan Region in the*

^{127.} Analyses available from authors.

^{128.} See CHARLES LEWIS TAYLOR & MICHAEL C. HUDSON, WORLD HANDBOOK OF POLITICAL AND SOCIAL INDICATORS 216 (2d ed. 1972). Racial fragmentation is a measure of the racial heterogeneity within an area, and is computed as: $1 - ((P)^2)$

Where P = proportion of each race within the spatial unit.

^{130.} SHAW & MCKAY, supra note 77, at 183-89; SHORT, supra note 83, at 55; see Sampson & Lauritsen, supra note 77, at 1, 51-75; Meares, supra note 80, at 673.

^{131.} Shaw & McKay, supra note 77, at 32, 37, 205.

hold heads who were born outside the U.S. We also included two additional measures that are predictors of crime rates at the community level: the housing vacancy rate¹³³ and the percentage of housing units in the area that are public housing.¹³⁴

Finally, we included a global measure of crime in the sub-borough: the count of 1997 arrests within each precinct, aggregated to the sub-borough. Arrest counts, published in the OAG Report,¹³⁵ were obtained by the OAG from the New York State Division of Criminal Justice Services. State crime counts include "finger-printable" crimes, or crimes that are punishable by jail or prison sentences.

B. Stops and Arrests

Counts and rates of stops and arrests within precincts were compiled from data published by the OAG.¹³⁶ In addition to stop counts, the ratio of stops to arrests was computed for each precinct and each type of crime. Cases involving stops that occurred from January 1998 - March 1999 were included. The data tables were compiled by the OAG from files created by the NYPD from UF-250 forms.¹³⁷ UF-250 forms are completed by officers following

133. See Ralph B. Taylor, The Impact of Crime on Communities, 539 THE ANNALS OF THE AMER. ACAD. POL. & SOC. SCIENCE 28 (1995).

134. E.g., TAMARA DUMANOVSKY ET AL., THE NEIGHBORHOOD CONTEXT OF CRIME IN NYC'S PUBLIC HOUSING PROJECTS (1999) (manuscript on file with author); TERENCE DUNWORTH & AARON SAIGER, NAT'L INST. OF JUSTICE, SUMMARY: DRUGS AND CRIME IN PUBLIC HOUSING: A THREE-CITY ANALYSIS, at viii (1994); Harold Holzman, Criminological Research on Public Housing: Toward a Better Understanding of People, Places and Spaces, 42 CRIME & DELINQUENCY 361 (1996).

135. OAG REPORT, supra note 5, at tbl.I.C.3; see also id. at 120 n. 25 (explaining that arrest counts for 1997 were used—instead of 1998 arrest data—to avoid autocorrelation between stops and arrests that both occurred in 1998). Arrest counts are preferable to crime complaint data, since many types of crime (such as drug crimes or minor property crimes) are not reported in citizen complaints to the police. Id. at 121. In addition, complaints often include crimes with no suspect information, while arrests include information on the demographic characteristics of the suspect. See id.

136. Id. at tbl.I.C.3. Race-specific rates for the total number of stops were computed from the percentages included in the table. The race-specific ratios of stops to arrests were computed from data in tbl.I.B.1 and I.B.2, and Appendix tbl.I.B.1 and I.B.2. tbl.I.B.2 also included data on weapons stops by race.

137. Id. at 88.

^{1990&#}x27;s, in MIGRATION WORLD, Volume XXVII, No. 5. (1999); ARUN PETER LOBO ET AL., THE NEWEST NEW YORKERS 1990-1994: AN ANALYSIS OF IMMIGRATION TO NYC IN THE EARLY 1990s (1996); I. M. Miyares, Little Odessa: Brighton Beach, Brooklyn: An Examination of the Former Soviet Refugee Economy in New York City, 19 URB. GEOGRAPHY 518 (1998).

each stop event.¹³⁸ Both global stops and arrests were analyzed, as well as stops where the suspect was alleged to have a weapon. Weapons stops were analyzed separately because of the heavy emphasis on the control of gun violence in the formulation and implementation of NYPD policy.¹³⁹

The analyses included only stops where a UF-250 form was mandated. NYPD policy mandates that officers complete a UF-250 under four specific circumstances: when (1) force is used in the course of the stop; (2) the suspect is frisked (i.e., pat down) and/or searched during the course of the stop;¹⁴⁰ (3) the suspect is arrested; or (4) the suspect refuses to identify him or herself.¹⁴¹ Nonmandated reports also were submitted during this time, but compliance with reporting requirements when reports were not mandated was uneven, raising reliability problems in assessing the consistency of these reports across precincts.¹⁴²

139. For a discussion of the policy, see POLICE STRATEGY NO. 1, supra note 25, and OAG REPORT, supra note 5, at 53. The memo described the NYPD's plan to reduce gun violence by intensified efforts to find and seize illegal firearms. Guns and violent crime also were a primary focus of the NYPD's Street Crime Unit ("SCU"), an elite unit of plain-clothes officers tasked to "hot spots" of concentrated criminal activity. The SCU's "mission" is to "effect the arrests of violent street criminals, with a particular emphasis on recovering illegal firearms." OAG REPORT, supra note 5, at 53 n.32 (citing Police Commissioner Howard Safir, Statement Before the New York City Council Public Safety Committee (Apr. 19, 1999)) [hereinafter Safir Statement].

140. That is, searches inside his or her clothing.

141. PATROL GUIDE, supra note 138; OAG REPORT, supra note 5, at 63-64.

142. Analyses in the OAG Report show that whites were over-represented in cases involving non-mandated reports. OAG REPORT, *supra* note 5, at 95 n.9. Although whites comprised 12.9% of all cases and 10.4% of cases where reports were required, whites comprised 19.3% of cases where a form was not mandated. However, completion of non-mandated reports varied from precinct to precinct, when compared as a ratio to the number of stops with mandated reports. See *id.* at tbl.I.A.1. The OAG Report constructed two scenarios to explain the racial disparity in non-mandated reports. In one scenario, "the police completed non-mandated UF-250's for 'stops' of minorities and non-minorities at the same rate, but [found] that 'stops' of whites were less likely to rise to the more intrusive level of force, a frisk or an arrest." *Id.* at 95 n.9. In the second scenario, "the police were more likely to … complet[e] a UF-250 form … in a non-mandated situation when the person 'stopped' was white." *Id.* In either scenario, analyzing only mandated report cases—which by definition are more intrusive—would show greater racial disparity than would an analysis of all cases. *Id.*

^{138.} Id. at 63 (describing the UF-250 form and the NYPD policies regulating the filing of these reports). Although initially designed as a tool for investigation, completion of the UF-250 form has been required by the NYPD Patrol Guide since 1986. Id. at 65. In 1997, the police commissioner assigned a high priority to filing UF-250s. N.Y. CITY POLICE DEP'T, PATROL GUIDE: PROCEDURE NO. 116-33 (effective Nov. 14, 1986) (detailing policy police officers, in certain circumstances, to document stop and frisk street encounters on the UF-250 form) [hereinafter PATROL GUIDE].

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C. Results

Two dimensions of police stops of citizens were computed to test the hypothesis that crime rates alone do not explain differences in stop rates by race or type of crime. First, comparisons of stop rates by race and type of crime are shown in Table 4.143 Stop rates by race and type of crime are shown, and the overall race-specific crime rate is shown as a basis of comparison. We used the 1997 race-specific crime counts to compute a per capita stop rate over the fifteen month interval. The results show large disparities by race. Stop rates were nearly five times higher for blacks compared to non-Hispanic whites, and four times higher for Hispanics.¹⁴⁴ The citywide stop rate is heavily weighted by the concentration of stops among blacks and Hispanics. The disparities by race are consistent across crime types, and the heaviest disparities between stops of black and white citizens. For violence and weapons, stops of blacks occur at a rate ten times higher than the rate for whites, and more than twice as high as the rate for Hispanics. Disparities remain for other crime types, but are narrower. Comparisons of race-specific stop rates per 1000 population to arrest rates per 1000 population show that blacks and Hispanics were stopped at rates higher than their arrest rates.

^{143.} Id. at 120 n.25 (describing types of crimes). Crimes were reported using four generic crime categories. Violent crimes included robbery, assault, homicide, kidnapping and sex crimes. Weapons crimes included arrests for both gun and other illegal weapons. Property crimes included larceny and burglary. Drug crimes included both possession and sale offenses. Id.

^{144.} The OAG analysis constructed four categories of race from the eight recorded on the NYPD documentation in the UF-250 data: white, black, Hispanic white, Asian, American Indian, other, unknown. OAG REPORT, *supra* note 5. We use four: black, white, Hispanic, and other. The UF-250 form has no category for black Hispanics, so we were unable to determine whether officers classified black Hispanics as black or Hispanic, or whether officers were consistent in their classification decisions. *Id.* The NYPD classification is based on officers' observations, the Census Bureau classification is based on self-report. In constructing race-specific population rates from the HVS for the sub-boroughs, we classified both white and black Hispanics as black, consistent with classifications in the U.S. Census. The construction of the Hispanic classification from census data involves a two-stage process regarding both race and ethnicity. Once race is determined, a secondary question asks whether the individual identifies himself or herself as a person of "Hispanic origin."

TABLE 4. RACE-SPECIFIC AND CRIME-SPECIFIC STOP RATES PER1,000 Persons, Crime Rates per1,000 Persons, and Race-
Specific Population Citywide145

Type of Crime	Stop Rate: Citywide	Stop Rate: Black	Stop Rate: Hispanic	Stop Rate: White	Stop Rate: Other
Violent	3.2	7.5	3.5	0.7	1.0
Property	2.0	3.1	2.6	1.1	0.9
Drug	1.4	2.7	1.8	0.6	0.3
Weapon	7.6	18.0	8.7	1.3	1.8
Quality of life offenses	1.3	1.8	1.5	0.1	0.5
All offenses	17.1	22.6	20.0	4.8	5.2
Total arrests	104,847	53,472	31,454	16,776	3,145
Arrest rate per 1,000 persons	14.1	29.0	15.1	6.0	4.4
1999 population	7,428,162	1,845,306	2,089,149	2,775,637	718,070

These differences are consistent with significant differences reported in the OAG Report.¹⁴⁶ Controlling for race- and crime-specific crime rates and population, that report showed that stop rates for blacks and Hispanics were significantly higher than the stop rates for whites.¹⁴⁷ These effects were most acute for stops for weapons and violent crimes.¹⁴⁸

The second measure of police stop activity is the ratio of stops to arrests by race and type of crime. Once police officers decide to stop a citizen, the outcomes of those stops—including whether a frisk or search is conducted, and whether an arrest is made should not differ by race. Presumably, the "reasonable suspicion" articulated in *Terry v. Ohio* and incorporated into both the formal training and professional judgment of police officers,¹⁴⁹ should lead to stops with race-neutral outcome probabilities. In other words, there is no rationale for police to exercise discretion differently by race that would lead to a higher rate of "false positives" for any racial group. Accordingly, stop rates should reflect a similar efficiency and strategic allocation of police efforts across races.

^{145.} OAG REPORT, *supra* note 5, at tbl.I.A.1, tbl.I.A.5; DEP'T OF CITY PLANNING, CITY OF N.Y., 1990-99 POPULATION CHANGE ESTIMATES, *available at* http://www.ci.nyc.ny.us/html/dcp/pdf/9099pop.pdf.

^{146.} OAG REPORT, supra note 5, at 94-95. Citywide, blacks constituted 50% of the total "stops" and 51% of the arrests for the covered period. Hispanics constituted 33% of all "stops" and 30% of all arrests. Whites constituted 13% of all "stops" and 16% of all arrests. However, this evidence of proportionality masks differences by neighborhood. *Id.* at 95 n.9, 123.

^{147.} Id. at tbl.I.C.1 and I.C.2.

^{148.} Id. at tbl.I.C.1 and I.C.2.

^{149.} See Thompson, supra note 17, at 971.

Table 5 shows the ratio of stops to arrests by race of suspect and suspected charge. A higher rate indicates less efficiency in stops, or an excessive rate of stops needed to affect an arrest. A high stop rate may also indicate more indiscriminate stop practices, or simply broadened suspicion of individuals based on race alone.¹⁵⁰ Overall, the total stop-to-arrest ratio of blacks (7.3 stops per arrest) is 58.7% higher than the ratio for non-Hispanic whites (4.6); the ratio for Hispanics (6.4) is 39% higher than the rate for non-Hispanic whites. For weapons stops, the stop-to-arrest ratio for blacks is 18.7% higher than the ratio for whites, but the ratio for Hispanics is less than 23.0% higher.

TABLE 5. RACE- AND CRIME-SPECIFIC STOP-ARREST RATIOS CITYWIDE¹⁵¹

Type of Crime	Citywide	Black	Hispanic	White	Other
Weapon	16.5	16.5	17.1	13.9	17.3
All Stops	6.5	7.3	6.4	4.6	5.5

To test whether stops were proportionate to crime rates, and to assess factors that might explain stop rates higher than would be predicted by crime rates, multivariate analyses were completed incorporating three potential explanations: the crime rate within the sub-borough (or strategic theory), disorder (or place-based theory), or social disorganization (or person-based theory). Trends in both Tables 4 and 5 confirm the emphasis on weapons stops articulated in NYPD strategy memoranda. Accordingly, separate analyses were completed on the overall stop counts, and then on stops where weapons were the suspected charge or rationale for the stop.

Table 6 shows the bivariate correlations—the correlation between two variables—among these predictors and the outcome variables.¹⁵² Correlations were statistically significant and in the predicted directions for stops overall and stops involving non-white

^{150.} One could also argue that a higher stop rate for one group may indicate "under-stops" of other groups, or a reluctance to stop more often persons of one race or another. That is an unlikely explanation, however, since the OAG Report shows that the racial distribution of stops were consistent across precincts and stable over the fifteen months. See OAG REPORT, supra note 5, at 92-110. It is unlikely that the pattern of under-documentation or depressed stop rates for whites would remain so consistent across the NYPD's many precincts and neighborhoods.

^{151.} OAG REPORT, supra note 5, at tbl.I.C.1.

^{152.} For example, stop rates for whites were negatively correlated with vacancy rates, concentrations of public assistance recipients, and housing units with broken windows.

TABLE 6. CORRELATION MATRIX (PEARSON R, P)

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Housing Rate Windows Assistance Fra 474** .397** .461** .573** .573** .361** .477** .423** .474** .573** .361** .477** .423** .474** .573** .388** .147 .337* .502** .474** .155 .337* .337* .502** .522** .155 .337* .337* .502** .435** .155 .337* .136 .219 .219 .024 .201 .1136 .219 .219 .449** .460** .514** .664** .495** .321* .462** .425** .495** .495** .094 .255 .429** .641** .076 .008 .110 .065 .076 .076		Total	% in Public	Vacancy	% Units with Broken	% Receiving Public	Racial		
.707** 474** .397** .461** .573** .082 039 .582** .361** .477** .423** .474** .082 039 .582** .361** .477** .423** .474** 120 .154 .582** .361** .477** .423** .573** .082 .039 .582** .361** .477** .337* .502** .236 .142 .107 .155 .337* .502** .207 .025 .098 .024 .201 .136 .219 .371** .009 .645** .449** .400** .514** .664** .017 .124 .509** .321* .460** .514** .664** .017 .124 .518** .447** .255 .429** .641** .185 .069 .052 .008 .110 .065 .076 .316* .080		Arrests	Housing	Rate	Windows		Fragmentation	Mobility	% Immigrants
.707** .474** .397** .461** .573** .082 039 .582** .361** .477** .423** .474** .120 .154 .582** .361** .477** .423** .474** .120 .154 .582** .361** .477** .423** .474** .120 .154 .481** .387** .147 .337* .502*** .236 .142 .107 .155 .337* .344* .435*** .207 .025 .098 .024 .201 .136 .219 .371** .009 .098 .024 .201 .136 .201 .126 .124 .645** .449** .460** .514** .664** .017 .124 .509** .321* .462** .495*** .6117 .124 .201 .518** .447** .255 .429** .641** .185 .069 .518** .447** .255 .429** .641** .185 .069 .523	ALL STOPS								
.582** .361** .477** .423** .474** 120 154 .481** .388** .147 .337* .502*** .236 .142 .481** .388** .147 .337* .502*** .236 .142 .107 .155 .337* .344* .435*** .207 .025 .107 .155 .337* .344* .435*** .207 .025 .098 .024 .201 .136 .219 .371** .009 .098 .024 .201 .136 .219 .371** .009 .645** .449** .460** .514** .664** .017 .124 .509** .321* .462** .425** .495*** .017 .124 .518** .447** .255 .429** .641** .185 .069 .052 .008 .110 .065 .076 .316* .080	Stops - All	.707**	.474**	.397**	.46]**	.573**	.082	039	.418**
481** .388** .147 .337* .502** .236 .142 107 .155 337* .344* .435** .207 .025 107 .155 337* .344* .435** .207 .025 .098 .024 201 136 .219 .371** .009 .098 .024 201 136 .219 .371** .009 .645** .449** .460** .514** .664** .017 .124 .609** .321* .462** .495** .617 .124 .509** .321* .462** .495** .017 .124 .518** .447** .255 .429** .641** .185 .069 .052 .008 110 065 076 .316* .080	Stops - Blacks	.582**	.361**	.477**	.423**	474**	120	154	.259
107 155 337* 344* 435** .207 .025 .098 .024 201 136 219 .371** .009 .098 .024 201 136 219 .371** .009 .645** .449** .460** .514** .664** .017 .124 .645** .449** .460** .514** .664** .017 124 .609** .321* .462** .425** .495** .017 124 .509** .321* .462** .514** .664** .017 124 .518** .447** .255 .429** .641** .185 .069 .052 .008 110 065 076 .316* .080	Stops - Hispanics	.481**	.388**	.147	.337*	.502**	.236	.142	.418**
.098 .024 201 136 219 .371** .009 .645** .449** .460** .514** .664** .017 124 .509** .321* .460** .514** .664** .017 124 .509** .321* .462** .425** .495** .017 124 .518** .447** .255 .429** .641** .185 .069 .052 .008 204 .230 .200 .015 .223 .008 110 065 .076 .316* .080	Stops - Whites	107	155	337*	344*	435**	.207	.025	033
.645** .449** .460** .514** .664** .017124 .509** .321* .462** .425** .425** .495**157201 .518** .447** .255 .429** .641** .185 .069 .052094244204230 .015 .223008110065076 .316* .080	Stops - Other	860.	.024	201	136	219	.371**	600	126
.645** .449** .460** .514** .664** .017 124 .509** .321* .462** .514** .664** .017 124 .509** .321* .462** .425** .495** .157 201 .518** .447** .255 .429** .641** .185 .069 .518* .447** .255 .429** .641** .185 .069 .052 094 204 .230 .200 .015 .223 008 110 065 076 .316* .080	WEAPONS								
.509** .321* .462** .425** .495** .157 201 .518** .447** .255 .429** .641** .185 .069 .518** .447** .255 .429** .641** .185 .069 .518** .447** .255 .429** .641** .185 .069 .052 094 204 .230 .200 .015 .223 008 110 065 .076 .316* .080	Stops - All	.645**	.449**	.460**	.514**	.664**	017	124	.336*
.518** .447** .255 .429** .641** .185 .069 .052094244204230 .200015 .223008110065076 .316* .080 .	Stops - Blacks	. 509**	.321*	.462**	.425**	.495**	157	201	.169
.052094244204230 .200015 .223008110065076 .316* .080 -	Stops - Hispanics	.518**	.447**	.255	.429**	.641**	.185	<u>.069</u>	.451**
.223008110065076316* .080 -	Stops - Whites	.052	094	244	204	230	.200	015	.015
	Stops - Other	.223	-008	110	065	076	.316*	.080	092
	** p<.01								
•• p<01	100. > q ***								

suspects. Stops involving whites either were not correlated with the disorder or disorganization variables, or were correlated negatively with disorganization variables.¹⁵³

Results of multivariate tests of the relative contributions of crime, disorder, and disorganization to stop counts are shown in Table 7. A fixed effects Poisson regression analysis was used, with predictors from each of these three domains.¹⁵⁴ The model estimates the expected value of the number of events in relation to the causal factors and other explanatory variables of interest. The question in this analysis is whether the count of events (stops) in an area (sub-borough) is predicted by factors that might influence these events (arrest rates, social disorganization variables, and physical disorder variables). The baseline model tests the hypothesis that the race-specific stop count is proportional to the number of arrests in the area. The full model assesses whether factors beyond the arrest count predict the stop count in the area.

153. Overall, whites in New York City live in neighborhoods that are marked by the absence of social isolation or economic deprivation, as well as neighborhoods with lower crime rates. See, e.g., JOHN MOLLENKOFF & MANUAL CASTELLS, DUAL CITY: RESTRUCTURING NEW YORK 29-31, 304-05 (1991). However, the correlation of stops of whites and crime rates in the neighborhood were not statistically significant. This may reflect the fact that whites often were stopped when they were observed in nonwhite neighborhoods, usually on suspicion of drugs. Id. This illustrates the "racial incongruity" source of disparity, where a stop is triggered by a racial "mismatch" of a person of one color moving through a neighborhood with population dominated by persons of another color. In the case of whites in non-white neighborhoods, it is often on suspicion of drug buying or possession. When black or Hispanic suspects are stopped in predominantly minority neighborhoods, it often is on suspicion of violence or weapons crimes. OAG REPORT, supra note 5, at 126-28, and tbl.I.C.1.

154. P. MCCULLAGH & J. NELDER, GENERALIZED LINEAR MODELS 193-08 (1989); WILLIAM H. GREENE, ECONOMETRIC ANALYSIS (2d ed. 1993); PETER KENNEDY, A GUIDE TO ECONOMETRICS (3d ed. 1994). Poisson regression is an ideal method to analyze factors that predict counts of events, and determining the relationship of these counts to a set of explanatory or predictive variables. The loglinear Poisson model is the one utilized for these analyses. Standard errors are corrected for overdispersion.

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		All	All Stops			Weapons Stops	is Stops	
	All Suspects	Black Suspects	Hispanic Suspects	White Suspects	All Suspects	Black Suspects	Hispanic Suspects	White Suspects
Intercept	12.71***	7.74***	3.47**	6.36***	8.86***	6.51***	2.18*	4.86***
1997 Arrests	4.61***	3.24**	3.16**	.81	4.20***	3.17**	3.79***	1.41
% in Public Housing	.30	.01	.28	.95	80	43	68	.16
Vacancy Rate	-1.21	88.	-3.73***	94	80	.80	-3.92***	-1.08
% Broken Windows	6.	71	2.09*	49	.45	83	2.20*	26
% Public Assistance	2.54*	1.55	3.50**	-2.09*	3.97***	2.24*	5.67***	79
Racial Fragmentation	1.72	-11	2.92**	1.01	1.14	35	3.77***	1.12
Residential Mobility	61	-1.44	1.66	23	-1.38	- 1.80	96.	61
% Immigrant	.05	56	1.26	.42	46	- 99	1.30	.31
- 2 Log Likelihood	117.1	172.5	163.3	166.7	147.4	190.7	165.6	166.1
Model Chi-Square	16431.4	27870.4	12198.4	5281.7	12888.2	18624.2	4698.5	1542.9
* p < .05 ** p < .01 ** p < .01								

The results confirm the claim that the arrest rate predicts both total stops and weapons stops in the sub-boroughs. Arrests are a significant predictor of the total number of stops, the total number of weapons stops, and both total and weapons stops for black and Hispanic suspects. However, arrests fail to predict stops for whites. In part, this may reflect the low rate of stops of whites, or the heterogeneity of the locations of white stops. That is, stops of whites may include both "racial mismatch" stops of whites in non-white areas where crime rates may be elevated, but other types of stops occur as well, most in neighborhoods of varying crime rates. Some may simply be based on descriptions from complainants, and others based on the reasonable suspicion grounds articulated in *Terry*.

Crime rates *should* predict stop rates, and should take into account any differences by race in the likelihood that a citizen should be stopped relative to his or her propensity for crime commission. However, when factors other than crime rates affect stops, we attribute these additional factors to policy, or to other tacit assumptions about race, neighborhoods, and criminality. Table 7 shows that for stops overall, factors other than crime in the neighborhood predict the stop counts. For all suspects, after controlling for crime, stops within the sub-boroughs were predicted by their poverty rates. Accordingly, policing in the city's neighborhoods appears to reflect the economic status of people rather than the physical condition of its buildings.

When race-specific stop counts are considered, both disorder and disorganization variables predict stop counts for Hispanics, but not for blacks. The concentration of dwellings with broken windows, low vacancy rates, high concentration of persons in public housing, and racial heterogeneity all predict the stop count for Hispanics. The diversity of this pattern of predictors for Hispanics reflects the heterogeneity of residential patterns and socio-economic factors for Hispanics. For whites, stops are not predicted by crime, but instead are predicted by the absence of poverty. Again, this reflects the tendency for whites to live in areas that although not necessarily affluent, are less likely to be poor.

Finally, Table 7 shows a different picture for weapons stops. For weapons stops of all suspects generally and specifically of black suspects, poverty rates predicted stop counts, after controlling for crime. As above, policing weapons is concentrated in poor neighborhoods. Stop and frisk activity targeted at weapons seems focused on the economic status of people in neighborhoods, not the

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physical condition of their buildings. For stops of Hispanic suspects, weapons stops were predicted by both disorder and disorganization variables.

These patterns suggest that stop and frisk strategies have departed from their original Broken Windows underpinnings, and more closely resemble policing of poor people in poor places. How the policy in action evolved so far from its complex and nuanced theoretical origins is a potentially important tale. It is important to understand whether and how race became a marker of increased risk of criminality in this hothouse policy context, the ways in which race interacted with the social organization of policing to produce greater intensity of enforcement and over-enforcement against minority citizens, and the cultural and political dynamics that allow the conflation of race, poverty, and disorder in policing policy. These lessons await a different research paradigm, focused on the hot cognitions of police-citizen interactions, and the social contexts in which these events unfold.

IV. SOCIAL NORMS AND AGGRESSIVE POLICING

In New York, the application of Broken Windows theories through OMP strategies and stop and frisk tactics produced a style of racial policing with stigmatizing effects on minority communities. In fact, the implemented strategy departed sharply from the original design of Broken Windows theory, focusing more on the consequences of broken windows than their causes. The strategy as implemented was intensified surveillance and proactive engagement with citizens under a broad standard of "reasonable suspicion." The emphasis on persons rather than place, and the racial demography of places where OMP was most intense and active, suggest that the cues to which police responded were primarily tied to race as well as places that are defined by race. Not only is this a long way from Broken Windows theory, but it invites constitutional problems that can further distance police from minority citizens.¹⁵⁵ The drift from engagement with community in the co-production of security reflects two different dimensions of social norms, dimensions of both community and organization.

^{155.} See generally OAG REPORT, supra note 5, at 15-44 (discussing Fourth and Fourteenth Amendment issues related to stop and frisk activity and racial profiling, respectively); Garrett, supra note 7, at 1829-34 (discussing equal protection issues in racial profiling cases).

A. Social Norms and Aggressive Policing Revisited

Although stop and frisk tactics likely contributed to the crime decline in New York, the precise contribution of these tactics is contested.¹⁵⁶ But there also is little doubt that there were social costs from the crackdown on crime that may compromise the original intent to redirect and rebuild social norms.¹⁵⁷ If the mechanism of decline is search, surveillance, and aggressive misdemeanor arrests, there is no causal path to declining crime that runs through order and social norms. As Harcourt observed, these efforts "have little to do with fixing broken windows and much more to do with arresting window breakers—or persons who look like they might break windows, or . . . strangers . . . or outsiders."¹⁵⁸

The social norms approach underlying Broken Windows theory required that the cues of crime be removed and replaced with alternative cues that signaled order and social regulation. In the causal dynamic hypothesized by the theory, citizens engaged with police to enforce norms of orderliness, conveying a social meaning that influenced behavior of citizens in the orderly milieu.¹⁵⁹

This construction of social control comports well with the dynamics of collective efficacy discussed by Sampson, Raudenbush, and Earls.¹⁶⁰ Citizen participation in the dynamics of informal social control, such as collective supervision of teenagers and citizen interventions in low-level crimes, are manifestations of the neigh-

^{156.} Fagan et al., supra note 36, at 1322 (crediting the decline in gun violence in part to "gun-oriented policing" but acknowledging multiple causation by other social factors); Waldeck, supra note 19, at 1283-84 (citation omitted) (suggesting that the stop and frisk tactics produced a crackdown that deterred many from carrying weapons or drugs); Harcourt, supra note 19, at 339-40 (claiming that the huge increase in misdemeanor arrests under OMP produced a surveillance effect that depressed crime rates). But see generally KARMEN, supra note 36 (citing interactions among multiple causes for the crime decline that complicated attribution of effects to any single cause).

^{157.} See generally Tom R. Tyler, Public trust and confidence in legal authorities: What do people want from the law and legal institutions?, in BEHAVIORAL SCIENCE AND THE LAW (forthcoming) (arguing that public views are primarily shaped by evaluating the fairness of police and court procedures). Neighborhood residents in high crime neighborhood often express satisfaction with the lowered crime rate, but greater distrust of police when aggressive stop, search, and arrest tactics are used. OAG REPORT, supra note 5, at 74-87.

^{158.} Harcourt, supra note 19, at 342.

^{159.} Kahan, supra note 36, at 2488; Meares & Kahan, supra note 26, at 823.

^{160.} Sampson & Raudenbush, *supra* note 20, at 611-612 (discussing the link between disorder and "collective efficacy"); *see also* Robert J. Sampson et al., *supra* note 79, at 919-21 (showing evidence that crime rates fluctuate according to the neighborhood's collective efficacy, independent of poverty, racial composition, and other socio-demographic factors).

borhood's "collective efficacy" that reduces crime and disorder.¹⁶¹ Collective behavior of this type may involve citizen-police interactions, but often these are citizen-initiated efforts, such as "phone trees" among residents to call police and report either physical or social disorder, citizen demands to enforce housing codes to rid neighborhoods of crack houses, advocacy in court proceedings for substantive punishment for chronic disorder offenders, and collective political activity on zoning and licensing.¹⁶² However, neither collective efficacy nor social capital is likely to be increased by policing tactics that rely almost exclusively on stopping, searching, and arresting people. Wilson and Kelling, in the original *Broken Windows* essay, did not imagine a scenario where aggressive policing—in the absence of interaction with community groups or social agencies—would create enduring forms of social interaction by citizens to prevent and control crime.¹⁶³

The incentives for people to engage with legal actors in social regulation and the co-production of security may lie in their evaluations of their treatment by the police. Fairness and crackdowns may be inconsistent, but at least citizens know they are tradeoffs. Recent work by Tom Tyler and colleagues in a survey of residents in three Oakland, California neighborhoods suggests that citizens' evaluations of legal actors are not linked to the outcomes of their court cases or interactions with police, or on the crime rate in their neighborhood.¹⁶⁴ They focus instead on the fairness of their treatment from those authorities.¹⁶⁵ Ronald Weitzer reaches the same conclusion in a survey of residents of three neighborhoods in Washington, D.C.¹⁶⁶ He reports contrasting evaluations of police services in two predominantly black neighborhoods. Proactive po-

166. Ronald Weitzer, Racialized Policing: Residents' Perceptions in Three Neighborhoods, 34 Law & Soc'Y REV. 129, 150-52 (2000).

^{161.} Sampson & Raudenbush, supra note 20, at 612.

^{162.} Id.

^{163.} The original Broken Windows theory recognized that a disorder-focused policing strategy would "only be effective if applied in conjunction with a wide variety of other police tactics" and "pursued in partnership with . . . other social agencies." Waldeck, *supra* note 19, at 1270 (citation omitted). Waldeck shows that the social norms and tactics suggested by the original Broken Windows theory diverged sharply from the traditional social norms of policing as "crime-fighters" where the officer's "basic business" is arresting offenders. *Id.*; *see* George L. Kelling, *Toward New Images of Policing: Herman Goldstein's Problem-oriented Policing*, 17 LAW & Soc. INQUIRY 539, 540 (1992).

^{164.} TYLER, supra note 157. Tyler also notes that some judgments are made on vicarious experiences of neighbors and friends, an illustration of the importance of linked fate. Id.

^{165.} Id.

licing of residents of a poor, high crime neighborhood elicited less favorable reactions to police than did the more reactive and respectful treatment of citizens in an "orderly" middle-class neighborhood.¹⁶⁷

Such empirical findings suggest the viability and importance of an approach to social regulation based on procedural fairness. Procedural fairness—or better treatment—promotes greater trust and confidence in the law, and higher rates of compliance.¹⁶⁸

These perceptions of law and legal actors have important implications about popular attributions of legitimacy to law. People who view the law as illegitimate are less likely to obey it, and people who view police officers and judges as lacking in legitimacy are less likely to follow their directives.¹⁶⁹ Although the law is based on the implicit or explicit threat of sanctioning for wrongdoing, the legal system depends heavily on voluntary compliance from most citizens to set and enforce norms, and to engage with the police in social control. Hence, lower levels of legitimacy make social regulation more costly and difficult, both materially and politically. The police depend heavily on the voluntary cooperation of citizens to fight crime. Citizens report crime and criminals, informally help to police their neighborhoods, and aid the courts as jurors and witnesses. Without these cooperative acts from the public, the police risk being seen as an intrusive force imposing order. And without these acts, the meaning of order becomes detached from its social basis and loses its moral weight to influence others in the community.

A social norms approach would invite policing of public order laws in the context of corresponding and contemporaneous extralegal social initiatives aimed at the same or parallel problems. These efforts reflect a more complex view of the interaction of crime and disorder, one that recognizes their spurious relationship to broader underlying social and physical conditions within neighborhoods. The legitimacy of the law benefits from the simultane-

^{167.} Id. at 151. Weitzer's findings stand Broken Windows theory on its head by suggesting that the police may be reacting to the visible cues of crime and disorder, not just would-be criminals who might journey to a disorderly neighborhood to take advantage of crime opportunities. Weitzer's findings suggest that in neighborhoods with visible signs of disorder, police react with indiscriminate and widespread patterns of aggressive stops and interdiction of citizens.

^{168.} TOM R. TYLER, WHY PEOPLE OBEY THE LAW 172-73 (1990).

^{169.} Id. at 172; Robert J. Sampson & Dawn Jeglum Bartusch, Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences, 32 Law & Soc'Y Rev. 777, 793-800 (1998); TOM R. TYLER ET AL., SOCIAL JUSTICE IN A DIVERSE SOCIETY 86 (1997).

ous and aligned actions of citizens and legal actors to promote social norms. While OMP approaches might promote a temporary reduction of crime through suppression, a legitimacy-focused approach promotes construction of social networks that integrate community-level social processes with the regulation of crime and disorder.

B. Organizational Norms

Explanations of the importance of race in police decision making-up and down the hierarchy within police organizations-focus on both the occupational culture and social norms of policing.¹⁷⁰ Although the empirical literature on police "subculture" offers inconsistent evidence of generalizable attitudes and beliefs, several studies show that the dynamics and structure of the police workplace may work to reinforce social (behavioral) norms. perceptions, and beliefs.¹⁷¹ The separation of the policing and nonpolicing worlds is widely acknowledged, even in the era of reform and innovation.¹⁷² The insularity of the police workplace leads to a closed system of ideas, a reluctance to question the statements or actions of fellow officers, and "matter of fact prejudices" that are reinforced through customs, rituals, and a shared language.¹⁷³ If the workplace is where citizens "acquire 'social capital' . . . and develop ties of empathy and solidarity with their fellow citizens,"174 then the workplace may be the appropriate locus for efforts to change social norms supporting racial policing.

^{170.} See e.g., STATE POLICE REVIEW TEAM, supra note 6, at 33-34 (1999). See generally Jeffrey Goldberg, supra note 6; OAG REPORT, supra note 5, at Ch. III, Part III (discussing "Police Attitudes Toward Stop and Frisk"). "A recent survey of 650 Los Angeles Police Department officers found that 25% felt that racial bias (prejudice) on the part of officers toward minority citizens currently exists and contributes to a negative interaction between police and the community." REPORT OF THE INDEPENDENT COMMISSION ON THE LOS ANGELES POLICE DEPARTMENT 69 (1991). But see Steve Herbert, Police Subculture Reconsidered, 36 CRIMINOLOGY 343, 344 (1998) (claiming that norms within police departments are influenced by bureaucratic structures).

^{171.} See generally BITTNER, supra note 102; ANTHONY V. BOUZA, THE POLICE MYSTIQUE: AN INSIDER'S LOOK AT COPS, CRIME AND THE CRIMINAL JUSTICE SYSTEM 6-7 (1990).

^{172.} BITTNER, supra note 102, at 11; see also JEROME H. SKOLNICK & JAMES J. FYFE, ABOVE THE LAW: POLICE AND THE EXCESSIVE USE OF FORCE 242 (1993) (citation omitted).

^{173.} POLICING: A VIEW FROM THE STREET 267-70 (Peter K. Manning & John Van Maanen, eds., 1978).

^{174.} Cynthia L. Estlund, Working Together: The Workplace, Civil Society, and the Law, 89 GEORGETOWN L. REV. 1, 4 (2000) (describing the workplace as performing crucial functions of the civil society including fostering communication, connected-ness, and empathy among diverse individuals).

The skewed version of Broken Windows theory implemented by the NYPD reinforced the crime-fighting image of policing rather than the alternative norms about alternative solutions to crime problems developed carefully in other community-policing models.¹⁷⁵ The "crime fighting" image included stereotypes of citizens and criminals, stereotypes pregnant with racial meaning.¹⁷⁶ After all, the emphasis on social manifestations of disorder, with its demographic and neighborhood correlates, confounded race and disorder, giving rise to broad suspicion of criminal activity and intensified enforcement in minority neighborhoods. Despite recognizing that some citizens were law-abiding and welcomed police presence, the broad reach of stop and frisk policing risked placing many law-abiders under suspicion.

Efforts to reform the police workplace to modify social norms that emphasize race as a risk factor for crime will require complicated and sustained efforts to "admi[t] the workplace into the realm of civil society"¹⁷⁷ Policing as a workplace is at once both regulated by the state but also subject to hierarchy, rules, coercion, formal sanctions, and restraint. Is social norms theory applicable to changing the everyday logic and rules of policing? The shift in police function to OMP did not significantly modify core police functions, and in turn it was unlikely to modify the occupational "frame of reference" about crime and race.¹⁷⁸ Accordingly, the older social norms that were reinforced by those police functions and rewards that remained intact. How then, to change those norms?¹⁷⁹

Many efforts to curtail racial profiling have increasingly focused the role of statistics on police stops. Legislators in seven states have passed laws requiring police to keep statistics, and similar legislation is being considered in twenty-one additional states.¹⁸⁰ Rep-

180. An Act Concerning Traffic Stops Statistics, 1999 Conn. Acts 99-198 (Reg. Sess.); An act concerning criminal procedure; relating to the collection of information on traffic stops, 1999 Kan. Sess. Laws 2683; N.C. GEN. STAT. § 114-10 (1999); 2000 Mo. Legis. Serv. 1053 (West); An Act Relating to Motor and Other Vehicles, 1999

^{175.} Waldeck, supra note 19, at 1269-70.

^{176.} Thompson, *supra* note 17 at 987-89 (discussing the processes of racial and other stereotyping that may unconsciously influence stop and arrest decision making). 177. Estlund, *supra* note 174, at 5.

^{178.} POLICING: A VIEW FROM THE STREET, supra note 173, at 269.

^{179.} Professor Waldeck suggests that changes in police functions, specifically a return to the original intent of community policing and its emphasis on alternatives, will promote changes in social norms based on a different functional definition of policing. Waldeck, *supra* note 19, at 1300-01. But we propose changes that do not necessarily involve substantive modifications in police functions that are disruptive of the structural relationships within police hierarchies and workplaces.

resentative John Conyers, Jr. (D-MI) proposed similar legislation, the National Traffic Stops Statistics Study Act of 1998, which passed unanimously in the U.S. House of Representatives but was rejected in committee by the U.S. Senate.¹⁸¹ One rationale for the emphasis on data collection is that statistics can lead to transparency in policing,¹⁸² making decisions visible and publicly accountable. Statistics may enable police departments to evaluate their strategies, or assess whether there are disparity costs that come with successes of particular strategies. Data also make officers' actions transparent, making them more accountable for their decisions. As decisions and everyday actions become more democratic, social norms from community stakeholders will be infused into police norms.

But the dynamics of organizational change following the introduction of data raises several challenges. The organizational and democratic structures within which data are introduced, how datadriven facts are evaluated, and how their meaning is interpreted require experimentation to develop open forums for both internal organizational reflection and open policy debates.¹⁸³ How information is shared with community stakeholders, whether the agenda for analysis is shared with these groups, and how the findings of data analyses are translated into concrete measures for organizational change are part of a process of community participation that can "civilize" the police workplace through transparency, leading to democratic interactions focused on data-driven facts.¹⁸⁴ The ex-

181. See H.R. Rep. No. 105-435 (1998). The legislation passed unanimously in the House, but was voted down in the Senate Judiciary Committee due to opposition from police organizations. E.g., Robert Cohen, Racial profiling Allegations Spur Lawmakers to call for U.S. Study, THE STAR-LEDGER, Apr. 14, 1999 at 7.

182. For illustrations of the uses of data to assess strategies, see Eric Luna, Transparent Policing, 85 Iowa L. Rev. 1108, 1167-94 (2000).

183. Susan Sturm & Brandon Garrett. Moving Beyond Racial Profiling in New Jersey, Phila. INQUIRER, Dec. 4, 2000, at A15.

184. Constructing these types of relationships is likely to be contested, even when consent decrees set forth a framework for data collection on stops and monitoring of

R.I. Pub. Laws 7164; An Act Relating to reporting information on routine traffic enforcement, 1999 Wash. Legis. Serv. S.S.B. No. 6683 (SN); see also UNIV. OF MINN. Law SCH., INSTITUTE OF RACE AND POVERTY'S RACIAL PROFILING DATA COLLEC-TION STATUS REPORT (indicating that bills have been introduced in Alabama, Arkansas, Florida, Iowa, Illinois, Indiana, Kansas, Kentucky, Maryland, Massachusetts, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Wisconsin, and Virginia), http://www1.umn.edu/irp/ARB%20.html; Laura Gunderson, *Bill Aims to Track Racial Profiling*, PORTLAND OREGONIAN, Sept. 12, 2000 at B1 (describing proposed bill in Oregon, which following introduction, was hailed by state police and several major local police departments expressing interest in collecting data on stops).

tent to which opportunities for community interaction with police are routinized and institutionalized can break down the insularity of police social norms at the top and bottom of its hierarchy.

statistical trends. National Public Radio ("NPR") reported that civil rights groups including the American Civil Liberties Union of Southern California, and plaintiffs in prior racial profiling litigation against the Los Angeles Police Department ("LAPD") have filed motions to be included as monitors in the consent decree involving the LAPD. Morning Edition (Nat'l Pub. Radio broadcast, Dec. 18, 2000) (discussing the LAPD consent decree described supra note 7), audio clip of report available at http:// search.npr.org/cf/cmn/cmnps05fm.cfm?SegID=115661. In the wake of statements by President-elect Bush in the second presidential debate questioning the federal role in the reform of police departments, these groups are concerned that a court-appointed federal monitor will not effectively enforce the city's agreement. The NPR report quotes Mark Rosenbaum, legal director the Southern California ACLU, as stating that "[t]he decree fences out those individuals who have the greatest interest in the most conscientious enforcement " The NPR report quotes attorneys for the City of Los Angeles, who counter that "involving more people will lead to too much legal fighting and not improving policing. A federal judge will do the job on enforcing the court order, so no outside parties are needed." Id.

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Social Disorganization	Mean	Standard Deviation
% Non-Hispanic White	36.71	28.77
% Hispanic	27.34	20.50
% Black	26.77	27.00
Racial fragmentation	0.51	0.14
% Living in neighborhood < 6 months	25.57	9.32
% Living in residence < 4 years	39.81	4.60
% Immigrants	82.97	10.58
% Households with public assistance	18.88	13.81
% Not in labor force	40.76	8.19
% Worked less than 26 weeks past year	11.54	2.91
% Unemployed since 1997	38.22	8.65
% Education < less than HS graduate	27.69	12.72
Sex ratio: males: females	0.87	0.10
% Female headed households	21.71	10.97
% Population < 15 years old	22.42	6.63
Disorder		
% Dwellings with damaged exterior walls	3.24	17.71
% Dwellings with damaged exterior windows	2.80	19.11
% Dwelling with damaged stairways	5.69	23.17
% Dwellings with broken heat	13.58	34.26
% Dwellings with damaged floors	5.56	22.92
% Reporting any broken windows in neighborhood	8.89	28.46
% Reporting dilapidated buildings in neighborhood	7.78	26.79

Appendix A. Descriptive Statistics for Neighborhood Variables