

What Effect Did Police Response Have on Urban Riot Severity?

Investigating the Consequences of Initial Police Response to the Urban Riots of the 1960s and 1970s¹

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I. Introduction

On the evening of June 19th, 1967, tension at the Atlanta headquarters of the Student Nonviolent Coordinating Committee (SNCC) was running high. Frustration with police aggression, political exclusion and racial bias in the delivery of city services brought roughly 250 local blacks together to discuss possible agendas. Some leaders advocated submitting a petition of grievances to the government but the crowd was unmoved. Former SNCC president Stokely Carmichael took to the stage and exhorted the attendees to “take to the streets and force the police department to work until they fall in their tracks.” He further explained, “It’s not a question of law and order. We are not concerned with peace. We are concerned with the liberation of black people. We have to build a revolution” (National Advisory Commission on Civil Disorders, 29).

Following Carmichael’s speech, the group spilled into the street and grew to a mass estimated at approximately 1,000 people. Soon, the nine police officers present at the event were pelted with rocks and bottles, police car windows were broken and firecrackers were detonated in the night. Amid the tumult, 60 to 70 police reinforcements arrived and quickly restored order. Shots were fired over the heads of the crowd, 10 people were arrested and the crowd dispersed. Though that summer saw three more civil disorders in Atlanta, each succeeding riot involved less conflict than the previous one.

¹ I would like to thank Gregg Lee Carter for providing his urban riot data set.

Three weeks later on the evening of July 12th, nearly 900 miles to the north in Newark, New Jersey, similar discontent with the justice system, schools and city officials devolved from a peaceful protest into scattered minor acts of looting, property damage and anti-police violence. Though initially viewed by the mayor as an exceptional episode, the following night another peaceful march on the police station ended with the crowd dispersing and some participants instigating looting and arson. Outnumbered, the police attempted to cordon off the main downtown business area where young people were smashing storefront windows.

According to the National Advisory Commission on Civil Disorders (NACCD), or Kerner Report, “Grocery and liquor stores, clothing and furniture stores, drugstores and cleaners, appliance stores and pawnshops were the principal targets. Periodically, police officers would appear and fire their weapons over the heads of looters and rioters. Laden with stolen goods, people began returning to the [nearby] housing projects” (NACCD, 35). The police efforts to establish order proved ineffective and, ultimately, the National Guard was brought in to stop the riot. The riot continued, however, and not until July 17th was the National Guard withdrawn. Over the course of six days, 23 people were killed, including a 73-year old man, six women and two children.

Between 1964 and 1971, 752 spontaneous riots were recorded in black communities in 316 American cities—events that shocked the nation (Carter data set, 1995). The vast majority of these conflagrations, however, were less severe than portrayed in the media. Fewer than one in ten involved a person being killed and only about half of the incidents saw more than 10 people arrested. Yet in a small number of riots, such as the conflicts in Newark, Watts or Detroit, the level of violence, theft, property damage and arson were astonishing in their magnitude.

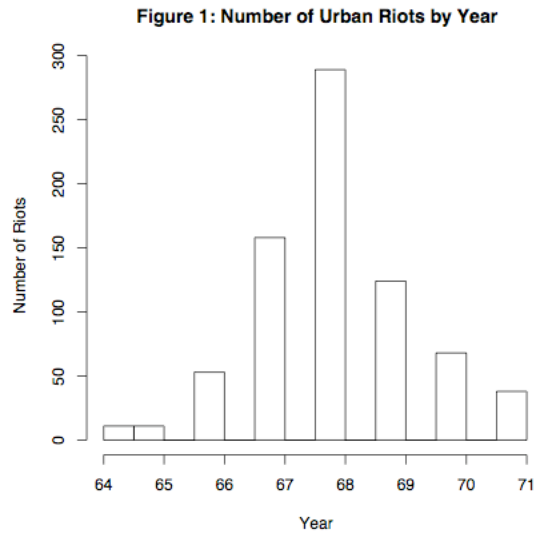
Why did some angry black throngs disband without major incident and other groups escalate into catastrophic violence? Ever since what has come to be known as the “long hot summers” of the mid-1960s, social scientists have suggested a variety of explanations for the dramatic differences in damages from different instances of urban rioting. These accounts include reasons such as racial grievances, deprivation or inter-ethnic competition for jobs. In particular, scholars have tried to determine what factors might affect a city’s likelihood of racial riots or varying riot severity. These analyses, however, have typically focused on broad trends, like the black unemployment rate, that affect whole cities or, in a number of cases, the whole nation. Few analyses have examined local factors specific to individual riots that might also play a critical role in the emergence and severity of riots. Commenting on this gap in the literature, Carter writes, “...much could be done by changing the unit of analysis from the ‘city’ to the ‘riot’ event and studying, in detail, the various circumstances surrounding police mobilization....” (Carter 1987, 612).

Building on the work of Carter and others, in this paper I assess whether policing activities in the early stages of civil disorder affect the severity of the ensuing riot. Three types of sources are referenced for this research: a database of 752 riots compiled by Carter, newspaper accounts of the riots in the *New York Times*, *Los Angeles Times* and *Washington Post* and U.S. government documents on urban riots like the Kerner Commission report. In contrast to much of the literature on the urban riots of the 1960s, which contends that federal interventions escalated tensions, I find that the local and state response plays a significant role in determining the severity of the riot. In particular, looking at a small subset of the 752 riots, I find that police under-response or over-response in the early stages of a civil disorder substantially increases the likelihood of a more severe riot.

Given the limited number of individual riots evaluated, however, my results are tentative and are useful primarily as an initial test of a hypothesis and methodology. A future research effort could attempt to review government and newspaper accounts of all 752 riots and code the responses to allow for a more thorough test of this finding. In addition, I make no attempt in this paper to control for other factors which have been shown to contribute to the likelihood of urban riots such as the size of the local black population and the black male unemployment rate. Any future research should incorporate other related forces into the model to assess the robustness of the theory.

II. Background and Literature Review

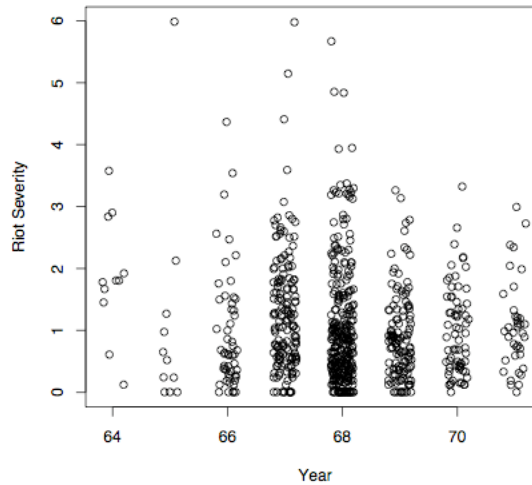
Throughout most of American history, racial rioting was initiated by whites and directed at blacks. Terrifying sprees of murder and mayhem like the New York City Draft Riots of 1863 could result in dozens of blacks losing their lives and thousands having their property stolen (Bernstein, 1990). Prior to the 1960s, however, black-initiated civil unrest was rare. As Figure 1 illustrates, however, beginning around 1964, the number of spontaneous, black-initiated riots grew dramatically through 1968, and then declined just as quickly through the early 1970s.



In addition to the significant increase in the number of black riots, these black acts of civil unrest were qualitatively different from anything prior in American history. Almost all prior race riots were led by white mobs directing their fury at black victims. Also, while white rioters combined violence towards people and property in black neighborhoods, black rioters generally focused their attention on property damage and looting in their own neighborhoods. Nearly 300 riots had significant numbers of arrests, injuries, killings and arson. A riot severity rating composite of those four measures for all 752 riots can be seen in Figure 2 (all scatter plots have the x-axis values “jittered” so that overlapping values do not appear as a single observation).² Eight riots in Los Angeles, Chicago, Baltimore, Detroit, Newark, Cleveland, Milwaukee and the District of Columbia were especially destructive and received severity ratings above four. Those eight events alone resulted in 33,542 arrests, 7,653 incidents of arson, 5,350 injuries and 135 people killed. The scope and unprecedented nature of these riots meant that disorders like the Watts riot of 1965 were front page news across the nation.

² For ease of interpretation, I recoded Carter’s severity rating from a scale of -1 to 5 to a scale of 0 to 6.

Figure 2: Riot Severity by Year



In response, government commissions and academics almost immediately attempted to explain the causes of the riots. Most early scholarship interpreting the explosion of urban rioting in the 1960s and early 1970s tended to view racial disorder as a function of racial grievances and deprivation (Eisinger, 1973; Gurr, 1972). The Kerner Commission Report, the paradigmatic example of this school of thought, argued that the riots were an unavoidable backlash to “the racial attitudes and behavior of white Americans toward black Americans” (NACCD, 10).

Though intuitively appealing, analyses that posited anger about racism, lack of opportunity and police repression were the fuel of civil unrest were unable to find solid empirical backing. Cities like Los Angeles and Detroit, where the two worst riots of the era occurred, were among the best places for blacks to live or work by a wide variety of measures (Thernstrom & Thernstrom, 162). For example, a few months before the Los Angeles riot, the National Urban League rated the city the best place in the nation for blacks to live. In Detroit, black unemployment in the city, prior to the riot, was lower than the national white unemployment rate. Conversely, many cities in which blacks suffered under especially difficult circumstances saw little or no rioting. In an influential series of articles, Spilerman (1971, 1976) consistently

found no relationship between various measures of grievance and absolute or relative deprivation, and a city's likelihood of experiencing a riot. Spilerman's results suggested that only the size of a city's black population and its presence outside the South were strongly, positively correlated with the probability of riot. Donald Horowitz summarized the early results as "indicators of black disadvantage do not predict either the location or the severity of the violence when it occurs" (1983, 192).

Spilerman's findings largely defined the field until more recent scholarship by Gregg Lee Carter, Susan Olzak and Daniel Myers extended and refined his results. Carter (1987) found that the size of the local police force had a curvilinear or inverse "U" relationship to riot severity. Carter's results suggested that initial growth in police force size might be correlated with more opportunities for hostile interactions between blacks and police officers and therefore lead to more severe rioting. Above a certain police force size, however, the repressive power of the state would be sufficient to quell incipient riots.

Olzak, in a series of groundbreaking articles (1987, 1996a, 1996b) further found that competition for jobs between whites, blacks and immigrants was strongly correlated with likelihood of rioting. Building on Spilerman's data set, Olzak found that declining segregation and consequent declining ethnic differentiation in job markets combined with economic contraction strongly predicted likelihood of a particular city experiencing riots. Olzak and Myers further extended Spilerman's results using event history analysis that allowed for measuring possible contagion effects of a riot in one area affecting the likelihood of future rioting in the same or proximate locations. Olzak (1996a) and Myers (1997) showed that there does appear to be a significant spatial and temporal relationship between distinct riots. In other words, a riot

today in one city significantly increases the likelihood that the same or adjacent cities will also experience riots in the near term.

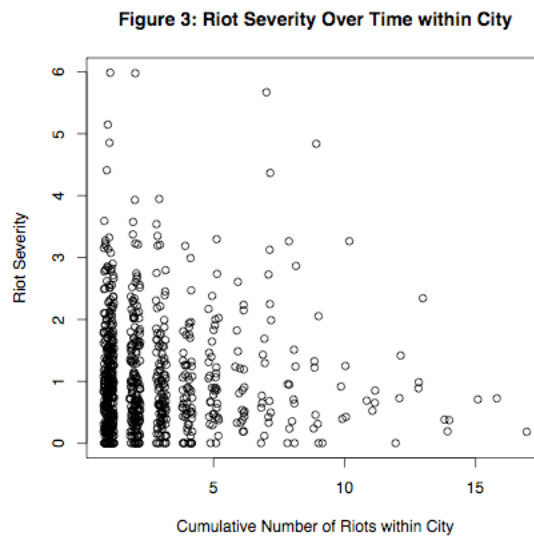
DiPasquale and Glaeser (1996) also test both neoclassical economic models of rioting and community grievance models. They conduct three separate analyses using data from cross-national riots that occurred between 1960 and 1985, mid-1960s urban riots in the United States, and the Los Angeles riots of 1992. They find some support for the view that the costs of time and arrest are associated with the incidence and intensity of riots. Further, echoing the work of Spilerman, they find ethnic diversity is a significant correlate of riots while poverty appears to explain little. Using the first two data sets, they further develop a model to predict which American cities are riot prone. In particular, they use their cross-national and cross-city results to investigate if the 1992 Los Angeles riots could have been predicted. In a ranking of which large cities are most prone to experience riot incidents, DiPasquale and Glaeser are surprised to find that eight out of 24 large cities rank ahead of Los Angeles in their estimated likelihood to riot. This last result suggests room for improvement in their model.

While macro-level theories of competition and diffusion have contributed significantly to understanding why blacks might have been inclined to violent civil disorder and which cities were more likely to erupt, the theories leave several important questions unresolved. First, given that most of the city-level characteristics did not change much between one year and the next, such theories do not adequately address why riots within the same city varied so dramatically in severity when separated by short time spans. Second, neither competition nor diffusion theory explain why the propensity to riot declined so dramatically after 1968.

Third, competition and diffusion theories do not explain why, within cities that experienced multiple riots, riot severity declines significantly over time. Though Figure 2 might

appear to suggest that riot severity peaks along with the number of riots, Figure 3 suggests that riot severity is much more tightly linked to the cumulative order of the riot. As seen in Figure 3, riot severity appears to decline as cities experience cumulatively more riots. Fourth, and finally, Carter (1987) notes an additional unsolved paradox, “In some riots, a rapid, massive police response ‘nipped the riot in the bud,’ keeping severity low; in others, the same response inflamed a milling and indecisive crowd-resulting in a great deal of violence” (31).

This paper seeks to address all four unresolved issues with the prior literature by testing the hypothesis that police under- and over-response explain a significant amount of the variation in riot severity. Further, this paper proposes, but can only confirm with anecdotal evidence, that the decline in riot severity is heavily influenced by improved policing developed in response to prior riots. As an example of this latter point, in their own analysis of the massive 1965 riots, the Los Angeles Police Department (LAPD) concluded that “deploying massive force at the outset could have controlled the riot,” and they further vowed “not to make the same mistake again” (Kennedy School of Government 2000).



III. Data

The dependent variable in this analysis is riot severity from the Carter data set.

Carter's data set covers every American city that experienced at least one black riot between 1964 and 1971 (Carter 1987). Carter's definition of a riot is intentionally similar to that of Spilerman and requires that each event involve mainly black aggression, produce a measurable amount of property damage or injury, involve at least 30 people and occur outside of a school setting or organized civil rights demonstration. The Carter data set was coded and cross-checked using a range of primary sources including the news clippings, government reports and Riot Data Reviews from the Lemberg Center for the Study of Violence at Brandeis University, Senate and Congressional reports, and *The New York Times* and *Washington Post*. From these sources, the total number of arrests, injuries, arson, deaths and days of rioting were calculated. The logarithm of each riot severity measure was then used to build a riot severity scale.

The independent variable in this analysis is police over- or under-response. Using government reports such as the National Advisory Commission on Civil Disorders and newspaper accounts from *The Los Angeles Times*, *The New York Times* and *The Washington Post*, individual riots were coded for indicators of police response. An under-response was coded positively when the police respond slowly or cautiously to growing turmoil. (See the article presented in Appendix Figure A-1 for an example of what appears to be police under response.) An over-response occurs when the state, typically the National Guard, applies too much indiscriminate force and unintentionally amplifies the destructive tendency of rioters. I find clear over-response (such as police shooting at unarmed crowds rather than into the air) to be relatively rare.

The coding works as follows: two additional variables are measured for each riot incident, under-response and over-response. Currently, the scoring is simply a dummy variable of “0” for “no” and “1” for “yes” for each response variable. Under- and over-response are coded independently and therefore it is possible for a single riot to have both. See Appendix Table A-1 the coding of each of the 65 individual riots being categorized according to police response. For the regression analysis in Table 1, the coefficients of the two variables are calculated separately. In Figure 4, the two dummy variables are added together to create a single composite police response score of 0, 1 or 2.

The coding for under- and over-response was completed by one person without an instrument that could create “bright-line” rules. Consequently, there is substantial risk that the results may be biased by the subjective reading of that one individual. Nevertheless, some riots, such as those in Watts and Newark, provide vivid examples of state inaction and overreaction. In Watts, the Kerner Report described police under-response in the early stages of the riot:

When police departed, members of the crowd began hurling rocks at passing cars, beating white motorists, and overturning cars and setting them on fire. The police reacted hesitantly. Actions they did take further inflamed the people on the street...Not until almost 30 hours after the initial flareup did window smashing, looting, and arson begin. Yet the police utilized only a small part of their forces. Few police were on hand the next morning when huge crowds gathered in the business district of Watts 2 miles from the location of the original disturbance, and began looting. In the absence of police response, the looting became bolder and spread into other areas (20).

In the example of Newark, though property damage and looting were occurring by the second day, it was not until the arrival of the National Guard on the third day that the riot began to escalate. Rumors of sniping, and a mandate from the governor to take a “hard line,” contributed to the National Guard firing an exceptional 13,326 rounds of ammunition in three days. By contrast, the U.S. Army troops marshaled during the Detroit riot, who were given strict

orders to hold fire, shot only 201 rounds over a longer time period. The Newark Director of Police told the Kerner Commission, “down in the Springfield Avenue area it was so bad that, in my opinion, Guardsmen were firing upon police and police were firing back at them. I really don’t believe there was as much sniping as we thought” (37). Of the estimated 23 deaths during the Newark riot, all but two were African American and almost all killed by police officers or the National Guard. Twelve blacks were killed in encounters with police and nine were bystanders. Numerous other Newark residents were injured, many in their own homes, as police and the National Guard shot into buildings while attempting to hit alleged snipers.

Similarly, in the Detroit riots, Sidney Fine in *Violence in the Model City* notes that in the early stages of the riot the mayor advocated a “walk softly” policy and delayed in marshalling local or outside law enforcement (172). Unfortunately, comments Fine, the early restraint resulted in the police losing any ability to reassert order and may have contributed to over-response later. Fine is attentive to the abuse and points out that “...the bulk of the criticism about law enforcement misdeeds was directed at the police and the Guard, and properly so” (236). Fine further highlights that “There were complaints that the police removed their badges and taped over license plates and squad car numbers so that they could not be identified when they engaged in improper behavior” (236). Finally, Fine cites specific examples of verbal and physical abuse by police and Guardsmen such as:

On July 25 Guardsmen halted a car in which Ronnie Moore and two other blacks were riding. Two police officers arrived on the scene, one saying ‘we have some more smart Niggers.’ One policeman reached into the car to hit Moore, and when he got out of the vehicle, the police hit him in the mouth, blackjacked him, and smashed the car’s windshield” (237).

At the end of the Detroit riots, of the 43 deaths, approximately 21 were at the hands of police, and nine by the National Guard, one by the Army (NACCD, 61).

IV. Model

Following the work of Chong (1992), this paper suggests that the interactions between police and rioters can be viewed as an iterative game in which each side is constantly learning about and adapting to the evolving tactics of the other side. This iterative game plays out in two stages. First, during the riot, police and rioters gauge each other's intentions and adjust their own behavior accordingly. Second, between riots, police and community members interpret the results of the prior riot and refine their tactics such that each additional riot event reflects some degree of increased knowledge. Thus, in the first iterative game, under-response by the police can be viewed as a signal to potential rioters that near-term lawlessness will likely go unpunished which in turn emboldens their behavior. In the second game, police learning after a riot substantively changes their response tactics to future riots and decreases the likelihood of "hold back" techniques which are more common for the first riot in a city.

Conversely, if, once the riot is underway, the police and Guardsmen intensify violence towards citizens, the perception of unjust state action may fuel temporary increases in violence on the part of rioters. Though striking the right balance between social control and repression is complicated under any circumstances, police forces were additionally burdened by the fact that they were often poorly trained and used inadequate techniques for riot control. Where policing is typically done independently in small groups, riot control requires military like command and control systems with large groups. The Kerner Report noted that "A study conducted for the Commission by the International Association of Chiefs of Police of 30 major police departments found that, while all had some form of written mobilization plan, the quality of the plans varied greatly" (NACCD, 268). Finally, the riot control methods developed in the 1960s in most police forces were designed to disperse crowds but were of little use against vandals breaking windows,

looters robbing stores or arsonists torching buildings (269). Thus, there was significant room for learning and improvement.

DiPasquale and Glaeser propose a useful way to model the costs and benefits of rioting. Though their model does not address between-riot learning by police, the basic framework remains quite applicable to this paper. Their model suggests equilibria will be achieved when the benefits of rioting meet the costs multiplied by the probability of arrest:

$$B(N, X, Y) = C(X)P(N, X)$$

In the model, $B(i, X, Y)$ is the net benefits of rioting to individual i . X is a vector of individual level characteristics that affect the cost of time and likelihood of profiting from rioting. Y is a vector of attributes that may affect the grievance or communal rewards from rioting. For the purposes of their study, DiPasquale and Glaeser generalize X and Y from individual level variables to location level variables. On the right-hand side of the equation are $C(X)$, the cost of being caught rioting, and $P(N, X)$, the probability of arrest given N number of rioters.

Figure 1: DiPasquale and Glaeser Model

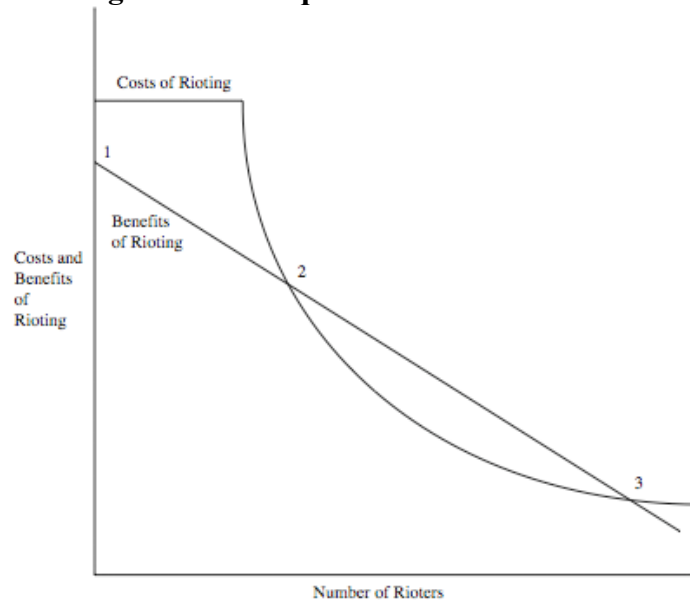


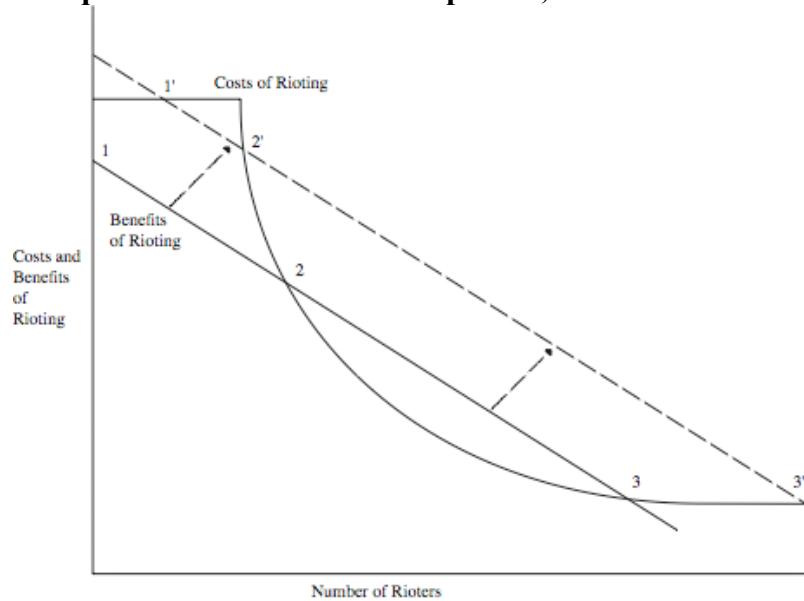
Figure 1 presents a plot of the DiPasquale and Glaeser model of the costs and benefits of rioting. The costs of rioting curve is downward sloping due to the fact that as more individuals enter the riot, the probability of arrest declines for each additional marginal rioter. The benefits of rioting curve is also a downward sloping curve because the marginal rioters will obtain lower benefits as the number of rioters increases. At point 1 within the Figure 1, the cost of rioting exceeds the benefit and there is no equilibrium. DiPasquale and Glaeser suggest that “riot entrepreneurs” may take on the responsibility of initiating riot activity. As more people join the riot, eventually the number of rioters overwhelms the police effort to impose costs (typically in the form of arrest) and an equilibrium is reached at point 2. From point 2 to point 3, rioting is profitable and mass looting takes place. As more people join the riot, however, the marginal benefit of rioting declines and equilibrium point 3 is crossed at which point the riot peters out.

Though a useful starting point, DiPasquale and Glaeser’s model is constrained by three flaws. First, they pay insufficient attention to the effects of shifts in the costs and benefits curves. Second, because most of their data analysis combines distinct riots within a given city, their model misses important differences between riots, even within the same city, that produce dramatically different riot intensities. Lastly, because their model assumes that the cost of enforcing order is fixed until a sufficient number of people have joined the riot, their model overlooks critical dynamics that determine both the likelihood and intensity of each riot.

DiPasquale and Glaeser acknowledge that: “Forces that shift that equilibrium in will make riots more likely” (58). They do not, however, plot or further discuss the implications of shifts in the cost or benefit curve. As seen in Figure 2, two significant implications of an upward shift in the benefits curve are the possibility that at point 1 the benefits of rioting will rise above the costs and also that the model will gain an additional equilibrium point. If the benefits curve

rises above the costs in the initial stage of the conflict, then the no-riot equilibrium shifts into a state where rioting is likely, solving the collective action problem the authors suggest would otherwise require “riot entrepreneurs.” As DiPasquale and Glaeser are more focused on assessing the neoclassical “greed” dimension of riots or X in the formula, they devote less attention to the “grievance” or Y dimensions. Anecdotally, however, the typical riot is triggered by some police action perceived by members of a community as unjust and that, in turn, significantly raises the Y component.

Figure 2: DiPasquale and Glaeser Model Updated, Benefits Curve Shifts Upward

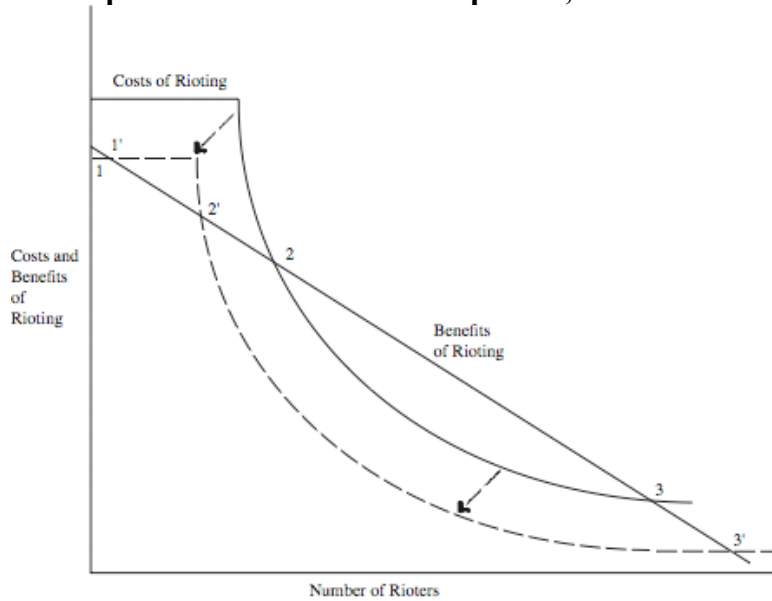


The other important implication of an increase in the benefits curve is the emergence of a third point of equilibria. As seen in Figure 2, a new point of equilibrium, 1', appears to the left of 2'. Between points 1' and 2', a no-riot equilibrium reemerges. This new set of equilibria suggests that the bigger collective action problem for an incipient riot exists after some initial riot incident. DiPasquale and Glaeser recognize the importance of the early riot interactions but do not appear to see the full implications. They argue: “The multiple equilibria framework suggests

that riots are related to initial events that bring the riot to a certain critical size” (58). What they miss is the significant hurdle a small mob confronts in the transition to becoming a bigger riot event. In other words, after some sort of precipitating incident increases Y and shifts the benefits of rioting curve upwards, a small mob may behave in rebellious ways but will likely dissipate unless significantly more people enter the melee and shift the benefits curve back above the costs (i.e. past point 2').

DiPasquale and Glaeser also are insufficiently attentive to the dynamic elements of the police response. Figure 3 demonstrates that if the cost of rioting curve shifts downward, the no-riot equilibrium can, again, transform into a scenario with a higher likelihood of rioting. Thus, police efforts to “hold back” early in a riot may signal to rioters that cost of rioting, $C(X)$, and probability of arrest, $P(N, X)$, are lower. This lower cost of rioting may then increase both the incidence and intensity of the riots as evidenced by the shift from 3 to 3'. DiPasquale and Glaeser briefly acknowledge the possibility that “police inactivity” may have been linked to the scale of the Los Angeles riots but then ignore this hypothesis and proceed to argue for other causal mechanisms (70).

Figure 3: DiPasquale and Glaeser Model Updated, Cost Curve Shifts Down



A final flaw in the DiPasquale and Glaeser model is their representation of a static quality to the costs of rioting curve during the initial period of the riot. The flat section between 1 and 2 in Figure 1 suggests that the cost of rioting remains fixed even as the initial number of rioters is growing. Ironically, this error is roughly akin to that made by police chiefs in cities like Detroit, Newark and Los Angeles when they expected conventional policing techniques to sufficiently circumscribe the riot behavior. A more accurate model would account for the fact that the initial outbreaks of lawlessness often occur in contexts where the police are sorely outnumbered and have little hope of controlling the crowd. After a spike in grievance (Y), once again, the initial no-riot equilibrium collapses. Only after the police are able to mobilize a larger repressive force or activate a riot plan, are the police in a position to restore order and push the costs of rioting above the benefits.

Figure 4: DiPasquale and Glaeser Model Updated, Variable Initial Cost Curve

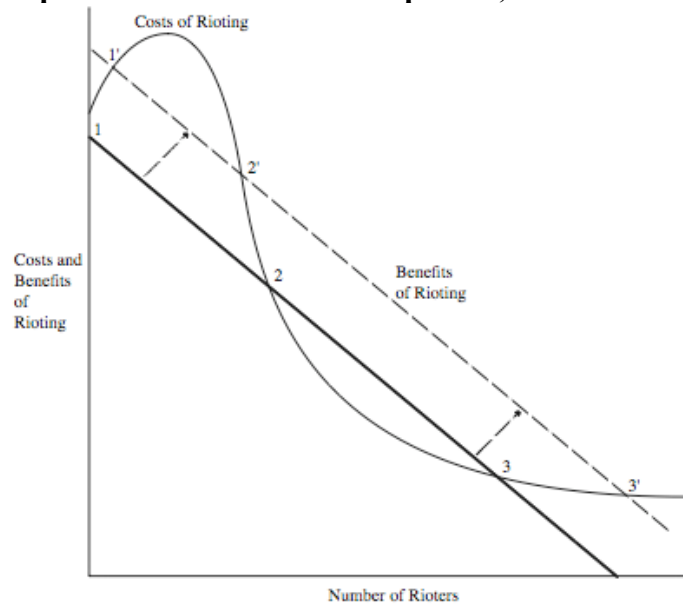


Figure 4 attempts to model the transition from crime policing at point 1 to riot control policing at point 1'. As with Figures 2 and 3, Figure 4 is also a three equilibria model, as opposed to DiPasquale and Glaeser's two equilibria model. As before, this suggests that once the police are sufficiently mobilized, a riot must add a large number of people to restore a riot equilibrium and move from point 1' to 2'.

Another way to interpret Figure 4 is to think of the number of rioters or x-axis as a function of time. From 1 to 1', the interactions between police and citizens are typically grievance related, relatively minor and may initially be hard to distinguish from more general criminal behavior. For example, the Watts riots began with a seemingly unremarkable argument between a cop, a drunk driver and his family. From 1' to 2' the state either mobilizes a riot response and quells the riot or, through under- or over-response, allows the riot to persist to point 2'. From 2' to 3' the primary motivation of rioters shifts from grievance to greed and many more people join the fray to loot rather than to express any social or political dissatisfaction.

Eventually, increased repressive power by the state and lower marginal gains from looting depress the riot and it ends.

V. Findings

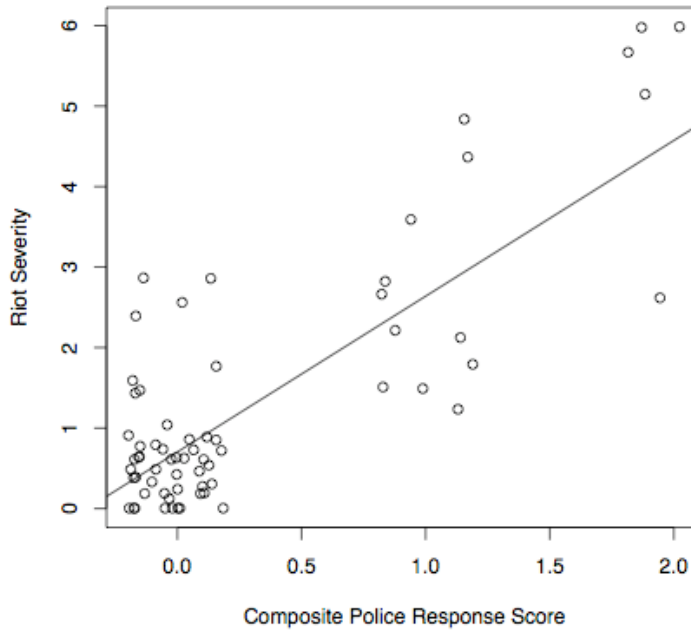
Based on a limited analysis of 65 riot events, I find significant evidence of a linear relationship between police response and riot severity. Specifically, government under-response or over-response to initial civil unrest appears to significantly escalate the severity of the riot. Table 1 presents the results of a linear model in which under- and over-response are regressed on riot severity. According to these findings, a shift from a timely, appropriate police response to police under-response increases the level of property damage, arson, injury and death by about two units on the severity scale. Given that the scale is comprised of logarithmic components and runs only from zero to six, a two unit increase is very significant. Similarly, a police over-response raises the riot severity by about 2.4 units.

Table 1

	Estimate	Std. Error	t value
(Intercept)	0.7032	0.1249	5.630
Under-response	1.9354	0.2915	6.639
Over-response	2.3611	0.4243	5.565

Figure 4 presents these results in a scatter plot in which it is clear that police response is strongly associated with riot severity.

Figure 4: Effect of Police Response on Severity



Though this paper suggests revisions to the DiPasquale and Glaeser model, these findings nevertheless echo their findings that the probability and size of punishment affect criminal actions. As they note: “...an increase in the probability of arrest lessens the probability and size of riots. Rioting is less common when the time or property costs of rioting are high” (75).

Similarly, my finding indirectly parallels Carter’s findings of an inverse “U” or curvilinear relationship between police force size and riot severity. The main distinction between my findings and Carter’s is that my results suggest a large force of police and National Guardsmen, if they use indiscriminate force, can actually increase riot severity. Nevertheless, Carter’s basic finding remains that larger per-capita police forces decrease riot severity primarily due to their ability to preempt the building momentum of mob activity, i.e. avoid under-response.

This research effort also found substantial anecdotal evidence that the hypothesized iterative game model is a good description of police and rioter interactions. Thus, the rapid decline in the number of riots after the peak in 1968 may have been, in part, due to improved

police techniques. For example, one police officer quoted after the second riot in Los Angeles suggested that, “the major differences in police tactics lay in the use of a ‘mobile arrest van,’ and not in using motorcycle police [who are far more vulnerable]” (Bart 1). In response to a third riot in Watts, one article reports that “By prearrangement, police instantly mobilized half the patrol cars from all seven metropolitan divisions and rushed them to the 36-square-block area centering on 103rd St. and Wilmington Ave.” (Houston, 1). Another story reported on a meeting at the Harvard Business School with the headline “Police Chiefs to Study How to Do a Better Job” and the sub-headline, “U.S. Backed Program Offers Aid on Such Problems as Budgets, Riot Prevention” (Ostrow, E3)

Similarly, community members adjust their behavior as well. One headline in the *Los Angeles Times* reported “Residents Give Cooperation” to describe a change in the relationship between the police and residents (Beck 1). Another article, under the headline “Detroit Sets Up ‘Listening Posts,’” described a voluntary community program to create a “human radar” to help provide early warnings to “signs of trouble” (New York Times, 80). Finally, in Tampa, the police and community residents established a “white-helmet” program in which volunteers, many of them young men from the black community, were encouraged to be the first responders to incipient riots. Of the program, Police Chief J. P. Mullins said: “he was overwhelmed with the effectiveness of the white-helmet patrols” (Chriss, E16).

VI. Future Research

This analysis could be improved in at least five ways. First, the current simple linear model assessing police response on severity would be substantially more credible if it controlled for city-specific variables which might affect both likelihood of rioting and riot severity. This could

be done with either city-level background characteristics or through the use of differences-techniques in which the first observation for each city acts as a baseline (See A-1 in the appendix for an initial attempt this type of model). Second, future efforts should develop a better instrument for coding police behavior to achieve more objective measures of under- and over-response. Third, more should be done to address endogeneity. It is entirely possible that my theory has causality backwards and that more severe riots lead to police under- and over-response. This research effort cannot currently refute that claim. Additionally, police over-response should probably be redefined or dropped from the model as it is very closely tied to some measures of riot severity like the number of deaths. Ideal measures of police under- or over-response would exclude any indicators that also are included in the composite of riot severity.

Fourth, much of the best recent work on riots uses event history analysis that treats the cumulative effect of riots within a city as a longitudinal data set, rather than as entirely separate events. This approach better accounts for the contagion effects of rioting across time and geography. To fully test this hypothesis, an event history-style model that was better able to account for the clustering of riots by time and place would need to be developed.³ Lastly, though clearly good qualitative evidence exists of police and community learning in the context of riots, further research is needed to fully substantiate the claim that the decreasing number and severity of riots was significantly driven by the evolution of an iterative game.

³ Personal correspondence with Prof. Susan Olzak.

VII. Conclusion

Though urban riots in America are now few and far between, several important implications arise from the preliminary results presented here. First, while the urban riots of the 1960s and early 1970s have often been described as organic uprisings in response to state and social oppression, the results of this paper suggest that state actors may be as responsible for the spread of lawlessness as the rioters themselves. Second, though riots are typically viewed as exceptional events, this paper suggests that incipient riots are in constant formation but most end uneventfully. In other words, riots only grow substantially when the state fails to maintain order. Third, this state failure to maintain order in urban communities can be viewed as part of a broader issue of ineffective policing and underprotection in poor black communities. Though clearly police brutality has been a primary and recurring spark to civil unrest, the Kerner Report suggests that the insufficient policing may in fact have been a greater contributor to black antipathy towards the police. The report notes that "...surveys have reported that Negroes in Harlem and south central Los Angeles mention inadequate protection more often than police brutality or harassment as a reason for their resentment toward the police" (161).

This paper also suggests several additional lines of inquiry. First, a sophisticated method, such as computer-driven textual analysis, is needed to code news and government reports on police behavior around riots. Second, an attempt to code such behavior for at least a few hundred of the riots would be ideal to fully test the hypothesis. Third, further research is necessary to assess if the decline in both the number of riots and riot severity over time could be a function of learning by the police and the local black communities on how to better calibrate their responses to incipient riots.

In conclusion, while some activists and scholars have glorified urban riots (Marable, 1984), recent research has suggested that the post-civil rights movement unrest has had serious long-term negative consequences for African Americans. One recent paper posits that blacks in cities with more severe riots experienced depressed income and employment for over a decade (Collins & Margo, 2004). A second paper by the same authors finds that after the 1970s, the disparity between black and white housing property values increased significantly in cities which suffered riots relative to those that did not (Collins & Margo, 2004). If these tentative findings are borne out, the short-term effects of the riots in property damage, injuries and lost life could conceivably be vastly exceeded by the long-term costs in social and economic dislocation. Viewed with these long-term costs in mind, the failure of local and state governments to adequately maintain order might be seen as a kind police brutality far worse than any other protested.

VII. Bibliography

- Bart, Peter. 1966. "New Riot in Watts Kills 2, Injures 25; 200 Police Quiet Negro Teen-Agers." *The New York Times*, 3/16/1966; ProQuest Historical Newspapers, p 1.
- Beck, Paul. 1966. "Growing Stability in Watts Noted During New Rioting." *The Los Angeles Times*, 3/18/1966. ProQuest Historical Newspapers, p 1.
- Bean, Jonathan J. 2000. "'Burn, Baby, Burn': Small Business in the Urban Riots of the 1960s." *Independent Review* 5(2):1086–1653.
- Bernstein, Iver. 1990. *The New York City Draft Riots*. Oxford University Press, Oxford, UK.
- Carter, Gregg Lee. 1986. "The 1960s Black Riots Revisited: City-Level Explanations of Their Severity." *Sociological Inquiry* 56(2):210–228.
- . 1986. "In the Narrows of the 1960s Black Rioting." *Journal of Conflict Resolution* 30(1):115-127.
- . 1987. "Local Police Force Size and the Severity of the 1960's Black Rioting." *Journal of Conflict Resolution* 31(4):601–614.
- . 1990. "Black Attitudes and the 1960s Black Rioting: A Community-Level Analysis of the Kerner Commission's 15-Cities Data." *The Sociological Quarterly* 31(2):269–286.
- . 1990. "Collective Violence and the Problem of Group Size in Aggregate-Level Studies." *Sociological Focus* 23(4):287–300.
- . 1992. "Hispanic Rioting During the Civil Rights Era." *Sociological Forum* 7(2):301-321.
- . 1997. "The Intersection Between Social Conflict and Collective Definitions of Reality: Why the 1960s African-American Rioting Ended." *Perspectives on Current Social Problems*. Allyn & Bacon. Boston, MA. 25–34.
- Chong, Dennis. 1991. *Collective Action and the Civil Rights Movement*. University of Chicago Press., Chicago, IL.
- Chris, Nicholas C. "Tampa 'White Helmet' Tryout Being Watched," *Los Angeles Times*, 6/18/1967; ProQuest Historical Newspapers, p E19.
- Collins, William and Robert Margo. 2004. "The Economic Aftermath of the 1960s Riots: Evidence from Property Values." *National Bureau of Economic Research*. Working Paper No. 10493.
- Collins, William and Robert Margo. 2004. "The Labor Market Effects of the 1960s Riots." *National Bureau of Economic Research*. Working Paper No. 10243.
- DiPasquale, Denise and Edward L. Glaeser. 1998. "The L.A. Riot and the Economics of Urban Unrest." *Journal of Urban Economics* 43:52-78.
- Eisinger, Peter K. 1973. "The Conditions of Protest Behavior in American Cities." *American Political Science Review* 67:11-28.
- Fine, Sidney. 1989. *Violence in the Model City: the Cavanagh Administration, Race Relations, and the Detroit Riot of 1987*. University of Michigan Press. Ann Arbor, MA.
- Gurr, Tedd Robert. 1972. "The Calculus of Civil Conflict." *The Journal of Social Issues* 28:27-48.
- Horowitz, D. 1985. *Ethnic Groups in Conflict*. University of California Press, Berkeley, CA.

- . 1983. "Racial Violence in the United States." *Ethnic Pluralism and Public Policy: Achieving Equality in the United States and Great Britain*. Lexington, MA: Lexington Books. 192.
- Houston, Paul. 1966. "Two Slain In New Watts Riot." *Los Angeles Times*. 3/16/1966. Proquest Historical Newspapers. P 1.
- John F. Kennedy School of Government. 2000. "Case Study: The Flawed Emergency Response to the 1992 Los Angeles Riots." C16-00-1586.0. <
<http://www.ksg.harvard.edu/research/publications/terrorism.htm>> (5/11/07).
- Marable, Manning. 1984. *Race, Reform, and Rebellion: The Second Reconstruction in Black America, 1945-1982*. London: Macmillan. 103.
- McAdam, Doug. 1982. *Political Process and the Development of Black Insurgency, 1930-1970*. Chicago, IL: University of Chicago Press.
- Mendelberg, Tali. 2001. *The Race Card: Campaign Strategy, Implicit Messages, and the Norm of Equality*. Princeton, NJ: Princeton University Press.
- Myers, Daniel J. 1997. "Racial Rioting in the 1960s: An event history analysis of local conditions." *American Sociological Review* 62(1):94-112.
- National Advisory Commission on Civil Disorders. 1968. *Report of the National Advisory Commission on Civil Disorders*. New York; Bantam Books.
- New York Times, The*. "Detroit Sets Up 'Listening Posts,'" 6/11/1967. ProQuest Historical Newspapers. p 80.
- Olzak, Susan. 1987. "Causes of Ethnic Protest and Conflict in Urban America, 1877-1889." *Social Science Research* 16:185-210.
- Olzak, Susan, and Suzanne Shanahan. 1996a. "Deprivation Race Riots: An Extension of Spilerman's Analysis." *Social Forces* 74:931-61.
- Olzak, Susan, Suzanne Shanahan, and Elizabeth H. McEneaney. 1996b. "Poverty, Segregation, and Race Riots, 1960-1993." *American Sociological Review*. 61(4): 590-613.
- Thernstrom, Stephen and Abigail Thernstrom. 1997. *American in Black and White*. Simon & Schuster. New York. NY.
- Spilerman, Seymour. 1976. "Structural characteristics of cities and the severity of racial disorders." *American Sociological Review* 41:771-793.
- . 1971. "The causes of racial disturbances: Test of an explanation." *American Sociological Review* 36:427-442.
- Wanderer, Jules J. 1969. "An Index of Riot Severity and Some Correlates." *American Journal of Sociology* 74(5):500-505.

VI. Appendix

A-1: Possible Alternative Model

An alternative specification using a simple differences approach might look like the following:

$$S = f\{C, N, E(t)\}$$

Where S is the severity of the riot, C is a measure of the conditions unique to each place (which is assumed for the sake of simplicity to change very slowly and therefore treated as unchanging), N is the number of previous riots, and $E(t)$ is the function of enforcement.

The formula written as a linear relationship is as follows:

$$S = \beta_0 + \beta_1 C + \beta_2 N + \beta_3 E(t)$$

And the change in severity of a riot,

$$S(t) - S(t-1) = \beta_0 + \beta_1 C + \beta_2 N + \beta_3 E(t) - [\beta_0 + \beta_1 C + \beta_2(N-1) + \beta_3 E(t-1)]$$

Which simplifies to:

$$S(t) - S(t-1) = \beta_2 + \beta_3 [E(t) - E(t-1)]$$

Thus, the change in riot severity is a linear function of the change in policing. The constant term β_2 which is the coefficient for the effect of the number of riots is expected to be negative.

Table A-1: 65 Riot Events Coded for Under- and Over-response

CITY	STATE	MONTH	DAY	YEAR	UNDER	OVER	FACTSEV
LOS ANGELES	CALIFORNIA	8	11	65	1	1	5.98613
LOS ANGELES	CALIFORNIA	3	15	66	0	0	2.56115
LOS ANGELES	CALIFORNIA	5	18	66	0	0	0.61167
BAKERSFIELD	CALIFORNIA	5	22	66	0	0	1.43443
LOS ANGELES	CALIFORNIA	5	24	66	0	0	0.46437
BROOKLYN	NEW YORK	5	30	66	0	0	0.62514
BROOKLYN	NEW YORK	6	12	66	0	0	0.85978
DES MOINES	IOWA	7	4	66	0	0	0.1861
CLEVELAND	OHIO	7	18	66	1	0	4.36731
OMAHA	NEBRASKA	7	30	66	1	0	1.51
LOS ANGELES	CALIFORNIA	7	31	66	0	0	0.00408
DETROIT	MICHIGAN	8	9	66	1	0	2.21419
OMAHA	NEBRASKA	4	1	67	0	0	0.79197
SAN FRANCISCO	CALIFORNIA	5	14	67	1	0	2.12494
HOUSTON	TEXAS	5	16	67	1	0	1.79191
BOSTON	MASSACHUSETTS	6	2	67	0	1	2.66406
PHILADELPHIA	PENNSYLVANIA	6	10	67	0	0	0.88924
TAMPA	FLORIDA	6	11	67	1	1	2.61815
CINCINNATI	OHIO	6	12	67	1	0	3.59144
LOS ANGELES	CALIFORNIA	6	13	67	0	0	0.33148
DAYTON	OHIO	6	14	67	0	0	1.7675
ATLANTA	GEORGIA	6	18	67	0	0	1.46993
BUFFALO	NEW YORK	6	27	67	1	0	2.82287
SAN DIEGO	CALIFORNIA	6	28	67	0	0	0.61167
CINCINNATI	OHIO	7	3	67	0	0	1.59081
TAMPA	FLORIDA	7	9	67	0	0	0.18893
NEWARK	NEW JERSEY	7	12	67	1	1	5.1475
PLAINFIELD	NEW JERSEY	7	14	67	0	0	2.85907
EAST ORANGE	NEW JERSEY	7	15	67	0	0	1.0403
JERSEY CITY	NEW JERSEY	7	15	67	1	0	1.49111
NEW BRUNSWICK	NEW JERSEY	7	17	67	1	0	1.23415
ELIZABETH	NEW JERSEY	7	17	67	0	0	0.48757
NYACK	NEW YORK	7	18	67	0	0	0.72081
DETROIT	MICHIGAN	7	23	67	1	1	5.97745
MANHATTAN	NEW YORK	7	26	67	0	0	0.53879
NEW ROCHELLE	NEW YORK	7	27	67	0	0	0.00408
N. AMITYVILLE	NEW YORK	8	27	67	0	0	0.00408
TRENTON	NEW JERSEY	12	13	67	0	0	0.90918
CHICAGO	ILLINOIS	4	4	68	1	0	4.83736
SYRACUSE	NEW YORK	4	4	68	0	0	0.61041
D.C.	WASHINGTON	4	4	68	1	1	5.66954
TRENTON	NEW JERSEY	4	5	68	0	0	0.12365
NIAGRA FALLS	NEW YORK	4	5	68	0	0	0.63306
PORTCHESTER	NEW YORK	4	5	68	0	0	0.1861
OSSINING	NEW YORK	4	5	68	0	0	0.00408
NEW ROCHELLE	NEW YORK	4	5	68	0	0	0.27487
MONTICELLO	NEW YORK	4	5	68	0	0	0.00408
DAYTON	OHIO	4	5	68	0	0	0.00408
HEMPSTEAD	NEW YORK	4	9	68	0	0	0.77444
NEWBURGH	NEW YORK	4	9	68	0	0	0.00408
LONG BEACH	NEW YORK	4	9	68	0	0	0.42373
UNIONDALE	NEW YORK	4	9	68	0	0	0.19359
JERSEY CITY	NEW JERSEY	5	7	68	0	0	0.38841
BROOKLYN	NEW YORK	5	16	68	0	0	0.00408
BROOKLYN	NEW YORK	7	4	68	0	0	0.24027
BOSTON	MASSACHUSETTS	7	8	68	0	0	0.63761
BROOKLYN	NEW YORK	7	10	68	0	0	0.85176

PHILADELPHIA	PENNSYLVANIA	7	13	68	0	0	0.64538
DETROIT	MICHIGAN	7	25	68	0	0	0.30566
LOS ANGELES	CALIFORNIA	8	11	68	0	0	2.8657
BROOKLYN	NEW YORK	8	21	68	0	0	0.72914
PEEKSKILL	NEW YORK	10	24	68	0	0	0.48757
MANHATTAN	NEW YORK	5	10	69	0	0	0.73733
MIAMI	FLORIDA	6	15	70	0	0	2.39253
BROOKLYN	NEW YORK	5	17	71	0	0	0.38309

Figure A-1: Example of News Report Coded for Under-response

Looting in Washington
Special to The New York Times
New York Times (1957-Carson/36); Apr 5, 1968; ProQuest Historical Newspapers The New York Times (1851 - 2003)
pg. 26

Looting in Washington
Special to The New York Times

WASHINGTON, Friday, April 5—Scattered but persistent looting and vandalism, led for a time by Stokely Carmichael, erupted in the nation's capital last night an hour after the death of the Rev. Dr. Martin Luther King Jr.

The looting, the work of roving groups of Negro youths racing on foot from the Negro slum area into Washington's fashionable downtown shopping district, began at about 8:30 and caused a citywide police alert.

As it began, Carmichael advised Negroes to "go home and get your guns."

Police were dispatched to several of more than a dozen fires to protect firemen, who came under barrages of gravel, bottles and rocks. The police said the fires appeared to have been set.

At one point, the looting reached to within six blocks of the White House. The display window of a men's store at 10th Street and Pennsylvania Avenue, N.W., on a stretch of the national boulevard that is familiar to Washington tourists, was stripped of suits before the police, heavily committed in the Negro commercial section a mile to the north, could respond.

'Mopping Up' Drive Starts

At 1 A.M. today, Police Chief John B. Layton said a "mopping up operation" was underway. The chief said there had been "some isolated window breaking." There were seven reported arrests.

But there was still a steady stream of fire alarms and calls for police to disperse looters and roving gangs of youths.

Mayor Walter E. Washington, a Negro, and Public Safety Director Patrick V. Murphy were among the top Government officials cruising the streets in the effort to restore order.

After several hours of deliberately holding the police tactical squad in reserve, away from the disturbance, cordons of helmeted officers, some of them wearing gas masks, began dispersing the crowds.

Deputy Police Chief John S. Hughes said that every member of the 2,000-man force "we can get our hands on is on duty."

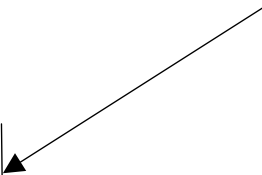
"We are trying to maintain a visible presence in the troubled area," he said.

Chief Hughes told newsmen that troops of the District of Columbia National Guard were on stand-by "but we have not called for them yet."

The police said riot squad officers used tear gas late tonight to open a path through a hostile crowd for fire equipment responding to an alarm.

The area of looting and disturbances was half a mile wide and about three miles long, from Seventh to Fourteenth Street N.W. and from Pennsylvania Avenue north to Randolph Street.

"After several hours of deliberately holding the police tactical squad in reserve, away from the disturbance, cordons of helmeted officers, some of them wearing gas masks, began dispersing the crowds."



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