Black Lives Matter: Evidence that Police-Caused Deaths Predict Protest Activity

Vanessa Williamson, Kris-Stella Trump, and Katherine Levine Einstein

Since 2013, protests opposing police violence against Black people have occurred across a number of American cities under the banner of “Black Lives Matter.” We develop a new dataset of Black Lives Matter protests that took place in 2014–2015 and explore the contexts in which they emerged. We find that Black Lives Matter protests are more likely to occur in localities where more Black people have previously been killed by police. We discuss the implications of our findings in light of the literature on the development of social movements and recent scholarship on the carceral state’s impact on political engagement.

While the movement is now closely associated with opposition to police brutality, the phrase “Black Lives Matter” originated in response to the July 2013 acquittal of a civilian, George Zimmerman, in the shooting death of the unarmed teenager, Trayvon Martin. Over the following months and years, Black Lives Matter activists played a central role in organizing protests that drew attention to deaths of Black people at the hands of police, to the broader issue of police violence and over-policing, and to other persistent racial disparities in economic, social and political power. Groups associated with Black Lives Matter have advocated for a wide variety of policy changes—including body cameras, independent special prosecutors, and greater transparency in policing—and have proven to be a salient political force, drawing enormous attention from all sides of the political spectrum at the local and national levels.

By calling attention to police brutality against Black people, this new wave of activism has spurred scholars to highlight a failure in political science to fully explore the consequences of state repression in the United States. While recent studies have begun to examine the political consequences of the American carceral state, we have relatively little evidence on when and why these conditions...
generate protest activity such as that engaged in by Black Lives Matter (BLM) activists. Moreover, though scholars have done crucial work to situate the movement historically and philosophically, empirical research on the scope and impact of BLM has focused primarily on the online networks within and around the movement. We extend the early empirical literature on BLM by assessing the contexts in which physical-world protests occurred.

We combine a novel dataset of BLM protests in the United States with political and demographic data to assess where these protests emerged, with a particular focus on the extent to which police-caused deaths spatially predict protest activity. Our goals for this study are twofold. First, we offer new descriptive evidence on the geographic spread of these politically significant protests. From August 2014 to August 2015, at least 780 BLM protests occurred in 44 states and 223 localities; 14% of all U.S. cities with more than 30,000 inhabitants saw at least one BLM protest in this time period. Our BLM protest dataset is available as part of the replication materials for this paper, available in the supplemental materials, and we hope it will be a useful tool for future research.

Second, we explore the pattern of BLM protests. We focus especially on recent scholarly discussions of how the state security apparatus affects political activity in the United States, but also draw on classic theories regarding the state security apparatus. Given this history, it is important to assess how the criminal justice system plays into the distribution and exercise of political power in contemporary America. The most obvious way in which the criminal justice system limits political engagement is felon disenfranchisement, which affects approximately 2.5% of the U.S. voting age population, including 7.4% of the Black voting age population. But this is far from the only way in which contact with the criminal justice system might reduce political activity. Weaver and Lerman have found that even comparatively low-level interactions with the carceral state—such as questioning and arrest without conviction—reduce individuals’ political participation. If policies can “make citizens,” interactions with government can also provide deeply disempowering lessons about how and for whom democracy works.

As Weaver and Lerman note, “carceral contact is not randomly distributed, but is spatially and racially concentrated.” High rates of incarceration in a neighborhood reduce political participation by fraying social ties and reducing economic resources. In addition, entire communities subject to heavy policing may experience reduced trust in government. Lerman and Weaver find correlative evidence of a decline in 311 calls in places experiencing high rates of invasive policing. Other research, however, suggests that proximal contact with the criminal justice system—i.e., knowing individuals who have interacted with the carceral state but not having had such interactions oneself—might actually be mobilizing.

In this paper, we contribute to the literature on the carceral state and political participation by examining the association between the deaths of Black people at the hands of police officers and protest action about that grievance. Our work represents an expansion of previous research, which has often relied on survey indices of individual political behaviors or attitudes, or on datasets of individual civic activities not directly related to policing. Our dependent variable, protest frequency, provides a locality-level perspective on the political correlates of the carceral state. This observational data allows us to explore political expression where lethal police violence has occurred.

Analyzing protest activity at the level of locality has implications for our theoretical expectations. On the one
hand, the localities we look at are large enough that much of their population is relatively farther removed from the individual- and community-level social and economic consequences of overpolicing. This distance could make the collective action of protest easier, since it implies relatively less exposure to the demobilizing effects of direct carceral contact. On the other hand, being farther removed from the direct experience of grievance could also result in less motivation to participate. But there are good reasons to imagine that political responsiveness to police killings might extend beyond familial or neighborhood boundaries.

First, the Black community shares a historically strong sense of “linked fate,” and growing class divides have not weakened the cross-class commitment to racial justice. This strong sense of in-group identification can increase reputational and expressive benefits to potential protest participation. Additionally, racial bias in policing is an issue that appears to transcend class boundaries. Among Black Americans, education correlates with an increased propensity to see police profiling as pervasive, and an increased likelihood of reporting having experienced police profiling personally. Members of the Black middle class are also especially skeptical of the notion that Black people receive equal treatment in the justice system. To the extent that the killing of Black people by police is perceived as one example of a broader array of biases in the criminal justice system—a point we return to in the discussion section—it would be reasonable to expect the Black Lives Matter mobilization to cross class divisions among Black people, and therefore to reach well beyond the lower-income neighborhoods most subject to overpolicing.

In addition, mobile technology may have increased the efficacy of protest by helping marginalized groups to “circulate their own narratives without relying on mainstream news outlets,” and to “socialize conflicts with police by providing clear empirical evidence of the violation. This capacity may be of critical value when protestors come from groups that tend to receive less sympathetic media coverage and whose testimony may be seen as suspect by the broader public.”

Moreover, police killings are concrete and observable events carried out by a specific state actor. These factors may facilitate the process of blame attribution, setting police killings apart from more diffuse social problems (such as poverty, inequality, or lack of mobility). For instance, Muller and Schrage show that growth in state powers of the state are expanding in the domestic arena, and localities can under certain conditions respond to overpolicing with political mobilization, that cycle can be broken.

On the other hand, a pattern of over-policing might create the expectation among potential protestors that such protests would be met, not with accommodation of their demands, but with violent state repression. Moreover, if police officers are perceived as able to violate local citizens’ rights with impunity, potential protestors might also doubt that state violence against protestors would draw public attention and sympathy, a key component of an effective protest strategy. If we find that localities with a history of frequent police-caused deaths of Black people were more prone to protest under the banner Black Lives Matter, the implications are significant. If carceral contact is always reinforcing cycle of disempowerment. If, on the other hand, localities can under certain conditions respond to overpolicing with political mobilization, that cycle can be interrupted. However, if those directly impacted by the carceral state come to be represented in the political arena by geographically proximate others—whose lived experiences and policy priorities may be quite different—the result remains a substantial and deeply problematic distortion in representation. In a time when the coercive powers of the state are expanding in the domestic arena, these questions are critical ones.

**Resource Mobilization and Political Opportunity Structure**

Political and social discontent only occasionally results in public protest, in part because mass protest faces a substantial collective action problem. There is a rich tradition of research in the social sciences that seeks to identify the contexts in which larger, more frequent, and more organized protests occur. In examining the potential relationship between police violence and BLM protests, we must also account for the economic, social, and political materials and tools available to protestors and potential protestors. Here we discuss this robust literature and how we apply it to our analysis.

While those groups with the fewest resources are hampered in their ability to engage in public contestation, those with the most resources may have less need to resort to such methods; for this reason, the impact of resource mobilization on protest is sometimes described as curvilinear. It is for those in the middle that protest activity

The burgeoning literature on the impact of the carceral state on political participation has, to date, focused primarily on “insider” strategies, such as voting or running for office, rather than “outsider” strategies, like public protest, that are the political strategies of the disempowered. This focus may overlook the most likely forms of political participation if heavily policed communities, discouraged from pursuing insider strategies, find other channels to voice their dissatisfaction.
is most likely.\textsuperscript{39} This scholarship leads us to expect a curvilinear relationship between the resources available to the Black community and the intensity of protest. In addition to income, Verba, Schlozman, and Brady show that education is a critical political resource.\textsuperscript{40} Counter-intuitively, this insight appears to hold for some more extreme political expression also; in the context of the Watts riots in Los Angeles, Sears and McConahay find that among the residents of the protesting areas, those with more education were more likely to participate in the riots.\textsuperscript{41} The scholarship on the importance of resources on the individual level thus leads us to expect that higher percentages of middle-class Black people and college-educated populations will be associated with larger or more frequent protests.\textsuperscript{42}

As political process theory would suggest, we need to take account of political opportunities and mobilizing structures as well as the material resources available to potential protestors.\textsuperscript{43}

From this perspective, we would expect protests to be more frequent in cities where local politicians are more concerned about police brutality, or about the concerns of the Black community more generally. In an ideal world, we would be able to glean the attitudes of local political elites and policing and police violence in American cities prior to the start of the Black Lives Matter movement. Unfortunately, to the best of our knowledge, this kind of elite survey does not exist. We are therefore left with imperfect proxies for attention to the concerns of Black constituents.

First, we include in our analysis an indicator of whether a city has a Black mayor.\textsuperscript{44} In addition, we expect that local partisan conditions may predict the frequency of Black Lives Matter protests. Black Americans strongly and increasingly identify with the Democratic party,\textsuperscript{45} so we include city partisanship as a control, expecting more protests in Democratic cities (based on presidential election vote tallies) and in cities with Democratic mayors. While local partisan divisions are often not as sharp as those at the national level, the left-right divide that partitions national politics persists locally,\textsuperscript{46} suggesting that local political elite party affiliation should similarly correlate with political opportunity for BLM protestors.

Moreover, there is some evidence that BLM leaders deliberately targeted Democratic presidential candidates for protests because of their perceived friendliness to the movement’s aims. In an appearance on the news program Democracy Now, Danausia Yancey, a prominent organizer of Black Lives Matter Boston, offered this explanation for targeting Democratic candidates: “It’s actually a practice called ‘power mapping’, . . . where you actually map who’s closest to you on the issue and go to those folks first in order to force them to articulate their stance and then hold them accountable. So this movement is very strategic, and that’s what we’ve been doing.”\textsuperscript{47} To the extent Yancey describes a broader strategy within the Black Lives Matter movement, we would expect higher levels of protest in more strongly Democratic localities.

Another relevant aspect of the local political opportunity structure is the historical strength of local Black political institutions and community organizations. Places where Black Americans have a history of political contestation may favor greater protest activity.\textsuperscript{48} These locations are more likely to have institutions and networks in place that can overcome collective action problems, as well as a local population more familiar with protest tactics and scripts. We consider the tricky question of how to operationalize such a variable later.

In our analyses that follow, we include indicators for economic resources and political opportunity structures, in part to confirm whether patterns of BLM protests are successfully predicted by such variables, and in part to improve interpretation of any relationship that we find between police killings and protest activity. Of course, no quantitative operationalization of ideas as complex and nuanced as political resources or social ties will be comprehensive. And since these data are observational, there are several limitations to our approach, even with these controls in place. We are unable to establish causality, and the locality-level nature of our measurements also rules out an exploration of detailed individual-level mechanisms that may explain patterns of behavior that we uncover. Nonetheless, we believe that this is a useful first step toward better understanding the relationship between police violence and protest activity. In the next section, we discuss our data and its promises and limitations in more detail.

\section*{Data}

To examine the contexts in which Black Lives Matter protests occurred, we developed a novel dataset of protests, including their size and location. To perform the following analyses, we matched this dataset with demographic and political data.

Our dataset of Black Lives Matter protests captures 780 BLM protests in the year after the death of Michael Brown, an unarmed man killed by a police officer in Ferguson, Missouri, on August 9, 2014.\textsuperscript{49} Our data was developed from a dataset built by Alisa Robinson, graduate of the political science department at the University of Chicago, and made available by a Creative Commons license. We amended her data by adding additional protests, correcting some errors, and removing all protests that were not in-person public gatherings held in the United States.\textsuperscript{50} For each protest we have a date, geocoded location, and, wherever possible, an estimate of the number of protest participants. The dataset includes protests in 44 states and 223 localities. Because protest size estimates are inherently
error prone, all of our analyses below rely on a dichotomous measure of whether or not a protest occurred.

Figure 1 reviews the frequency of protests during the protest year. The largest peaks are associated with the death of Michael Brown in Ferguson, MO (August 2014), the non-indictment of officer Darren Wilson in that case (November 2014), and the non-indictment of officer Daniel Pantaleo in the chokehold death of Eric Garner (December 2014).

In the analysis that follows, we bring together our protest data with contextual data about the localities in which protests took place. Because in-person protest activity by definition requires large groups of people to congregate, we focus our analysis on the 1,358 localities in the United States with a population over 30,000.

Most research exploring the relationship between the carceral state and political participation has used individual- or neighborhood-level metrics as dependent variables. Here we use a city-level metric of protest frequency. Though we have more granular data regarding the location of protests and of police-caused deaths, we aggregate our data here to the level of FIPS locality. While some BLM protests were held at the location of a police-caused death (such as at the site of Michael Brown’s death in Ferguson, MO), we do not think that, within a locality, there would be a theoretical reason to expect a strong systematic relationship between the location of a police-caused death and the location of protest. The precise location of the protests in our dataset often reflect logistical or symbolic considerations—such as in front of City Hall, or in a large park. By contrast, localities map relatively well onto towns and other similarly politically and socially meaningful geographic areas from which one might expect protestors to be drawn.

It may be that events in some localities have spillover effects in neighboring localities, especially where several FIPS codes map on to one larger city with its surrounding suburbs. As a result, our estimates of the number of applicable police killings in a city, as well as our estimates of the available protest population may be underestimates in some cases. However, the FIPS locality remains the best spatial unit for which we can obtain control variables. In addition, insofar as the data cannot capture spillover effects that one death may cause in nearby localities, this would push against finding an effect, making our results more conservative.

Our locality-level measures of population, population density, percentage Black, and Black poverty rates are drawn from the 2014 American Community Survey’s 5-year estimates. Summary statistics for our key variables can be found in table 1; the replication materials also include a correlation matrix. In keeping with the resource mobilization literature that predicts a quadratic relationship between economic wellbeing and protest, we include both the Black poverty rate and the square of the Black poverty rate.

We operationalize local education levels in two ways. First, we include a measure of the percentage of the population with at least a bachelor’s degree, based again on the American Community Survey’s 5-year estimate. Second, because college students themselves often play an important role in protests, we include an estimate of the number of college students attending schools in each locality, drawing on the estimates produced in the Integrated Postsecondary Education Data System maintained by the National Center for Education Statistics.

We include several measures intended to assess the political opportunity structure of the localities. First, we include variables for mayoral race and mayoral party (expecting Democratic and Black mayors to preside over more BLM protests). We also include a control for local Democratic vote share, using 2008 presidential election results aggregated at the level of locality.51

In addition, we develop a measure intended to capture, as best as we can, the history of Black political organizing in an area. We use a dataset of NAACP chapters, 1912–1977, developed by the University of Washington’s Mapping American Social Movements Project.52 Our measure is the number of years a locality had a local NAACP branch during this early period of the organization’s activism. This variable is not intended to imply a leading role of the NAACP in the development of the Black Lives Matter,53 but rather to serve as an (imperfect) proxy for a tradition of Black political activity that might be missed by measures of Black population, mayoral race and the strength of the local Democratic Party.
Finally, we examine the key relationship of interest: the association between deaths caused by police and BLM protests. There are no governmental databases of police-caused homicides; our data comes from the nonprofit databases, “Killed By Police” and “Fatal Encounters.” The two sites provide local news reports of each reported death. For further confirmation, we verified the two datasets against one another. These data are intended to capture one aspect of the state security apparatus; this is an aspect of the state that BLM protests have explicitly targeted. We acknowledge that deaths caused by police may, but do not necessarily, correlate with other aspects of policing, such as arrest rates, stop-and-frisk rates, or excessive non-lethal violence. Each of these aspects of the carceral state may well have an independent, and different, impact on political participation that we do not examine here. In addition, our data by definition and choice do not address the underlying determinants of police violence. We are interested in asking whether the constellation of social forces that manifest themselves in high rates of lethal police violence are associated with higher rates of protest against such violence.54

We limit our data on deaths caused by police to the dates between January 1, 2013, the earliest date for which the data is available, and August 9, 2014, the date of death of Michael Brown and the beginning of our protest observation period. During that time, at least 1,730 people were killed by the police;55 we remove from this dataset deaths that were caused by vehicle collisions, leaving a total of 1,637 people killed by police, including 439 Black people. A total of 235 victims were unarmed, including 80 unarmed Black people.

**Protests and Police-Caused Deaths**

Table 2 summarizes the data on police-caused deaths and Black Lives Matter protests by locality. The table shows the total number of localities in our analysis, and breaks these localities down by the presence/absence of at least one documented Black Lives Matter protest during the observation period.56 Overall, from August 2014 to August 2015, Black Lives Matter protests occurred in 14% of U.S. cities with population over 30,000.

The rows in table 2 subset the analysis to cities with various forms of experience of police-related deaths. Black Lives Matter protests were significantly more common in cities that experienced at least one police-related death between January 1, 2013 and August 9, 2014: protests occurred in 9% of cities without a death, but in 24% of cities with at least one death. The pattern is even more pronounced when we restrict our attention to Black deaths (44% of cities with at least one Black death experienced at least one protest) or unarmed Black deaths (60% of cities with at least one unarmed Black death experienced at least one protest). Cities that experienced at least one unarmed death during the period of protest observation were also more likely to experience protests (40% of cities with at least one unarmed death during the period of observation experienced at least one protest).

The pattern holds up when we restrict our attention to cities without any police-caused deaths of unarmed individuals during the protest observation period; these cities can be thought of as holding “solidarity” protests (a distinction we return to below). These results mirror the patterns in table 2; detailed results are available in the online appendix.

Of course, cross-tabulations of raw data run the risk of spurious correlations; to give just one example, these data are not adjusted for population size or the percentage of residents who are Black. In the following section, we examine the relationship between police-caused deaths and Black Lives Matter protests more rigorously.

**Correlates of Protest Frequency**

Our main statistical results are presented in table 3, which looks at protest activity in the 1358 U.S. localities with a population over 30,000. The outcome variable is the number of protests held over the year from August 9, 2014 to August 9, 2015; 186 of these locations had at least one
Black Lives Matter protest during this year. The outcome (number of BLM protests) is modelled using a negative binomial distribution, as is appropriate for an event count.\(^57\) As a robustness check, we also test a logit model for whether any BLM protests occurred and find similar results.\(^58\)

All models in table 3 include key background variables that we expect to correlate with protest activity. These variables are drawn primarily from the protest literature as described earlier. The first control variables are the size of the city, population density, and percentage Black residents. As described in the introduction, we anticipate that higher numbers and concentrations of residents, and in particular Black residents, increase the pool of potential protestors from which the movement can recruit participants. We find that population size and percentage Black are both positively linked to protest activity while population density is negatively related to protest activity.

All models in table 3 also include variables that operationalize the resource mobilization and opportunity structure theories of protest. As the resource mobilization theory would suggest, there is a quadratic relationship between protests and Black poverty; protests are most frequent in the middle of the Black poverty spectrum. Protests are also more frequent in localities with a larger college-educated population and with a large population of current college students, consistent with the observation that individuals with more resources may be more likely to protest.

Turning to the opportunity structure approach to protests, we found that out of the four variables that we expected to be relevant (Democratic vote share in 2008 Presidential elections, mayoral partisanship, mayoral race, and early NAACP activity), only one improves model fit and significantly predicts protest activity: Democratic vote share. Because we expected all four variables to be significant, we present model specifications with all four variables included (Models 4–6) and with only Democratic vote share included (Models 1–3). With the benefit of hindsight, we present Models 1–3 as the best fit with the data; the replication package has additional detail on model fit comparisons. In the replication package, we also test adding the three non-predictive variables one at a time and show that they still do not improve model fit.

These null findings may suggest that more subtle political dynamics are swamped by partisanship, or they may simply be due to limitations of the variables with which we attempt to operationalize other aspects of the political opportunity structure. In the case of mayoral race, for example, there is a substantial underrepresentation of Black people in local politics; only 91 cities in our sample have a Black mayor. As discussed above, NAACP history is also, at best, a coarse indicator of the history of Black organizing in a locality.

In Models 2 and 3 in table 3, we add two measures of key interest to the model: police-caused deaths of Black people, and police-caused deaths of people of any race. Model 2 shows that adding a measure of Black police-caused deaths per capita to the regression does not change the point estimates or the significance of the other variables, and that Black deaths per capita is itself a significant predictor of protest. In a city of 100,000 residents, holding all other variables at their means, going from no police-caused deaths of Black people to one such death increased the likelihood of protest by about 23%. It is worth remembering however, that the likelihood of protest remained small—our model predicts that about one in ten cities of that size and demographic makeup would hold a protest at all. Model 3 expands the variable of police-caused deaths to deaths of victims of all races; here we find a smaller estimate and a positive but not significant relationship.\(^59\) This finding is consistent with the BLM movement’s explicit focus on police brutality against Black Americans in particular.

So far, our results show a correlation between police-caused deaths and BLM protests that suggests that protest

### Table 2
Cities tabulated by police-caused deaths (January 1, 2013–August 9, 2014) and occurrence of BLM protests (August 9, 2014–August 9, 2015)

<table>
<thead>
<tr>
<th>Share of cities with at least one protest</th>
<th>Total N of cities</th>
<th>N of cities with no protests</th>
<th>N of cities with at least one protest</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cities with population &gt; 30k</td>
<td>0.14</td>
<td>1358</td>
<td>1172</td>
</tr>
<tr>
<td>No deaths</td>
<td>0.09</td>
<td>909</td>
<td>830</td>
</tr>
<tr>
<td>At least one death</td>
<td>0.24</td>
<td>449</td>
<td>342</td>
</tr>
<tr>
<td>No Black deaths</td>
<td>0.10</td>
<td>1200</td>
<td>1084</td>
</tr>
<tr>
<td>At least one Black death</td>
<td>0.44</td>
<td>158</td>
<td>88</td>
</tr>
<tr>
<td>At least one unarmed Black death</td>
<td>0.60</td>
<td>45</td>
<td>18</td>
</tr>
<tr>
<td>At least one unarmed death during year</td>
<td>0.41</td>
<td>101</td>
<td>60</td>
</tr>
</tbody>
</table>

Note: Based on all cities with population over 30,000.
Table 3
Correlates of Black Lives Matter protest frequency

<table>
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<th>(1)</th>
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<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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</thead>
<tbody>
<tr>
<td>Population (log)</td>
<td>1.292***</td>
<td>1.281***</td>
<td>1.277***</td>
<td>1.222***</td>
<td>1.212***</td>
<td>1.209***</td>
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<td></td>
<td>(0.071)</td>
<td>(0.070)</td>
<td>(0.071)</td>
<td>(0.080)</td>
<td>(0.079)</td>
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<tr>
<td>Population density (log)</td>
<td>−0.314**</td>
<td>−0.307**</td>
<td>−0.313**</td>
<td>−0.262*</td>
<td>−0.260*</td>
<td>−0.264*</td>
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<tr>
<td></td>
<td>(0.132)</td>
<td>(0.131)</td>
<td>(0.132)</td>
<td>(0.136)</td>
<td>(0.135)</td>
<td>(0.135)</td>
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<tr>
<td>Percent Black</td>
<td>0.022***</td>
<td>0.018***</td>
<td>0.022***</td>
<td>0.022***</td>
<td>0.017***</td>
<td>0.021***</td>
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<tr>
<td></td>
<td>(0.005)</td>
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<tr>
<td>Black poverty rate</td>
<td>0.132***</td>
<td>0.129***</td>
<td>0.130***</td>
<td>0.123***</td>
<td>0.118***</td>
<td>0.120***</td>
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<td></td>
<td>(0.031)</td>
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<td>(0.032)</td>
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<tr>
<td>Black poverty rate (squared)</td>
<td>−0.001***</td>
<td>−0.001***</td>
<td>−0.001***</td>
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<td>−0.001***</td>
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<td>(0.0005)</td>
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<td>Percent college-educated</td>
<td>0.044***</td>
<td>0.044***</td>
<td>0.045***</td>
<td>0.044***</td>
<td>0.043***</td>
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<td>(0.005)</td>
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<td>(0.006)</td>
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<td>College students (% of population)</td>
<td>0.011***</td>
<td>0.010**</td>
<td>0.010**</td>
<td>0.010**</td>
<td>0.009**</td>
<td>0.010**</td>
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<td></td>
<td>(0.004)</td>
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<tr>
<td>Democratic vote share</td>
<td>0.041***</td>
<td>0.041***</td>
<td>0.041***</td>
<td>0.038***</td>
<td>0.039***</td>
<td>0.039***</td>
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<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
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<td>(0.008)</td>
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<tr>
<td>Black police-caused deaths (per 10,000)</td>
<td>2.795***</td>
<td>2.811***</td>
<td>2.811***</td>
<td>2.811***</td>
<td>2.811***</td>
<td>2.811***</td>
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<td></td>
<td>(0.931)</td>
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<tr>
<td>Police-caused deaths (per 10,000)</td>
<td>0.940</td>
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<td></td>
<td>0.833</td>
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<td></td>
<td></td>
<td>(0.632)</td>
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<td>Republican mayor</td>
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<td>Years of NAACP activity</td>
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<td>Black mayor</td>
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<tr>
<td>Constant</td>
<td>−20.901***</td>
<td>−20.730***</td>
<td>−20.798***</td>
<td>−20.115***</td>
<td>−19.974***</td>
<td>−20.000***</td>
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<td></td>
<td>(1.113)</td>
<td>(1.098)</td>
<td>(1.105)</td>
<td>(1.273)</td>
<td>(1.259)</td>
<td>(1.264)</td>
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<tr>
<td>Observations</td>
<td>1,225</td>
<td>1,225</td>
<td>1,225</td>
<td>1,065</td>
<td>1,065</td>
<td>1,065</td>
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<tr>
<td>Log Likelihood</td>
<td>−550.251</td>
<td>−545.917</td>
<td>−549.112</td>
<td>−531.287</td>
<td>−526.972</td>
<td>−530.398</td>
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<tr>
<td>theta</td>
<td>1.577***</td>
<td>1.703***</td>
<td>1.639***</td>
<td>1.620***</td>
<td>1.739***</td>
<td>1.675***</td>
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<td>(0.355)</td>
<td>(0.408)</td>
<td>(0.378)</td>
<td>(0.364)</td>
<td>(0.413)</td>
<td>(0.384)</td>
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<td>Akaike Inf. Crit.</td>
<td>1,118.501</td>
<td>1,111.835</td>
<td>1,118.224</td>
<td>1,086.574</td>
<td>1,079.944</td>
<td>1,086.796</td>
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</tbody>
</table>

Notes: Negative Binomial regressions. Observations: all U.S. localities with population over 30,000
*p;**p;***p<0.01
activity is more common in places where the police kill more Black people. This finding is in keeping with a grievance-based explanation of protest.

However, as figure 1 suggests, certain cities in this dataset are exceptional. For example, in Baltimore and Cleveland, massive protests responded to prominent local deaths of unarmed Black individuals that occurred during the year of protests. It is theoretically possible that protests primarily emerged in response to prominent killings during the year in question. Cities with overall higher rates of police killings are more likely to experience such a killing in any given year. This makes it possible that these results are driven by short-term responses to specific killings, rather than being more systematic responses to longer-term patterns of state repression. We therefore perform additional analyses in which we exclude cities where an unarmed person was killed by police during the year in question. By excluding these cities, we remove the possibility that our results are driven solely by protests that occurred in response to high-profile unarmed deaths during the protest year. Protests that occurred in cities where no unarmed individuals were killed by police during the year in question, in contrast, can be thought of as “solidarity protests”; protests that occur to voice frustration with a general pattern of events, rather than any one recent event in one’s immediate vicinity.

We therefore ask whether such “solidarity protests” were more common in cities where, in the years leading up to the protest year, more people had been killed by police (refer to the online appendix for detailed results). We find that relationships that we saw in the full set of cities remain almost entirely unchanged. The coefficient measuring the relationship between Black police-caused deaths per capita increases slightly in magnitude, and remains statistically significant. Holding all other variables at their means, going from zero to one police-caused death of a Black person in a city of 100,000 predicts a 31% increase in protest activity. The point estimate on all police-caused deaths per capita also increases, but this variable is not statistically significant. For more detailed results, refer to the table provided in the online appendix. We conclude that the correlation between deaths of Black people at the hands of police and the frequency of Black Lives Matter protests is not limited to the cities that experienced a surge of protest activity following a police-caused death of an unarmed person during the protest year.

When Grievances Predict Protest Activity

On July 6, 2016, in front of his girlfriend and her four-year-old daughter, Philando Castile was shot and killed by a police officer during a traffic stop in Falcon Heights, Minnesota. The incident rapidly became national news in large part because Castile’s girlfriend, Diamond Reynolds, live-streamed the immediate aftermath of the shooting. Asked later why she filmed the incident, Ms. Reynolds responded that she was afraid for herself and her daughter, and wanted to have independent evidence of the events; “I know that the people are not protected by the police,” she explained.60 Nearly a year later, the officer who shot Mr. Castile was acquitted of all charges.

The day after the verdict in Minnesota, several hundred Black Lives Matter activists held a rally in Oakland, California.61 The “Justice for Philando Castile” protest was nearly 2,000 miles from the St. Paul suburb where Mr. Castile was killed. But for attendees, the incidents in Minnesota felt close to home. One woman who spoke at the event had lost her son in an accident with the local highway patrol; another told of her son’s newfound decision to travel with his driver’s license on his dashboard, so that, if pulled over, he would not have to reach for his wallet. The rally was held in front of City Hall, at what is informally known as “Oscar Grant Plaza,” in memory of the young Black man shot in 2009 by police in a nearby train station. It is the same site where the mother of Alan Blueford, killed by Oakland police in 2012,62 led a protest a few years earlier.

In this paper, we demonstrate that the Oakland protest—which occurred outside of the time frame we examine—is in keeping with the general trend of Black Lives Matter protests; BLM protests are more common in localities with a history of police killings of Black people.

We have examined the correlates of in-person Black Lives Matter protests in U.S. cities with a population over 30,000 in the time period August 9, 2014 (the day of the shooting death of Michael Brown) and August 9, 2015. Our results broadly conform with resource mobilization, political opportunity structure, and grievance-based analyses of protest mobilization, and also contribute to a growing literature examining political engagement in conditions of high levels of policing and state violence.

We find support for a resource mobilization theory of protest in the form of a curvilinear relationship between protest frequency and poverty among Black Americans. This result fits with previous research suggesting that protest is most common not among the most or least resourced, but among those in the middle. Similarly, and also in line with resource mobilization theory, localities with a more educated population and a larger local college enrollment have more protests.

We also find some support for a political opportunity structure approach to explaining protest activity: BLM protests are more common in cities with a higher Democratic vote share in Presidential elections. We also tested other plausible measures of political opportunity structure, and found that a history of NAACP organization, mayoral partisanship, and mayoral race do not predict BLM protests once local partisanship is included in the model.
Finally, we find a relationship between local police-caused deaths of Black people and the probability of protest. These findings echo a much older school of research into the origins of social movements that expected political grievances to predict protest activity. In its most modern forms, “grievance theory”\textsuperscript{63} suggests that, at least in some contexts and when resources and political opportunity are present,\textsuperscript{64} levels of deprivation or injustice can in fact predict levels of protest.\textsuperscript{65} That theorized relationship between grievance and protest is supported by our data.

Our results contribute to the developing literature on how the criminal justice system relates to political engagement. However, the interpretation of the correlations we identify here requires careful consideration. Though a local history of police-caused deaths of Black people predicts BLM protest activity, we do not know that the variable we are measuring is precisely that which spurred protest. It is easy to imagine that police-caused deaths correlate with a broader array of police behaviors, including patterns of over-policing and police brutality, and that these other factors are the grievances that inspired protest.

Unfortunately, data on these more specific aspects of local policing are spotty at best. The highly localized nature of policing in the United States means that—like many facets of local politics and policy—there is enormous heterogeneity in the quality of data. While the Obama Administration made improving local police transparency an important part of its policy agenda, as of this writing, only 79 law enforcement agencies had signed onto the Administration’s Police Data Initiative, which commits agencies to releasing at least three policing datasets to the public.\textsuperscript{66} In contrast, many localities take active steps to make it harder for the public (and researchers) to access data on their policing practices. These actions include mandating secrecy when settling civil suits for police misconduct and refusing to produce records.\textsuperscript{67} Without equivalent data across the cities in our sample, we are unable to assess how specific policing practices may shape protest activity. In part because of the Black Lives Matter movement, there is a resurgence of scholarly interest in patterns of policing coupled with greater propensity on the part of (at least some) police departments for transparency.\textsuperscript{68} These dual trends may, over time, allow for the testing of more specific hypotheses regarding the aspects of policing that provoke protest, among many other important topics about the nature of policing in the United States.

With this data, we also cannot speak to the circumstances in which police brutality may be more likely to occur. For example, police-caused deaths or police brutality likely correlate with other features of cities, such as residential segregation, poverty, or crime rates. In particular, there is good reason to believe that over-policing occurs in high-crime areas—that violence and punishment are related “forms of state failure, particularly with respect to African-Americans.”\textsuperscript{69} When we include a variable for high local violent crime rates in our main model, we find a positive relationship between crime and BLM protests; the addition of this variable does not change our primary results (details are available in the online appendix). The crime rate correlation—which we emphasize is tentative, given the poor quality of national crime data—is subject to multiple interpretations. First, it is possible that local violent crime increases frustration with the police for their failure to ensure local safety. Following Miller, it is also possible that violent crime rates are so closely related to police behaviors that this measure can in fact serve as a proxy for overpolicing. The institutional and structural origins of police brutality are a critical avenue for future research.

**Directions for Future Research**

In this paper, we find that Black Lives Matter protests were more common in localities where police had more frequently killed Black people. This finding is consistent with the interpretation that while individuals may respond to direct carceral contact by withdrawing from public life, those proximate to police violence can and do respond with coordinated political action.

We see several ways to build upon the contributions of our research. While our community-level data yield valuable insights, individual-level data and analyses of community organizations and political networks would help scholars better unpack the psychological and institutional mechanisms at work. Some ongoing research has attempted to harness social media geocoding to make such a connection.\textsuperscript{70}

Even more important, future research could take advantage of our systematic protest data to explore the consequences of this political mobilization, and to compare Black Lives Matter protests to other protests against the carceral state. For instance, did BLM protests spur local law enforcement agencies to move towards greater transparency or greater opacity? Do police-caused deaths decline in areas with active BLM mobilizations? An additional avenue for scholarly exploration is the extent to which the relationship presented here—between the state’s exercise of power and a popular mobilization in opposition—holds in other aspects of the state security and carceral system, such as federal immigration enforcement. We hope the data presented here serve as a resource for these and other continuing lines of research.

There are important continuations of the data collection we have begun. First, as with any observational data analysis, there are important limitations to our data and results. While we have attempted to be comprehensive in our search for Black Lives Matter protests, there are undoubtedly protests we missed, including what could be
a substantial number of small protests that did not leave enough of a media footprint to appear in our dataset. Additionally, though the federal government has recently moved to create an official database of police-caused deaths, we remain reliant on non-profit sources for the years of interest to our study, and those sources may also be incomplete. Efforts are underway to create a comprehensive dataset of police-caused deaths over a longer time frame, which will have a much larger number of observations and would therefore allow for important sub-analyses, for instance of the relationship between BLM protest and unarmed deaths of Black people or protest in response to the prosecution or non-prosecution of the officers involved. Our data collection and analysis provide a starting point for conducting future studies.

While better understanding the emergence of the Black Lives Matter movement is in and of itself an important exercise given the movement’s political and social salience, our results also help point towards a broader understanding of when protest activity might emerge in the context of state repression. In a presidential administration that many policy observers—including participants in the BLM movement—have argued is characterized by increased state repression, we hope that our results will be useful not only to researchers but also to political actors who seek to contextualize and understand protest activity. The need for high quality scholarship on the political correlates and consequences of state repression in the United States remains great, and we hope to read other work that goes beyond our movement case study to help us fully understand how the state’s coercive power affects our democracy.

Notes

1 Throughout this work, we use the phrase “Black Lives Matter” to refer to the entire movement, not just the online activism associated with the #BLM hashtag or the specific organization, “Black Lives Matter.”

2 The terminology used to describe racial groups in the United States has long been contested (Hochschild and Powell 2008). A review of recent literature suggests that it is common to use “black”, “Black,” and “African American” (e.g., Weaver and Lerman 2010; Walker 2014). In this article we use Black, and, following the U.S. Census convention, we capitalize all racial groups; see also Bobo and Hutchings 1996, 952, and Tharps 2014.

3 See the platform of the Movement for Black Lives, a document that frames their movement in the historical context of gender and class inequalities and provides a redistributive policy platform across issue areas; https://policy.m4bl.org/platform/.

4 See, for instance, the solutions proposed by Campaign Zero: http://www.joincampaignzero.org/solutions/#solutionsoverview.

5 Soss and Weaver 2016.
6 Lebron 2017 and Taylor 2016.
8 Western 2006; Epp and Maynard-Moody 2014.
9 Alexander 2012, 201.
10 Wacquant 2009.
11 Weaver 2007, 236.
12 Giddings 2009.
15 Campbell 2003.
16 Soss 1999.
17 Lerman and Weaver 2010, 817.
19 Lerman and Weaver 2014.
20 Walker 2014.
21 Dawson 1994. Foster and Matheson 1999; Chong, Rogers, and Tillery 2004; Gay 2004
22 Hochschild and Weaver 2015.
24 Protest events themselves can also affect the mobilization and unity of the protestors’ larger community. Latinos become more unified in their views on immigration, and were more likely to see immigration as an issue of primary importance, following the 2006 immigration protests; Barreto et al. 2009; Carey, Branton, and Martinez-Ebers 2014. Interestingly, smaller protests have been shown to increase Latinos’ sense of efficacy, while large protests had the opposite effect; see Wallace, Zepeda-Millán, and Jones-Corra 2014.
25 Weitzer and Tuch 2002. For a discussion of why middle-class Black people may be more likely to be profiled, refer to 451–452.
26 Brooks and Jean-Slaughter 2001
28 Freelon, McIlwain, and Clark 2016
29 Schattschneider 1975.
31 Muller and Schrage 2014.
33 There is historical evidence to suggest that protests attended by Black people are more harshly policed. See Davenport, Soule, and Armstrong 2011. Additionally, Reynolds-Stenson 2017 shows that police respond to protests making anti-police brutality claims more aggressively than other protests.
34 Chenoweth and Stephan 2011; Chong 2014.
36 Piven and Cloward 1979.
37 Chong 2014.
38 Dalton, Van Sickle, and Weldon 2010; McCarthy and Zald 1977.
40 Verba, Schlozman, and Brady 1995.
41 Sears and McConahay 1973.
42 Inferring the characteristics of protestors from the characteristics of locations where the protests occurred would constitute ecological inference with all its attendant problems. Our argument here is not that we know who attends BLM protests (unfortunately we have no data on individual characteristics of protesters). However, we do argue that in locations with larger numbers of educated and middle-class Blacks, the protest movement has a larger pool of potential protestors who are available for mobilization.
44 In 1968, having greater representation by Black aldermen increased the local propensity for protest; Eisinger 1973. For more on descriptive representation, see Mansbridge 1999; Gay 2002.
45 Frymer 2011.
46 Tausanovitch and Warshaw 2015; Einstein and Kogan 2016.
47 DemocracyNow 2015.
48 A wide array of social-scientific research suggests that these areas experience more political activity generally alongside protest activity. See for example Tate 1991 and 1993; Fitzgerald 2005.
49 Among others, the dataset includes protests in response to the death of 12-year-old Tamir Rice, shot by police on a playground in Cleveland, OH; Walter Scott, shot in the back after being pulled over for a broken tail light in North Charleston, SC; and Freddie Gray, who died after suffering a spinal injury incurred while in the back of a police van in Baltimore, MD. It also includes protests that occurred when the police officers involved were not indicted in the death of Eric Garner, who died after being put in a choke hold by a police officer in New York City. In order to specifically focus on BLM protests, as distinct from other forms of protest relating to Black civil rights, we excluded protests that occurred in Selma, AL, relating to the anniversary of the 1965 Selma to Montgomery marches, and in Charleston, NC, after June 17th, 2015.
50 We found additional protests via a systematic search of Google News results during the protest year, as well as snowball searches where news articles referred to protests at other times or in other localities. Though no dataset can be assured to be absolutely complete, we believe this to be a thorough and systematic assessment of protest activity during the period in question. The dataset in the replication materials (available in the supplemental materials) includes links to the original news articles used to verify each included protest.
51 Einstein and Kogan 2016.
52 Estrada and Gregory 2016.
53 Indeed, the division between the NAACP and BLM activists has been well documented and acknowledged by leaders of both groups/movements. One of the founders of the BLM movement, Patrisse Cullors, said of the divide: “Each generation has their own understanding of what’s most important . . . . The hope is that groups like the NAACP will see that we have to bridge the generational divide and the political divide”; Vega 2016.
54 For instance, it may be that people are more likely to be killed by police in high-crime areas, but unless one posits a relationship between crime and protest independent of crime’s effect on policing, crime is not a control variable of interest in our analysis as we have defined it. Additionally, the coefficient on a crime variable will have an ambiguous interpretation due to the possibility that high-crime areas are subject to harsher policing practices that predict protest activity but are not captured in our measure of deaths at the hands of police. In the online appendix, we provide a regression in which we include this control variable for interested readers (the main results do not change). We also emphasize that in addition to these theoretical reasons for not using crime indicators in our main models, there are serious data concerns with national crime data. The FBI’s Uniform Crime Reports are the only nationally comparable dataset on crime. Police departments provide these data to the FBI voluntarily and the FBI has taken minimal steps to ensure data quality, leading many scholars to question their value. See for example Lynch and Jarvis 2008.
55 Forty-five deaths in the combined dataset could not be conclusively attributed to a Census location, and are therefore omitted from analysis.
56 In the main geographic analysis, we use localities with more than 30,000 residents. This reduces the number of police-caused deaths in our final dataset: 1,156 of 1,637 deaths occurred in these localities.
57 The data violate the more restrictive assumptions of the Poisson model. We also tested whether the data call for a zero-inflated negative binomial, due to the relatively high number of cities with zero protests. Goodness-of-fit tests indicated that zero-inflated models did not improve model fit; by Occam’s razor we choose the negative binomial model. Refer to the replication package in the supplemental materials for more detail on model selection.
58 For concision, these similar results are not presented here but these models are included in the replication package in the supplemental materials.
59 The data for unarmed Black deaths (with 45 localities), is too sparse for reliable analysis. When we tested this variable while anticipating that the results may be unreliable, the point estimate for this variable was about twice as large as the estimate for all Black police-caused deaths, but not statistically significant.

60 Smith 2017.
61 Havernell 2017.
62 Winston 2012.
64 Dalton, Van Sickle, and Weldon 2010, 71.
66 Davis, Austin, and Patil 2016.
67 Harmon 2013.
68 Recent research from economist Roland Fryer, for example, highlights new policing data (in this case, thorough but highly geographically limited) and scholarly analyses made possible by this heightened police department transparency; Fryer 2016.
69 Miller 2015.
70 Hsuan Yun Chen, Fariss, and Zachary 2017.
71 Lichtblau 2016. As of May 2017, the FBI was still moving forward with this initiative under the Trump Administration; https://ucr.fbi.gov/national-use-of-force-data-collection-flat-file.
72 Fatal Encounters is continuing to update their dataset with the goal of a comprehensive list of people killed by law enforcement dating back to 2000; http://www.fatalencounters.org/.
73 Morrison 2017.
74 As an example, immigration arrests rose in the first three months of the Trump administration compared with the same time period in the previous year; see Dickerson 2017.

References


