

# Flooded Communities: Explaining Local Reactions to the Post-Katrina Migrants

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## Abstract

This paper uses the post-Katrina migration as an exogenous shock to test theories of contact and racial threat while minimizing concerns about selection bias. Drawing on a new survey of 3,879 respondents, it demonstrates that despite the national concern about issues of race and poverty following Katrina, people in some communities that took in evacuees became *less* supportive of spending to help the poor and African Americans. There is no evidence that direct contact with evacuees softened attitudes. Yet hypotheses based on racial threat are not sufficient, since they cannot explain why the evacuees provoked an anti-crime reaction in Houston and an anti-spending reaction in Baton Rouge. The results instead suggest a novel hypothesis that threatened responses to newcomers hinge on both local conditions and the coverage of their arrival in the local media. In-depth interviews, content analyses of media coverage, and a pre-Katrina survey provide additional evidence supporting this “politicized places” approach.

# 1 Introduction

Before Hurricane Katrina, one town in rural Arkansas had fewer than one thousand residents and a single African American. According to a state official, the Ku Klux Klan was active nearby. Yet for a short while, Hurricane Katrina changed those demographics dramatically. Overnight, a local church camp became a shelter to 350 evacuees, the vast majority of whom were poor African Americans. In the words of one community leader, “the majority of the people here in [town]...were very angry with us. In the beginning, people were very prejudiced. Once these people got to know them, everyone’s outlook totally changed.” This town was far from unique. In the weeks following the storm, Katrina evacuees were scattered across the nation. Treating the post-Katrina migration as an exogenous shock, this paper investigates how people’s political attitudes changed in response to the sudden demographic shifts in their communities that followed in the storm’s wake.

Since at least the work of V.O. Key (1949), scholars in the racial threat tradition have been interested in how the racial, ethnic, partisan and class composition of one’s surroundings shapes her political views.<sup>1</sup> Scholars have been interested as well in the extent to which direct contact across lines of race or class can influence inter-group attitudes (Allport, 1954; Pettigrew, 1998). Yet past work in these traditions has faced significant methodological challenges. On account of geographic mobility, it is impossible to know whether observed correlations result from contextual effects<sup>2</sup> or from individuals’ self-selection into differing environments. The post-Katrina migration provides an unusual opportunity to test theories of racial threat and inter-group contact in a case where those encounters could not have been anticipated.

Section 2 details these two longstanding theoretical approaches, and also identifies a theoretical challenge common to both. If it is true that Americans think about politics sociotropically, in terms of collective evaluations and outcomes, then it is unclear what role local experiences

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<sup>1</sup>Key citations include Putnam (2007); Gay (2006); Branton and Jones (2005); Oliver and Wong (2003); Leighley (2001); Cain, Citrin and Wong (2000); Oliver and Mendelberg (2000); Stein, Post and Rinden (2000); Hero (1998); Taylor (1998); Bledsoe, Welch and Sigelman (1995); Huckfeldt and Sprague (1995); Glaser (1994); Giles and Hertz (1994), and Blalock (1967).

<sup>2</sup>Following Huckfeldt and Sprague (1995), this paper defines contextual effects as the impacts of social interactions or observations within a bounded environment.

play in shaping political views. Information gleaned from one’s immediate environment, while readily available, might remain separate from politics. In response, that section develops an alternative one might term “constructivist” emphasizing the interplay of local conditions and their portrayal by the media. Available media depictions help people become aware of the local demographic changes and then shape the political conclusions they draw. Put differently, *the changing demographic environment and the information environment might interact to produce contextual effects*. This “politicized places” approach explains not just the valence of individuals’ responses to their contexts, but the specific attitudes that change.

To test the competing predictions, this paper’s Section 3 introduces a new survey of 3,879 Southern respondents with over-samples in heavily affected communities such as Harris County, Texas (home to Houston) and East Baton Rouge Parish, Louisiana (home to Baton Rouge). The exogenous variation in community demographics induced by the Hurricane gives researchers an unusual opportunity to confront concerns about self-selection, since residents could not have chosen their communities knowing that they would later become home to the evacuees.<sup>3</sup> This research design also provides unusually good balance on key covariates, as there are many surveyed individuals who are highly similar but for the city in which they happen to live. To provide additional information about a key counterfactual—what people’s attitudes would have been absent the post-Katrina migration in Harris County—this paper turns to supplemental evidence from the General Social Survey (GSS). As discussed in Section 4, the core results prove robust to multiple estimation techniques including matching.

The study’s design maximizes its leverage over the problem of self-selection. None of the prior research cited here exploits exogenous demographic shocks. By comparing survey respondents in Harris County and Baton Rouge with those from more than 700 ZIP codes and 312 counties in unaffected areas, this paper can clearly and convincingly demonstrate attitudinal differences between affected and unaffected areas. However, determining *why* communities responded in

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<sup>3</sup>The “treatment” of living in a community alongside many evacuees was highly correlated with one’s distance from New Orleans, meaning that the “as if random” assumption underpinning natural experiments (Dunning, 2005, pg. 2) is not plausible and this is not productively thought of as a natural experiment. Instead, it is an opportunity to use exogenous variation to overcome the selection bias that commonly plagues research on contextual effects.

particular ways is a harder problem. While the evacuees' arrival was exogenous, the local media coverage and other local responses were not. Moreover, the evacuees in Houston and the surrounding Harris County were not identical to those in Baton Rouge: the latter group included more middle-class evacuees. The paper thus introduces a wide range of additional evidence to rule out alternative explanations. Key propositions are reinforced with data from 59 in-depth interviews. In places, the paper draws on data about crime rates and the geographic distribution of homicides. Elsewhere, it draws on other surveys of the affected communities to trace trends before and after Katrina. Its Section 5 presents a content analysis of local television and newspaper coverage.

Based on the remarks of the relief worker mentioned above, we might expect that the demographic shocks after Katrina increased support for assistance to the needy, and perhaps improved evaluations of African Americans. The presence of a visible natural disaster—as well as the halting governmental response—made it clear that the victims were not to blame for their predicament.<sup>4</sup> In some respects, the aftermath of Hurricane Katrina was a likely case for positive contextual influence given the highly public ordeal suffered by the evacuees. And indeed, in the days after the storm, residents of the host communities mounted a tremendous response that undermines simplistic notions of racial threat. 50% of Baton Rouge respondents reported having had evacuees in their homes (Weil, Shihadeh and Lee, 2006), for example. One church leader was even told by an evacuee, “we didn’t know white people could love us.”

Yet this extraordinary volunteerism makes the central finding of this paper all the more puzzling: why was it that during a period of unusual altruism, attitudes towards African Americans and the poor actually hardened in some places? As this paper will demonstrate in Section 4, residence in host communities like Baton Rouge led to reduced support for spending on the poor and more negative affect towards African Americans. Meanwhile, in Harris County, the influx of evacuees led to increased demand for anti-crime spending. And the anti-crime results do not appear to reflect pre-existing differences, since no such attitudinal differences are detected in

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<sup>4</sup>For instance, in a Pew survey conducted in September 2005, significant majorities of both blacks and whites thought that those who stayed behind “didn’t have a way to leave” (Pew Research Center, 2005). Large majorities also believed that President Bush could have done more to get relief efforts moving.

prior surveys. Nor do they appear to be direct responses to rising crime, since the spikes in violent crime were similar in both places. Section 6 probes alternative explanations. Comparing 2002 and 2006, it shows that Houston residents became more worried about lower levels of crime.

The challenge is to explain the negative attitudinal response and the differing forms it took. As this paper illustrates, those who had direct contact with evacuees did not have more positive attitudes, ruling out the notion that these effects were driven by interpersonal contact. Since political elites in the host communities studied here received acclaim for their efforts on the evacuees' behalf, it seems unlikely that they led any visible effort to demonize the evacuees.<sup>5</sup> Instead, the sudden change in local demographics appears to have interacted with news stories about evacuee benefits, joblessness and criminality to produce marked changes in many community members. In Harris County, the evacuees were linked to crime by the media, and the residents responded to their changing context by becoming more anti-crime. In Baton Rouge, the evacuees were associated with issues of government benefits by the media, again suggesting an explanation for the specific attitudes that changed. In both places, the combination of physical proximity and media coverage appear to have produced contextual effects. The next section provides the theoretical background for these claims.

## 2 Theorizing Contexts

Scholars developed contextual theories primarily to explain how Americans respond to local racial demographics. The dominant “racial threat” approach contends that context can generate feelings of threat, either by triggering prejudice or by generating zero-sum competition for scarce resources (e.g. Gay, 2006; Taylor, 1998; Giles and Hertz, 1994; Glaser, 1994; Blalock, 1967; Key, 1949). Another approach claims that inter-group contact generates more positive attitudes towards out-groups (Tropp and Pettigrew, 2005; Welch et al., 2001; Pettigrew, 1998; Allport, 1954). The two theories are not strictly contradictory (Stein, Post and Rinden, 2000).<sup>6</sup>

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<sup>5</sup>Elsewhere, there is ample evidence of such efforts, from the infamous police barricade preventing evacuees from entering Jefferson Parish to the marginalization efforts documented in *Desert Bayou*.

<sup>6</sup>Indeed, some have argued that the mechanisms operate at different geographic levels (Oliver and Wong, 2003).

Still, by focusing on this theoretical dualism, past scholarship has neglected another hypothesis that is more constructivist in approach. Perhaps political attitudes typically come from influences outside one's immediate social context and geographic environment, meaning that contextual effects might be more limited and conditional than past accounts have acknowledged. As this section will argue, prominent theories of public opinion reinforce that view. This section then offers an alternative conception of contextual influence—called the politicized places hypothesis—that reconciles contextual effects with contemporary understandings of public opinion and political information. Throughout, this theoretical approach emphasizes information, a potential mechanism through which contexts could operate.<sup>7</sup>

## 2.1 The Ambiguity of Contact

Not all contact has an equally positive influence on inter-group attitudes. As Allport theorized, four conditions facilitate contact's positive effect: that the groups have equal status, that they have common goals, that they have the support of local authorities or institutions, and that the situation require inter-group cooperation (1954).<sup>8</sup> These conditions influence both the probability that an individual will obtain new, stereotype-defying information about an out-group and the likely salience of that new information.

Many of the in-depth interviews with local leaders suggest that contact was indeed at work in the weeks after Hurricane Katrina. Consider the words of a church leader from rural Arkansas, who explained, "I found it very positive. I had the opportunity to meet people I never would have met." In some cases, the contact was intense, as hosts and residents lived together in shelters. The evacuees often wanted to tell their stories, providing further grounds for empathy. Yet the contact was usually brief, and was decidedly not on equal terms. Overall, though, *contact theory predicts declining prejudice after sustained inter-group encounters*, and this case presents a test of that theory when some but not all of its preconditions are met.

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<sup>7</sup>Information is defined as knowledge about a specific fact or event, and could include answers to such questions as "how are the evacuees affecting my community?" One can glean information from the immediate surroundings in many ways, including through one's own observations, through inter-personal contact, through local news stories, or through conversations with other residents.

<sup>8</sup>Recent research contends that these conditions are not strictly necessary, although each can facilitate contact's capacity to reduce prejudice (Pettigrew, 1998).

Still, consider the wife of one informant, who sometimes “really sympathized with the evacuees” and “sometimes thought they were a lazy bunch of jerks.” Having worked closely with them, she had anecdotes to support either view. This raises a fundamental question for contact theory. Given a variety of personal experiences, some positive and some negative, how do people choose which to draw upon in updating their political attitudes?

## 2.2 Racial Threat and Its Limits

A parallel question faces theories of racial threat. As with contact theory, we need to explain the specific ways in which threat is constructed. There were many possible responses to the influx of evacuees, and many possible conclusions one might draw from local encounters with evacuees. So what explains the commonalities in many residents’ attitudes?

To be sure, a few variants of racial threat appeared often during the in-depth interviews. The first was the concern that the evacuees would drain much-needed public resources. Mimicking the conventional view, one Houston official asked, “why can’t they get a job? Why are my taxes paying for their free rent?” Many long-time residents saw the evacuees as recipients of special treatment, treatment that they did not deserve, and borrowed from anti-welfare rhetoric to express that. During an August 2006 community meeting, a Houston resident triggered sustained applause by asking the Mayor, “where do you stand on stopping the FEMA and the welfare money, on stopping the giveaways?” (Kilday and Villafranca, 2006). The interviews uncovered the same sense of strain on public resources repeatedly. When presented with a novel and sometimes tragic situation, many people responded with familiar frames about welfare and dependency (Gilens, 1999). Another type of threat, this one tapping both prejudice and group conflict, concerns personal safety. Some of the evacuees were believed to be criminals, leading the host communities to equate the evacuees with crime. A Houston social worker who assisted the evacuees noted that he himself had been robbed while in a neighborhood that housed many evacuees, and said that “since they got here, there’s nothing but crime.”

There is preliminary evidence, then, of threat-style responses in host communities. Yet when we consider the likely mechanisms that underpin theories of racial threat, it becomes apparent

that the theories face important challenges. Many political attitudes have their origins in partisan identification and information gleaned from mass media (Kinder, 1998; Mutz, 1998; Zaller, 1992; Campbell et al., 1960). To the extent that experiences shape attitudes, collective experiences portrayed through the media typically outweigh individuals' personal experiences as a source of opinion change (Books and Prysby, 1999; Mutz, 1998; Mutz and Mondak, 1997; Mutz, 1994; Kinder and Kiewiet, 1981). Certainly, people's day-to-day contexts contain significant amounts of information with potential political relevance. But without clear connections between that information and politics, people are unlikely to connect the two, and the personal experiences remain apolitical or "morselized" (Mutz, 1998, 1994). There is also the possibility that people screen information derived from their locality so as to reinforce whatever attitudes they already hold, just as they do with messages conveyed by partisan elites (Zaller, 1992). Political scientists' conceptions of sociotropic thinking and partisan filtering both cut against the possibility that local contexts exert a strong influence on attitudes.

### **2.3 The Politicized Places Hypothesis**

Thus theories of contextual effects need an account of how local experiences become politically relevant. The hypothesis presented here offers such an account. It first claims that rapidly changing contexts attract residents' attention. Psychological research has demonstrated that in filtering the tremendous amount of available information, people are especially attentive to change (Kahneman and Tversky, 1979). This could be true in communities as well. Case studies on ethnic and racial transition underscore the key role of demographic change in catalyzing ethnic and racial contention (Kruse, 2005; Horton, 1995; Rieder, 1985). In addition, a change in the minority population is a strong predictor of racially motivated crimes (Green, Strolovitch and Wong, 1998), indicating the processes of neighborhood defense that follow the arrival of an out-group.

In local politics, this attention to change is also potentially exacerbated by home-ownership. 66% of Americans live in homes they own (U.S. Department of Commerce, 2007). Because Americans' largest investments are often their homes, and because race and ethnicity are taken

as a proxy for a community's socioeconomic status (Gould, 2000), local ethnic and racial changes can trigger anxiety about the community's future and about its housing values. Ethnic and racial changes might suggest rising taxes, increasing crime, and declining public services (Alesina, Baqir and Easterly, 1999; Poterba, 1997). Given that, there is good reason to suspect that changes in demographics, more than any absolute level, could command residents' attention.

One potential role of local media is to publicize information about changes, since most cities are simply too large to convey such information via social networks or personal observations. Of more theoretical interest is the fact that the media can not only inform people about the changes but can also shape their responses. The second part of the hypothesis stipulates that people draw on available frames to interpret their changing environments. Frames "defin[e] what the problem is and how to think about it; often they suggest what, if anything should be done to remedy it" (Kinder, 1998). Information conveyed through the media is often framed in ways that make it directly relevant to politics (Kinder, 1998; Mutz, 1998, 1994; Iyengar and Kinder, 1987).<sup>9</sup> This sets it apart from other forms of information. As past research has found, information provided through the media can interact with people's personal circumstances: "news appears to be most effective in telling people what to think about when the stories it presents reinforce and ratify the experience of ordinary life" (Kinder, 1998, pg. 179). What was once a personal and contextual experience becomes politicized once it is mentioned by the media.

Several predictions emerge from these claims. *First, sudden changes in demographics provide a powerful opportunity for demographics to influence attitudes. And second, that influence is more likely when the local and national news media call attention to the changes and provide ready-made ways of relating them to politics.* Demographic change is most likely to impact attitudes on those issues which are explicitly connected to it by the media. The politicized places hypothesis also implies that contextual effects are potentially fleeting—and that people could respond to the same local demographics or conditions very differently depending on the issues that are currently salient. This is quite distinctive from traditional inter-group threat

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<sup>9</sup>Alongside these canonical findings is a growing literature on framing in the wake of Hurricane Katrina, including Ben-Porath and Shaker (2007), Iyengar and Morin (2006), Fong and Luttmer (2007), and Harris-Lacewell, Imai and Yamamoto (2007).

theories, which provide no expectation that contextual effects vary with time. This theoretical approach suggests as well that media messages or elite rhetoric will be more persuasive when they relate to people's day-to-day experiences. Those latter implications are explored through a study of responses to immigrants from 1992 to 2006 (Hopkins 2007). Here, the first two implications will be tested in a case with strong empirical leverage: the post-Katrina migration.

### **3 Survey Data and Methods**

In the ideal test of the politicized places hypothesis, one would observe a single population which is randomly sent to communities that differ only in whether they receive an influx of newcomers and in how that influx is framed by the local media. In actuality, place of residence and media frames are almost never assigned randomly, and large, homogeneous populations rarely move to multiple communities at the same time. While the post-Katrina migration was not a randomized experiment, it does have features which offer researchers unusual leverage on these issues. The process through which evacuees were dispersed was sufficiently haphazard that thousands of poor, suddenly homeless evacuees found themselves in Baton Rouge (LA), Harris County (TX), and elsewhere. Their destination often depended on which bus they happened to board at the Superdome. The evacuees were not randomly assigned to host communities, but the resettlement process was driven primarily by host communities' distance from New Orleans. Conditional on a variety of covariates, there is no reason to think that two people living at different distances from New Orleans should hold different political views except on account of the post-Katrina migration. Due to the possibility of lingering southern exceptionalism, the analysis is limited to residents of the South, defined following the Census Bureau. This section outlines the survey data and statistical methods used.

#### **3.1 Survey Information**

Conducted between January 4th and August 15th, 2006, the second Social Capital Community Benchmark Survey (SC06) is a cross-section of 12,100 Americans, including 3,879 Southern-

ers. It included a nationally representative sample and clustered samples in communities such as Harris County, Texas; Baton Rouge, Louisiana; Sarasota County, Florida; Winston-Salem, North Carolina; and Greensboro, North Carolina. The first two communities took in substantial numbers of evacuees, while the latter three did not. To increase variation in the communities that hosted evacuees, the 2006 survey also sampled 100 people in four Arkansas communities: Jonesboro, Little Rock, Siloam Springs, and Pine Bluff. 979 of the 2006 national respondents lived in the South as well, providing additional leverage. The survey asked respondents a battery of questions about community participation, politics, and inter-group relations.

### 3.2 Defining the Treatments

There are two main treatments of interest: whether a respondent lived in a community that hosted evacuees and whether a respondent had direct contact with evacuees. For the former, this paper uses Harris County, Texas and East Baton Rouge Parish, Louisiana as “treated” communities, and uses change-of-address data from the U.S. Postal Service as of December 31st, 2005 to identify “control” communities that did not take in many evacuees. Communities with ratios of less than one new person from New Orleans for every 200 existing residents are considered to be unaffected and are eligible control units. To measure contact, the survey asked respondents in Harris County, Baton Rouge, and Arkansas, “did you have any direct personal contact with Katrina evacuees, for example through hosting them, cooking meals, providing direct service, etc.?” In communities with few evacuees, we can safely impute a zero with only small measurement error.<sup>10</sup> The potential endogeneity of this measure is addressed below.

An additional concern relates to the oft-overlooked distinction between the evacuee population overall and the poor, predominantly African American population that has been at the center of post-Katrina coverage. Yet because our survey over-sampled precisely those areas whose evacuees came from the Superdome by bus, and because we interviewed local leaders in the over-sampled communities, we can be reasonably confident that our indicator of evacuee presence is a valid measure of evacuees who are African American and often poor. The State of

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<sup>10</sup>To prevent more substantial measurement error, these analyses omit respondents who lived in high-evacuee states but were not asked about their contact with the evacuees.

Texas estimated that 81% of its “new residents” were African American, for instance, and that 61% lived in households making less than \$20,000 per year.

### 3.3 Methods

This paper couples an analysis of surveys with in-depth interviews, in large measure because the strengths of each approach help compensate for the weaknesses of the other. The interviews provide texture, and allow opinion leaders to indicate their thinking without the limitations of a pre-set agenda.<sup>11</sup> They proved useful in targeting the communities that were most affected by the evacuees as well. By contrast, the phone survey allows us to compare responses to identically posed questions across a wide range of individuals and to generalize more widely.

This paper adopts the same approach to its statistical analyses by using diverse techniques to ensure that the findings are robust. Its primary findings are cross-sectional, and rely on the assumption of no omitted variable bias. Put differently, the analyses assume that after conditioning on the covariates, we can attribute differences between the treated and control groups to the treatment itself. But to confirm that the results do not come from pre-existing differences between Harris County and comparable communities elsewhere in the South, the paper presents results based on differences-in-differences. These analyses show that *the cross-sectional Harris County findings do not appear using pre-Katrina surveys*, and suggest that this finding is indeed attributable to recent events. No other study of contextual effects cited in this paper uses differences-in-differences to isolate when contextual effects occurred.

This paper also draws on two separate pre-processing techniques. One technique, matching, removes observations in the control group that are the most dissimilar from those in the treated group, limiting concerns about model dependence (Ho et al., 2007). The specific matching algorithm employed is genetic matching (Diamond and Sekhon, 2005) due to its effectiveness in finding balanced control groups; using propensity score matching instead generates the same substantive conclusions. After matching, the analyses then estimate linear models on the matched

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<sup>11</sup>The vast majority of interviews were conducted in person, and were semi-structured interviews of those individuals who had appeared most prominently in the post-Katrina news reporting in their specific communities. Sampled communities included eight in Arkansas as well as Houston and the surrounding Harris County and Baton Rouge, Louisiana, and were chosen to maximize variation in local demographics prior to the Hurricane.

data sets and report the coefficients of interest. Conditional on the model, any covariate imbalance that remains after matching is removed at this second stage. Matching can be difficult or impossible with several partially observed covariates, so the matching analyses use listwise deletion. Separate analyses instead use multiple imputation to handle missing data (Schafer, 1997; King et al., 2001) and do not match.<sup>12</sup> They show that *the results are robust irrespective of whether one uses matching as a pre-processing step*. Again, the core assumption is that the use of multiple estimation techniques will increase the robustness of the findings, since the key results have to appear using both cross-sectional and temporal variation, as well as using multiple strategies for data analysis.

## 4 Survey Findings: Varying by Place

This section examines a wide range of survey evidence to adjudicate between theoretical approaches emphasizing contact, threat, and politicization. It first considers whether respondents who made direct contact with the evacuees reported differing attitudes, and then turns to the attitudes of those living in affected neighborhoods and affected cities.

### 4.1 Contact's Effects

The contact hypothesis predicts that those who had direct contact with evacuees will emerge with less prejudiced views of the groups to which the evacuees belong: African Americans, the poor, and the working class. To test this hypothesis, the analysis began with the 381 fully observed respondents in Arkansas, Harris County, and Baton Rouge who reported direct contact with evacuees. Table 2 in the online appendix shows a logistic regression predicting who reports contact with evacuees within the affected communities. Ideology and partisanship have no relationship with selection into contact whatsoever, a reassuring observation. At the same time, we see clearly that the well educated, the wealthy, and church attenders were much more likely to report contact with evacuees. While survey reports can always differ from actual behavior, it

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<sup>12</sup>Item non-response means that without this correction, some 13% of the SC06 respondents would be deleted.

is also reassuring these factors overlap with the observations of informants during the in-depth interviews.

The first analysis of contact uses genetic matching to find comparable control units from a pool of 1,224 people in unaffected communities.<sup>13</sup> Put differently, this analysis compares people who made contact with evacuees in affected communities to those who would have been likely to make contact had the evacuees gone to their community instead. For example, it compares a well educated religious Protestant who volunteered in a Baton Rouge church to his counterpart in Winston-Salem, North Carolina. This design ensures that people are classified as “treated” or “control” based entirely on their place of residence rather than any active decision to assist the evacuees, reducing self-selection. The covariates represent a standard set for attitudinal analyses, and also include three measures of religion and religious activity out of a recognition that churches played a central role in assisting the evacuees.<sup>14</sup> Conditioning on the respondents’ religion also helps account for the cultural distinctiveness of Baton Rouge and southern Louisiana.

This procedure generates a matched data set where one control unit was matched to each of the 381 treated respondents with replacement. In all, 284 of the 1,224 control units were matched. As Table 1 illustrates, this approach provides excellent balance on the observed covariates, including everything from political ideology to religious attendance. Indeed, one advantage to studying exogenous events that affect a particular area is that comparable individuals in other areas are available as controls. To show that the results are not dependent on the matching procedure, separate analyses use the same procedures on the full data set of 1,605 individuals who made contact or had no chance to do so. After pre-processing, we estimate OLS models for each dependent variable with an indicator variable for whether the respondent made contact as well as the 13 other covariates in the matching algorithm.

Figure 2 illustrates the results of OLS regressions for a variety of relevant attitudinal de-

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<sup>13</sup> “Affected” means living in Alabama, Arkansas, Georgia, Louisiana, Mississippi, Oklahoma, Tennessee and Texas. This is a reasonable definition, in that after Oklahoma, the percentage of evacuees in the mean community drops by more than half, to just one evacuee for every 769 locals on average in Florida.

<sup>14</sup> The covariates used in matching include indicator variables for African Americans, males, Hispanics, Protestants, and members of religious congregations; the tract’s percent Black and median household income in 2000; the county’s percent voting for Bush in 2000; the respondent’s income in dollars; the respondent’s education and age in years; a three-category measure of party identification; a five-category measure of political ideology; and a five-category measure of attendance at religious services.

pendent variables scaled from zero to one.<sup>15</sup> Consider the solid black lines, which indicate the coefficients and 95% confidence intervals from the matched data sets. For example, the “x” under “Spending on the Poor” indicates that the coefficient for having contact with the evacuees is -0.044 (SE=0.029) with a confidence interval that crosses zero. Still, the overall pattern is clear: if anything, contact appears to have left respondents with more negative attitudes towards African Americans, although few of the results are statistically significant. One that is: those who made contact are on average 0.038 (SE=0.018) lower in their affect towards African Americans. That impact is 16% of a standard deviation. As the dashed line underneath indicates, the coefficient is similar and significant for the full sample of 1,605 as well. This result is surprising for a well-educated group, since such individuals might be especially attentive to anti-racist norms (e.g. Mendelberg, 2001). Other variables do not appear to be as strongly affected or are sensitive to the choice of data set, although the trend is overwhelmingly negative. For instance, using multiple imputation, those who made contact with the evacuees are less supportive of anti-poverty spending ( $\beta = 0.056, SE = 0.019$ ), although using matching, the result is not significantly different from zero. Contact theory is at a loss to explain such findings, since it predicts more positive attitudes after face-to-face interactions. The positive impacts are chiefly those that indicate concern about crime.

Still, this analysis confounds differences in contact with differences in place of residence. All those who had contact were residents of Harris County, Baton Rouge, or Arkansas; those who did not were residents of Virginia, North Carolina, and five other southern states. Figure 3 re-estimates the impact of contact after expanding the potential control population to include 485 residents of affected areas who did not come into contact with evacuees.<sup>16</sup> It also presents

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<sup>15</sup>In light of the content analyses below, the ten dependent variables most closely related to crime, safety, race, and poverty are presented. But the analyses were conducted on a total of 33 dependent variables. This provides a source of discriminant validity, since the effects for those other measures are always small or null. They include attitudes on immigration, the wealthy, and the community. Of the key dependent variables, the measures of trust, fear of crime and expectations about someone returning a lost wallet have four response categories. Preferred spending levels have three, and affect is measured using a 0-100 feeling thermometer. The online appendix details the question wording.

<sup>16</sup>Expanding the universe of controls can only improve covariate balance. In this updated matching, respondents who had contact with evacuees were matched to 81 respondents from Arkansas, 50 from Harris County, 54 from Baton Rouge, four from Kentucky, five from Maryland, 91 from North Carolina, two from South Carolina, eight from Virginia, and two from West Virginia.

the impact for this enlarged sample without matching, again using dashed lines. As compared to the results above, these approaches are less likely to confuse the differing potential treatments but more prone to selection bias.

Fewer patterns are visible when allowing for intra-community controls. As illustrated in Figure 3, the findings diminish in size and sometimes reverse sign. It does appear that those who made contact were less supportive of spending on the poor ( $\beta = -0.039, SE = 0.026$ ) in the matched analysis, but this is only significant for the imputed data ( $\beta = -0.043, SE = 0.017$ ). Not a single impact is statistically different from zero using both pre-processing strategies. Considering Figures 2 and 3 jointly, one key conclusion is that *the ostensibly negative effects of contact are stronger when making comparisons exclusively across communities*. This suggests that the differing attitudes could stem in part from community-level differences which would have affected both those who made contact and those who did not. Despite the expectations from the in-depth interviews, those who had contact with evacuees became *less* favorable towards African Americans. Since contact theory does not apply here with much strength, the coming sections explore the possibility of community-level differences and the impact of media framing.

## 4.2 Proximity within Houston

We now investigate whether contextual effects operate through proximity to the evacuees. Attentive to their home values and to their neighborhood's perceived status, individuals might respond to groups that move in nearby even without meeting them directly. The first analysis focuses on Harris County, where officials released information about the density of evacuees in the 71 ZIP codes where SC06 respondents lived. Do those 112 people who lived in high-evacuee ZIP codes—defined as having taken in more than 1,000 evacuees—show distinctive attitudes compared to the 288 respondents elsewhere in Harris County? Mostly no, as Figure 4 illustrates. It uses OLS models with all of the covariates and preprocessing strategies discussed above, as well as standard errors clustered at the ZIP code level (Wooldridge, 2003). Again, the top line under each variable indicates the results from matching while the dashed line indicates the results from multiple imputation. The matching analyses have only 140 observations on average, explaining

their much wider 95% confidence intervals.

The figure demonstrates that conditional on other factors, respondents in high-evacuee ZIP codes do not display many distinctive attitudes. Most of the coefficients are substantively small and their 95% confidence intervals cross zero. But there is an exception. Those living near evacuees are more supportive of anti-crime spending than their counterparts elsewhere in Houston and the surrounding Harris County. In fact, using matching, we see that shifting to a ZIP code with many evacuees leads to an increase of 0.120 in respondents' support for anti-crime spending. That change is 40% of a standard deviation. This result holds using multiple imputation as well, and is in line with the politicized places hypothesis. In Houston, those living near the evacuees were more supportive of anti-crime spending.

At first glance, these findings could also support the straightforward idea that people respond to objective conditions and to rising crime rates in their community, irrespective of media coverage. To deal with this, the models described above also conditioned on the respondent's average squared distance from the 84 homicides committed in the three months prior to Hurricane Katrina. People who lived in close proximity to the average homicide will have a lower squared distance than those who lived at greater distances. In addition, the models also conditioned on a separate measure of the *change* in that distance in the four months after Katrina, when another 158 homicides took place.<sup>17</sup> If survey respondents were directly responding to the increase in crime and the threat to their personal safety, these measures should predict attitudes towards spending. But neither measure of proximity to homicides is a strong predictor of any of the attitudes in question. Objective conditions and their changes alone do not explain the patterns we observe. This provides initial evidence that respondents were reacting to the evacuees in their neighborhoods rather than to the increase in crime that accompanied them. We will see additional evidence on this issue later.

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<sup>17</sup>The addresses were obtained via the Houston Police Department ([www.houstontx.gov](http://www.houstontx.gov)), and were geocoded with their exact latitude and longitude.

### 4.3 Different Cities, Different Effects

The next analysis considers the possibility that simply sharing a locality with evacuees could reshape attitudes, even if the evacuees live in remote neighborhoods and do not interact with many long-time residents. The analysis first performed genetic matching to identify one-to-one matches for the 800 respondents in Baton Rouge and Houston (and the surrounding counties). The matches could come from any of the 2,981 respondents living in an unaffected community in the South. The same 13 covariates as in the matching analyses above were employed (see Table 1). The outcome models are again linear models, with three caveats. First, these models also condition on whether the respondent is Catholic, the tract's population density, and the county's level of support for George Bush in 2000. The results are substantively identical without these covariates, but their inclusion eliminates alternative explanations based on urbanicity or local religious or political traditions. Balance statistics for Houston and Baton Rouge are provided in Tables 3 and 4 in the online appendix, and show that matching produced highly similar distributions across a broad range of covariates. Second, the standard errors were clustered by ZIP code. It is important to note that *this is a conservative specification: if we instead estimate the models with standard errors clustered by county, which better approximates the unit at which the treatment was assigned, the standard errors are typically smaller.*<sup>18</sup> Third, all results for dependent variables with fewer than six response categories were confirmed with ordered probit models which relax the assumption of a linear relationship among the response categories.

The left-hand side of Figure 5 presents the results for the five most theoretically relevant dependent variables. Under each dependent variable, the figure provides the impact of living in Houston and then Baton Rouge for the matched data. The results demonstrate that the attitudes of respondents in affected communities were distinctive compared to other Southerners—and to one another. In Houston, we see that people became more supportive of anti-crime spending (0.085), more worried about being victimized by crime (0.052), and less sanguine about having a lost wallet returned (0.083) than people in unaffected areas.<sup>19</sup> Not only are those in Houston's

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<sup>18</sup>For example, the standard error for the Houston crime spending estimate drops from 0.021 to 0.019. For spending on Blacks in Baton Rouge, the estimate drops from 0.024 to 0.022.

<sup>19</sup>Using ordered probit models, we confirm these results. Respondents in Houston are 4.0 percentage points more likely to advocate increased anti-crime spending, and 7.4 percentage points less likely to expect their wallet

high-evacuee ZIP codes distinctive because of their concern about crime, but so too are Houston residents overall. Baton Rouge shows evidence of a different response, since there support for spending on the poor was comparatively quite low (-0.080), as was support for spending on African Americans (-0.092).<sup>20</sup> Although not shown, affect toward African Americans is lower in both Baton Rouge ( $\beta = -0.044, SE = 0.019$ ) and Harris County ( $\beta = -0.041, SE = 0.019$ ) as compared to unaffected communities. No strong patterns are evident for any of the other 27 dependent variables examined. As the right-hand side of Figure 5 illustrates, the results are quite similar when we instead use multiple imputation with a control population that includes all Southerners living in unaffected areas. This is strong evidence that they are not artifacts of particular data selection decisions or modeling choices.

Harris County and Baton Rouge differ from elsewhere, but do they differ from one another? To test that possibility, we evaluate the claim that each coefficient  $\beta$  for living in one city is larger or smaller than the coefficient for living in the other. For all five of these dependent variables, there is such evidence. For spending on the poor, simulations show that Baton Rouge's coefficient is smaller than Harris County's approximately once per one thousand simulations, providing a p-value of 0.001. For anti-crime spending in Harris County, the comparable p-value is 0.016. For both the analyses based on imputed data and the matching analyses, nine of the ten p-values are below 0.10.<sup>21</sup>

In short, we observe consistent differences in the specific form of the contextual effect. Harris County residents living near evacuees were more supportive of anti-crime spending than their neighbors. Compared to people living elsewhere, Harris County residents also seem more worried about safety and reciprocity in their communities. Baton Rouge residents, by contrast, responded to the evacuees with declining support for spending to assist the poor and African Americans. This suggests that racialized attitudes about poverty and dependency were triggered by the arrival of the evacuees. Effects appear for those who live near the evacuees and for those who

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will be returned by a stranger.

<sup>20</sup>Here, the prediction from an ordered probit is that people in Baton Rouge were less likely to advocate more spending on the poor by a similarly striking 10.9 percentage points.

<sup>21</sup>For the multiply imputed analyses, the p-value on the hypothesis that Baton Rouge residents are less likely to expect their wallets returned is 0.15.

simply share a locality with them.

If the politicized places hypothesis is correct, people respond to both their personal encounters and their changing neighborhood demographics only when there are available frames with which to understand the political impact of the demographic change. Having established variation in individuals' attitudinal responses across communities, we now turn to identifying the corresponding variation in the salient political frames.

## 5 Content Analysis of Coverage

The evacuee populations of Harris County and Baton Rouge overlapped. In many cases, the difference between the evacuees in the two cities was simply a matter of which bus took them away from the Superdome. Yet the hosts' responses differed, as the evidence above makes clear. This section uses content analyses to show that the media framing of the evacuees corresponded with the attitudinal changes identified above.

Local television news remains Americans' primary source of political information, with 54% of Americans reporting that they regularly watch local news (Pew Research Center, 2006). Thus the first content analysis compared coverage of the evacuees by Baton Rouge's ABC-affiliated WAFB News with that of Houston's CBS-affiliated KHOU. Transcripts for these stations were not available, but webpages of these stations for all available days from December 1st, 2005 through January 31st, 2006 were obtained via the Internet Archive ([www.archive.org](http://www.archive.org)).<sup>22</sup> The critical assumption is that website coverage follows on-air coverage closely. This was a formative period given that the modal SC06 interview in both places was conducted during February 2006.

The in-depth interviews indicated that two frames that were especially salient, those linking the evacuees to crime and those portraying the evacuees as dependent on government aid. To measure this systematically, the content analysis noted any prominent story that discussed the evacuees in connection with criminal activity, and separately noted stories linking the evacuees to poverty or government benefits. For instance, a story entitled "3 on the loose: HPD-11 Evacuees linked to string of at least 9 murders" would very clearly be a connection to crime. Stories about

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<sup>22</sup>Archived webpages are not available consistently for these stations before December 1st, 2005.

benefits remained salient throughout this period, as FEMA and others covered some evacuees' rent, furniture, and hotel bills. In Houston, 7 stories linked the evacuees to crime, and just 3 mentioned benefits. In Baton Rouge, by contrast, there were 5 stories connected to crime and 11 linked to benefits. This is initial evidence of a difference in the content of coverage between the two places, as illustrated in Figure 1.

40% of Americans reported reading a newspaper on the previous day (Pew Research Center, 2006). To further explore the coverage of Katrina evacuees, we now turn to an analysis of newspaper articles from the Baton Rouge-based *Advocate* and the *Houston Chronicle* from October 1st, 2005 to February 1st, 2006. Both are the lead newspapers in their markets, and among the only newspapers in these communities available through Lexis-Nexis. These articles were a stratified random sample of the 467 articles in those two publications that used the words “evacuee” and “Katrina,” producing 99 coded *Chronicle* articles and 113 coded *Advocate* articles. The full coding scheme is in the online appendix. Newspaper articles are typically structured to provide key information in the first paragraph, so the coding guidelines dictate that any tough cases be decided by using the first paragraph to determine what the author thought was most important. The results from newspaper articles, visible in Figure 1, reinforce those above. In Houston, 12% of all articles linked the evacuees to crime, a figure that was just 4% in Baton Rouge.<sup>23</sup> Two of the Houston articles about evacuee crime were front-page stories; none of the Baton Rouge articles were. The newspaper coverage of evacuee benefits was more even, with 11% of Houston articles and 13% of Baton Rouge articles falling into that category.<sup>24</sup>

For the politicized places hypothesis to operate, the residents of Harris County and Baton Rouge had to have been exposed to different media frames. That was clearly the case with crime and appears to be true with public benefits as well. In Houston, the evacuees were framed as bringing crime to the city, whereas in Baton Rouge they were framed more as a population

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<sup>23</sup>This finding is easy to double-check, since one might also search for the joint appearance of the words “crime” and “evacuee.” Those searches brought up 16 *Chronicle* articles and 7 *Advocate* articles.

<sup>24</sup>At the same time, it is important to note that overall discussions of the evacuees' impact in both places were actually quite balanced. In Houston, 28% of the articles were about community successes in responding to the evacuees, while 29% were about the challenges that the community faced as a result. For Baton Rouge, the figures were 26% and 25%. Yet despite the high-visibility stories of local altruism and volunteerism in the Hurricane's wake, those stories do not necessarily have any obvious political ramifications—and so might not have reshaped attitudes in the same way that stories about crime or benefits did.

receiving substantial government benefits. This research also examined newspaper coverage in the *Winston-Salem Journal* and the *Greensboro News and Record* to see if coverage of the evacuees was similar even in relatively unaffected communities elsewhere in the South. There, a total of just 19 articles were written about evacuees in the period in question. Houston and Baton Rouge had roughly 25 times that number of articles. There was variation not just in the content of the coverage about evacuees, but also in the salience of that coverage.<sup>25</sup> While it is difficult to know *why* the frames differed, Section 6.1 below considers the role of local conditions in producing these frames.

## 6 Alternative Explanations

Respondents in communities that took in evacuees differ from others in their attitudes, and those differences appear to track local media coverage. This fits with the politicized places approach, which contends that people respond to demographic changes by drawing on frames available in contemporary media. Yet alternative explanations remain. Here, we consider two: that the attitudinal profiles detected above pre-date Hurricane Katrina, and that survey respondents were reacting not to media frames but to objective conditions in their communities.

As with any cross-sectional analysis, it is possible that these analyses simply reflect pre-existing differences in these communities that affect both attitudes and media coverage. For instance, it is plausible that Houston residents have long been anti-crime, and that the focus on crime in the Houston media was more a reflection of those attitudes than an influence on them. To confront that possibility, an additional analysis used a difference-in-difference estimator to demonstrate that those differences were not present before the Hurricane.

The same question about preferred levels of anti-crime spending was included on the General Social Surveys (GSS) conducted in 1992, 1994, 1996, 1998, and 2000. During that time, the survey conducted 4,851 interviews in the South, including 154 in Harris County, Texas. The

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<sup>25</sup>This is not to deny that national coverage of the evacuees shaped opinions. Separate analyses of national television coverage through the Vanderbilt Television News Archive demonstrate that the benefits frame was salient not just in Baton Rouge but across the country. Still, because national coverage acts relatively evenly across space, this section has focused on identifying local variation in coverage.

geographic unit is thus an exact match with that used in the post-Katrina analyses.<sup>26</sup> So we can estimate whether Houston residents had distinctive attitudes on anti-crime spending as compared to other Southerners during the 1990s, excluding residents of the highly affected states of Louisiana and Mississippi. The analysis used a linear model with covariates including the respondent’s age, race, education, ethnicity, ideology, income, gender, party ID, religion, and religious attendance. GSS data are geocoded only at the county level, so the model also included the county’s logged median household income, its percent black, and an indicator variable for respondents in Harris County. The left panel of Figure 6 presents the distribution of predicted responses of Houston residents (“treatment”) and other Southerners (“control”) under the model before Katrina. It shows that on a zero-to-one scale, other Southerners average 0.808 while Houston residents average 0.790. Compared to Southerners outside of affected areas, Houston residents in the 1990s and 2000 were slightly but insignificantly *less* supportive of anti-crime spending. The Houston results are more uncertain because there are many fewer respondents in Houston as compared to the population overall.

We can estimate an identically specified model for the 2006 data, using only the 872 unaffected Southerners in the nationally representative sample and the 410 respondents who lived in Houston or Harris County.<sup>27</sup> Given the results above, it is not surprising that in 2006, residents of Houston and Harris County were more supportive of anti-crime spending than other Southerners, as the middle panel of Figure 6 demonstrates. Using both the models, we can then simulate the predicted average difference between Houston and the rest of the South for the 1990s and for 2006. Subtracting the two simulated vectors provides us with a difference-in-difference estimate of how much attitudes in Houston changed relative to attitudes elsewhere. The average differenced estimate is 0.056, with a 95% confidence interval from -0.004 to 0.117. In other words, *Harris County residents’ comparatively high levels of support for anti-crime spending are a recent phenomenon.*<sup>28</sup> As a placebo test, this analysis was also replicated for the largest sample

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<sup>26</sup>County-level geographic identifiers were obtained under a confidentiality agreement with the General Social Survey. The uses of the GSS data detailed here were specifically approved as well.

<sup>27</sup>Of these 410 respondents, 10 were part of the national sample and 400 were part of the targeted over-sample discussed above.

<sup>28</sup>In the Baton Rouge case, we have a similar survey question administered in the 2004 NES, but we do not have a sufficient number of respondents in Baton Rouge, so one must instead make an assumption about their

of respondents from a largely unaffected community, which is the state of Alabama. No strong impact is detected there.<sup>29</sup>

## 6.1 Different Conditions?

The post-Katrina experiences of Houston and Baton Rouge were obviously not identical, so another alternative explanation is that the differing objective conditions lead to the differing attitudinal responses on their own. Here, we consider whether the objective conditions in the two cities differed in relevant ways. In the case of Baton Rouge and declining support for the poor, this claim is relatively easy to set aside. It was Houston's evacuee population, not Baton Rouge's, that was overwhelmingly poor. For a period of time, Houston was the primary destination for buses from the Superdome, and 61% of the evacuees in Texas reported incomes of less than \$20,000 per year. Baton Rouge officials did not have comparable demographic information about their evacuee population, but it was clear that the evacuees in Baton Rouge included many middle-class evacuees who had access to cars as well. Indeed, that is part of the reason why 8% of Houston and Harris County respondents but 41% of Baton Rouge respondents actually hosted an evacuee in their homes. If anything, given these population differences, we might have expected frames about government benefits to be more prominent in Houston. There were large numbers of poor evacuees in both cities, so evacuee poverty levels themselves are an insufficient explanation for the patterns we observe.

Similarly, we need to consider whether the media attention to crime in Houston was necessary in fostering anti-crime sentiment, or whether the rise in crime alone was sufficient. According to the FBI, in Houston there were 24,250 violent crimes in 2006, a 3.5% increase over 2004. The increase in Baton Rouge was a much steeper 20%, from 2,444 to 2,954. Certainly, the crime *rate* could have increased by more in Houston if Baton Rouge had a much larger proportionate population increase. But using the public school population as one proxy, we see that the 6.7%

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views relative to others in their state. This assumption is sufficiently heroic that the results are not presented here, but they are available upon request, and do reinforce the claim that Baton Rouge became distinctive after 2004.

<sup>29</sup>The GSS provides 232 Alabama respondents in the 1990s; the SCCBS provides 44 in 2006. The difference-in-difference estimate comparing their crime spending attitudes to those of other unaffected respondents is 0.01 with a standard error of 0.06.

population increase in Baton Rouge from 2004 to 2006 was not much higher than the 5.9% increase in Houston.<sup>30</sup> The number and rate of violent crimes grew more quickly in Baton Rouge, undercutting the notion that attitudinal responses were a straightforward response to objective conditions. Longitudinal data from Houston further reinforce this point. Even in 2006, the number of violent crimes and coverage of violent crimes in Houston were down from their peaks in 2002, when just 13% of respondents to the Houston Area Survey indicated that crime was Houston's most important problem. By 2006, that number had soared to 31%. *After the arrival of the evacuees, Houston residents were paying more attention to fewer crimes.*

Houston did outpace Baton Rouge in one respect, however. Its 39% increase in homicide from 2004 to 2006 was larger than the 21% increase in Baton Rouge. Yet as we saw earlier, living near those homicides did not predict increased support for anti-crime spending. Moreover, since homicides typically receive disproportionate media attention as compared to other crimes (Paulsen, 2003), the politicized places approach can make sense of why a spike in the murder rate would be especially likely to shape attitudes. The hypothesis does not claim that objective conditions play no role in shaping attitudes. Instead, it contends that the interaction of local objective conditions and media attention does so. With crime in Houston, and with government benefits in Baton Rouge, that is clearly what we see. In both cases, there were grounds to frame the evacuees as connected to either crime or to government benefits. But the dominant frames in the two places differed, and the attitudinal impacts did as well.

## 7 Discussion and Conclusion

The central results recur in several specifications, and they are counter-intuitive. The initial predictions that Katrina would generate anti-poverty activism proved entirely incorrect (Grusky and Ryo, 2006). But beyond this sober rejoinder to conventional wisdom, the pattern of findings is instructive about the applicability of key theories. Some variants of contact theory suggest that people's direct experiences with the evacuees would shape their attitudes positively, but

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<sup>30</sup>As of December 31st, 2005, 38,733 people had filed change-of-address forms from New Orleans to one of Houston's four 3-digit ZIP Code Tabulation Areas, while the comparable figure for Baton Rouge was 44,299. Given the school enrollment figures, it seems likely that the Baton Rouge evacuees were less likely to settle there.

the analyses above find no such evidence, even though some of the prerequisites for contact were operating. On most measures, those who had direct contact with the evacuees were not very different from highly similar individuals who happened to live in areas that did not receive evacuees. The differences we do observe are typically negative reactions: those who had contact were more negative towards African Americans.

For traditional theories of racial threat, the threat posed by the out-group is self-evident, whether it is a threat to jobs, political power, social status, or something else. Yet this theory, while clearly applicable, is not well suited to explain how similar populations of evacuees can produce different attitudinal changes in different communities. More generally, it cannot explain why the same group of people is not always construed as threatening in the same ways. For that, we turn instead to the politicized places hypothesis, which calls attention to the interaction of local encounters and available media frames. It provides a way to understand cross-sectional and temporal variation in contextual effects. To operate, contextual effects require a confluence of factors, an idea which could explain the inconsistent findings of past contextual research.

The patterns of evidence provide strong support for this “politicized places” approach. Despite the wide range of experiences with evacuees, only those experiences that fit with available media frames appear to have shaped people’s attitudes. In Houston, the evacuees were framed as bringing crime to the city. That helped produce two anti-crime shifts in attitudes, one among people living near the evacuees and one among Houston residents overall. Personal encounters and proximity do matter under the right conditions. In Baton Rouge, the frame of public benefits was prominent, and those in Baton Rouge reported less support for spending on the poor and on Blacks as well as more negative feelings toward those groups. Houston and Baton Rouge were no strangers to racial and economic diversity before Katrina, but that did not stop a salient demographic change from reshaping attitudes. Through the politicized places hypothesis, we have a potential explanation for when and how contexts matter that amends theories of racial threat.

Those who worked with the evacuees had many kind things to say about them, but as the survey data show, those charitable thoughts did not influence their political views. Instead, to

the extent that people's political views changed, they often responded to news of the evacuees' generous federal benefits by withdrawing their support for federal spending targeting Blacks and poor people.<sup>31</sup> Or else they responded to portrayals of the evacuees as criminals in Houston. One informant captured this insight when he explained, "heart-warming, good stories—they don't sell. The stories that sell are the one evacuee who uses a Red Cross [benefit] card in the Galleria, [a local mall]." The newspapers did print positive stories. In Houston, 35% of stories were either about host community accomplishments or evacuee accomplishments, and the figure for Baton Rouge was 42%. Making the best of a tough situation was a common story line. Yet the attitudinal changes were universally negative toward the evacuees, perhaps reflecting the fact that the success stories were not framed in politically relevant ways. No wonder one Houston evacuee told a survey, "the media blame New Orleans people" (Wilson and Stein, 2006, pg.16).

Hurricanes such as Katrina are mercifully rare, and so too are the massive dislocations that Katrina brought to the Gulf Coast. That raises questions about just how general these results are. But the Hurricane did create a powerful opportunity to study contextual effects in a case where measurement error and selection bias are greatly reduced. Processes that often occur gradually and invisibly were in this case highly salient and easily measured. People who would otherwise never have met poor, life-long residents of New Orleans spent weeks in close contact with them. This research design of identifying exogenous variation in local demographics, together with the robust results it uncovered, gives us confidence that living in a community that undergoes a rapid demographic change can reshape the political views of residents. But even where such a design is not possible, this research suggests that to accurately identify contextual effects, we need information on more than just local demographics. We need to know about local elites, about salient events, and about news coverage. Responses to demographic change are shaped by the processes through which they become known to the public.

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<sup>31</sup>This response was not concentrated among a specific sub-population; other analyses found no interaction between living in a host community and an indicator for Black respondents. Indeed, during a call-in show on a predominantly Black radio station, a Houston official was surprised by the vehemency of the anti-evacuee sentiment from the Black community. They were "identical to the white community, maybe even stating it more emphatically." This is striking given the racially polarized response to the storm documented in Gross and Kohenak (2007), Frymer, Strolovitch and Warren (2006) and Huddy and Feldman (2006).

	Mean Treated	Mean Control	SD Treated	SD Control
Contact	1.00	0.00	0.00	0.00
Black	0.25	0.24	0.44	0.43
Tract Pct. Blk.	0.24	0.24	0.30	0.26
Tract Median Inc.	44980	45598	20114	16912
County Pct. Bush	0.51	0.53	0.08	0.06
Religious Cong.	0.81	0.80	0.39	0.40
Income	65.71	66.22	47.25	46.15
Education	14.81	14.79	2.60	2.62
Male	0.35	0.37	0.48	0.48
Party ID	1.98	2.00	0.84	0.86
Ideology	2.57	2.53	1.13	1.07
Attend Services	3.96	3.91	1.35	1.32
Protestant	0.67	0.69	0.47	0.46
Hispanic	0.06	0.06	0.24	0.23

Table 1: This table demonstrates the balance for the matched samples of 381 respondents who had contact with the evacuees and 284 who did not. The comparison is thus between individuals who had contact with the evacuees in Arkansas, Louisiana, and Texas and comparable individuals in states with few evacuees, including South Carolina, North Carolina, and Virginia.

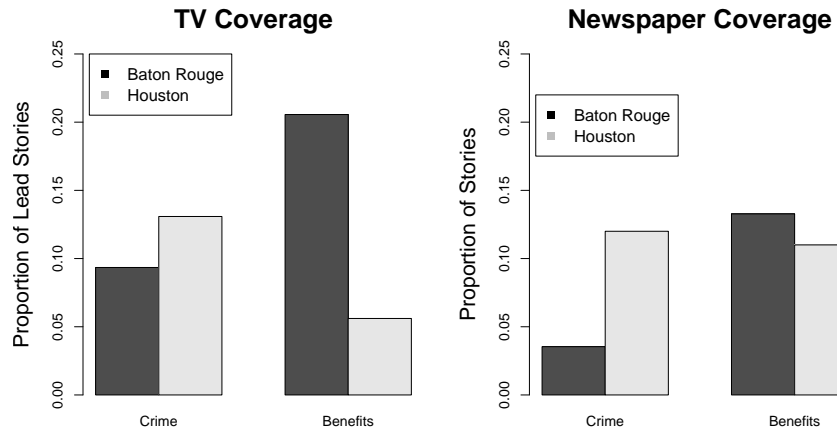


Figure 1: This figure presents the results of content analyses of coverage by two TV stations and two newspapers in the aftermath of the Hurricane. Coverage of crime in Houston was comparatively high, as was coverage of evacuee benefits in Baton Rouge.

**Effect of Contact  
Only Cross-Community Matches**

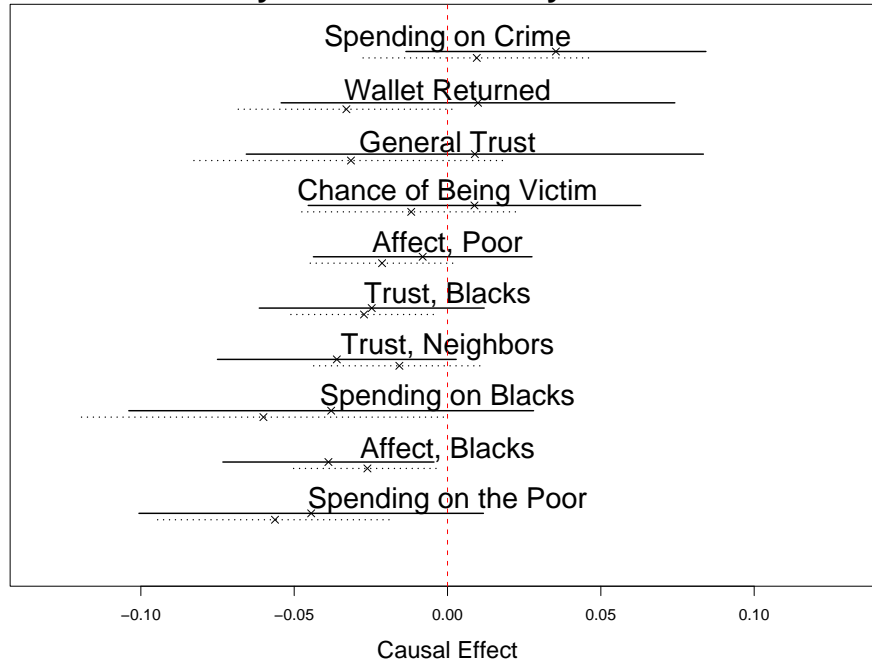


Figure 2: This figure presents the causal effects and 95% confidence intervals of having direct contact with the evacuees conditional on several covariates. The top line under each dependent variable is based on matched samples while the bottom line is based on the full sample. Those who made contact appear more negative toward African Americans than comparable people living elsewhere, although few results are significant.

### Effect of Contact Allowing Intra-Community Matches

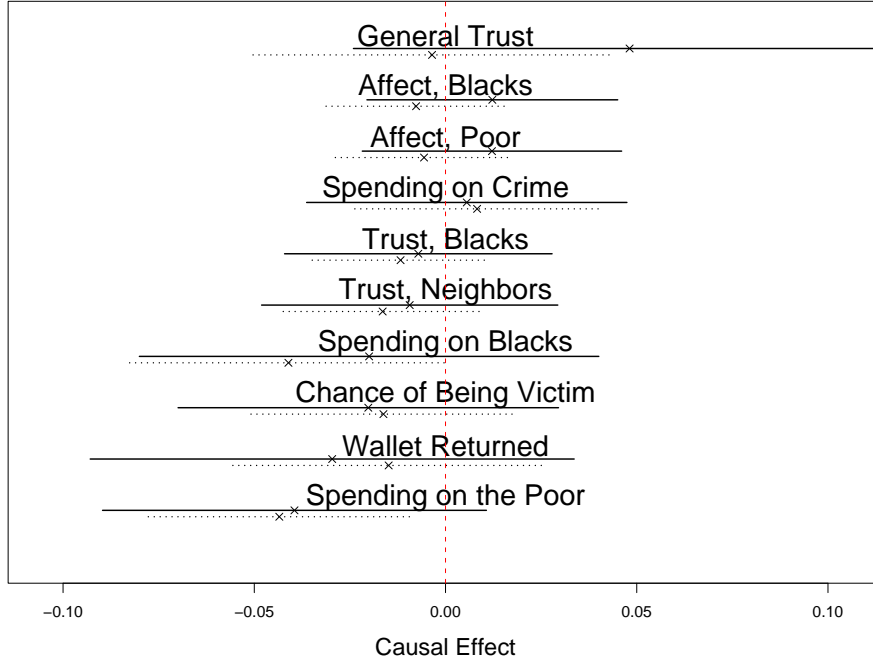


Figure 3: This figure presents the causal effects and 95% confidence intervals of having direct contact with the evacuees conditional on several covariates. Here, the comparisons are partially within communities. The top line under each dependent variable is based on matched samples while the bottom line is based on the full sample.

### Effect of Living in Host Neighborhood within Houston



Figure 4: This figure presents the causal effects and 95% confidence intervals for the impact of living in a highly affected Houston ZIP code conditional on several covariates. The straight lines indicate results based on matching; the dashed lines indicate results based on multiple imputation. Those who live in affected communities differ from comparable respondents elsewhere in one key respect: they are more supportive of anti-crime spending.

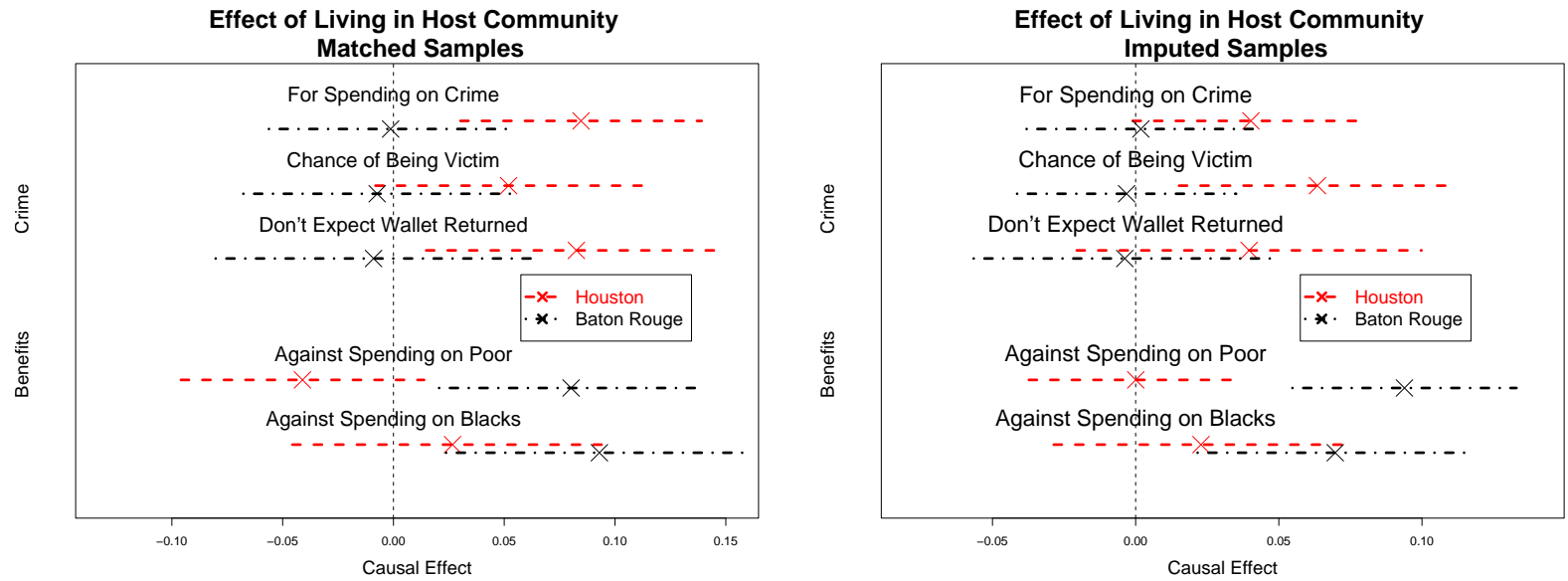


Figure 5: This figure presents the causal effects and 95% confidence intervals for the impact of living in Houston or Baton Rouge on several attitudes. The left figure presents results using matching, while the right figure presents results using multiple imputation. Those in Houston were more likely to support spending on crime and to think they might be victims of crime. Those in Baton Rouge were less supportive of spending on the poor and African Americans.

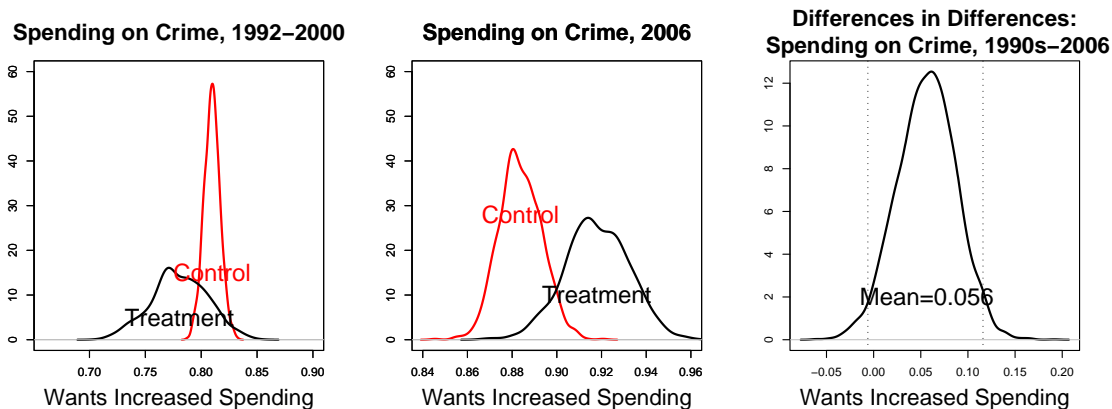


Figure 6: This figure presents the distribution of predicted differences-in-differences for attitudes on spending toward crime in Houston versus elsewhere. The left panel shows that prior to Katrina, Harris County residents were perhaps slightly less supportive of crime spending than other southerners. The center panel shows that they were decidedly more supportive of crime spending post-Katrina. The right panel presents the “difference-in-difference” estimate. The mean of 0.06 indicates that support for anti-crime spending on a 0-1 scale increased by 0.06 in Houston relative to other communities.

## Online Appendix

	Estimate	Std. Error
Intercept	-3.676	0.833
Black	0.399	0.272
Tract % Black	0.253	0.414
Tract Med Income	0.115	0.497
County % Bush	0.498	1.001
Church Member	0.317	0.223
Income	0.660	0.213
Education	0.148	0.032
Male	-0.228	0.164
Republican	0.006	0.114
Liberal	0.001	0.076
Churchgoer	0.165	0.069
Protestant	0.032	0.176
Hispanic	-0.150	0.309

Table 2: This table presents the results of a logistic regression predicting which of the 1,200 individuals in affected communities reported direct contact with evacuees.

	Mean	Mean	SD	SD
	Treated	Control	Treated	Control
Houston	1.00	0.00	0.00	0.00
Black	0.19	0.13	0.39	0.38
Tract Pct. Blk.	0.17	0.15	0.24	0.26
Tract Median Inc.	53388	51986	27436	24506
County Pct. Bush	0.54	0.54	0.00	0.08
Income	60.43	58.50	46.59	46.01
Education	13.99	13.94	3.21	2.98
Male	0.37	0.38	0.48	0.48
Party ID	2.03	2.07	0.81	0.81
Ideology	2.64	2.57	1.15	1.06
Attend Services	3.53	3.54	1.48	1.41
Protestant	0.50	0.50	0.50	0.50
Hispanic	0.23	0.24	0.42	0.37
Tract Density	4416	4128	3374	2705
Catholic	0.33	0.33	0.47	0.44

Table 3: This table presents the balance for the matched sample of 307 Houston residents and 202 highly similar respondents from unaffected areas.

	Mean Treated	Mean Control	SD Treated	SD Control
Baton Rouge	1.00	0.00	0.00	0.00
Black	0.35	0.34	0.48	0.47
Tract Pct. Blk.	0.34	0.32	0.31	0.31
Tract Median Inc.	42066	42187	16102	15084
County Pct. Bush	0.53	0.53	0.00	0.03
Income	60.78	61.72	45.57	46.29
Education	14.42	14.58	2.75	2.58
Male	0.35	0.37	0.48	0.48
Party ID	1.93	1.98	0.88	0.87
Ideology	2.55	2.54	1.14	1.06
Attend Services	3.90	3.90	1.40	1.34
Protestant	0.58	0.58	0.49	0.49
Hispanic	0.02	0.02	0.14	0.15
Tract Density	2337	2224	1525	1358
Catholic	0.28	0.28	0.45	0.42

Table 4: This table presents descriptive statistics for 309 Baton Rouge residents and 231 matched counterparts from unaffected parts of the South.

## Coding Scheme for Media Frames

### Community Challenges

- crime – any article which connects the evacuees to crimes perpetrated or to the potential for such crimes. This category includes any articles about crimes committed by or against evacuees, as well as articles about fugitives, sex offenders, gangs, or others who entered the community as a result of Hurricane Katrina. Also included are any instances of violence within schools attributed to evacuees.
- public benefits – any article which connects the evacuees to benefits that they receive from the state or federal government, such as hotel vouchers paid for by FEMA, rental assistance provided by the City of Houston, furniture assistance, FEMA trailers provided to the evacuees, or cases of fraud involving benefits. Also include articles about upcoming FEMA deadlines for receiving aid.

- schooling – any article which connects the evacuees primarily to non-violent challenges faced by the schools, such as over-crowded classrooms, students who are behind in their work, and schools that lack resources to deal with the influx of evacuees.
- Community costs, general – any article which emphasizes other costs to the community imposed by the evacuees, such as challenges siting trailers, FEMA obstructionism, or other miscellaneous community challenges not in the above categories.

## **Community Benefits**

- Host volunteerism – any story primarily about acts of charity performed for the evacuees by either local or national groups, churches, or individuals. Also, stories about politicians or other local leaders welcoming the evacuees or taking action on their behalf.
- economic growth – any article which connects the evacuees to economic benefits for the host community, such as articles about the improved economic situation or economic prospects of certain sectors after Hurricane Katrina.
- Miscellaneous benefits – Other articles emphasizing the benefits the evacuees have brought to the host community, such as diverse cuisine or new music.

## **Evacuee Successes**

- Evacuee economic integration – any stories emphasizing evacuees who have gotten or held new jobs post-Katrina. Also, stories emphasizing evacuees who are using Katrina as an opportunity to seek education or make other life changes.
- Family reunification – any stories emphasizing families being reunified with lost relatives or pets, or those evacuees who have become married since Katrina.
- Community Incorporation – any stories emphasizing evacuees' efforts to thank or repay their host communities through volunteerism, as well as those emphasizing evacuees join-

ing churches. Also include any articles about evacuees finding homes or settling in the community.

- Political organization – any article about efforts by the evacuees or on behalf of the evacuees to organize politically to influence federal, state, or local policy.
- Evacuee school incorporation – any article primarily about an evacuee becoming a member of a school community, participating in its activities, or encountering any kind of academic success.
- Miscellaneous – any article emphasizing evacuees’ successful adaptation that cannot be categorized as above.

## **Ongoing Evacuee Challenges**

- Housing – any article about the difficulties evacuees face in finding permanent housing in their new community.
- Finding work – any article about the difficulties evacuees face in finding full-time employment or in paying bills.
- Mental Well-being – any article about the evacuees’ mental health challenges, homesickness, social isolation, or other psychic challenges.
- Rebuilding New Orleans – any article about the difficulties evacuees face in returning to New Orleans due to lack of housing, the slow speed of the rebuilding process, or anything else.
- Miscellaneous – any article about evacuee challenges not categorized above.

## **Not Applicable**

- Any article which does not associate either the evacuees or the host community with positive or negative outcomes such as those emphasized above.

## Question Wording

- Spending Questions: “I am going to read you a list of federal programs. For each one, I would like you to tell me whether you would like to see spending increased or decreased... Dealing with crime? Aid to blacks? Aid to the poor?”
- Social Trust: “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?”
- Trust Blacks: “Think about Blacks. Generally speaking, would you say that you can trust them a lot, some, only a little, or not at all?”
- Probability of Being Victim: “How likely do you think it is that you may be the victim of a crime in the next 12 months?”
- Affect: “Next, I’d like to know whether you have warm or cold feelings toward a number of well-known groups. I’ll read out a group and ask you to rate it from 0 to 100... Blacks? Poor people?”
- Wallet Returned: “If you lost a wallet or a purse that contained two hundred dollars, and it was found by a neighbor, how likely is it to be returned with the money in it? Would you say very likely, somewhat likely, somewhat unlikely, or not likely at all?”

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