

## **The Social Fabric Under Stress. Baton Rouge's Explosive Growth after Hurricane Katrina**

### **Project Summary**

#### Intellectual Merits

The destruction caused by Hurricane Katrina has led to the redistribution of approximately 1.4 million people by both voluntary and involuntary means. Much of this population has landed in the city of Baton Rouge and the surrounding parish (hereafter referred to as Baton Rouge), 80 miles Northwest of New Orleans and the state capital of Louisiana. Local officials estimate this parish of just over 400,000 people has gained over a quarter million people in about 1 week. Traffic in this already congested area is estimated to have increased by 35-45%. Aside from being the worst natural disaster in American history, this catastrophe spawned what may be the most substantial population growth of a single metropolitan area in the shortest period of time in U.S. history. Due to the severity of the damage in New Orleans and areas to the east, it is anticipated that much of the growth in Baton Rouge will be long term, perhaps permanent. While recognizing the enormity of human suffering caused by this calamity, we also see a unique opportunity to study the effects of fast paced and large scale population redistribution on various sociological processes.

We propose to capitalize on a survey conducted by the P.I.'s in April of 2005. The Baton Rouge Survey contained important modules on social capital, fear of crime, trust and confidence in local officials, race relations, and various other topics. Not surprisingly, the massive population growth in Baton Rouge has prompted widespread discussion on crime, the potentially changing racial and class structure of the city and parish, the ability of public administrators to manage the necessary infra-structural changes, and so forth. The fortuitous alignment of the pre-existing survey and the unexpected but massive social change in Baton Rouge creates a natural experiment where the influence of the unanticipated stimulus on public trust, fear of crime, and the like can be examined - - not only just before and after the hurricane, but over an extended period of time as this city transitions to a new social equilibrium. Moreover we still have the original phone numbers for the pre-existing survey respondents, creating the opportunity for a panel study. We therefore request funding to conduct additional waves of the original survey with an expanded instrument, providing for a very unique panel data set. In sum, we are striving for a four-panel survey, two of which will be funded by the NSF: One survey was already done prior to the hurricane as part of the ongoing Baton Rouge survey; we request that two more be funded by NSF (one as soon as possible, and another 1 year from now). An intermediate panel will be conducted in late spring as part of the normal sequence of the Baton Rouge Survey (not at the NSF's expense). To our knowledge, we are the only group which will be able to collect panel survey data just before and immediately after the massive population change in Baton Rouge.

#### Broader Impacts

The proposed panel study has the potential to inform sociology, political science, criminal justice and criminology, and related social science fields about the fluidity of these social processes when subjected to sudden, dramatic and unexpected pressures. Additionally, we have a pre-existing relationship with the mayor's office and other local governmental, civic, religious, aid, and economic organizations. Our findings will be used to inform the decision making process for local policy makers and stake-holders by way of fact sheets and policy briefs that we will release through our recently established research group.

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### **Project Description**

#### Results from Prior NSF Support

Of the three investigators, Lee has the only NSF grant falling within the five year window required in the NSF Grant Proposal Guide. Professor Lee is a 2003 recipient of CAREER grant number SES 0237968 from the Sociology program entitled CAREER: Institutional Structure, Civic Engagement, and Crime in Nonmetropolitan America. The CAREER project is 5 years in duration, and focuses on crime in rural communities. Significant progress has been made with that project, and it is currently slightly ahead of schedule. Several papers have been published or are forthcoming from that effort, including publications in *Social Forces*, *Homicide Studies*, and *Criminal Justice Studies*. Because that project is largely on a different topic, we do not extensively summarize the findings here. However, we call attention to the fact that all three investigators have received NSF funding in the past. Professors Weil and Shihadeh have been involved in three different NSF grants in the past. All three of these grants were successfully completed and closed out in accordance with NSF guidelines and regulations, and over time various publications have resulted from those projects. Thus, the principal investigators have experience managing and successfully completing major grants from NSF.

#### Rationale for Proposed Study

Baton Rouge is the closest city to New Orleans, some eighty miles to the northwest, and survived Hurricane Katrina with relatively minor physical damage. It was the closest major point of refuge for evacuees, and the closest major staging point for aid workers. It is the seat of state government, site of both Southern University and Louisiana State University, and East Baton Rouge Parish is home to more than 412,000 people according to the 2003 U.S. Census Bureau estimate. Baton Rouge experienced a flood of a different kind due to Katrina. Immediately prior to Katrina, Baton Rouge experienced a significant influx of evacuees, which is typically the case when hurricanes threaten the Louisiana gulf coast. Nearly all of these people stay with friends, relatives, or temporarily take shelter in hotels and motels until the threat subsides. However, due to the severity of the storm, New Orleans was shut down completely, and Baton Rouge experienced a second wave of emergency evacuees that arrived by way of bus, helicopter, ambulance, bicycle, foot, and virtually any other means possible. Major shelters sprung up at the convention and entertainment center downtown, and at both university campuses. Smaller shelters took hold at countless churches and civic organizations throughout the parish. The latest estimates are that approximately a quarter of a million people have landed in Baton Rouge, many of whom are expected to be permanent, or at least long term. Meanwhile, traffic in this already congested city has ground to a halt, critical supplies of gasoline, eggs, milk, bread, and other basic commodities are scarce, and the housing market has tightened enormously.

In response, volunteers from all walks of life converged on the evacuees, offering food, clothing, housing, and social support. This civic spirit was so widespread that at some relief points, volunteers were being sent home for lack of things for them to do. In contrast, stories of civil unrest, looting, and crime were running rampant through the local grapevines. Radio and television commentators further promulgated these concerns, passing along unsubstantiated information to an already traumatized public. The national media echoed these sentiments, with the September 7, 2005, *New York Times* reporting "mounting frustration over gridlocked roads and an undercurrent of fear about crime and the effect of evacuees." Making reference to long

lines at a local firearms store, they surmised “many were local residents concerned about the newcomers from New Orleans and stocking up on Glock and Smith and Wesson handguns.”

The unprecedented population growth experienced by Baton Rouge raises a host of questions related to mainstream sociological research such as social capital and trust, fear of crime, confidence in local officials, and race relations. In a fortuitous alignment of circumstance, we propose to examine this significant shock to the local social system by capitalizing on existing surveys by this proposal’s investigators, conducted before the hurricane and on precisely the above named issues. Moreover, because we retained the contact information of the respondents, we are in the position to collect panel data on a random sample of Baton Rouge households which will capture both the before and after effects of this massive population growth, as well as the transition over time as this city realigns itself. We are thus in a position to partially harness the social processes of a natural experiment in progress. We plan to convey this information to local policy makers via fact sheets and policy briefs to help guide this city in distress.

### Conceptual Issues

In recent years, the concept of social capital has provided a bridge linking areas of social research that were not always considered related. If we understand social capital in part as a way of describing the social fabric, then a healthy political culture and fear of crime are on opposite sides of the same coin. In a narrow sense, social capital may consist of networks of ties among social actors, but in a broad sense, social capital includes interactions within civil society, participation in social and political groups, relations among ethnic, religious, and other groups, trust and comity among social actors, and trust of authorities in a democratic setting. It represents social support against isolation and democratic self-restraint among competitors for power. From this perspective, crime and fear of crime stem from a breakdown of civil society and from social isolation. James Coleman and Robert Putnam are usually cited as sources of these ideas, but it is easy to trace their intellectual roots back through Gabriel Almond and Sidney Verba to Tocqueville and Montesquieu.

It has long been recognized that rapid social change puts strains on the social fabric. Functionalists from Spencer and Durkheim to Parsons and Smelser argued that rapid social change entails an adjustment from one social equilibrium to another, often with bumps along the way. In rapid social growth, according to Durkheim, the surface on which social connections rest is stretched till the ties reach the breaking point. An old division of labor is replaced by a new one, and some people feel lost (anomic) or forced to accept roles for which they do not feel suited. If the transition is successful, people eventually find their places in the new order, but until they do, as Smelser argues, they may protest, and authorities may try to prevent them from seeking their former places and force them to accept their new ones. Social capital theorists attempt to specify what these social ties consist of - connections with these people, membership in those groups - and how the network of ties is structured.

If the social fabric is strained by rapid growth, then crime, or at least the fear of crime, could increase. Anecdotal evidence suggests that the explosive growth of Baton Rouge in the days following hurricane Katrina, has increased the fear of crime substantially. Gun shops, for instance, are reporting a one hundred-fold increase in daily sales. Unfortunately, the mechanisms by which rapid social change translates into fear of crime are not well understood. On the one hand, those who have remained well embedded in their social networks - those who have strong ties, who participate in civic activities - may be better able to weather the challenges of growth,

and may fear crime less because they feel less isolated and more protected. This is in conformity with the social support literature which finds that those embedded in support networks score lower on measures of anxiety and depression. But on the other hand, strong community ties may have the reverse effect, and might actually increase the fear of crime because such ties are efficient conduits by which accounts of victimization get transmitted. This implies, ironically, that it is precisely those individuals - - those with strong ties and more social capital and who are thus unlikely targets of crime - - are ones most fearful of it. Indeed, in the days after the hurricane, as Baton Rouge was besieged by an influx of the displaced, accounts of victimization and social unrest spread like a shockwave through the community, thus spreading the impact of crime beyond those directly victimized. So the link between rapid social change and the fear of crime remains an open and empirical question, and recent events make Baton Rouge an ideal location to examine that link.

In partnership with Wesley Shrum, Edward Shihadeh, (one of the P.I.s in this proposal) conducted video interviews with both displaced and resident populations last week. Preliminary discussions in the last few days suggest that black residents of Baton Rouge generally report less apprehension about crime than do whites. Given the sudden increase in the black population in Baton Rouge, this raises the possibility that the link between social change and fear may be a spurious artifact of an underlying relationship between racial composition and fear. This conforms to prior research linking racial composition and fear at the neighborhood and at the city level. We will closely analyze this possibility.

These preliminary interviews also suggest that non-economic institutions - - particularly faith-based institutions - - played a dominant role in blunting the effects of Hurricane Katrina and its subsequent effects on Baton Rouge. While local, state and federal authorities were widely criticized for being slow in responding, churches, synagogues and mosques reacted quickly, efficiently and with conspicuous force. These organizations may have provided a stabilizing framework in which moral and civil communities can transition from one social equilibrium to another. They provide a “free social space” for groups and individuals to channel energy, and thereby reduce frustration, feelings of helplessness and, in particular, apprehension about crime. Our survey instrument, which has been used for the last five years in Baton Rouge, and just several months before the hurricane, addresses these issues.

It is not always easy to measure outcomes predicted by theory because the generating causes often change at a glacial pace, or are often not strong enough to produce the predicted effects. For instance, political sociologists long looked in vain for evidence of the political generations or cohorts that Karl Mannheim predicted would be generated by historical events. Much of the problem was that the events of American history were not “strong” or relevant enough to produce the outcomes, or they moved at a glacial pace. However, when Frederick Weil investigated democratic values across cohorts after 1945 in Germany, the effects of Nazism emerged clearly in certain generations. The generating events (Nazism and regime change) were strong, concentrated, and relevant enough to produce detectable outcomes as predicted by the theory. Robert Putnam has suggested that social growth, with long commuting times, may undermine social capital because people have less time and energy to devote to civic activity; but he acknowledged that he could not find strong evidence for his hypothesis. In the present case, it is estimated that Baton Rouge increased in size by more than 50% within a week, and is likely to retain much of this growth for a long time, maybe permanently. This is the sort of “strong” event that may produce outcomes predicted by theory that could not be detected after smaller change.

## Methodology

Our methodology to investigate these issues is grounded in survey research and capitalizes on the availability of prior Baton Rouge Surveys, the most recent of which was conducted in March-April of 2005. The former allows a broad array of comparison points to gauge the effects and magnitude of change in pre-and post-growth Baton Rouge. Because the respondent contact information was retained, the latter will allow for the construction of a panel data set, i.e., repeated observations of the same units over time. The benefits of panel data are well-known, and we do not reiterate all of them here. However, we stress that this presents a unique situation to strengthen our inferences regarding the theoretical issues of interest.

Our questionnaire contains a series of (mostly validated) instruments to measure hypotheses about social capital, fear of crime, and trust, in the face of explosive social growth (see the instrument at [www.lsu.edu/faculty/fweil/BRPostKatrinaQQ0509.pdf](http://www.lsu.edu/faculty/fweil/BRPostKatrinaQQ0509.pdf)). Most of the questions are replicated from national surveys, and except for the questions specific to the aftermath of Hurricane Katrina, most of the questions have already been asked in the prior surveys in Baton Rouge, and in established surveys at the national level. These previous surveys include six annual samples of about 400 respondents from 2000 to 2005 produced under the direction of Frederick Weil. And they also include the Baton Rouge sample (N=500) of Robert Putnam's "Social Capital Community Benchmark Survey" of 2000, which Frederick Weil helped direct locally (Baton Rouge was one of 40 communities surveyed, in addition to a large national sample). Thus, we have good benchmarks with which to measure change. And as noted elsewhere, we still have contact information from our last survey in March-April, 2005, so we can produce a panel data set.

Our indicators are as follows. Social capital is conceptualized primarily as social embeddedness, social participation, and relations among groups. Social trust and trust of elites is an additional or closely related dimension. We adapt scales of Associational Involvement, Civic Leadership, Faith-Based Engagement, and Informal Socializing from Putnam's and Weil's previous surveys in Baton Rouge - which, in turn, were mostly replicated from previous national surveys. For trust, we use scales of Interpersonal Trust, Inter-Racial Trust, and Trust of Public Authorities of various types. We augment the trust indicators with questions of satisfaction or blame of authorities for their performance in the aftermath of Katrina. We also include standard political efficacy items and a previously used battery of questions about policy priorities for local government. For fear of crime, we include a number of standard indicators, most of which have already been used in our Baton Rouge surveys. We also add a set of new questions regarding Katrina that have not been asked before in Baton Rouge, though some of them have been asked in national samples. In addition to the blame questions, we ask specifically whether respondents have volunteered for relief activities or donated money, how they feel emotionally about the evacuees, whether they feel stressed or irritated by the growth and crowding of the city - and in their homes - whether they feel optimistic or pessimistic about Baton Rouge's (and New Orleans') future. At the end, we include a set of standard questions about social structure (age, race, gender, etc.), media usage, religious and political attitudes. Finally, we ask for geographical locators so that, at a later time, we can merge contextual variables to the data set (no NSF funding is requested for this step). Using fine-grained geographical units, we will merge census demographic information about specific census block groups, actual crime rates from the police department, and the location of churches, liquor stores, evacuee shelters and housing, and other relevant contextual variables. Most important, we plan to combine our work with colleagues here

at LSU (Wesley Shrum, Jack Beggs, and Jeanne Hurlbert) who submitted a complementary SGER proposal to study *evacuees*, not Baton Rouge residents as we are proposing. We have all collaborated in the past, are doing so now on other projects, and will continue to do so in order to extract the maximum value as we cross-fertilize these two projects.

We have generated several working hypotheses. The overarching framework is that sudden and massive social change will put the social fabric under stress. At the descriptive level, we anticipate that inter-group (especially interracial) relations may worsen. Social trust, trust of authorities, and efficacy may decline. Usually minor irritants like traffic, crowds, shortages, increases in the cost of living, and rudeness may loom large. However, despite the conceptual basis for predicting that interpersonal ties and civic engagement may weaken under such severe circumstances, we may be informed by evidence to the contrary. Indeed, volunteering is almost certainly at an all time high here in Baton Rouge.

At the explanatory level, the relationship between variables is less predictable. For instance, the results regarding the fear of crime suggest that while fear has likely risen, the underlying causes - - and mitigating factors - - are open questions. Contrary to the literature, those ties to community, which are instrumental in reducing stress, fear and anxiety, may have served as efficient conduits for the dissemination of worrisome rumors, particularly during the early days of the crisis. Likewise, the findings regarding the role of faith-based organizations may be unexpected. While the public discourse centers on the role of government during this crisis, we expect to find that participation in non-economic institutions - - particularly for blacks - - may reduce fear and, more generally, dampen the abrupt transition to a new social reality.

From a temporal standpoint, we are also interested in how residents of Baton Rouge adapt over time, which is a major advantage of this study's multi-panel design. We hypothesize that, net of other factors, those with greater social capital may reorient more quickly to social life in Baton Rouge. Those who are more socially embedded and socially active may be quicker to overcome inter-group tension, distrust, fear of crime, potential hostility toward evacuees, and may be less likely to leave the city. However, an important caveat is in order. Since we are treading new ground here, we are prepared to be surprised by some of our findings and anticipate that these surprises will lead to new insights and predictions.

#### Requested Resources and Product

We request funds to conduct a 500 respondent telephone survey as quickly as possible to serve as wave 2 of the panel data set. We intend to cover the cost of a third wave in-house by way of Professor Weil's research methods class in March-April 2006. We then request funds to follow this up with a fourth wave during September of 2006. Two of the waves will essentially be funded in-house, and two of will be funded by NSF.

The research group has a pre-existing relationship with the mayor's office and local government and non-profit agencies. We also recently developed a conduit to disseminate this type of information via fact sheets and policy briefs that we will use to inform the local policy makers on an ongoing basis as the data are collected (see [www.lsu.edu/capergroup/](http://www.lsu.edu/capergroup/)). Our primary goal is to help inform local policy makers and stake-holders, and ameliorate the problems being generated by this unexpected population explosion. In other words, using the tools of sociology to inform and guide social action.