

**Results from the Louisiana Back to Business Workshops Written
Surveys and Telephone Follow-Ups**

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EXECUTIVE SUMMARY

During late August, through mid September 2006, the largest displacement of American business occurred. The strikes of Hurricanes Katrina (August 29, 2005) and Rita (September 24, 2005) upon the Gulf Coast of the United States claimed thousands of lives, billions of dollars in destruction and caused the largest regional disruption and dislocation of American business in its recorded history. As part of the unprecedented response efforts, members of the Department of Homeland Security's (DHS) Private Sector Office (PSO) deployed to the affected areas and worked with FEMA and other federal, state and local responders and private sector members to support the affected region's recovery efforts. During that 'field' deployment, members of the PSO recognized the critical need to disseminate information and address the needs of small businesses in the impacted areas. As part of that effort, the PSO, in partnership with FEMA and other federal, state, local and private sector components organized three 'Back to Business' workshops. The workshops were held in downtown New Orleans, LA on October 6, 2005; Belle Chasse, Plaquemines Parish, LA on October 27, 2005; and Lake Charles, LA on December 15, 2005.

At each of these workshops, business owners and managers were asked, using a one page survey, how they were impacted by the two hurricanes and what were their greatest needs or concerns. Respondents were also asked about property damage, sales loss, utility restoration and employee housing. Between the three workshops, 1013 surveys were completed with the vast majority of the surveys being collected at the first workshop in New Orleans.

From November 2005 to February 2006, a follow-up telephone survey was conducted with the original written survey respondents. Approximately 35% of the original respondents were contacted and completed the follow-up. Follow-up participants were asked to explain their obstacles returning to regular (pre-Katrina) operations. Many of the concerns expressed by businesses over the telephone were confirmed by the interviewer during an on-site visit to the City of New Orleans in March 2006, one week following the Mardi Gras celebrations.

During the times of each of the workshops, the operating atmosphere for businesses in the three communities (New Orleans, Plaquemines Parish and Lake Charles/Southwest Louisiana) were very challenging with numerous obstacles (e.g., forced evacuations; property destruction; no access to facilities or records; lack of power, communications, safe drinking water; no operating health care facilities; no (or lack of) employees, customers and incoming revenues; no mail service; no housing, etc.) Issues such as these had a dramatic impact upon the persons and businesses that participated in the three workshops. Consequently, the populations interviewed were self-selected.

The methodology in this report is perhaps best described as a case study using convenience sampling. The sample appears to be diverse from an industry and geographic perspective, but there are still biases. Only if the businesses sampled represented a random sample of all businesses affected would the results be statistically

valid. Nevertheless, the information presented represents, to the authors' knowledge, the best information available about Gulf Coast small businesses affected immediately after the hurricanes.

The following are some of the results of the written surveys collected at the workshops:

- **The industry distribution in the collected sample is slightly skewed, but does not leave any major industry unrepresented.** The 14 largest industries in the City of New Orleans had some amount of representation. The construction and professional services industries were overrepresented at the New Orleans workshop while health care and financial services were the most notable underrepresented industries.
- **Approximately 80% of the survey population reported shutting down or suspending operations as a result of the hurricanes.** For some regions, such as Southern Plaquemines Parish, the figure was as high as 94%.
- **The median loss in business sales volume for Orleans Parish businesses was \$60,000 for the first six weeks following Hurricane Katrina's landfall.** However, the arithmetic mean was over \$1 million, signifying the presence of a few large firms in a sample of mostly small businesses. Results were very similar for the other parishes surveyed.
- **Median property damage sustained by Orleans Parish survey respondents was \$200,000.** Median property damage sustained by Plaquemines Parish survey respondents was \$100,000; however, damage totals were much higher in the southern end of the Parish, where Katrina made landfall, than in the north.

Meaningful statistics were more difficult to obtain from the follow-up telephone interviews because the sample of businesses surveyed was mostly limited to those that were operational and had working telephone service. However, some of the best information that was collected is based on the personal comments of the business owners and managers.

- **The most common obstacle cited by the recovering businesses was a lack of financial capital.** Delays from insurance companies and the SBA also made it very difficult for small businesses to find enough money to make repairs and restore operations. At the time of the telephone follow-up, over 70% of the businesses interviewed had still received no response regarding their SBA application. Even firms that were fortunate to be awarded loans were sometimes not eager to accept them due to the uncertain future of the business climate.
- **Large tourism and population drops caused a severe shortage in demand for goods and services.** Negative media images of New Orleans threatened to curb tourism and convention events for an extended time period. A lack of available housing prevented displaced residents from returning.

- **A lack of available housing caused severe labor shortages.** As a result, unskilled workers' wages doubled and many smaller businesses were unable to afford hiring help. Of the 202 businesses that were operational during the telephone follow-up interviews, nearly 60% reported they did not have enough labor to match the demand for their services. Some businesses lost skilled workers who could not be replaced at all.
- **Utility service had been restored to 80-90% of the businesses surveyed (at the time of the telephone follow-up); however, rates often doubled or tripled.**
- **The U.S. Postal Service recovered slowly.** Businesses faced long delays with regard to sending products to customers and with sending and receiving bills and payments. When alternative services such as UPS and FedEx were available, they were usually more effective but also much more expensive.

U.S. Department of Homeland Security, Private Sector Office
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INTRODUCTION

In the first weeks after Hurricane Katrina, the Private Sector Office (PSO) of the US Department of Homeland Security recognized that the New Orleans business community had limited access to information necessary for facilitating recovery. This vacuum of information was the motivation for the first Back to Business Workshop held in New Orleans, LA on October 6, 2005. The event was organized by the PSO in partnership with the Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers.

The workshop featured presentations from Federal, State, and Local government leaders, including the Honorable Kathleen Babineaux Blanco, Governor of Louisiana; the Honorable Ray Nagin, Mayor of the City of New Orleans and Vice Admiral Thad Allen, Principal Federal Official (PFO) for Hurricane Recovery. Presentations focused on loans and disaster assistance, safety, public health for employees, permitting of business operations; as well as updates on insurance issues.

While preparing for the event, it was decided by members of the PSO that this meeting would be an excellent opportunity to collect information on local businesses shortly after the storm. Hurricane Katrina caused the largest displacement of businesses in New Orleans (and American history) and the Back to Business Workshop presented a venue where a large number of business owners would be gathered in one place. In order to take advantage of this opportunity, a written survey instrument was created to assess the status of the New Orleans business community.

During the lectures at the workshop, attendees were asked to complete a registration form as well as a brief survey about how their business was impacted by Hurricanes Katrina and Rita. More than 1470 businesses registered for the workshop and 842 responded to the written survey. The survey included questions about the current status of the business, the amount of damage sustained from the hurricane, level of insurance coverage, access to basic utility service, and the status of their employees.

Due to the success of the first workshop, and the subsequent demand for similar events, a second Back to Business Workshop was held in Plaquemines Parish, Louisiana at the Belle Chasse High School Auditorium on October 27, 2005. Over five hundred residents and businesses attended the event. Of those that attended, one hundred fifty businesses registered and completed a survey instrument similar to the one used at the New Orleans workshop.

A third Back to Business workshop was held for Southwest Louisiana businesses in the City of Lake Charles, LA on December 15, 2005. Over one hundred twenty-five persons and businesses attended the program. Of those in attendance, twenty-five businesses completed a survey at the event. This third workshop added further geographical diversity to the sampling of Louisiana small businesses surveyed.

Survey participants were asked to provide a phone number in order to contact their business in the future. In the months following these workshops, a follow-up telephone survey instrument was prepared and administered to the original respondents to the written surveys.

Due to time constraints and limited available resources, the PSO was not able to perform a statistically valid sampling of Louisiana businesses the events of Hurricanes Katrina and Rita. It was determined at the time of the workshops that a convenience sample would be of some potential benefit and certainly a better option than no collection at all. Due to it not being a probability sample, the PSO makes no claim that the results of the survey, as outlined in this document, can be at all generalized to the business populations of the cities where the survey was administered. However, the PSO is unaware of any other collection of primary data where business owners were able to voice their largest concerns and obstacles to recovering from one of the worst natural disasters in American history.

This document attempts to describe the characteristics of the businesses which chose to participate in the survey, outline their status of operations at the time of the workshops, and relay the most frequently mentioned comments and concerns from both the written surveys and telephone follow-up interviews. The sample populations from Orleans Parish (New Orleans, LA) and Plaquemines Parish (Belle Chasse, LA) are described in detail. Very little meaningful analysis could be conducted for the Lake Charles, LA surveys due to the sample's small size.

METHODOLOGY

Due in part to a shortage of preparation time, the first draft of the written survey instrument administered at the workshop in New Orleans was closely modeled after a survey produced by the Downtown Alliance of New York City shortly after the events of September 11, 2001. The survey produced by the Downtown Alliance asked retail establishments how they were affected by the World Trade Center tragedy. Questions covered topics such as: loss of business days; loss of sales; physical damage sustained to building; loss of inventory; loss of utility services; insurance; employee payroll; and how business was coping with restricted delivery access to the area. Minor modifications were made to the Downtown Alliance survey to make the questions relevant to Hurricanes Katrina and Rita.

Duplication of the survey was stopped when local authorities co-sponsoring the workshops expressed dissatisfaction with its questions and formatting. In a last minute effort, the survey instrument was revised twice more to conform to the local authorities' wishes: some wording was changed, questions were removed, and the whole instrument was designed to fit on a single side of paper. Thus there were copies of three versions of survey instruments at the time of the workshop; with the second revision having questions which were identical to the first revision, differing only in format. Because the turnout of businesses at the workshop was so high, supply of the second revision of the survey ran out. Previously made copies of the unapproved surveys were then

administered. By the end, 77% of completed surveys were second revision, 12% first revision, and another 12% original.

Because the first two revisions were identical to each other for all practical purposes, it can be safely said that almost 89% of the surveys received at the workshop could be expected to produce the same types of answers. The rest of the surveys, which were copies of the original draft, asked questions covering all of the same topics^{*}; however, they used different wording. When the data collected from the surveys were put into an Excel spreadsheet, attempts were made to group answers from the original surveys with corresponding answers from the revisions. In total, 842 surveys were completed at the New Orleans workshop and subsequently put into an Excel spreadsheet.

While inputting the data, it was noticed that several questions produced unreliable types of answers. It was concluded that some poorly worded questions confused many respondents as to what exactly was being asked. Using the lessons learned from the New Orleans workshop, a third revision of the survey[†] was made prior to the Plaquemines Parish workshop at Belle Chasse High School on October 27th. 150 completed surveys were received at the Plaquemines Parish workshop.

Prior to the third workshop, in Lake Charles, LA, a small number of additional modifications were made to the written survey instrument. For example, the fishing and agriculture industry comprises a large segment of businesses in Plaquemines Parish, LA. Unfortunately, this fact about the local economy was not known by the creators of the survey, and as a result there were no questions specifically aimed at fishermen or farmers at the workshop held in Plaquemines Parish, LA. The agriculture industry oversight was corrected in the final revision of the survey[‡] used at the workshop in Lake Charles, LA on December 15th. At that workshop, a survey of 21 questions was completed by 25 businesses.

About one month following the New Orleans workshop, a two page summary of the preliminary results from the survey was prepared and made available to local New Orleans government institutions for distribution as they saw fit. A similar summary was also prepared for the Plaquemines Parish survey approximately one month after that workshop was held and was also given to local government authorities.

Following the completion of the preliminary results from the New Orleans and Plaquemines Parish workshops, a follow-up telephone survey of the participating businesses was prepared. Businesses were contacted using the telephone numbers they provided on the written surveys. The plan was to capture the state of businesses six weeks after the storm (at the workshop) and several months after the storm (with the telephone survey).

* The original draft in fact covered more topics than the revisions since several questions from it were deleted.

† See Appendix

‡ See Appendix

One attempt was made to call each respondent. If a person answered, the contact listed on the written survey was requested. If the contact was available, the interviewer introduced themselves and explained the purpose for the call. Pending approval of the contact, a follow-up interview was then conducted either at that time or arrangements were made to conduct it at a later time. If the contact was not available, the interviewer either made arrangements to call back at a later time, leave a message for the contact to return the interviewer's call, or the interview was conducted with an available third party qualified to speak on behalf of the business. Follow-up completion rates for written survey participants who PSO was able to reach by phone were extremely high, with less than two percent declining to complete a follow-up survey.

The telephone survey typically took between 5-15 minutes to administer. The interview was designed to be short so to encourage a high response rate. First, a series of up to twenty closed-ended questions were asked regarding the status of the business pre- and post-Katrina. The questions for the follow-up survey were based on another survey produced by the Downtown Alliance of New York in January 2002, which was a follow-up of the first September 11th survey mentioned earlier. Businesses were asked about: whether they had yet reopened; their total sales loss following the hurricane; their current level of sales; access to utilities; status of employees; the need for housing; insurance; and attempts to obtain financial assistance. Finally, two open-ended questions were asked regarding the biggest obstacles faced by that business while rebuilding, and any additional comments they might have.

As soon as the follow-up telephone survey instrument was created, calls to businesses that attended the New Orleans workshop commenced on November 28, 2005. (14 weeks after Katrina and 8 weeks after the workshop) Follow-up calls were finished by February 3, 2006. (23 weeks after Katrina and 17 weeks after the workshop) The next three weeks were spent calling the respondents from the Plaquemines Parish and Lake Charles workshops. Calls to Plaquemines Parish businesses extended from February 6, 2006 (23 weeks after Katrina and 14 weeks after the workshop) to February 24, 2006 (26 weeks after Katrina and 17 weeks after the workshop). Calls to Lake Charles, LA were made from February 6, 2006 (20 weeks after Rita and 8 weeks after the workshop) to February 10, 2006 (21 weeks after Rita and 9 weeks after the workshop).

Table 1 – Dates of the follow-up telephone surveys in relation to the workshop event

Workshop Location	Workshop Date	Follow-up Start	Follow-up End	Duration
New Orleans	October 6, 2005	November 28, 2005	February 3, 2006	10 weeks
Plaquemines	October 27, 2005	February 6, 2006	February 24, 2006	3 weeks
Lake Charles	December 15, 2005	February 6, 2006	February 10, 2006	1 week

At the conclusion of the follow-up survey, 246 (29%) New Orleans businesses were contacted and completed a follow-up survey. 87 (58%) Plaquemines Parish businesses and 12 (48%) Lake Charles businesses were also contacted and completed surveys. The higher response rates for Plaquemines Parish and Lake Charles are attributed to the fact

that wireless phone numbers were requested and provided on the written surveys distributed at those workshops. In all, 345, or 34% of all businesses surveyed at the three Back to Business workshops were contacted for a follow-up survey.

Both the written survey and the follow-up telephone surveys are convenience samples. Because neither one provides a probability sampling of all businesses in Louisiana prior to Hurricanes Katrina and Rita, all conclusions drawn from analysis of the results can only be applied to the samples themselves. If the samples are not a representation of all businesses in Louisiana, then it is very important to define what exactly the samples are a representation of.

The next sections will attempt to do this by listing some of the characteristics of the businesses that attended the workshops and completed written surveys. Before looking at the information provided on the surveys though, a couple things are immediately apparent. Attendance at the workshops was limited to those businesses that were able to return to the area in a relatively short amount of time. Also, attending a Back to Business workshop displays a business's desire to reopen and its concern for the success of the local business community as a whole. Businesses not interested in reopening would not be expected to attend the workshop.

The sample obtained from the telephone follow-up survey is even less useful as far as drawing conclusions about the general business population of Louisiana. Often, the phone number provided was for the physical location of the business establishment, in which case contact was only possible if the business was operational and if it was located in an area where telephone service was restored. This fact is reflected in the result from the follow-up survey that 83% of New Orleans based businesses interviewed were operational.[§]

Despite the fact that the sampling of businesses was not random, the results gathered from the surveys still provide valuable insight regarding the kinds of successes and obstacles faced by businesses following a major catastrophe such as Hurricanes Katrina and Rita.

CHARACTERISTICS OF THE WRITTEN SURVEY SAMPLE

Orleans Parish Respondents

At the October 6th Back to Business Workshop in New Orleans, 806 unique businesses completed written survey instruments. There were 36 businesses which completed multiple survey instruments. In cases where a business filled out more than one survey,

[§] At the Plaquemines Parish workshop, wireless phone numbers were requested. This enabled more non-operational businesses to be contacted for a follow-up interview. As a result, telephone contact rate for the Plaquemines workshop surveys was 58% (double that of the New Orleans workshop surveys) and only 38% of those businesses contacted were currently operating.

all unique information from the additional surveys was transferred to the first and the additional surveys were then discarded from the database.

In order to better define the characteristics of the sample of businesses surveyed at the Back to Business workshops, businesses in the sample were divided into categories according to industry and geographical location. The industry and geographic characteristics of the sample were then compared to the most recent data available for Orleans Parish from the U.S. Census Bureau web site.

In order to make meaningful comparisons, only businesses which could be confirmed to reside in Orleans Parish were included in this exercise. A business's location was determined by the address or zip code provided on the written survey. 508 of the 806 total businesses (63%) were determined to reside in Orleans Parish, 279 businesses (35%) outside of the Parish, and no determination was made for 19 businesses (2%) which did not provide any location information.

Distribution of Businesses According to Physical Location

Table 2 shows the distribution of Orleans Parish businesses (both the total number as well as the number surveyed) according to zip code.

Table 2 - Zip code comparison of sample of businesses from New Orleans Back to Business workshop with 2003 economic census for Orleans Parish

Zip	Orleans Parish (2003 Census)		Back to Business Workshop		Proportion Difference
	Number of establishments **	Percentage of Total	Number of establishments	Percentage of Total	
70112	936	9.50%	42	8.30%	-13%
70113	360	3.60%	25	4.90%	35%
70114	348	3.50%	12	2.40%	-33%
70115	933	9.50%	38	7.50%	-21%
70116	474	4.80%	34	6.70%	39%
70117	443	4.50%	28	5.50%	23%
70118	610	6.20%	24	4.70%	-24%
70119	1,118	11.30%	65	12.80%	13%
70122	400	4.10%	28	5.50%	36%
70124	444	4.50%	16	3.10%	-30%
70125	353	3.60%	25	4.90%	38%
70126	471	4.80%	29	5.70%	20%
70127	543	5.50%	17	3.30%	-39%
70128	155	1.60%	2	0.40%	-75%
70129	200	2.00%	7	1.40%	-32%
70130	1,843	18.70%	105	20.70%	11%

** Non-employer businesses not included

70131	239	2.40%	11	2.20%	-11%
TOTAL	9,870		508		

It should be noted that non-employer statistics are not included in Table 2. This is partly due to the fact that the Census Bureau does not publish non-employer data separated by zip code. While this would normally be a significant omission, its severity is lessened by the result from the follow-up telephone survey that 84% of businesses contacted were employers. According to data from the Census Bureau, only 27% of businesses in Orleans Parish in 2003 were employers. This provides us with an important characteristic of the sample of businesses which completed the survey. Because of the difficulties involved with obtaining it, and its limited relevance to the written survey sample, non-employer census data will not be examined.

It is reasonable to expect a correlation between a business's geographical location and its attendance at the workshop. On the one hand, businesses in locations which sustained heavy damage might have more incentive to attend a rebuilding event. On the other hand, however, those same businesses might face greater obstacles in attending, especially considering that half of the City of New Orleans was reopened just one day prior to the workshop. Prior to any analysis of the survey data, it was hypothesized that the latter condition would have a greater affect on attendance and that businesses in areas which sustained heavy damage would be less likely to attend.

Figure 1 - Representation of the 17 Orleans Parish zip codes in the Back to Business workshop survey

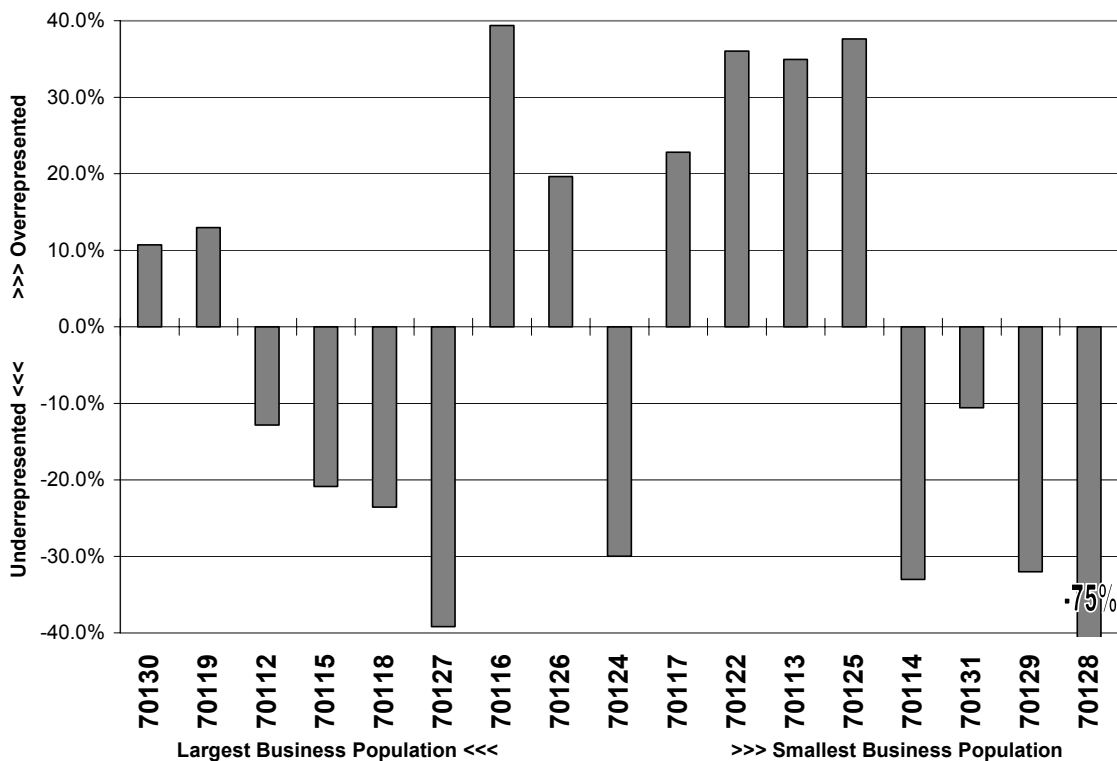


Figure 1 is a graphical representation of the last column of Table 2 with the zip codes ordered according to the number of business establishments located therein. It can be seen that the geographic distribution of the survey sample matches with the 2003 Business Census data surprisingly well, especially when looking at the five most heavily populated zip codes as far as businesses.

A simple test was conducted on the hypothesis that heavily damaged areas of Orleans Parish would be underrepresented in the survey sample. In the first weeks following Hurricane Katrina, the Mayor's Office of the City of New Orleans announced which areas of the City would be first to reopen. According to the Mayor's Office, the selection of these areas was done strategically, according to the amount of damage sustained. Eight zip codes in Orleans Parish were reopened on September 29, 2005 to business owners and on September 30, 2005 to all residents. The affected zip codes were 70112, 70113, 70114, 70115, 70116, 70118, 70130, and 70131; comprising Algiers, the French Quarter, Central Business District, and Uptown areas of the City. It is presumed that these first areas would have reopened sooner if not for delays caused by Hurricane Rita which made landfall on September 24, 2005. The rest of Orleans Parish (excluding the Lower 9th Ward in 70117) was reopened to both residents and business owners the following week on October 5, 2005. The first Back to Business workshop was held at the Sheraton Hotel, in the Central Business District, the next day (October 6, 2005).

Using the 2003 Business Census data, we can see that 58% of Orleans Parish businesses were located in the lesser damaged areas which were reopened on September 29, 2005. Looking at the businesses surveyed at the workshop we see that 57% of them were located in these areas. Thus, using the stated methodology, there does not appear to be any obvious correlation between the damage sustained by a zip code in New Orleans and its representation at the workshop.

A much more clear connection can be made between a zip code's representation at the workshop and its proximity to the location of the workshop. Five of the six zip codes closest to the Sheraton Hotel, where the workshop was held, (and seven of the closest ten) were overrepresented in the sample. Using only this data, however, it is not clear whether this is in fact due to the close proximity to the workshop location or if other factors are involved.

Distribution of Businesses According to Industry

The next step in our characterization of the survey sample is to look at the relative proportions of the different industries represented. The results of this are shown in Table 3. Once again, non-employer data from the Census is not included.

Table 3 - Industry comparison of sample of businesses from New Orleans Back to Business Workshop with 2003 economic census for Orleans Parish

Industry	Orleans Parish (2003 Census)		Back to Business Workshop		Percentage Difference
	Number of establishments ^{††}	Percentage of Total	Number of establishments	Percentage of Total	
Agricultural	9	0.1%	1	0.2%	129%
Mining	49	0.5%	0	----	----
Utilities	44	0.4%	0	----	----
Construction	373	3.6%	41	8.1%	126%
Manufacturing	224	2.1%	20	3.9%	84%
Wholesale trade	434	4.1%	16	3.1%	-24%
Retail trade	1,720	16.4%	71	14.0%	-15%
Transportation	253	2.4%	9	1.8%	-27%
Information	175	1.7%	0	----	----
Finance & Insurance	678	6.5%	10	2.0%	-70%
Real Estate & Rental	450	4.3%	17	3.3%	-22%
Professional Services	1,572	15.0%	120	23.6%	57%
Management	75	0.7%	3	0.6%	-18%
Administrative Services	460	4.4%	4	0.8%	-82%
Educational Services	190	1.8%	6	1.2%	-35%
Health Care	1,203	11.5%	20	3.9%	-66%
Arts & Entertainment	182	1.7%	16	3.1%	81%
Accommodation & Food	1,241	11.9%	69	13.6%	14%
Other services	1,089	10.4%	50	9.8%	-5%
Unclassified ^{‡‡}	39	0.4%	35	6.9%	----
TOTAL	10,460		508		

^{††} Non-employer businesses not included

^{‡‡} Unclassified businesses in the Census data are those that do not fit under any other category.

Unclassified businesses in the Back to Business Workshop data may also include businesses that did not provide enough information to be accurately placed in any category.

Figure 2 – Representation of industry sectors in the Back to Business workshop survey

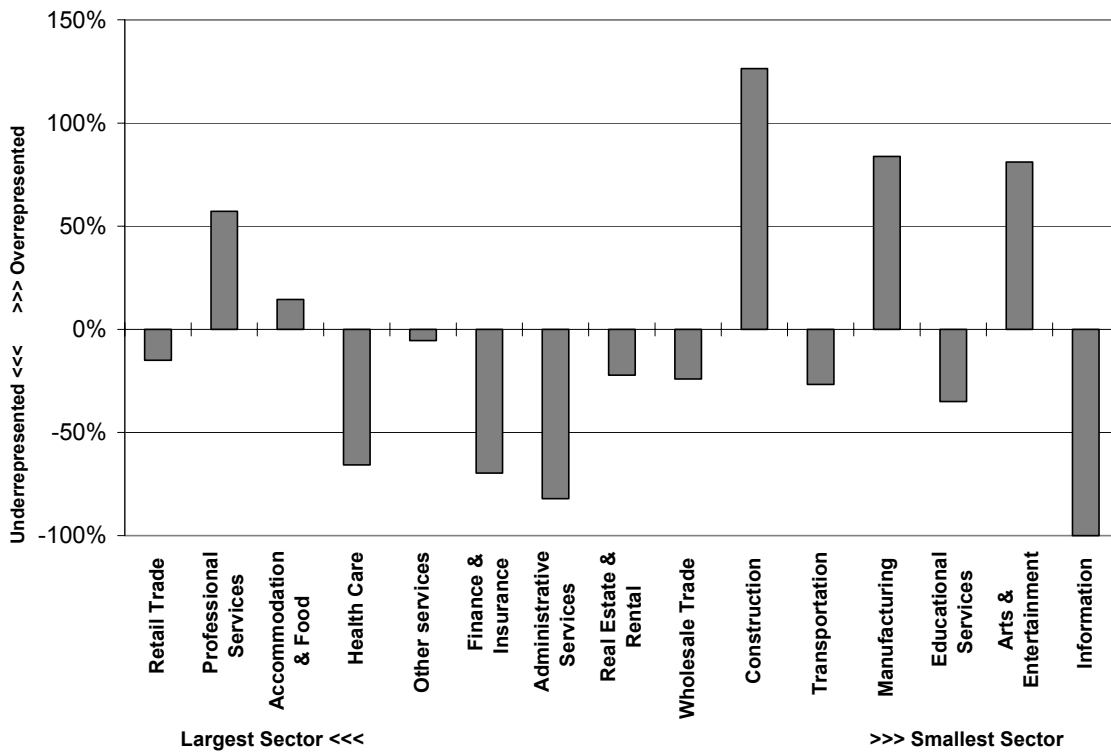


Figure 2 is a graphical representation of the last column of categories. The industry sectors are ordered from largest to smallest and only the 15 largest are included. It is apparent that the industry distribution in the survey does not match the Census data as well as the geographical distribution; however, most industries are still adequately represented.

The most notable underrepresentation is from the health care industry which made up over 11% of all Orleans Parish employers in 2003, but only 4% of participants in the Back to Business workshop survey. Health care is also the fourth largest industry in Orleans Parish, in terms of number of businesses, with over 1,200 establishments that employ people.

Overrepresented industries included professional services and construction. Careful analysis of the comments left on the workshop surveys shows that businesses in the professional services and construction industries were the most likely to inquire about contracting and subcontracting opportunities. Thus, the overrepresentation of these industries was anticipated due to the fact that one of the major purposes and goals of the workshop was to present opportunities for subcontractors.

Plaquemines Parish Respondents

At the October 27th Back to Business Workshop in Belle Chasse, LA, 145 unique businesses completed written survey instruments. There were five cases where a business completed more than one survey. These were handled in the same manner as duplicate surveys from the New Orleans workshop.

After the data were compiled, they were divided according to industry and geographical location in the same manner as was performed with the responses from the New Orleans workshop. Using zip code information provided by the respondents, it was determined that 130 of the 145 total businesses (90%) resided within Plaquemines Parish. 11 businesses (8%) were from Jefferson Parish, one business (1%) was from Orleans Parish, two businesses (2%) were from other parishes within the state, and one business (1%) did not provide any location information.

Distribution of Businesses According to Physical Location

Plaquemines Parish, LA does not have any incorporated towns or cities; however, the 130 survey responses from businesses within the Parish could be divided among seven distinct communities. From upriver to downriver they are: Belle Chasse, Pointe a la Hache, Port Sulphur, Empire, Buras, Boothville, and Venice. The table below shows the number of respondents from each of the seven selected Parish communities.

Table 4 – Number of businesses in the Belle Chasse Back to Business workshop survey sample grouped according to zip code

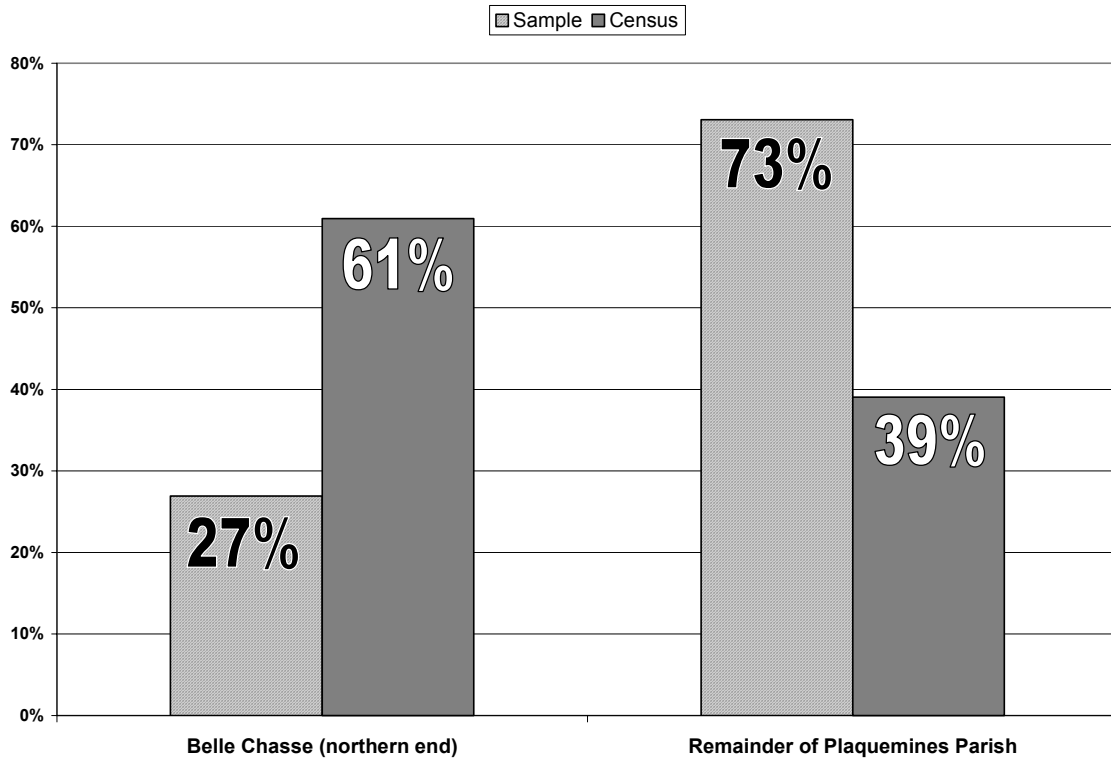
(Zip) Community	Number of Businesses in Sample
(70037) Belle Chasse	35
(70082) Pointe a la Hache	2
(70083) Port Sulphur	18
(70050) Empire	17
(70041) Buras	38
(70038) Boothville	7
(70091) Venice	13

Because many of the respondents at the Belle Chasse Workshop were non-employers and the U.S. Census Bureau is unable to release data for non-employer businesses tabulated by zip code, it is difficult to determine if the survey sample obtained from the Plaquemines Parish respondents is a proportionate representation according to geography of all businesses located in Plaquemines Parish prior to Hurricane Katrina. For this reason, an analysis of the geographic distribution of businesses at the Belle Chasse Workshop was not performed to the same extent as what was done for the New Orleans Workshop respondents.

While the entire Parish was impacted by the hurricanes, the damage to Belle Chasse, the suburban community farthest upriver, was less severe than the remainder of the Parish. Thus, to make the analysis simpler it was decided to divide the 130 Plaquemines Parish respondents into two regions: Belle Chasse, and the remainder of the Parish. The

number of survey respondents in each region was then compared with the number of employer businesses reported in the 2003 economic census. The results are shown in the figure below.

Figure 3 – Distribution of surveyed businesses compared to the 2003 economic census



From looking at this figure it would appear that Belle Chasse, which was the primary location for the majority of businesses in Plaquemines Parish prior to Katrina, was greatly underrepresented in the sample. There are a number of possible explanations for this.

The first explanation is that due to Belle Chasse’s relative proximity to New Orleans^{§§}, a significant number of businesses from that community had already attended the New Orleans workshop and thus did not need to attend the workshop in Belle Chasse. However, after inspecting the survey responses from the New Orleans workshop, it was discovered that there were only five respondents from Plaquemines Parish and four of those were from Belle Chasse.

The second explanation is that the percentage of businesses located in Belle Chasse according to the 2003 Economic Census is skewed because it does not include non-employers. Results from the follow-up survey of Plaquemines Parish businesses show that approximately 41% of the original businesses surveyed were non-employers. While

^{§§} Belle Chasse is approximately a 12 mile drive from the site of the New Orleans Back to Business Workshop. Venice, located at the southern tip of the Parish, is 76 miles away.

this is much lower than the 77% figure obtain from the 2003 Economic Census, it nevertheless demonstrates that non-employer businesses were much better represented at the Belle Chasse workshop than at the New Orleans workshop where they made up only 16% of business respondents (despite making up 73% of all businesses in the Parish according to the Census). Thus, it is much more difficult in the case of the Belle Chasse workshop to disregard the effect of non-employer businesses on the results obtained from the survey.

A third possible explanation is that downriver communities were in fact disproportionately represented precisely because they suffered more damage as a result of the hurricanes and thus had more incentive to attend the workshop. While it will be shown later that survey respondents from downriver communities reported more physical losses than did respondents from Belle Chasse, it is inconclusive how much of an effect this had on workshop attendance.

Distribution of Businesses According to Industry

The presence of non-employers among the Plaquemines Parish respondents complicates any analysis of the distribution of businesses using the 2003 Economic Census as a benchmark. With the number of non-employer respondents estimated to be over 40% (compared with 16% at the New Orleans workshop), this complication becomes significant enough that it cannot be disregarded without casting much doubt on the credibility of the results. This prompts the inclusion of non-employer data from the 2003 Economic Census when analyzing the distribution of businesses at the Belle Chasse workshop according to industry.

Because it is unknown how much of an effect non-employer attendance should have on industry representation, the analysis in this section will only attempt to determine if an industry was disproportionately represented, not the magnitude of such representation. To achieve this end, the table below shows the distribution of businesses according to industry for three groups: Plaquemines Parish employers, Plaquemines Parish non-employers, and Plaquemines Parish respondents at the Belle Chasse workshop. For each industry, if the percentage of respondents at the workshop exceeds the percentage of both employers and non-employers in the census, then the industry is considered overrepresented at the workshop. Similarly, if the workshop percentage is less than the employer and non-employer percentages, then the industry is considered underrepresented.

Table 5 - Industry comparison of sample of businesses from Belle Chasse Back to Business Workshop with 2003 economic census for Plaquemines Parish

	2003 Economic Census		Plaquemines Parish Respondents at Belle Chasse Workshop	Disproportionate Representation
	Employers	Non-Employers		
Agricultural	1%	37%	21%	
Mining	5%	0%	3%	
Utilities	0%	0%	0%	
Construction	8%	9%	9%	
Manufacturing	6%	2%	4%	
Wholesale trade	11%	1%	2%	
Retail trade	11%	6%	18%	Overrepresented
Transportation	14%	6%	8%	
Information	1%	0%	1%	
Finance & Insurance	3%	2%	0%	Underrepresented
Real Estate & Rental	6%	7%	3%	Underrepresented
Professional Services	8%	7%	2%	Underrepresented
Management	1%	0%	0%	
Administrative Services	4%	6%	0%	Underrepresented
Educational Services	1%	0%	0%	
Health Care	3%	3%	2%	
Arts & Entertainment	2%	2%	5%	Overrepresented
Accommodation & Food	7%	2%	13%	Overrepresented
Other services	8%	10%	7%	

The construction and Professional Services industries, which had high relative attendance rates at the New Orleans workshop, were not as well represented at the Belle Chasse workshop. Meanwhile, the Retail Trade and Accommodation & Food industries were very well represented at the Belle Chasse workshop. This result is likely due to the differing focus of the two workshops. Advertisements for the New Orleans workshop described the highlight of the event to be breakout sessions with major contractors to discuss sub-contracting opportunities. Such sessions did not occur at the Belle Chasse workshop. Instead, the focus of the presentations was on financial assistance (loans and grants) and housing opportunities.

WRITTEN SURVEY RESULTS

Orleans Parish Respondents

The following section presents the quantitative results from the written survey administered at the first Back to Business workshop in New Orleans on October 6, 2005. Totals are taken from all surveys received from unique business establishments. In certain instances the results are tabulated across industry or geographic categories.

Closure of Businesses

Table 6 – Status of businesses in the written survey sample during the first 30 days following Hurricane Katrina; Sorted by geographical location

	Shut Down / Suspended Operations	Relocated / Maintained Operations
New Orleans section opened Sept 30, 2005	224 (79%)	61 (21%)
New Orleans section opened Oct 5, 2005	181 (85%)	33 (15%)
New Orleans total	405 (81%)	94 (19%)
Outside Orleans Parish (or undetermined location)	199 (70%)	86 (30%)
Entire Survey Sample	604 (77%)	180 (23%)

Over three-quarters of the businesses surveyed responded that they either shut down or suspended operations in the first month following Hurricane Katrina. This total was slightly higher (81%) for businesses located inside Orleans Parish, which issued a mandatory evacuation prior to the storm and did not allow any business owners back into the area until one month after the storm's landfall. Still, a significant number of firms in the Parish reported that they were either able to relocate their headquarters or at least maintain some level of operation after Katrina. It is also observed that the more heavily damaged section of New Orleans, which re-opened on October 5, 2005, had a lower percentage of businesses that were able to maintain operations. However, because no businesses were allowed back into any part of the City during the first month following the storm, this is more likely to be a result of the type of businesses located in that area than any consequence of damage received. Table 7 illustrates this point.

Table 7 - Status of businesses in the written survey sample during the first 30 days following Hurricane Katrina; Sorted by industry

	Shut Down / Suspended Operations	Relocated / Maintained Operations
Agricultural	2 (100%)	0 (0%)
Construction	62 (70%)	26 (30%)
Manufacturing	28 (67%)	14 (33%)
Wholesale trade	20 (83%)	4 (17%)
Retail trade	87 (86%)	14 (14%)
Transportation	7 (64%)	4 (36%)
Finance & Insurance	11 (55%)	9 (45%)
Real Estate & Rental	24 (86%)	4 (14%)
Professional Services	111 (59%)	76 (41%)
Management	5 (83%)	1 (17%)
Administrative Services	6 (60%)	4 (40%)
Educational Services	9 (90%)	1 (10%)
Health Care	23 (92%)	2 (8%)
Arts & Entertainment	21 (95%)	1 (5%)
Accommodation & Food	68 (96%)	3 (4%)
Other services	69 (92%)	6 (8%)
Unclassified	42 (84%)	8 (16%)

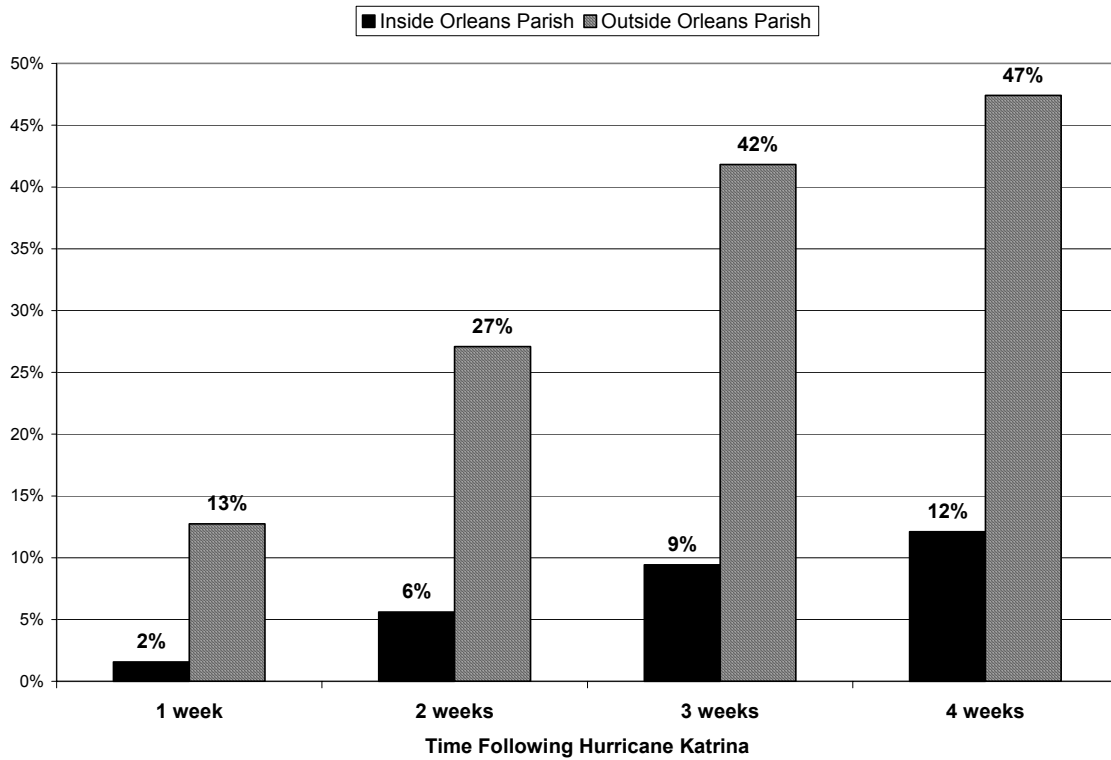
The financial, professional, and administrative services industries, which had the highest percentage of businesses able to maintain operations, were most heavily concentrated in the Central Business District and Uptown areas which were among the least damaged areas of New Orleans. It is reasonable that these businesses would be much easier to relocate than businesses in the accommodation and food industries.

When businesses were asked how many days of work they lost as a result of the storms, 34% responded with a day total less than 30. A plurality of businesses responded with 30 days, but it is difficult to interpret this answer. 30 days marks the amount of time between the landfall of Hurricane Katrina and the first day when businesses owners were allowed back into the City. However, 30 days was also used in a previous question to ask what the state of businesses was in the time between Hurricane Katrina and the Back to Business workshop. It is therefore possible that several respondents, unaware of the exact number of days lost, simply used 30 days to convey that they were still closed at the time of the workshop and would likely be closed for several days following the event.

It is therefore assumed that all businesses that gave responses of 30 days or more were still closed at the time of the workshop. For the remaining 262 businesses (34%), the mean, median, and mode of days lost were 14, or two weeks. A majority of these businesses were headquartered outside of Orleans Parish.

Figure 4 shows the percentage of businesses which had reopened within one, two, three, and four weeks following the landfall of Hurricane Katrina. It can be seen that a small percentage of Orleans Parish based businesses were able to reopen before the City of New Orleans officially reopened.

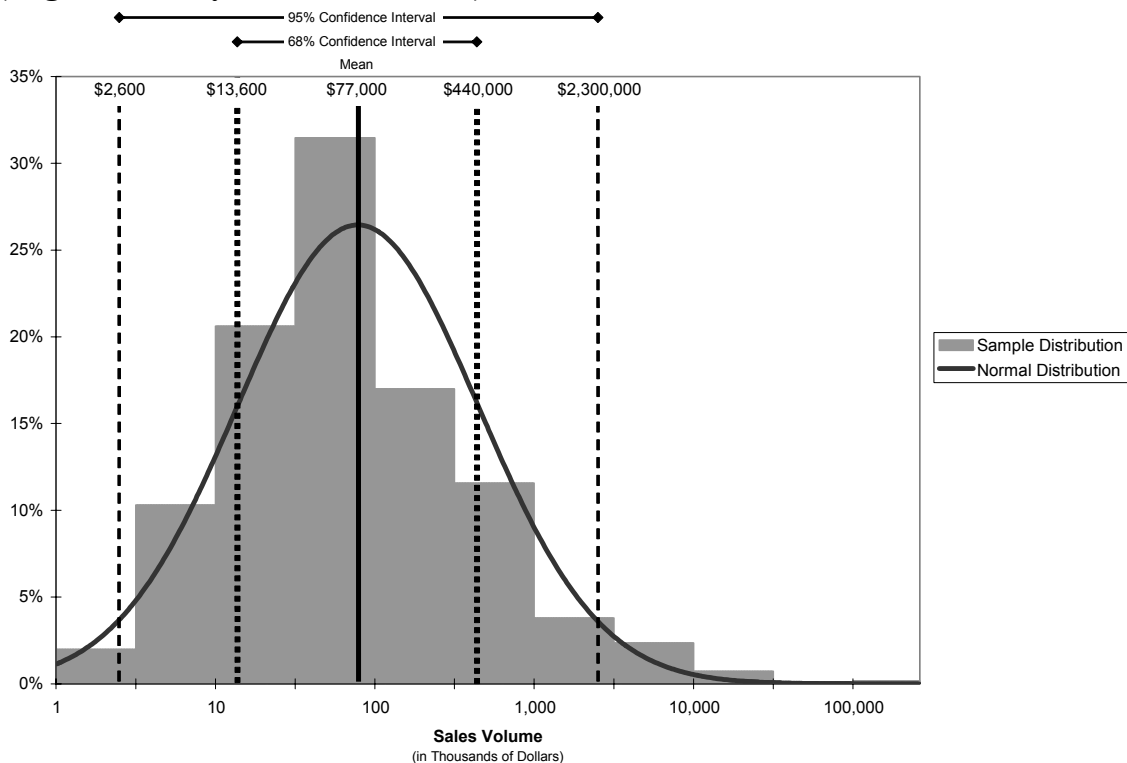
Figure 4 – Timeline of businesses reopening after Hurricane Katrina



Sales Volume Loss

Survey respondents were also asked to estimate how much sales volume they lost as a result of ceasing or reducing operation after Katrina. 553 businesses provided a dollar amount or range of dollar amounts. In cases where a range was provided, the maximum and minimum amounts were averaged to provide a single dollar amount of sales loss for the business. Responses varied from as little as \$1,500 to as much as \$250 million. The data was transformed logarithmically in order to produce a better fit with a normal distribution. The geometric mean value of sales volume lost was \$77,000 with a 95% confidence interval of \$2,600 to \$2.3 million. The arithmetic mean was \$1.1 million. The median was \$60,000 and the mode was \$100,000.

Figure 5 – Sales volume lost in six weeks following Hurricane Katrina (Logarithmically transformed data)

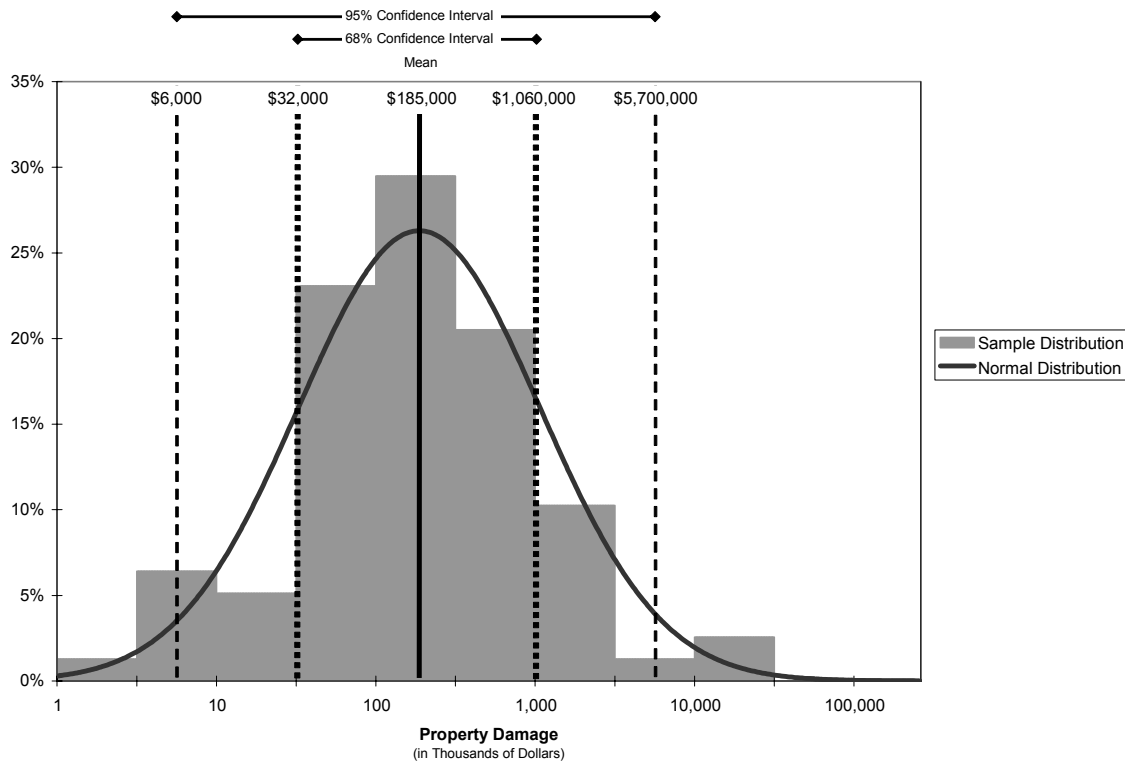


Property Damage Sustained

Businesses also estimated how much property damage they sustained from the hurricanes. Considerably fewer businesses participated in this exercise (79), but their responses still produced a distribution comparable to a normal distribution, after transforming the data logarithmically. The results are again plotted the same way as the sales volume lost data with a best-fit normal distribution curve superimposed. The amount of property damage sustained by the respondents varied from \$1,000 to \$20

million. The geometric mean value was \$185,000 and the 95% confidence interval was calculated to be from \$6,000 to \$5.7 million. The arithmetic mean was \$970,000. The median and mode were both \$200,000.

Figure 6 – Property damage sustained from Hurricane Katrina (Logarithmically transformed data)



Insurance Coverage

518 of 745 businesses (70%) responded that they were insured; however, very little information was provided regarding the level of coverage of the insurance. Several businesses reported that they were not covered for either wind or flood damage, or that they weren't covered for loss of inventory or business interruption. It was discovered during the telephone follow-up that many businesses were not covered beyond minimum liability insurance. Thus, while only 30% of businesses surveyed responded that they had no insurance coverage, it is estimated that many more had insufficient coverage.

75% of those businesses that reported they had insurance coverage filed a claim on insured goods by the time of the workshop. Only 33% of those businesses, however, reported that they received a response from their insurance company and less than 1% reported receiving any money for their claim. No information was obtained about the time when claims were filed so it is unknown how long the businesses had been waiting on receiving a response from their insurance company before the day of the workshop.

The closure of the City of New Orleans for one month following the storm certainly had an effect on how quickly insurance companies could send adjusters to assess damage and commence the claims process.

Utility Service

It took several months following the landfall of Hurricane Katrina, for some sections of New Orleans to have basic utility services restored. By the time of the workshop, 38 days after Katrina’s landfall, approximately half (49%) of the written survey respondents reported that both electricity and telephone service had been restored to their property. The table below shows utility restoration rates for written survey participants grouped according to zip code. Once again, Orleans Parish is divided into two regions: the zip codes which sustained heavier damage and were reopened on October 5, 2005; and the zip codes which sustained lighter damage and were opened a week earlier on September 29, 2005.

Table 8 – Percentage of businesses in each zip code of Orleans Parish that had utility service at the time of the New Orleans Back to Business workshop

	Electricity	Telephone	Gas
70117	7%	11%	8%
70119	15%	16%	14%
70122	22%	29%	19%
70124	0%	0%	0%
70125	4%	21%	4%
70126	21%	33%	19%
70127	7%	7%	7%
70128	0%	0%	0%
70129	17%	17%	17%
Heavier Damage Orleans Parish	12%	18%	11%
70112	63%	57%	42%
70113	55%	47%	40%
70114	56%	56%	43%
70115	59%	55%	44%
70116	48%	54%	33%
70118	27%	33%	25%
70130	80%	69%	71%
70131	80%	60%	80%
Lighter Damage Orleans Parish	64%	58%	49%
Total Inside Orleans Parish	41%	40%	30%
Outside Orleans Parish	81%	76%	63%
Total Survey Sample	55%	53%	39%

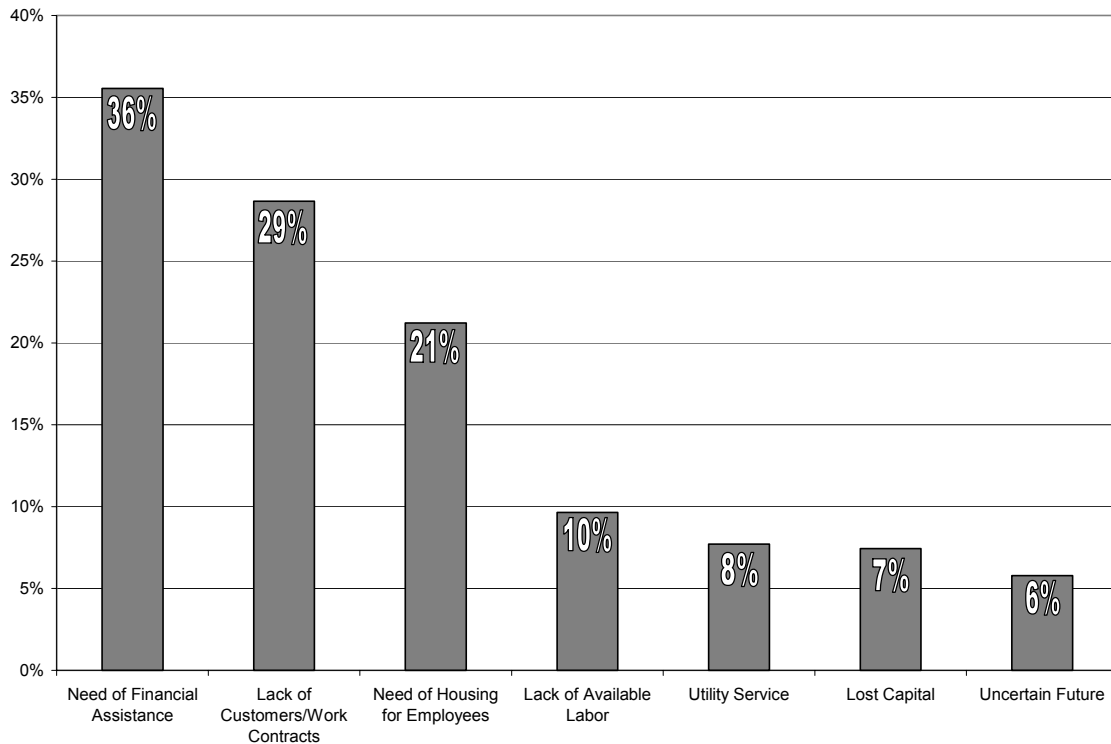
It can be seen from this table that nearly six weeks after the landfall of Hurricane Katrina, and two weeks after Hurricane Rita, the most heavily impacted areas of Orleans Parish were still largely without utility service. Other areas, such as the Central Business District (70130), were able to restore utilities faster, but a large percentage of New

Orleans based businesses returned to their original locations without the utilities needed to operate effectively.

Other Concerns

Most of the remaining useful data obtained from the written survey came in the form of brief comments about general concerns the respondents had as they were returning to the City and restarting their business operations. The range of these concerns varied greatly, from difficulty filing insurance claims to the lack of mail delivery service, but three issues in particular were mentioned far more frequently than any of the others: the need for financial assistance, the need for customers or contracting opportunities, and the need for housing for employees. 74% of businesses which provided comments on their survey made mention of at least one of these issues. No other topic was mentioned more than 10% of the time. During the follow-up telephone survey, the types of concerns mentioned by interviewed businesses were more varied because the most important problems and obstacles for each business changed over time. However, it is clear what the most important issues were for business owners immediately following the storms.

Figure 7 – Most frequent comments on the New Orleans Back to Business workshop survey; workshop held on October 27, 2005



Plaquemines Parish Respondents

The following section presents the quantitative results from the written survey administered at the Back to Business workshop in Belle Chasse, LA on October 27, 2005. Totals are taken from all surveys received from unique business establishments. In certain instances the results are tabulated across industry or geographic categories.

Closure of Businesses

As in the survey administered at the New Orleans workshop, businesses were asked to describe their status in the weeks following Hurricanes Katrina and Rita using one of four responses: Shut Down, Suspended Operations, Relocated, and Maintained Operations. The table below shows the results of this question. The first column is an aggregate of the first two response choices: Shut Down and Suspended Operations.

Table 9 – Status of businesses in the written survey sample during the first 60 days following Hurricane Katrina; Sorted by geographical location

	Shut Down or Suspended Operations	Shut Down	Suspended Operations	Relocated	Maintained Operations
Northern Plaquemines (Belle Chasse)	28 (82%)	15 (44%)	13 (38%)	2 (6%)	4 (12%)
Southern Plaquemines	88 (94%)	80 (85%)	8 (9%)	3 (3%)	3 (3%)
Total Plaquemines	116 (91%)	95 (74%)	21 (16%)	5 (4%)	7 (5%)

Short- or long-term business closures were very common throughout Plaquemines Parish following Hurricane Katrina. 91% of respondents located in the Parish reported that they either shut down or suspended operations. This number is slightly lower at 82% when only looking at respondents located in the community of Belle Chasse in the northernmost portion of the Parish.

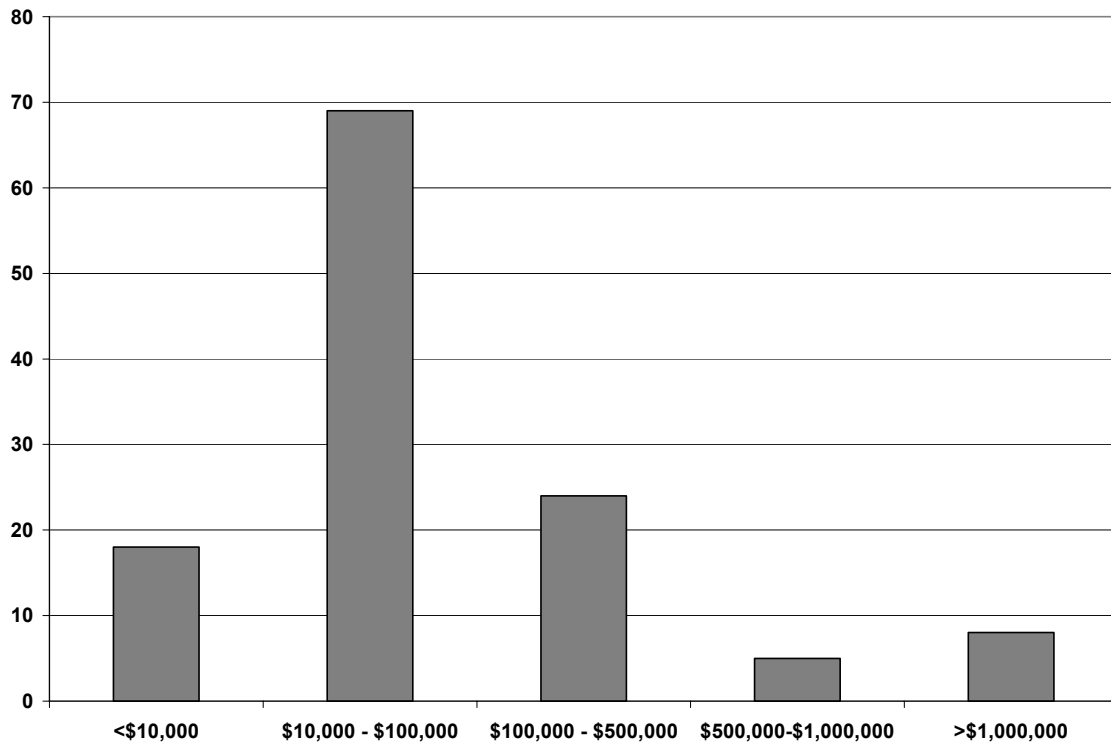
Analysis of this and other questions in the survey revealed that respondents had difficulty distinguishing between what is meant by “Shut Down” and “Suspended Operations”. However, it is assumed that a response of “Shut Down” generally signifies a more severe or desperate condition than “Suspended Operations”. While the number of businesses that were able to relocate or maintain operations after the hurricanes was very low throughout the parish, the percentage of businesses that stated they shut down following Hurricane Katrina was much higher in the southern part of the Parish compared to the northern part (Belle Chasse). Compared with the southern part of Plaquemines Parish, businesses from Belle Chasse that lost days of work as a result of the storms were much more likely to respond that they suspended operations rather than shut down their business. This is consistent with reports that the damage sustained from the hurricanes was much greater in the southern part of the Parish than in the north.

Businesses were also asked in the survey how many days of work they lost as a result of the hurricanes. 117 businesses answered the question. 89 (76%) either explicitly stated that they were still closed, or responded with a sufficiently high number (55 days) so as to make it unclear whether they were still closed or had just recently reopened. The remaining 28 businesses (24%) reported a mean loss of 29 work days.

Sales Volume Loss

Survey respondents were also asked to estimate how much sales volume they lost as a result of ceasing or reducing operation after Katrina. The respondents were given five ranges of dollar amounts to choose from. 124 businesses answered the question and the results are shown in the chart below.

Figure 8 – Sales volume loss during first 60 days following Hurricane Katrina

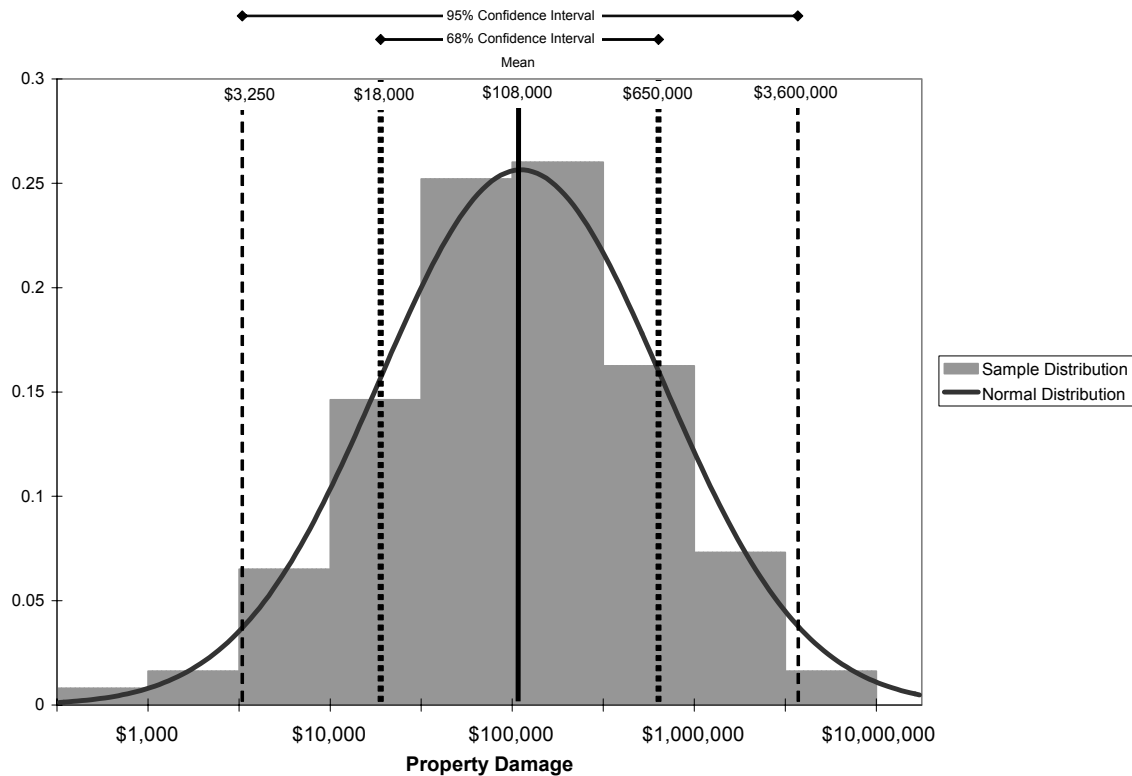


Property Damage Sustained

Businesses also estimated how much property damage they sustained from the hurricanes. 109 businesses participated in this exercise by giving dollar amount estimates for structural damage, lost inventory, and damaged equipment. The chart below shows the results for all of the categories aggregated. As in the case for Orleans Parish, the results are plotted with a best-fit normal distribution curve superimposed. The amount of property damage sustained by the respondents varied from \$500 to \$7 million. The geometric mean value was \$108,600 and the 95% confidence interval was calculated to

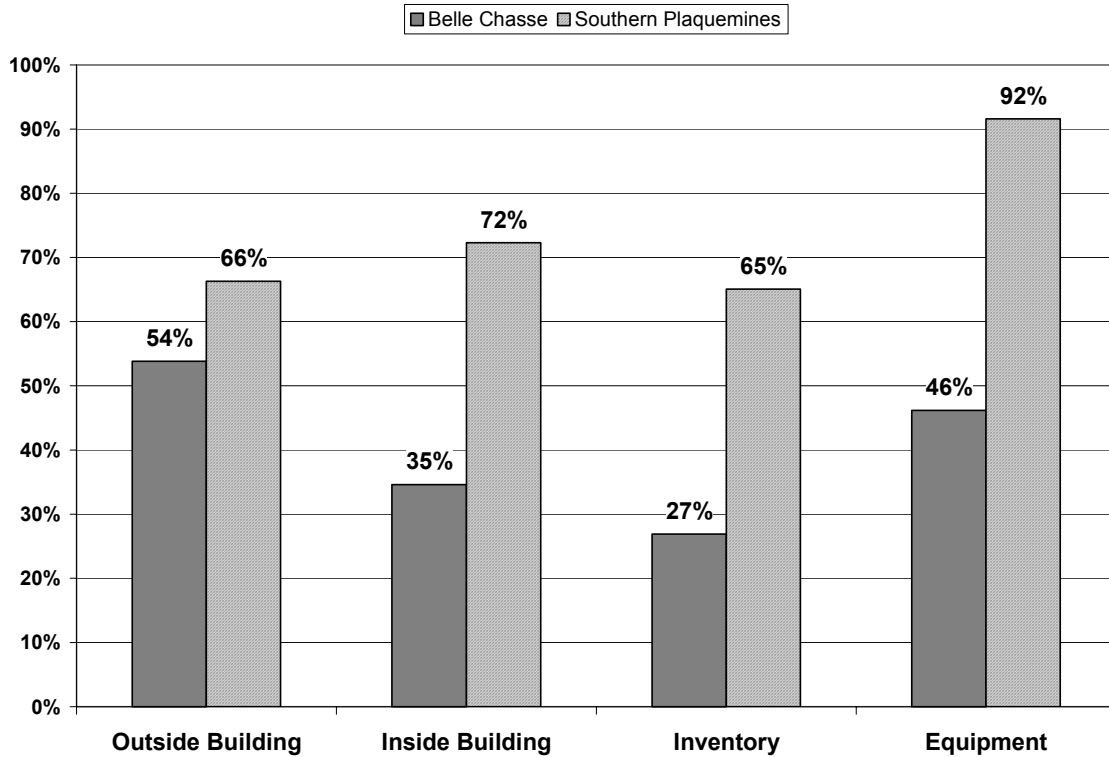
be from \$3,250 to \$3.6 million. The arithmetic mean was \$425,000. The median was \$100,000.

Figure 9 – Property damage sustained from Hurricane Katrina (Logarithmically transformed data)



The survey presented respondents with four categories of physical damage and asked them to select which ones described their situation best. The results, broken down by region, are shown in the chart below. Higher percentages are interpreted to signify higher likelihood of major damage in that category. Outside building damage was essentially equally prevalent in both regions of the Parish; however, damage to the inside of the building, and its contents, was much more frequent in the Southern region. The most significant result from this question is that 92% of businesses in the Southern region of the Parish reported significant damage to their equipment; another illustration of the large amounts of capitol lost by establishments in that area.

Figure 10 – Part of business most affected by the hurricanes



Insurance Coverage

61 of 128 businesses (48%) reported that they were insured, with 5 businesses (4%) recording the question as not applicable (reasons unknown). This rate of coverage is substantially lower than that reported by the respondents from Orleans Parish (70%). Like Orleans Parish, however, the businesses surveyed from Plaquemines Parish frequently did not have adequate insurance coverage to replace their losses.

87% of those businesses that reported they had insurance coverage filed a claim on insured goods by the time of the workshop (about two months after Hurricane Katrina). Response rates from insurance companies was better than that experienced by businesses in Orleans Parish; 66% of respondents had at least been visited by an adjuster and 10% of respondents had received a payment of some kind. These higher numbers are expected if only because the Belle Chasse workshop occurred three weeks after the workshop in New Orleans. For businesses that reported a response from their insurance company (usually a visit by an adjuster), the average wait was six weeks from the time the claim was filed.

Utility Service

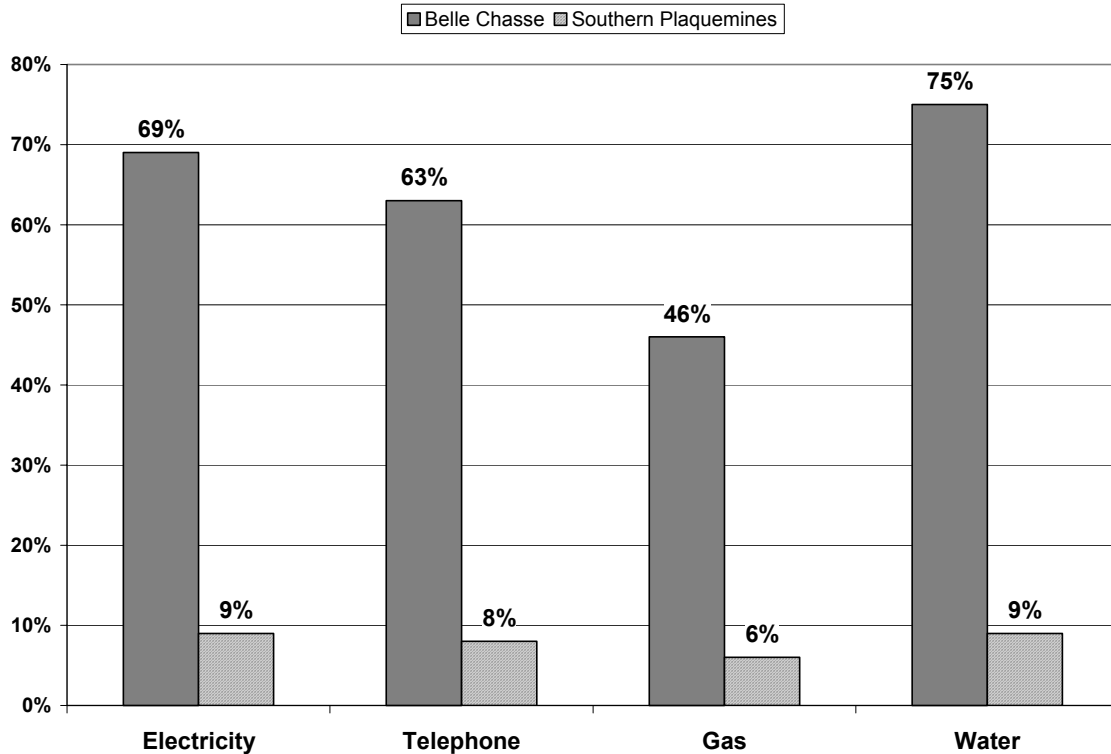
The table below shows utility restoration rates for written survey participants from Plaquemines Parish. Respondents were asked which utilities or services they had access to at the time of the workshop. Utility restoration was slow across the entire parish, with less than a quarter of businesses reporting access to both electricity and telephone service. However, the reasons for such a low percentage are mostly attributed to Southern

Plaquemines, where a majority of surveyed businesses were located. Utility restoration rates for respondents from Belle Chasse, in the north of the parish, were comparable with those from the lighter damaged zip codes of Orleans Parish.

Table 10 – Percentage of businesses in each region of Plaquemines Parish that had utility service at the time of the Belle Chasse Back to Business workshop

	Electricity	Telephone	Gas	Water	Mail
Belle Chasse	69%	63%	46%	75%	73%
Southern Plaquemines	9%	8%	6%	9%	38%
Entire Parish	25%	23%	16%	26%	46%

Figure 11 – Status of utility restoration at time of Belle Chasse Back to Business workshop on October 27, 2005



Upon initial analysis of these results, it was suspected that the relatively low reported rate of natural gas restoration in Belle Chasse, LA was the result of an erroneous negative report by businesses that never used that service before the storms. This hypothesis was confirmed in the follow-up telephone interviews when a better defined question regarding natural gas service was posed to the respondents. Thus, the results for natural gas restoration should not be relied upon even in the context of the sample population.

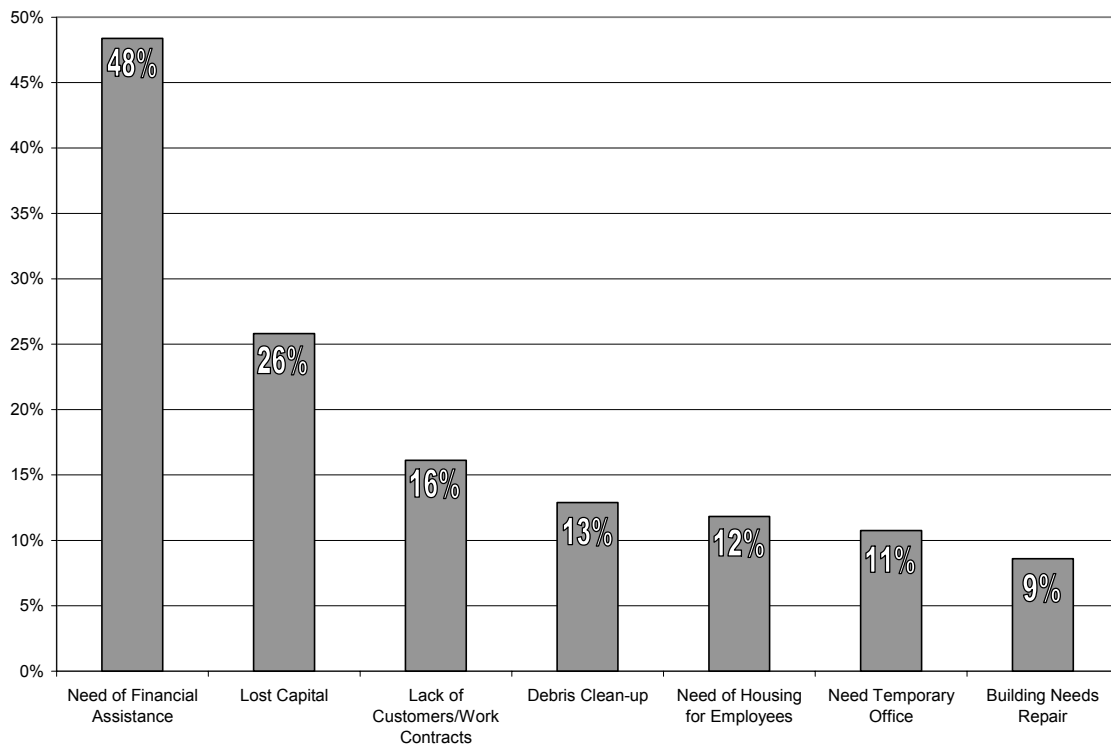
Similarly, in the case of mail service, follow-up telephone interviews revealed that many of the businesses that responded affirmatively to having access to mail services were in fact accessing those services at locations remote from the original business site.

There was no mail service to any of Southern Plaquemines Parish for several months following the hurricanes. Almost all of the businesses from that region that reported being able to receive and deliver mail were probably either doing it from home or driving to the post office in Belle Chasse.

Other Concerns

As with the New Orleans workshop survey instrument, there was a place on the Belle Chasse workshop survey for respondents to leave comments. 96 businesses from Plaquemines Parish took the opportunity to write comments. Financial assistance was again the most frequently cited concern, being mentioned in 48% of the comments. The other two topics which were heavily commented on in the New Orleans survey (the need for customers or contracting opportunities; the need for housing) were somewhat less frequent in the Plaquemines Parish responses. The most significant difference found in the comments from Plaquemines Parish is the repeated references to lost equipment and capital which were found in 26% of the comments (compared to 7% in New Orleans).

Figure 12 – Most frequent comments on the Belle Chasse Back to Business workshop survey; workshop held on October 27, 2005



FOLLOW-UP TELEPHONE SURVEY RESULTS

After reviewing the data obtained from the follow-up telephone interviews of Back to Business workshop attendees, the Private Sector Office has been able to extrapolate a number of key findings that business owners in the affected areas experienced. Each of these *** is listed in priority order (according to the survey data from both workshops) and is detailed below with analyses and comments from various business owners providing context to each finding.

1. Lack of Financial Resources

The most common concern expressed by survey respondents was a lack of financial resources. This response is almost always closely related with one of several other issues which will be discussed later. Some businesses faced inventory problems and other capital equipment destroyed in the storm which they could not afford to replace. Many businesses also do not have money to restore offices made uninhabitable by flood waters. These problems were almost always the result of the businesses being either underinsured or not insured at all; however, even those firms which were adequately insured often experienced trouble collecting claims from their insurance provider.

When money from insurance was not enough to cover the expenses of rebuilding, businesses looked to other financial assistance in the form of loans or grants. High interest rates offered by banks, extensive paperwork and delays from the Small Business Administration, and the poor credit of many of the establishments most affected by the storm made securing a loan difficult. Being awarded a grant was even rarer than receiving a loan.

Often a business's financial troubles were a result of rising costs more due to the storm; whether it was labor, supplies, utilities, or deliveries. As costs increased, companies faced the dilemma of not being able to increase their prices by a comparable amount due to the hurricane because of a sharp decrease in consumer demand. Consequently, it became difficult to generate profits and business owners were forced to borrow money to keep their businesses afloat while they waited for costs and demand to return to pre-hurricane levels.

When recovering businesses were asked what their biggest obstacles were, the most frequent response was that many of their problems could be solved with more financial capital. Difficulties with getting that capital often produced the biggest frustrations.

*** Note that although it was mentioned frequently, there will be no section devoted exclusively to problems arising from insurance claims.

Figure 13 – Most frequently mentioned concerns from New Orleans workshop attendees; follow-up conducted November 28, 2005 to February 3, 2006

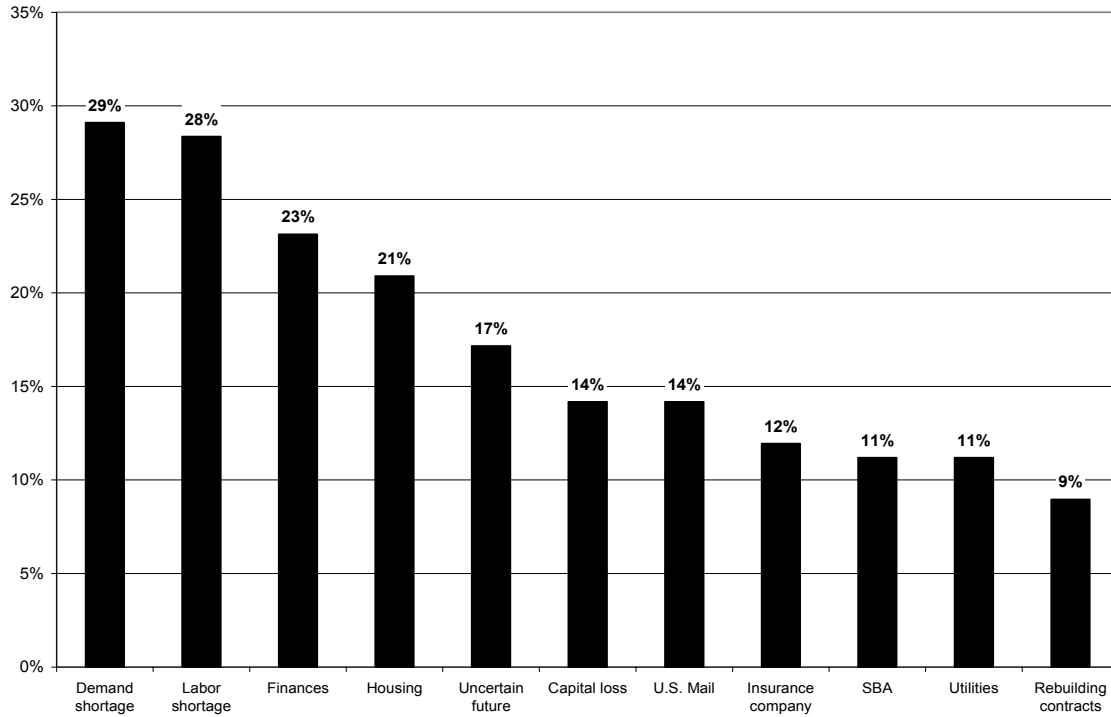
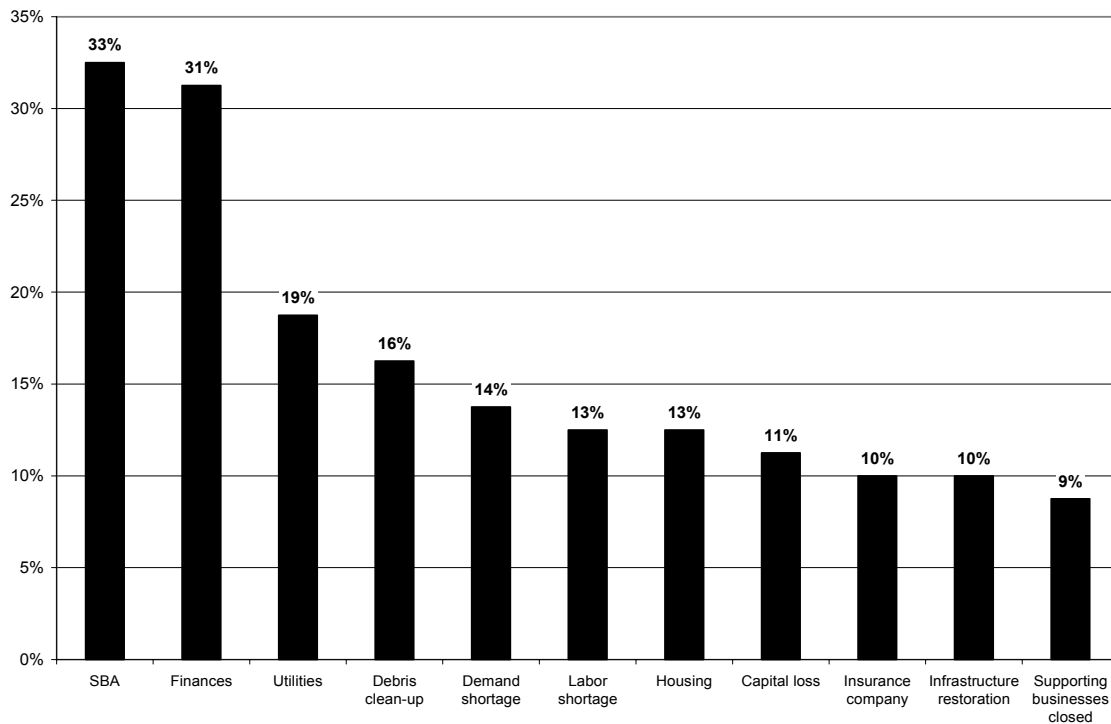


Figure 14 – Most frequently mentioned concerns from Belle Chasse workshop attendees; follow-up conducted February 6-24, 2006



2. Demand Shortages

A shortage of consumer demand might seem like an obvious condition in a city which has seen its population decrease by over 70%. In some cases following Hurricane Katrina, the demand for a business's goods and services fell proportionately with the population in the area. A few respondents to the follow-up discussions said that if New Orleans ends up staying at one-quarter or one-half of its original size, then their business will reflect that size and be one-quarter or one-half of its original size. For many industries though, changes in demand were not proportional to the change in population.

Companies which depend heavily on tourism need for the City of New Orleans to appear as a viable location for people to spend their vacations and for organizations to hold conventions. A number of tourist dependent firms were very concerned that bleak and depressing reports from New Orleans by the media would put them out of business. The cancellation of all events at the convention center in the Central Business District threatened to cripple many retail and service based businesses in that area for up to a year after the hurricane struck.

Other industries saw demand for their services evaporate completely following Katrina. Recording studios and talent agencies had a difficult time finding a role for themselves in the City's recovery effort. IT consultants lost clients who were more concerned with repairing their roofs than they were with upgrading their computer networks. The effect of Katrina on these businesses in the short and medium term was devastating to the point where they were forced to shutdown and find temporary employment elsewhere.

Despite the severe demand shortages for certain industries in New Orleans, most of the owners interviewed were very optimistic about the recovery of their business in the long-term. After other businesses are able to rebuild and more residents return to the city, they will have an idea of what the demand will be for their services.

3. Labor Shortages

Perhaps even more frustrating than the drop in demand in New Orleans following Katrina, are the labor shortages. A majority of employers interviewed still had some of their employees displaced by the storm, and in many cases, despite reduced levels in demand, they still have some need to replace some workers who cannot or will not return. Sometimes this is because a displaced employee provided a specific skill that is essential to the operation of the business.

As of six months following hurricane Katrina, skilled labor is still extremely difficult to find. Highly skilled labor which would normally require nationwide recruiting has the added obstacle that, due to the negative images of New Orleans being portrayed, it is hard to convince anyone to relocate there without significant salary incentives. This in turn makes it more difficult for the company to be profitable.

New Orleans also faced shortages in unskilled labor as a result of the hurricanes. Fast-food restaurants, which traditionally pay minimum wage to their workers, were offering large signing bonuses and rates of up to \$10 per hour with additional weekly bonuses. Large nationwide chains which can afford these high labor wage spikes have put a considerable strain on smaller local businesses that have seen workers leave their employment for better money at McDonald's. Many local firms with limited financial reserves simply cannot afford to pay high premiums for unskilled labor and remain competitive.

4. Small Business Administration Response

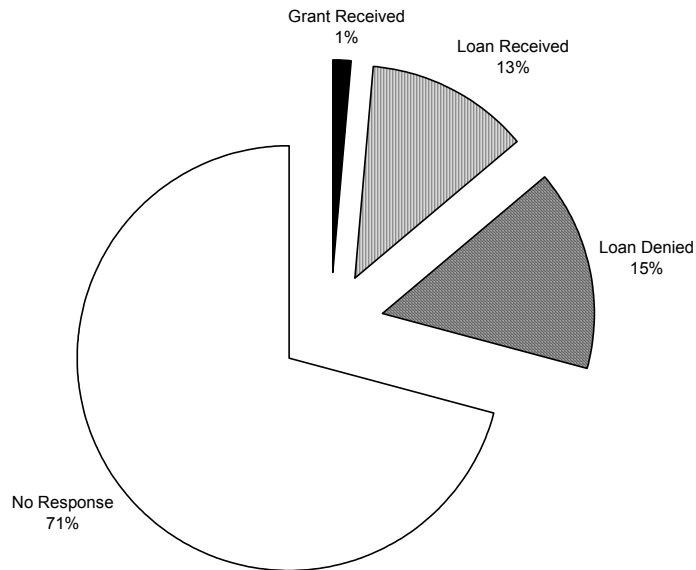
In 1953, Congress created the Small Business Administration (SBA) to "aid, counsel, assist and protect, insofar as is possible, the interests of small business concerns."^{†††} Some of its many duties included making direct business loans and guaranteeing bank loans to small businesses. Following Hurricane Katrina, many small business owners saw the SBA as a means of getting the financial assistance they needed to rebuild their business and had hoped that such assistance would come in the form of grants or low-interest loans. The SBA, however, was not prepared for the large volume of grant and loan applications that it subsequently received. As a result there were substantial delays in getting loans approved for the businesses that needed them.

The difficulty that the SBA had in assisting firms impacted by Katrina was a source of angst from the business owners interviewed in the follow-up. SBA loan applications took months to process and many establishments waited a long time for a response. When they did get a response, the loan was frequently either too small or the interest rate was no better than what was available from a local bank. Approved loans sometimes required disaster insurance to be purchased which the business could not afford. For businesses with poor credit histories, the loan would be rejected and the owners would be forced to go through the same process to apply for a grant. However, the most common complaints about SBA were not about the loan amounts, interest rates, or approval rates; it was that the process was extremely slow.

The chart below shows the responses of 218 businesses when asked about the status of SBA and other financial assistance applications they submitted. The vast majority of business owners only applied with SBA. Some also applied with other institutions. The follow-up was typically conducted about 3-4 months after the application was submitted.

^{†††} Source: <http://www.sba.gov/aboutsba/history.html>

Figure 15 – Financial Assistance Responses (218 businesses)



5. Housing for Employees

The shortage of available housing for employees ties in directly with the shortage of labor available to employers and is probably the most significant cause for the shortage of skilled labor following the disaster. Many employers had an interest in bringing back workers they had prior to Katrina, but did not have anywhere to house them. Even if they had lot space on which to place trailers, it was very difficult to secure the trailers and the associated infrastructure to support them.

Some business owners were willing to recruit new skilled laborers or to train unskilled laborers but faced the same obstacles as were explained previously in this report. It was not an uncommon occurrence for employers to house employees at their own residences or to allow them to make the office their domicile, but it was understood that such arrangements would not be viable for any extended period of time. Other employers (in certain service industries) worked out ways for their essential personnel to telecommute from distant cities where they were displaced to, but this was also a costly or otherwise unfavorable solution according to the employer.

6. Loss of Inventory and Other Capital

Loss of inventory and other capital was likely the most universal problem cited by business owners after hurricane Katrina, but not necessarily the most vital concern of the businesses interviewed in the follow-up. Among the respondents to the Back to Business surveys, the issue of lost or damaged capital, which was not insured, was more or less viewed as just another expense that increased their dependence on loans or grants to keep their business running. A specific dollar amount for damages was not collected for most of the businesses in the written surveys and was not asked for in the follow-up. Damage sustained is estimated to be significantly high for a majority of businesses that attended the workshop; however some businesses were more dependent than others on having storage of inventory and equipment for their day to day operations.

Some businesses refused to invest in restocking their inventory until they had a better idea of what demand for their products would end up being. Some were convinced that demand would be high but still could not afford the investment because of trouble getting loans. For many businesses interviewed, replacing their damaged capital was one of the first recovery steps they made; but because of the uncertain business climate following the storm, they understood it to be a significant risk.

7. Uncertain Future of the City

Although it was not specifically mentioned as a point of concern by a large percentage of businesses surveyed, the uncertain future of the business community of New Orleans affects the short-term strategies of the majority of small businesses in the area. Aside from not knowing the status of levee reconstruction and whether or not the New Orleans will be adequately protected during the next hurricane season, numerous business owners have indicated they are weary about going into debt to rebuild a business that may not be sustainable by future tourist and resident populations.

As mentioned earlier, many owners have chosen to reinvest money into their businesses despite the fact they are not currently profitable. However, there are still many firms which have been more hesitant, and their decision not to resume operations following the disaster has had a negative impact on other businesses which rely on their services. This has resulted in what has been described by one interviewee as “a waiting game” among the individual businesses in the area and with local government officials as they determine what kind of city New Orleans is going to be in the future. The businesses interviewed typically complained that the local government was not disclosing enough information about efforts that were being made to restore the levee system and encourage residents and tourists to return to the city. Many owners surveyed were not confident that the city had any adequate plans for the future.

8. Utility Service and Costs

When the follow-up survey commenced four months after the landfall of Katrina, many businesses reported that utility service to their properties had been restored if they still had a building on their premises to accept connections. By the conclusion of the initial round of follow-up calls six months after the storm, 80-90% of businesses surveyed reported that utility service^{***} was restored.

While that figure should be considered a tremendous accomplishment, it still implies that 10-20% of businesses are without utilities several months after the hurricane first hit. This is particularly problematic when those businesses are most likely grouped together in specific geographic areas. The most notable area which has yet to see significant utility restoration is the southern half of Plaquemines Parish. At the time of the written survey, approximately 30% of businesses in southern Plaquemines Parish reported that they had at least some utility services. The follow-up survey produced similar results as some owners even said they were told they would not have utility service restored until as late as fall 2006.

For those businesses which have had service restored, a significant number of them have complained about the rise in costs. The doubling and tripling of utility rates has put further strain on small firms already high rebuilding costs and meager revenues. A few business owners have appealed for government regulation or subsidies to aid them in their plight.

9. Mail Service

It is well known that the U.S. Postal Service was greatly impacted by the damage and chaos caused by Hurricane Katrina. Destruction to sorting facilities and displacement of postal workers has caused mail delays of 3 weeks to 3 months, some that still continue to this day. For a majority of residents and businesses in New Orleans, this only amounts to a minor inconvenience when combined with all of the other problems they faced. There are, however, several small businesses which have been impacted more by slow and unreliable mail service.

The most obvious firms impacted are retail and wholesale establishments which relied on out-of-state sales for a portion of their revenues before the storm and have relied on them to a greater degree after seeing local sales fall. Not being able to ship items from New Orleans in a timely matter has forced some businesses to use more costly parcel services, such as UPS and FedEx, if they are fortunate to have access to those services at all. An equally popular solution has been to travel to Baton Rouge (a 3.5 hour round-trip) to make and pick-up their deliveries.

^{***} Utility service in this case consists of telephone, electricity, water, sewer and, if applicable, natural gas.

The inadequate mail service has not only affected businesses that ship their products though, many other service based businesses reported not being able to receive bills or payments though the mail.

In the first few months following Hurricane Katrina, many creditors and lending institutions were lenient in the late fees and penalties they imposed on clients located in the New Orleans area. However, the patience of these lenders has lessened as many small businesses are now being subjected to fees and penalties, some because they cannot receive their bills or deliver their payments in a timely manner. Those same small businesses are experiencing the other side of this situation, as they try to collect payments from clients that owe them money. Lost and delayed checks in the mail have cost small New Orleans establishments a significant amount of sore needed revenues.

10. Rebuilding Contracts

One of the most contentious issues raised at the Back to Business workshop in New Orleans regarded FEMA rebuilding contracts. Immediately following the hurricane, one of the only sources of potential income for businesses was the rebuilding effort funded by the Federal government. However, because local businesses were displaced for several days or weeks, FEMA was forced to award the main rebuilding contracts to out-of-state firms. Many local businesses expressed dissatisfaction that priority was not given to local firms which needed the work and revenue the most.

Although, most of the main rebuilding contracts were issued shortly after the hurricane, many sub-contracting opportunities were still available when local businesses returned to the area. Following Hurricane Katrina, however, this information was not being effectively communicated to the local private sector. Therefore, one of the goals of the Back to Business workshops was to get local businesses in contact with the main contractors. Many New Orleans based businesses interviewed in the follow-up survey said they were able to obtain sub-contracting work in the rebuilding effort.

The issue of rebuilding contracts being available to local businesses was very prominent at the Back to Business workshop in New Orleans. Furthermore, several months following the storm, during the follow-up interviews, a significant number of businesses identified it as one of their biggest concerns. Most of the problems associated with this issue can be traced back to a lack of information being conveyed to the private sector in the aftermath of Hurricanes Katrina and Rita. Having a more understandable and transparent process for how rebuilding contracts and sub-contracts are awarded, would increase local businesses' confidence in the government following a catastrophe.

CONCLUSION

It is not surprising that the largest problems reported by small business owners after Hurricane Katrina had to do with finances. After all, the ultimate objective of a business is to make a profit so that it may sustain itself. In the aftermath of Katrina, businesses were hit with a double punch of high rebuilding costs and dramatically reduced sales and revenues. Because of the great uncertainty about the future of those sales and the future of the city overall, many owners who are fortunate to get loans to rebuild are contemplating whether it is worth the risk to do so.

Despite the doubts about the future of the City of New Orleans, the general attitude among small business owners is one of resilience. They are angry about the fate of their businesses and the initial handling of the disaster, but also desire to move forward and rebuild. Aside from making it easier to obtain financial assistance, they feel the best things the city can do is find ways to restore tourism and move displaced residents back into housing.

This report should provide points to consider the next time a natural or other wide-scale disaster strikes a large U.S. city. While it is true that many of the biggest obstacles faced by recovering small businesses are outside of the government's control, there are several cases where enacted policy can either have a helpful or harmful effect on local firms. The need for timely financial assistance, the uneven playing field between nationwide chains and local firms, and the strain of high utility costs on struggling small businesses are all examples of issues that are very important to small business proprietors and should be considered when devising any recovery strategy. It is hoped that this document will promote greater attention to the needs and concerns of small business communities in the wake of a disaster.

APPENDIX

Sample Survey Instruments from the Belle Chasse and Lake Charles Workshops
(Referenced in the methodology as the third revision and final revision respectively)

Survey of Businesses- Plaquemines Parish Meeting Date: _____

PLEASE PRINT LEGIBLY

Company: _____

Address: _____ Zip: _____

Cross St.: _____ Parish: _____

Type of Business: _____

Name: _____

Phone: _____ Cell: _____

Email: _____ Fax: _____

Do you want your business information placed in the Louisiana Back to Business database website? Y / N

How has your business been affected by Hurricanes Katrina and Rita?

1. During the first 55 days after the Hurricanes your business? (Circle)

Shut Down Relocated Suspended Operations Maintained Operations

2. Did your business lose days of work? Y / N If so how many? _____

What is the estimated sales volume loss? (Circle)

<\$10,000 \$10,000-100,000 \$100,000-500,000 \$500,000-1,000,000 Over \$1,000,000

3. How much damage, inventory, and equipment loss did your business sustain?

Physical Damage

Total \$ _____

Glass replacement \$ _____

Signage/Awnings \$ _____

Interior clean up \$ _____

Water damage \$ _____

Other damages \$ _____

Inventory

Total \$ _____

Spoilage \$ _____

Looting \$ _____

Dust/Debris \$ _____

Water Damage \$ _____

Other \$ _____

Equipment

Total \$ _____

Vehicles \$ _____

Office supplies \$ _____

Other equipment \$ _____

4. What part of your business did the storm affect the most? (Circle all applicable)

Inside Building Outside Building Inventory Equipment Other _____

5. Was your business insured? Y / N / NA (Not Applicable)

What items were NOT covered? _____

6. Have you filed a claim yet on insured goods? Y / N / NA

How long did it take to receive a response? _____

What was the response? (Money received, visited by adjuster, etc.) _____

OVER PLEASE

7. How many days after the storms were the following services not available? Are they available now?
Telephone_____ Y / N / NA Electricity_____ Y / N / NA Gas_____ Y / N / NA
Water_____ Y / N / NA Mail_____ Y / N / NA

8. If all services/utilities were available, how long would it take for your business to re-open?

Now 1-2 Days 3-7 Days 1-2 weeks 2-4 weeks More than one month

9. What type of business recovery opportunities are you looking for? _____

10. Can you operate your business from your current location? Y / N

If no, what types of assistance do you need to get started? _____

11. Does your business have the labor to start work? Y / N

If no, what type of skills or labor pool are you looking for? _____

12. Number of employees? 1-10_____ 10-50_____ 50-100_____ Over 100_____

13. Where are your employees currently? Out of State In the State Unknown

14. What is their employment status? Employed Unemployed Employed Part-time

15. Do your employees have access to housing? Y / N Unknown

16. Have the hours of your business changed? Y / N More Hours Same Hours Less Hours

17. Compared to similar businesses in your industry, please circle your

Pre-Hurricane sales activity? High Normal Low None

Post-Hurricane sales activity? High Normal Low None

18. Are you a minority-owned enterprise? Y / N

19. Will you be able to meet payroll? Y / N For how long? _____

20. Does your business plan to declare bankruptcy? Y / N

Please use the rest of this paper for concerns or other needs.

Survey of Businesses- Lake Charles Civic Center Meeting December 15, 2005
PLEASE PRINT LEGIBLY

Company: _____
 Address: _____ Zip: _____
 Type of Business: _____
 Name: _____
 Phone: _____ Cell: _____
 Email: _____ Fax: _____

Do you want your business information placed in the Louisiana Back to Business database website? Y / N

How has your business been affected by Hurricanes Katrina and Rita?

1. During the first 100 days after the Hurricanes, your business? (Circle)

Shut Down Relocated Suspended Operations Maintained Operations

If operations have resumed, when did your business reopen? _____

2. Did your business lose days of work? Y / N If so how many? _____

What is the estimated sales volume loss? \$ _____

3. How much damage, inventory, and equipment loss did your business sustain?

Physical Damage

Total \$ _____
 Glass replacement \$ _____
 Signage/Awnings \$ _____
 Interior clean up \$ _____
 Water damage \$ _____
 Other damages \$ _____

Inventory

Total \$ _____
 Spoilage \$ _____
 Looting \$ _____
 Dust/Debris \$ _____
 Water Damage \$ _____
 Other \$ _____

Equipment

Total \$ _____
 Vehicles \$ _____
 Office supplies \$ _____
 Other equipment \$ _____

Crop or Livestock Losses

Total \$ _____
 Rice \$ _____
 Sugar Cane \$ _____
 Other \$ _____

4. What part of your business did the storm affect the most? (Circle all applicable)

Inside Building Outside Building Inventory Equipment Other _____

5. (Farmers Only) What have the hurricanes done to your planting and harvesting schedules? _____

In 2005, _____ acres were farmed. In 2006, you expect to farm _____ acres.

6. Was your business insured? Y / N / NA (Not Applicable)

What items were NOT covered? _____

OVER PLEASE

7. Have you filed a claim yet on insured goods? Y / N / NA

How long did it take to receive a response? _____

What was the response? (Money received, visited by adjuster, etc.) _____

8. How many days after the storms were the following services not available? Are they available now?

Telephone _____ Y / N / NA Electricity _____ Y / N / NA Gas _____ Y / N / NA

Water _____ Y / N / NA Mail _____ Y / N / NA

9. If all services/utilities were available, how long would it take for your business to re-open?

Now 1-2 Days 3-7 Days 1-2 weeks 2-4 weeks More than one month

10. What type of business recovery opportunities are you looking for?

11. Can you operate your business from your current location? Y / N

If no, what types of assistance do you need to get started? _____

12. Does your business have the labor to start work? Y / N

If no, what type of skills or labor pool are you looking for? _____

13. Number of employees? 1-10 _____ 10-50 _____ 50-100 _____ Over 100 _____

14. Where are your employees currently? Out of State In the State Unknown

15. What is their employment status? Employed Unemployed Employed Part-time

16. Do your employees have access to housing? Y / N Unknown

17. Have the hours of your business changed? Y / N More Hours Same Hours Less Hours

18. Compared to similar businesses in your industry, please circle your

Pre-Hurricane sales activity? High Normal Low None

Post-Hurricane sales activity? High Normal Low None

19. Are you a minority-owned enterprise? Y / N

20. Will you be able to meet payroll? Y / N For how long? _____

21. Does your business plan to declare bankruptcy? Y / N

Please use the rest of this paper for concerns or other needs.