

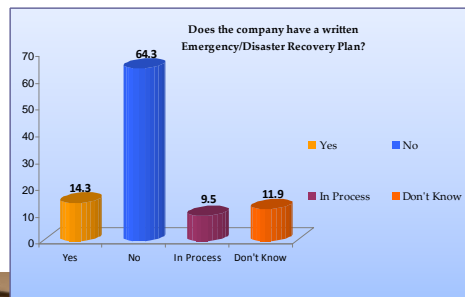


SERRI Report 89970-1

February 2010



Final Report: PILOT STUDY FOR BUSINESS CONTINUITY PLANNING BEST PRACTICES FOR SMALL BUSINESSES



A Public-Private-Academic Partnership:
Small Planet Works, Inc.
LeMoyne-Owen College
Tennessee State University

This material is based upon work supported by the U.S. Department of Homeland Security under U.S. Department of Energy Interagency Agreement 43WT10301. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security.

SERRI Project: 89970
Contract Number: 4000082562

Final Report
**PILOT STUDY FOR BUSINESS CONTINUITY PLANNING
BEST PRACTICES FOR SMALL BUSINESSES**

by Janice A. Banks
Small Planet Works, Inc.



**Jeffrey Higgs
Dr. Austin Emeagwai**

**Mildred Walters
Dr. Retta Guy**

**LeMoyne-Owen College
Community Development Corporation
802 Walker Ave., Ste. 5
Memphis, TN 38126**

**Tennessee State University
Nashville Business Incubation Center
315 10th Avenue North
Nashville, TN 37203**



Date Published:

February 2010

Prepared for
U.S. Department of Homeland Security
under Southeast Region Research Initiative

ACKNOWLEDGEMENTS

This work was made possible by funding received under a contract from the Southeast Region Research Initiative (SERRI) at the Department of Energy's Oak Ridge National Laboratory for the Department of Homeland Security. We are grateful to SERRI for its support and, particularly to Dr. Benjamin Thomas, Jr., Operations Manager and Technical Project Officer, for his guidance and assistance.

The authors wish to thank the many small disadvantaged and women-owned businesses and prime vendors that took time from their busy schedules to talk with us. We would also like to acknowledge the generous support of the following disaster community professionals and other individuals, who helped to facilitate this process:

Davita Brown-Miller, Metropolitan Nashville Airport Authority
Kebbyn Bryant, Metropolitan Nashville Airport Authority
Warren C. Edwards, Director, SERRI

Cheri K. Henderson, TN Minority Supplier Development Council, Nashville, TN
Michelle A. Hernandez-Lane, Director, Ofc. Minority & Women Business, Nashville, TN

Sharon Hurt, Jefferson Street United Merchants Partnership, Nashville, TN
John Irvin, Ofc. Minority & Women Business Assistance, Nashville, TN

James F. Johnson, Small Planet Works, Inc.
Dave Lannom, Program Manager, CARRI

LeMoyne-Owen College Division of Business and Economic Development, Dr. Austin
Emeagwai, CPA - Professor

LeMoyne-Owen College Community Development Corporation – US SBA Business
Development Institute

Dr. Millicent Lownes-Jackson, Assoc. Dean, College of Business, TN State University
Judy Maina, LeMoyne-Owen College CDC
Lethia Mann, The One Fund, Nashville, TN

Michael A. Matthews, Program Analyst, Department of Homeland Security
Keith Millbrook, LeMoyne-Owen College CDC

Wisty Pender, Business Enterprise Resource Ofc., State of TN

Dr. William D. Piper, Dean, School of Business, Alcorn State University
Rahim Rashada, Mid-South Minority Business Council, Memphis, TN

Jeremy Sanders, LeMoyne-Owen College CDC
Claude Talford, Lakeland EMA/CARRI

C. Joy Turner, LeMoyne-Owen College CDC

Sarah K. Walen, Senior Mediator, Meridian Institute/CARRI

Luke Yancy, Executive Director, Mid-South Minority Business Council, Memphis, TN

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ACRONYMS AND DEFINITIONS

Acronyms

BCP	Business Continuity Planning
CARRI	Community and Regional Resilience Initiative
EMA	Emergency Management Agency
FEMA	Federal Emergency Management Agency
HBCU	Historically Black Colleges and Universities
MBE	Minority Business Enterprise
NGO	Non-governmental organization
ORNL	Oak Ridge National Laboratory
SDB	Small Disadvantaged Business
SDB/WBE	Small Disadvantaged Business/Women-Owned Business. For purposes of this report, the acronyms MBE, WBE and SDB are used interchangeably and will be collectively referred to as SDBs.
SERRI	Southeast Region Research Initiative

Definitions

For purposes of this report, we use the following definitions that apply more directly to hazards and disasters.

Business Continuity Planning is the creation and validation of a practiced logistical plan for how an organization will recover and restore partially or completely interrupted critical functions within a predetermined time after a disaster or extended disruption.

Community Resilience is defined as “a community or region’s capability to prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to public safety and health, the economy, and national security” (Wilbanks 2007).

Mitigation can be considered as any sustainable action that prevents or minimizes injury or harm to people, prevents or minimizes damage to property, and ensures continuity of critical societal functions.

Resilience refers to the ability of a human system to respond and recover. It includes those inherent conditions that allow the system to absorb impacts and cope with the event, as well as post-event adaptive processes that facilitate the ability of the system to reorganize, change, and learn in response to the event (Cutter et al. 2008).

Small Disadvantaged Business means a small business concern that meets the criteria of social and economic disadvantage and other eligibility requirements for disadvantaged status set forth in 13 CFR 124.1002; that meets the size standard corresponding to the applicable four-digit Standard Industrial Classification (SIC) code; whose management and daily business operations are controlled by one or more socially and economically disadvantaged individuals whose net worth must be less than \$750,000 after taking into account the exclusions set forth in 124.104(c)(2); and whose owner(s) is a citizen of the United States.

SOUTHEAST REGION RESEARCH INITIATIVE

In 2006, the U.S. Department of Homeland Security commissioned UT-Battelle at the Oak Ridge National Laboratory (ORNL) to establish and manage a program to develop regional systems and solutions to address homeland security issues that can have national implications. The project, called the Southeast Region Research Initiative (SERRI), is intended to combine science and technology with validated operational approaches to address regionally unique requirements and suggest regional solutions with potential national implications. As a principal activity, SERRI will sponsor university research directed toward important homeland security problems of regional and national interest.

SERRI's regional approach capitalizes on the inherent power resident in the southeastern United States. The project partners, ORNL, the Y-12 National Security Complex, the Savannah River National Laboratory, and a host of regional research universities and industrial partners, are all tightly linked to the full spectrum of regional and national research universities and organizations, thus providing a gateway to cutting-edge science and technology unmatched by any other homeland security organization.

As part of its mission, SERRI supports technology transfer and implementation of innovations based upon SERRI-sponsored research to ensure research results are transitioned to useful products and services available to homeland security responders and practitioners.

For more information on SERRI, go to the SERRI Web site: www.serri.org.

EXECUTIVE SUMMARY

The key objective of this research project was to develop mitigation strategies or best practices for business continuity planning (BCP) which are appropriate and effective for small, disadvantaged and women-owned businesses (SDB/WBEs). Henceforth this category of businesses will be collectively referred to as SDBs. Other supporting objectives include: i) study BCP from an academic research perspective and from a practical perspective; ii) develop a pilot set of BCP best practices which can be customized or tailored for other communities; and iii) expand the awareness of BCP and its impact on community and regional resilience.

To accomplish the above objectives, the pilot was comprised of both quantitative and qualitative research components. The quantitative research consisted of surveys taken by SDBs and prime vendors to better understand how businesses feel, think or act regarding emergency/disaster planning and recovery. The qualitative research involved analysis of information from the surveys, follow-up workshops and current literature. In this process, SDBs also identified gaps in access to resources that enable mitigation activities and a clear methodology for implementing strategy.

The study was conducted by Small Planet Works, Inc. (a SDB whose key service is BCP development), LeMoyné-Owen College in Memphis, and Tennessee State University in Nashville (both HBCUs). The research investigated the impact of business disruption on SDBs and their ability to deliver goods and services in the supply chains of their prime vendor client base. As noted, the pilot was conducted in three phases – an online survey, a follow-up workshop, and a literature review. Our efforts were provided support by local area Chambers of Commerce, the City of Memphis Purchasing Department, Nashville’s supplier diversity department, and a stakeholder team of minority business and women-owned business associations.

Findings

Anecdotal evidence exists of practices employed by SDBs, such as placing a copy of client data on personal data assistants (PDAs) or universal serial bus (USB) drives as a back-up. However, most best practices literature for small business does not focus on the SDB as a subset of small business. As a result, survey and workshop participants had very limited exposure to the concept or processes of business continuity planning.

At least 70% of SDB respondents did not have BCPs in place and 61% have not conducted a risk assessment. SDBs reported that the lack of funding, know-how, staff and guidance are the most significant impediments to their disaster preparedness efforts. SDBs consider training in developing a BCP critical; however, most training is conducted during their most productive business hours. Only 24% of SDBs have an evacuation plan in place, and at least 52% do not have an alternate site for operations in the event of an emergency or disaster. However, 73% do have business insurance. SDBs receive considerably less information from or coordination with local emergency

management agencies (EMA) than do their prime vendor customers. Prime vendors who responded cited concerns with SDBs' sustainability, response time, and adequate inventories as major risks or consideration in doing business with them. There is a need to improve communication between SDBs and primes around BCP and disaster preparedness.

Mitigation Strategies

This report focuses on mitigation strategies that will be most helpful to SDBs that may be a part of a supply chain. Further, these mitigation strategies are directed toward companies with less than ten employees, as were the majority of the companies responding to our surveys and that attended the workshops – 46% of SDB respondents had sales receipts of less than \$100,000, and 81% reported fewer than 10 employees. It is important to make this distinction, because much of the literature prescribes outsourcing or creating teams to handle activities after an unplanned business interruption. These resources are not necessarily available to small disadvantaged businesses.

The Federal Emergency Management Agency (FEMA) site, www.ready.gov, and the Institute for Business and Home Safety site, www.disastersafety.org, offer excellent BCP templates that are appropriate and practical for SDBs. See the Disaster Planning Resources list in Appendix C for a more complete list of resources that provide helpful information for SDBs. The SDB participants in this study employ the following practices, with varying degrees and levels of consistency.

Most of these strategies cost less than \$200 to implement: determine what production machinery, computers and other essential equipment is needed to keep the business open; make a plan for a temporary location if the company is forced to relocate after the disaster; be ready for utility disruptions with a portable generator; find escape routes from the business and establish meeting places. Other strategies being used include reviewing insurance coverage to make sure the business has the right coverage and requesting a discount, based on having a BCP. Use more inexpensive portable drives to backup copies of all critical documents and contact information for employees, suppliers and customers. Talk with first responders, emergency managers, and utility providers about what can be done now to get the business up and running as soon as possible. Become involved with local business emergency planning organizations.

The major research findings, a comprehensive set of BCP practices for SDBs, and an expanded awareness of BCP's impact on community and regional resilience are presented in separate sections of this report.

1. INTRODUCTION

1.1 Background

Business continuity planning (BCP) is an important aspect of community and regional resilience. It is necessary to develop a better understanding of the critical success factors necessary for small disadvantaged, minority-owned, and women-owned business enterprises (SDBs) to become more resilient in the aftermath of an emergency or disaster. Research is needed to compare, validate, and expand the findings in the research literature with practical experiences of SDBs. Social vulnerability is one of the foremost explanations for the differential preparedness, impact, and response to Hurricane Katrina within New Orleans (Cutter 2005; Hartman and Squires 2006; Laska and Morrow 2007) and along the Mississippi Gulf Coast (Cutter et al. 2006). The researchers wanted to determine whether this finding extended to SDBs, as well, and to what extent. While there are a number of websites, businesses and organizations that make available various information and tools for BCP (such as FEMA, Disaster Recovery Journal (DRJ), Ready.gov, and National Institute for Standards and Technology, etc.), the reach and effectiveness of these resources to SDBs in this study proved negligible.

The Community & Regional Resilience Institute (CARRI) defines the characteristics of a resilient business and community as:

- ❑ **It Anticipates:** problems, opportunities, potentials for surprises.
- ❑ **It Reduces Vulnerabilities:** related to development paths, socio-economic conditions, sensitivities to possible threats.
- ❑ **It Responds:** effectively, fairly, and legitimately.
- ❑ **It Recovers:** rapidly, better, safer and fairer (objectives which may not align perfectly, calling for widespread community participation in strategy development).

The pilot was conducted in two Tennessee metropolitan statistical areas – Memphis and Nashville. Research consisted of surveys of local SDBs and prime vendors. It was followed by workshops held in the respective cities. Prime vendors were included in the study to better understand the impact of SDB resilience on, and the relationship to, the supply chains and recovery strategies of their prime vendor customers.

Over the past decade, devastation from man-made and natural disasters has shown itself relentlessly. Rike (2003) categorizes these disasters as (1) natural or environmental threats or hazards (fire, flood, hurricane, earthquake); (2) technical or mechanical hazards (power outage, gas leak, software failure, toxic spill, train derailment/airplane crash); and (3) human activities or threats (vandalism, theft, bomb threat, terrorism, epidemic, computer error).

Disturbing studies abound that reveal the majority of small businesses in the United States are ill-prepared for disasters. Federal experts estimate that 40% of small businesses close their doors permanently after experiencing a disaster (Clas, 2008). Castillo (2004) said it best: “The success of any business lies in the ease and flexibility of

adjusting critical business processes which may affect the business' viability to serve its customers and community."

Hewlett Packard conducted a study in 2007 in which it observed that 31% of small businesses exist without a business continuity plan in place. Among those businesses with plans, programs range from basic emergency response operations (e.g., drills, equipment shutdown procedures) to fully functional and tested programs (e.g., emergency procedures, redundant operational hot and cold sites, full-scale exercises).

Similarly, a national survey of 5,000 small businesses reported that an alarming number of business owners remain unprepared to face disasters such as hurricanes, tornados, wildfires, and computer viruses (Aker, 2008). Statistically speaking, 40% of small businesses surveyed by Office Depot in 2008 admitted that they were not prepared for a disaster with one-third (27%) indicating that they do not have any plans of becoming prepared. Of the businesses indicating that they were not prepared for a natural disaster, 37% had not taken the time to prepare; 17% indicated it was too expensive; and 11% don't know what to do in terms of preparation.

A disaster recovery and business continuity study conducted in 2008 by DMG Consulting reveals that contact centers are ill-prepared for disasters. The report documented contact centers' readiness to adapt to disruptions caused by internal system and process changes, and benchmarked how contact centers handle disaster recovery/business continuity, strategies, plans, and testing. Their findings indicate that less than 37% of companies are confident that their operations can withstand a disaster; 60.2% of businesses are not testing their contact center infrastructure with any regularity; only 4.7% of businesses test their disaster recovery/business continuity plans monthly; and finally 20% of contact centers are without a written disaster recovery plan.

The research implies that the majority of small business owners in the U.S. have not made adequate investments to prevent disruptions caused by disasters, mainly because of the strong misperceptions about what they can do to help prepare for such.

1.2 Purpose

The purpose of this pilot study is to assess the planning, preparedness, response and recovery activities of SDBs in the Memphis and Nashville areas in the event of a natural or man-made emergency disaster. Other supporting objectives include: i) study BCP from an academic research perspective and from a practical perspective; ii) develop a pilot set of BCP best practices which can be customized or tailored for other communities; and iii) expand the awareness of BCP and its impact on community and regional resilience.

1.3 Methodology

The Southeast Region Research Initiative (SERRI) commissioned a public-private-academic pilot of two urban areas in the southeastern region of the United States to identify and develop BCP best practices strategies appropriate for SDBs. The study was conducted by Small Planet Works, Inc. (a SDB whose key service is BCP development),

LeMoyne-Owen College in Memphis, and Tennessee State University in Nashville (both HBCUs). The pilot was conducted in three phases – an online survey, a follow-up workshop, and a literature review.

1.3.1 Online Surveys

The confidential online survey, administered through the SurveyMonkey tool, was accompanied by an introductory email, providing a description of the project and its goals. The distribution lists included SDBs and the major prime vendors in each metropolitan statistical area. Invitations to attend the follow-up workshop were also emailed to the entire distribution list.

Separate surveys were designed and emailed to SDBs and prime vendors. Each survey line of inquiry was based on BCP guidelines and best practices promulgated by *Ready Business* (FEMA) and *Open for Business* (Institute for Business & Home Safety®). The following BCP best practice areas were included:

- | | |
|---|---|
| <input type="checkbox"/> BCP awareness and status | <input type="checkbox"/> Vital records |
| <input type="checkbox"/> Risk assessments | <input type="checkbox"/> Equipment inventory |
| <input type="checkbox"/> Alternate site recovery location | <input type="checkbox"/> Insurance |
| <input type="checkbox"/> Employee emergency contact lists | <input type="checkbox"/> Supply chain awareness |
| <input type="checkbox"/> Communication | <input type="checkbox"/> EMA coordination |
| <input type="checkbox"/> Supplier emergency contact list | <input type="checkbox"/> Company demographics |
| <input type="checkbox"/> Alternate supplier contact list | <input type="checkbox"/> Training |

We were assisted in the survey process by the generous efforts of the following agencies that provided contact lists, emailed the online surveys directly to their organization’s client lists, or allowed us to present to their memberships:

- | | |
|---|--|
| ◆ City of Memphis | ◆ Metropolitan Nashville Airport Authority |
| ◆ City of Nashville Office of Minority & Women Business Assistance Office | ◆ Mid-South Minority Business Council |
| ◆ Jefferson Street United Merchants Partnership | ◆ Nashville Business Incubation Center |
| ◆ LeMoyne-Owen College Business Development Institute | ◆ State of Tennessee Business Enterprise Resource Office |
| | ◆ Tennessee Minority Development Council |
| | ◆ The One Fund |

The survey process began with contact being made with the company/organization’s designated point of contact. The introductory email was followed-up by two reminder emails, and possibly a follow-up conversation to answer questions and provide additional clarification. No identifying information was captured during the survey process to maintain the confidentiality of respondents’ answers. The survey period was open for three weeks.

The survey instrument consisted of Likert Scale questions, multiple-choice, and numerically scaled answers. The survey was designed with a diverse set of question formats (e.g., yes and no, multiple choice, rankings, open answer) in order to encourage a wide range of responses. It was tested in its preliminary form with members of the stakeholder team and revised accordingly. The following chart shows the survey population and the number and percentages of responses from each city for SDBs and prime vendors:

City	SDBs			Primes			Totals
	Pop.	Responses # %		Pop.	Responses # %		Responses
Memphis	200	54 25		29	9 25		63
Nashville	425	28 7		35	12 34		40
TOTALS	625	82 13		64	21 33		103

Out of a total survey population of 625 SDBs, an average of 13% responded. Of the 64 prime vendors in the survey population, 33% responded.

1.3.2 Follow-up Workshops

An email announcing the follow-up workshop was sent to all survey recipients. Personal contact was also made by the business associations of which SDB survey recipients were clients or members. Survey results were shared and discussed in the workshops. One of the workshop’s modules consisted of a discussion of gaps between the current state of SDBs and the desired state. Breakout sessions were held to generate strategies to assist SDBs and identify best practices they currently use.

Though we did not capture identifying information, the diversity of survey recipients, respondents and workshop attendees is reflected in the industries in which they work:

Small Disadvantaged Business Industries	Prime Vendor Industries
Information Technology	Retail
Education Services	Advertising/Public Relations
Social Services (Non-profit)	Professional Services
Construction	Architectural & Engineering
HVAC	Printing
Janitorial	Storage
Staffing	Personal Services
Management & Technical	
Recycling	
	City Government
	State Government
	Airport Authorities
	Hospitals
	Universities
	Utilities
	Education
	Banking
	Commercial/Industrial
	Healthcare
	Media

1.3.3 Literature Search

The researchers conducted an exploratory content analysis of business continuity planning literature, utilizing the results of several databases containing articles, programs, industry reports, and government reports. In addition, we collaborated with the Alcorn State University School of Business project, Business Continuity Planning Gap Analysis for Small Minority-Owned Businesses in MS, also funded by SERRI.

2. MEMPHIS SURVEY FINDINGS

The survey findings are presented in three separate sections. This section presents findings from Memphis. Section 3 presents Nashville findings and Section 4 presents the combined findings from both cities.

2.1 Memphis Area Description

The City has an estimated population of 674,976, making it the 18th most populous incorporated city in the nation. Of that number, roughly 71 percent are African American, Hispanic (all races), Asian, American Indian/Alaskan Native, Hawaiian/Other Pacific Islander or multi-racial, according to the 2007 Census Bureau.

According to the 2007 Census, the City of Memphis was home to 13,449 minority-owned firms in 2002, with total receipts of \$1,324,769,000. The average gross receipts per firm were \$98,503. An additional 3,067 minority-owned firms were located within Shelby County, but outside the city boundaries, with total receipts of \$215,521,000. The average receipts per firm for this group was \$70,271.

2.2 Memphis Survey Demographics

SDB Demographics

Out of a survey population of 200 SDBs, 54 or 25% responded.

Business Category						
Answer Options	Minority Business Enterprise	Woman-owned Business Enterprise	Small Disadvantaged Business	Small Office/Home Office		Response Count
	22	7	5	4		38
	57.90%	18.40%	13.20%	10.50%		
Business Structure						
Answer Options	Corporation	Partnership	Sole Proprietor	Limited Liability Corp.		Response Count
	23	3	14	6		46
	50.00%	6.50%	30.40%	13.00%		
Employees						
Answer Options	0 – 10	11 – 20	21 – 50	51 – 100	101+	Response Count
	34	7	0	3	1	45
	75.60%	15.60%	0%	6.70%	2.20%	
Avg. Revenue						
Answer Options	\$0 - \$99K	\$100K - \$249K	\$250 - \$499K	\$500K - \$999K	\$1.0 Mil - \$2.9 Mil	Response Count
	17	5	7	4	8	41
	41.50%	12.20%	17.10%	9.80%	19.50%	
						Question Totals
<i>answered question</i>						46
<i>skipped question</i>						8

Prime Vendor Demographics

Of the 29 prime vendors in the survey population, 9 or 25% responded.

Business Type						Response Count	
Corporation	Partnership	Limited Liability Corp.	Public-Sector				
4	0	0	4			8	
50.00%			50.00%				
Employees						Response Count	
101 - 499	500 - 1000	1001 - 5000	5001 - 10,000	10,001 +			
2	1	3	1	1		8	
25.00%	12.50%	37.50%	12.50%	12.50%			
Operations						Response Count	
Local	Regional	National	Global				
3	2	1	2			8	
37.50%	25.00%	12.50%	25.00%				
Avg. Revenue						Response Count	
\$5.0 Mil - \$10.0 Mil	\$10.1 Mil - \$30.0 Mil	\$30.1 Mil - \$100.0 Mil	\$100.1 Mil - \$999.0 Mil	\$1.0 Bil +			
0	0	1	2	3		6	
		16.70%	33.30%	50.00%			
						Question Totals	
						<i>answered question</i>	8
						<i>skipped question</i>	1

The survey questionnaires for SDBs and prime vendors are located in Appendices A and B, respectively.

2.3 Memphis Survey Results

In an attempt to ascertain a company’s readiness to adapt to disruptions caused by man-made or natural disasters, the survey participants were asked to respond to questions that directly relate to their business continuity plans or lack thereof. The surveys consisted of questions widely considered best practices to quantify the degree to which SDBs currently follow these practices. For comparative purposes, participating prime vendors were asked the same types of questions. However, they were asked additional questions about their relationships with SDBs and coordination around emergency planning practices.

A number of respondents replied “Don’t Know” to questions throughout the survey. According to contact information provided to the researchers, respondents should have had subject matter knowledge. Further research may be warranted in this area.

2.3.1 60% of SDB respondents do not have a BCP in place, and another 10% don't know whether the company has one.

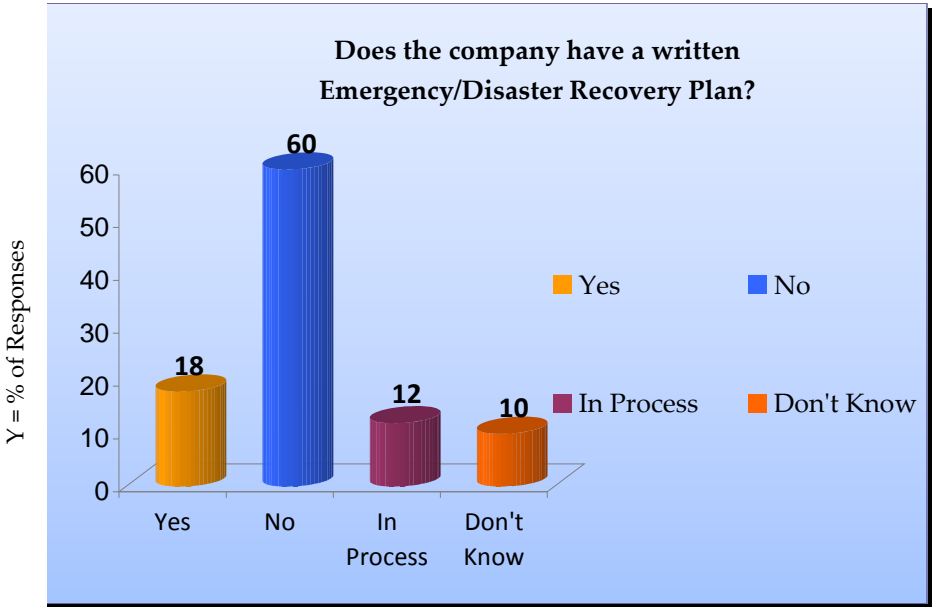


Figure 1. Does the company have a written Emergency/Disaster Recovery Plan?

2.3.2 Reasons cited for not having a BCP in place include the need for help, a lack of staff, and a lack of time:

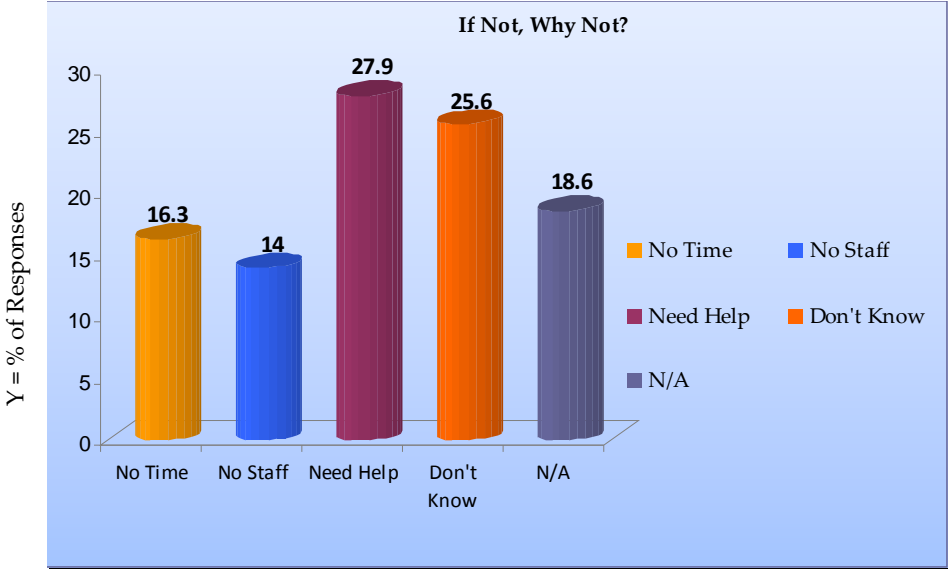


Figure 2. If not, why not? (Check all that apply.)

2.3.3 43.8% of SDBs have not conducted a risk assessment.

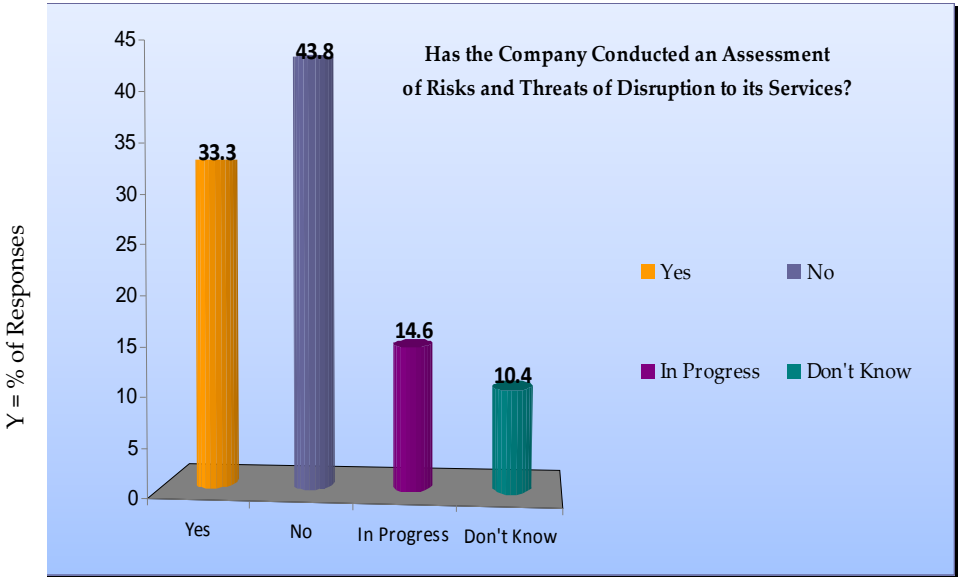


Figure 3. Has the company conducted an assessment of risks and threats of disruption to its services?

2.3.4 76.6% of SDBs have business insurance.

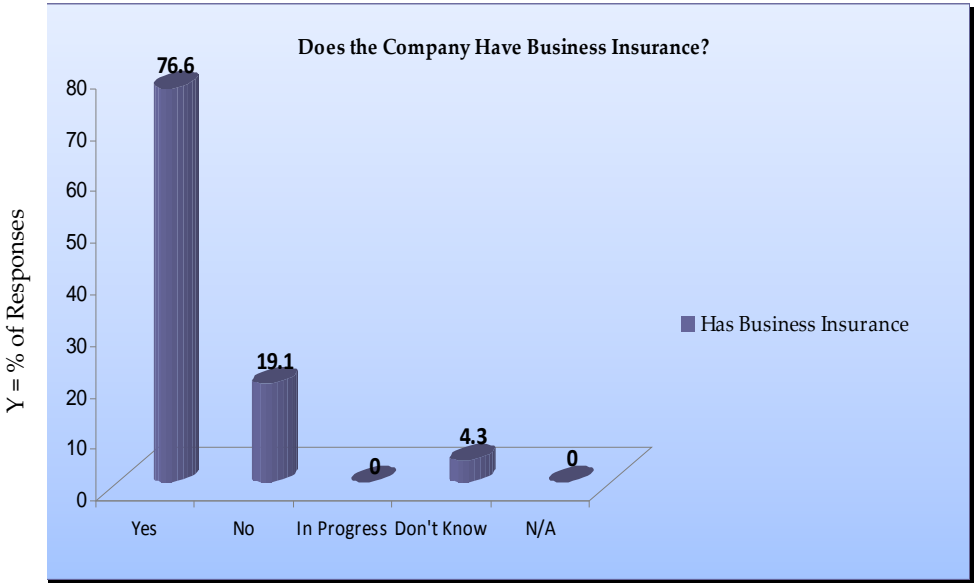


Figure 4. Does the company have business insurance?

2.3.5 Prime vendors prioritized what information about their organizations would assist SDB suppliers in continuing product delivery to them in the event of a disaster. Their priorities are listed in Table 1 below:

What Primes Say Would Help SDBs Continue Product Delivery to Them in the Event of an Emergency/Disaster	
Types of Information	Response Percent
Disaster communication plan	50.0%
Alternate site delivery process	50.0%
Disaster procurement process / operations	50.0%
Planned inventory levels	50.0%
Improved communication and information flow	50.0%
Supplier partnering	50.0%
Joint disaster planning / preparation activities	37.5%
Order forecasting techniques	37.5%
Computer systems integration	37.5%
Pre-established pricing contracts	37.5%

Table 1. What information about your organization would help SDB suppliers be better prepared to continue service/product delivery in the event of an emergency/disaster?

2.3.6 SDBs prioritized what information about their prime vendor customers would assist them in continuing product delivery in the event of a disaster. Their priorities are listed in Table 2 below:

What SDBs Say Would Help Them Continue Product Delivery to Primes in the Event of an Emergency/Disaster	
Types of Information	Response Percent
Disaster communication plan	38.5%
Alternate site delivery process	35.9%
Computer systems integration	35.9%
Improved communication and information flow	33.3%
Online data back-up	33.3%
Disaster procurement process / operations	23.1%
Planned inventory levels	15.4%
Understanding contract management processes	15.4%
Pre-established pricing contracts	15.4%
Joint disaster planning / preparation activities	12.8%

Table 2. What information from your prime/major customers would assist your ability to continue product delivery to them in event of an emergency/disaster?

2.3.7 Table 3 shows the top concerns of prime vendors as it relates to SDBs’ ability to continue to provide services following a business disruption. These concerns include adequate staff, response time, sustainability and adequate inventories.

Primes Greatest Risks with SDB Suppliers to Provide Products/Services in the Event of Disaster	
Risks	Response Percent
Adequate staff	62.5%
Response time	62.5%
Sustainability	50.0%
Adequate inventories	50.0%
Communication / information flow	37.5%
Lack of technology	37.5%
Disaster planning / training	37.5%
Supplier location	25.0%
Transportation	25.0%
Pricing	12.5%

Table 3. What are your greatest risks with SDB suppliers’ ability to provide products/services in the event of a disaster?

2.3.8 Table 4 indicates that while primes and SDBs understand what would improve SDBs reliability and the concerns held by primes, they do not generally coordinate to address these perceived risks.

Do SDBs and Primes Coordinate on BCP?		
Response	Percent of SDBs	Percent of Primes
Yes	15.0	25.0
No	62.5	37.5
In Progress	2.5	0.0
Don’t Know	12.5	37.5
N/A	7.5	0.0

Table 4. Do you coordinate with your prime customers/suppliers around BCP?

2.3.9 Table 5 indicates that SDBs and Prime Vendors were generally not aware of the preparedness of their suppliers.

Awareness of Suppliers' BCP		
Response	Percent of SDBs	Percent of Primes
Yes	22.0	0.0
No	17.1	0.0
In Progress	2.4	12.5
Don't Know	48.8	87.5
N/A	12.2	0.0

Table 5. Do your suppliers have a BCP in place?

NOTE: At least one respondent checked more than one choice.

2.3.10 SDBs coordinate with local government or local emergency management agencies (EMA) considerably less (9.8%) than do their prime vendor customers (87.5%). See Figure 5.

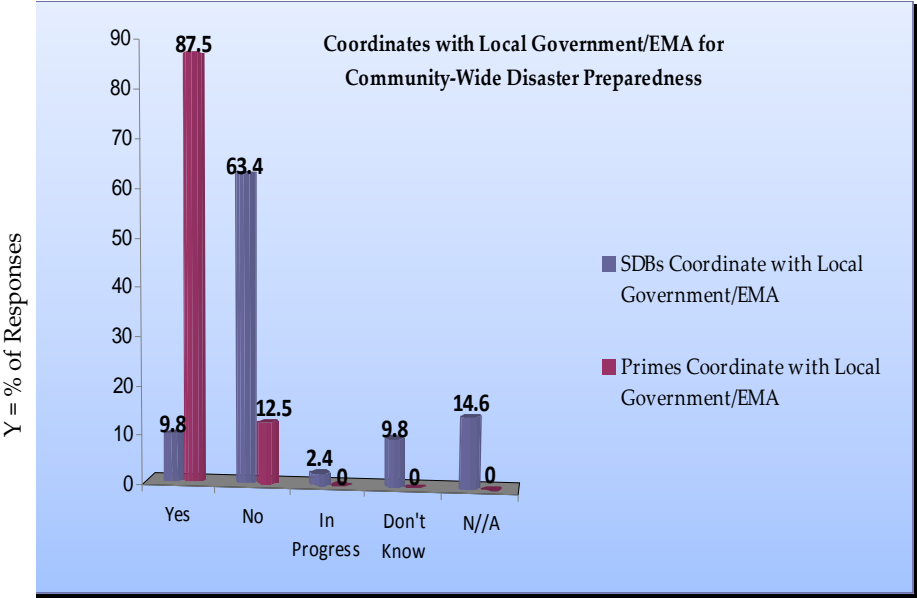


Figure 5. Does the company coordinate with local government in preparation for community-wide disaster preparedness?

2.3.11 By comparison, 87.5% of prime vendors receive information from local government/EMA versus 17.1% of SDBs receiving information from local government/EMA regarding disaster planning. See Figure 6.

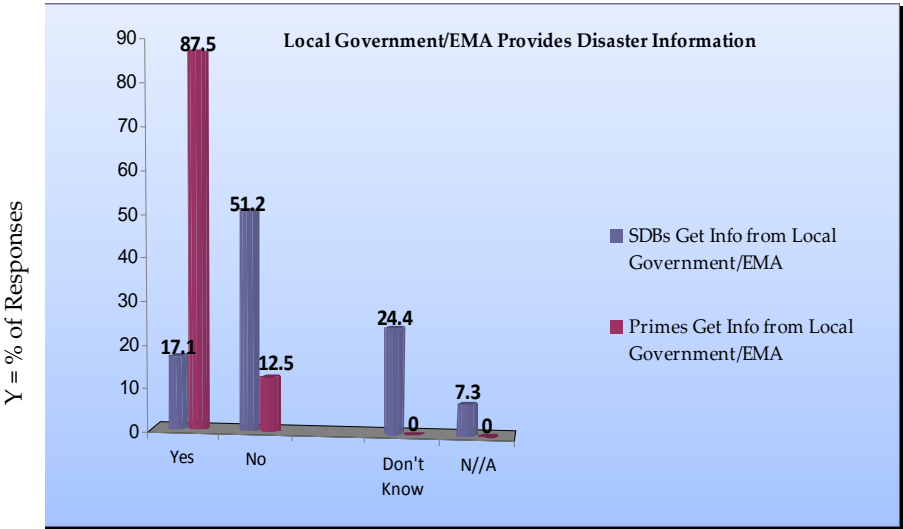


Figure 6. Does local government or EMA provide disaster information to organization?

2.3.12 50% of SDBs do not have an evacuation plan and 50% do not have an alternate site to recover operations in the event of a business disruption.

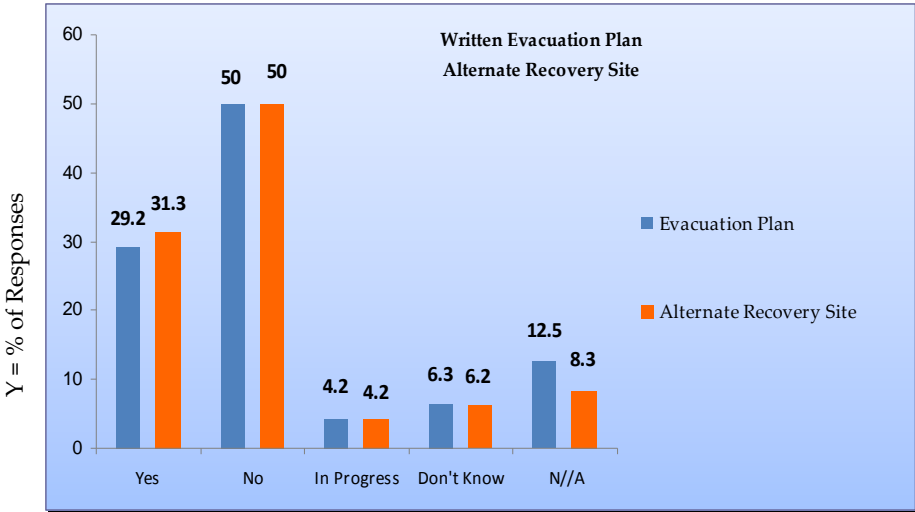


Figure 7. Does the company have an evacuation plan and an alternate recovery site?

3. NASHVILLE SURVEY FINDINGS

3.1 Nashville Area Description

Nashville is the largest metropolitan area in the central South. The Nashville economic market comprises 10 counties and more than 1.7 million people – 80.1% White, 16.3% African-American, 4.9% Latino, and 1.9% Native American. Nashville’s economy is uniquely diverse, which accounts for the area’s resilience in a fluctuating global environment. Median annual income is \$49,979.

According to the 2007 United States Census Bureau the City of Nashville was home to 10,995 minority-owned firms in 2002, with total receipts of \$1,814,784,000. The average gross receipts per firm were \$165,055.

3.2 Nashville Survey Demographics

SDB Demographics

Out of a survey population of 425 SDBs, 28 or 7% responded.

Business Category						
Answer Options	Minority Business Enterprise	Woman-owned Business Enterprise	Small Disadvantaged Business	Small Office/Home Office		Response Count
	12	6	0	4		22
Business Structure						
Answer Options	Corporation	Partnership	Sole Proprietor	Limited Liability Corp.		Response Count
	7	0	6	10		23
Employees						
Answer Options	0 – 10	11 – 20	21 – 50	51 – 100	101+	Response Count
	21	2	0	0	0	23
Avg. Revenue						
Answer Options	\$0 - \$99K	\$100K - \$249K	\$250 - \$499K	\$500K - \$999K	\$1.0 Mil - \$2.9 Mil	Response Count
	13	4	2	2	2	23
						Question Totals
<i>answered question</i>						23
<i>skipped question</i>						5

Prime Vendor Demographics

Of the 35 prime vendors in the survey population, 12 or 34% responded.

Business Type						
Answer Options	Corporation	Partnership	Limited Liability Corp.	Public-Sector		Response Count
	5	0	2	2		9
Employees						
Answer Options	101 - 499	500 - 1000	1001 - 5000	5001 - 10,000	10,001 +	Response Count
	2	3	1	0	1	7
Operations						
Answer Options	Local	Regional	National	Global		Response Count
	2	4	3	0		9
Avg. Revenue						
Answer Options	\$5.0 Mil - \$10.0 Mil	\$10.1 Mil - \$30.0 Mil	\$30.1 Mil - \$100.0 Mil	\$100.1 Mil - \$999.0 Mil	\$1.0 Bil +	Response Count
	1	2	2	1	0	6
						Question Totals
<i>answered question</i>						9
<i>skipped question</i>						3

The survey questionnaires for SDBs and prime vendors are located in Appendices A and B, respectively.

3.3 Nashville Survey Results

In an attempt to ascertain a company’s readiness to adapt to disruptions caused by man-made or natural disasters, the survey participants were asked to respond to questions that directly relate to their business continuity plans or lack thereof. The surveys consisted of questions widely considered best practices to quantify the degree to which SDBs currently follow these practices. For comparative purposes, participating prime vendors were asked the same types of questions. However, they were asked additional questions about their relationships with SDBs and coordination around emergency planning practices.

A number of respondents replied “Don’t Know” to questions throughout the survey. According to contact information provided to the researchers, respondents should have had subject matter knowledge. Further research may be warranted in this area.

3.3.1 When asked if their company has a written emergency/disaster recovery plan, 69.6% reported no, while only 21.7% reported yes with an additional 8.7% in the process of writing such a plan (Figure 8).

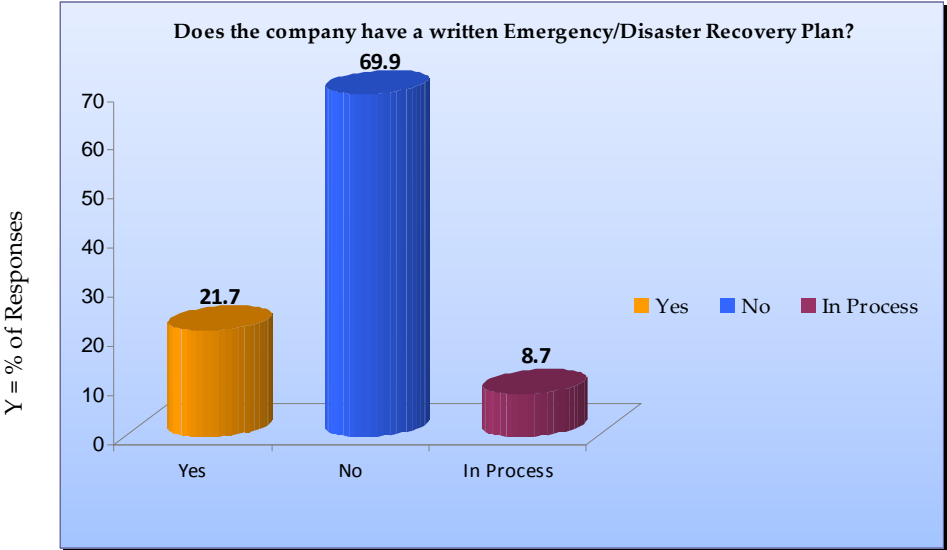


Figure 8. Does the company have a written Emergency/Disaster Recovery Plan?

3.3.2 When asked why the company elected not to have a written plan, 50.0% stated that they needed help with the plan, while 12.5% stated that they did not have the time, and 18.8% lacked the staff to complete such a task. Additionally, 12.5% can't afford it and 25% stated they did not need one (Figure 9).

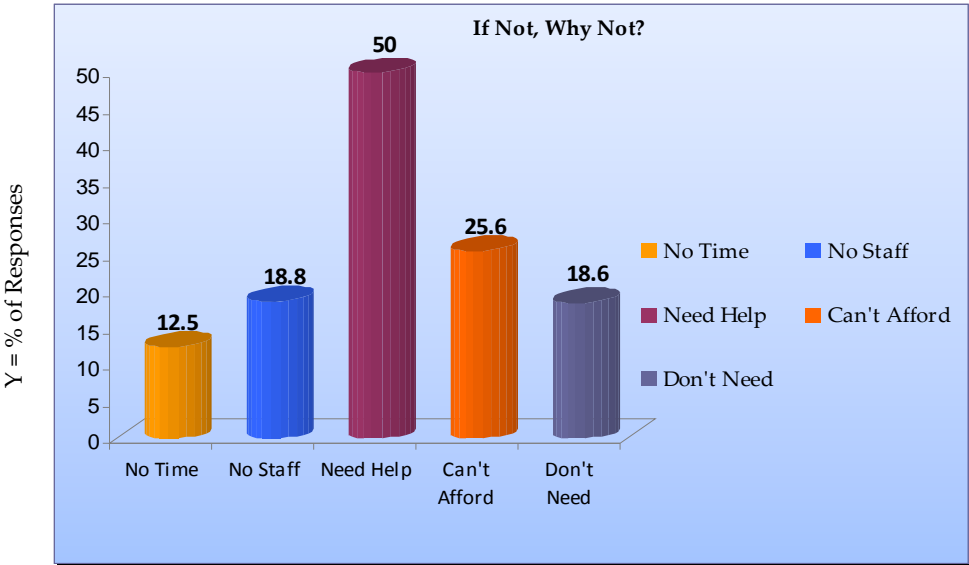


Figure 9. If not, why not?

3.3.3 When asked whether the company had conducted an assessment of risks and threats of disruption to its services, 60.9% had not conducted any such assessment. On the other hand, 30.4% had conducted the assessment while 8.7% were in the process.

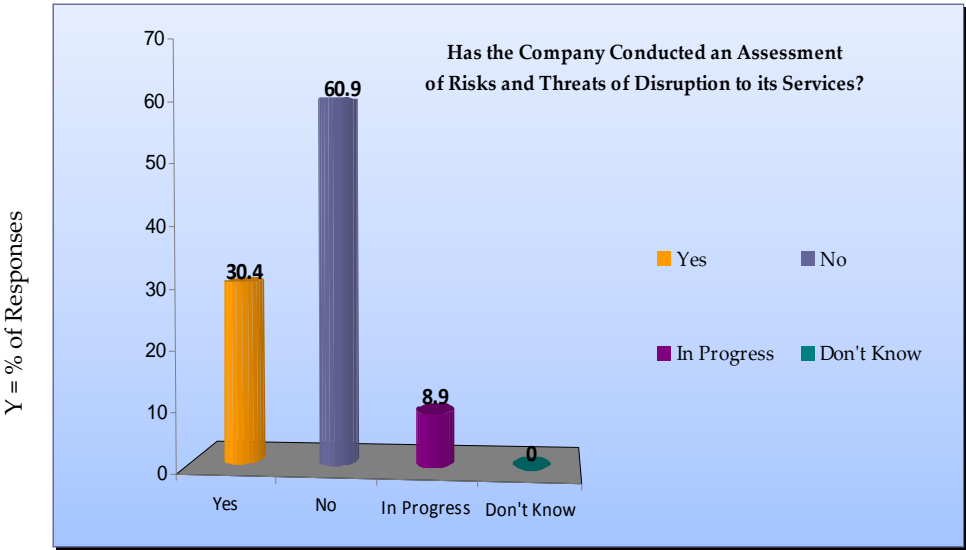


Figure 10. Has the company conducted an assessment of risks and threats of disruption to its services?

3.3.4 65.3% of SDBs have business insurance.

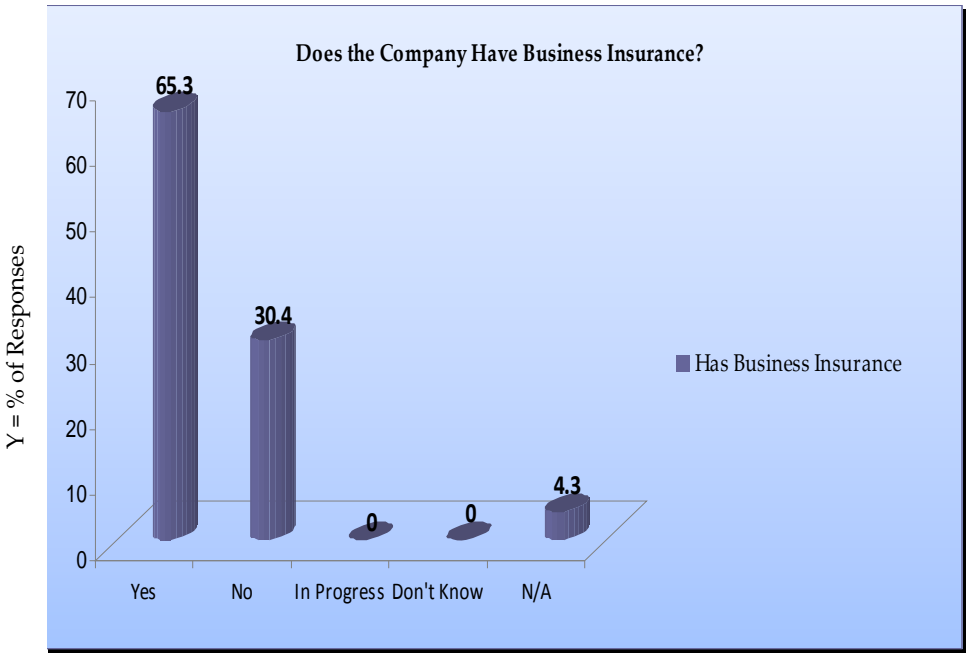


Figure 11. Does the company have business insurance?

3.3.5 Prime vendors prioritized what information about their organizations would assist SDB suppliers in continuing product delivery to them in the event of a disaster. As noted in Table 6, 50.0% cited the disaster communication plan as the most valuable information.

What Primes Say Would Help SDBs Continue Product Delivery to Them in the Event of an Emergency/Disaster	
Types of Information	Response Percent
Disaster communication plan	50.0%
Alternate site delivery process	37.5%
Disaster procurement process / operations	37.5%
Planned inventory levels	25.0%
Improved communication and information flow	12.5%
Joint disaster planning / preparation activities	25.0%
Order forecasting techniques	12.5%
Computer systems integration	12.5%
Understanding contract management processes	12.5%
Pre-established pricing contracts	12.5%

Table 6. What information about your organization would help SDB suppliers be better prepared to continue service/product delivery in the event of an emergency/disaster?

3.3.6 SDBs prioritized what information about their prime vendor customers would assist them in continuing product delivery in the event of a disaster.

What SDBs Say Would Help Them Continue Product Delivery to Primes in the Event of an Emergency/Disaster	
Types of Information	Response Percent
Improved communication and information flow	42.9%
Online data back-up	33.3%
Understanding contract management processes	23.8%
Disaster communication plan	19.0%
Computer systems integration	19.0%
Pre-established pricing contracts	15.4%
Alternate site delivery process	14.3%
Order forecasting techniques	14.3%
Disaster procurement process / operations	14.3%
Joint disaster planning / preparation activities	9.5%
Planned inventory levels	4.8%

Table 7. What information from your prime/major customers would assist your ability to continue product delivery to them in event of an emergency/disaster?

3.3.7 Table 8 shows the top concerns of prime vendors as it relates to SDBs’ ability to continue to provide services following a business disruption. Those concerns include sustainability, adequate staff, adequate inventories and response time.

Primes Greatest Risks with SDB Suppliers to Provide Products/Services in the Event of Disaster	
Risks	Response Percent
Adequate staff	71.4%
Sustainability	71.4%
Response time	50.0%
Adequate inventories	50.0%
Disaster planning / training	35.7%
Communication / information flow	35.7%
Supplier location	28.6%
Lack of technology	21.4%
Transportation	21.4%
Pricing	7.1%

Table 8. What are your greatest risks with SDB suppliers’ ability to provide products/services in the event of a disaster?

3.3.8 As in the Memphis survey, Table 9 indicates that while primes and SDBs understand what would improve SDBs reliability and the concerns held by primes, they do not generally coordinate to address these perceived risks. One prime vendor respondent stated in the Comments Section: “We have not coordinated DP [Disaster Planning] with majority suppliers either. This is a good warning for us.”

Do SDBs and Primes Coordinate on BCP?		
Response	Percent of SDBs	Percent of Primes
Yes	13.6	0.0
No	63.6	90.0
In Progress	4.5	0.0
Don’t Know	4.5	0.0
N/A	13.6	20.0

Table 9. Do you coordinate with your prime customers/suppliers around BCP?

*At least one respondent checked more than one answer.

3.3.9 Table 10 indicates that SDBs and Prime Vendors were generally not aware of the preparedness of their suppliers.

Awareness of Suppliers' BCP		
Response	Percent of SDBs	Percent of Primes
Yes	17.4	0.0
No	21.7	30.0
In Progress	0.0	0.0
Don't Know	34.8	70.0
N/A	26.1	10.0

Table 10. Do your suppliers have a BCP in place to continue to supply you if they experience an emergency/disaster?

NOTE: At least one prime respondent checked more than one choice.

3.3.10 SDBs coordinate with local government/EMA considerably less (9.1%) than do their prime vendor customers (54.5%). See Figure 12.

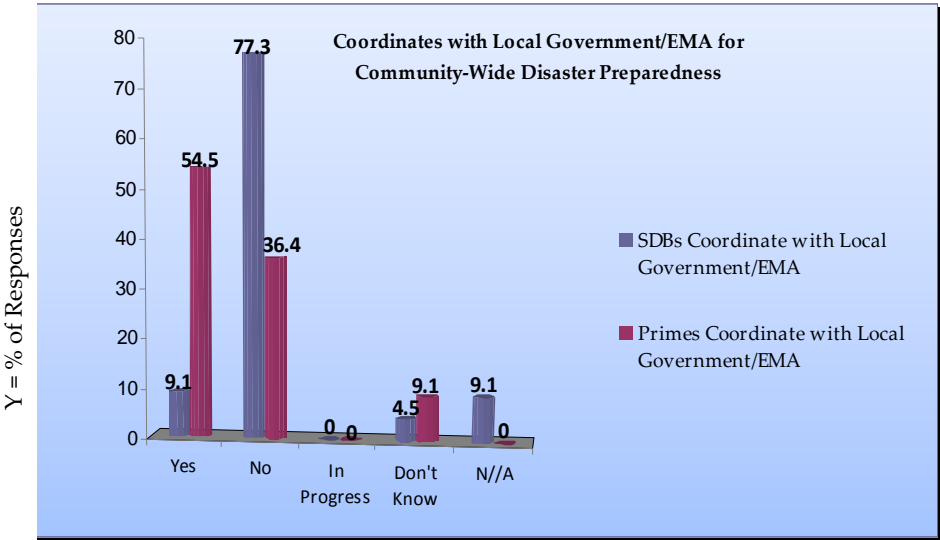


Figure 12. Does the company coordinate with local government in preparation for community-wide disaster preparedness?

3.3.11 Also by comparison, 54.5% of prime vendors receive information from local government/EMA regarding disaster planning, versus 17.4% of SDBs (Figure 13).

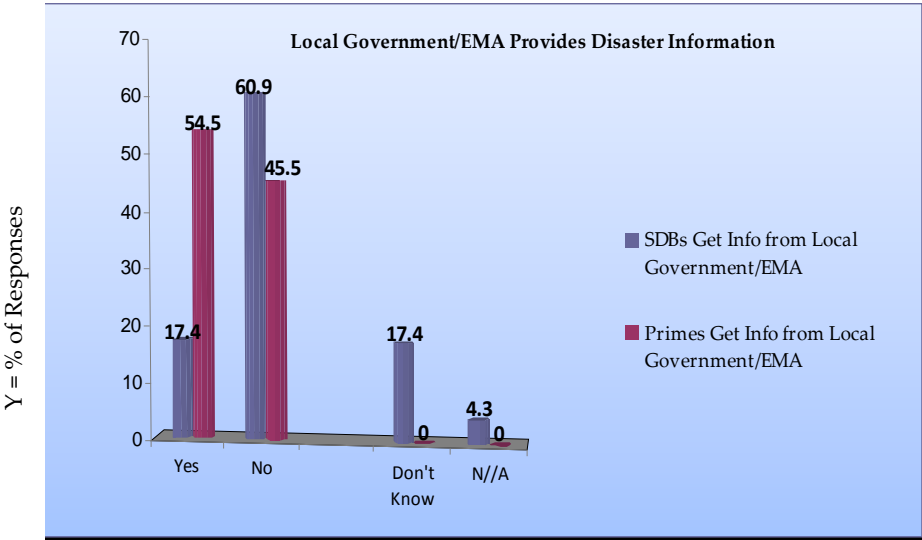


Figure 13. Does local government or EMA provide disaster information to organization?

3.3.12 60.9% of SDBs do not have an evacuation plan and 52.2% do not have an alternate site to recover operations in the event of a business disruption.

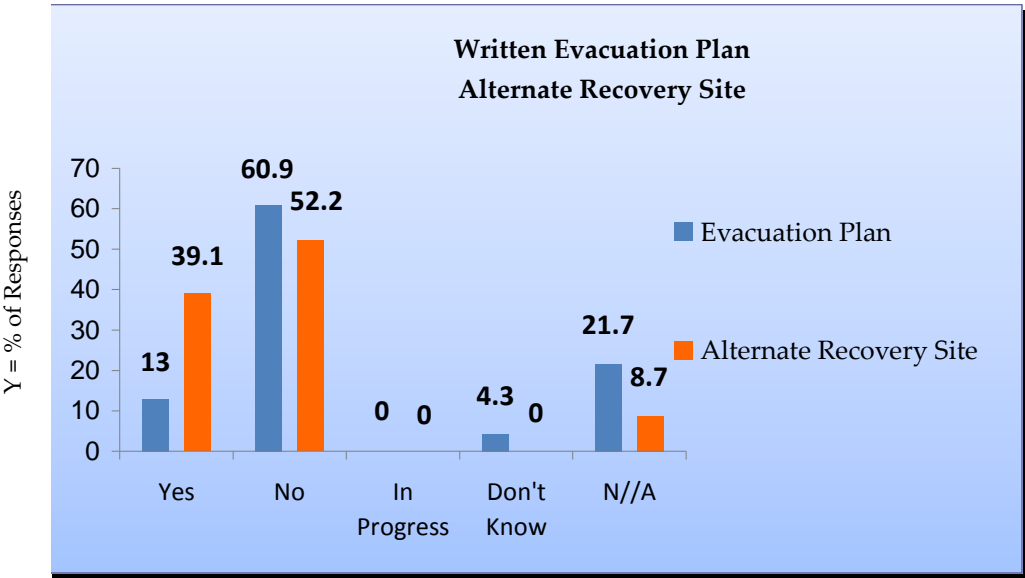


Figure 14. Does the company have an evacuation plan and an alternate recovery site?

4. COMBINED SURVEY RESULTS

4.1 Combined Survey Demographics

Combined SDB Demographics

Out of a combined survey population of 625 SDBs, 82 or 13% responded.

Business Category						Response Count
Minority Business Enterprise	Woman-owned Business Enterprise	Small Disadvantaged Business	Small Office/Home Office			
34	13	5	8			60
Business Structure						Response Count
Corporation	Partnership	Sole Proprietor	Limited Liability Corp.			
29	3	20	16			68
Employees						Response Count
0 – 10	11 – 20	21 – 50	51 – 100	101+		
55	9	0	3	1		68
Avg. Revenue						Response Count
\$0 - \$99K	\$100K - \$249K	\$250 - \$499K	\$500K - \$999K	\$1.0 Mil - \$2.9 Mil		
29	9	9	6	10		63
						Question Totals
<i>answered question</i>						69
<i>skipped question</i>						9

Combined Prime Vendor Demographics

Of the 64 prime vendors in the combined survey population, 21 or 33% responded.

Business Type					Response Count
Corporation	Partnership	Limited Liability Corp.	Public-Sector		
9	0	2	6		17
Employees					Response Count
101 - 499	500 - 1000	1001 - 5000	5001 - 10,000	10,001 +	
4	4	4	1	2	15
Operations					Response Count
Local	Regional	National	Global		
5	6	4	2		17
Avg. Revenue					Response Count
\$5.0 Mil - \$10.0 Mil	\$10.1 Mil - \$30.0 Mil	\$30.1 Mil - \$100.0 Mil	\$100.1 Mil - \$999.0 Mil	\$1.0 Bil +	
1	2	3	3	4	13
					Question Totals
<i>answered question</i>					17
<i>skipped question</i>					4

4.2 Combined Survey Results

A number of respondents replied “Don’t Know” to questions throughout the survey. According to contact information provided to the researchers, respondents should have had subject matter knowledge. Further research may be warranted in this area.

4.2.1 Collectively, when asked if their company has a written emergency/disaster recovery plan, 64.3% reported no, while only 14.3% reported yes, with an additional 9.5% in the process of writing such a plan (Figure 15).

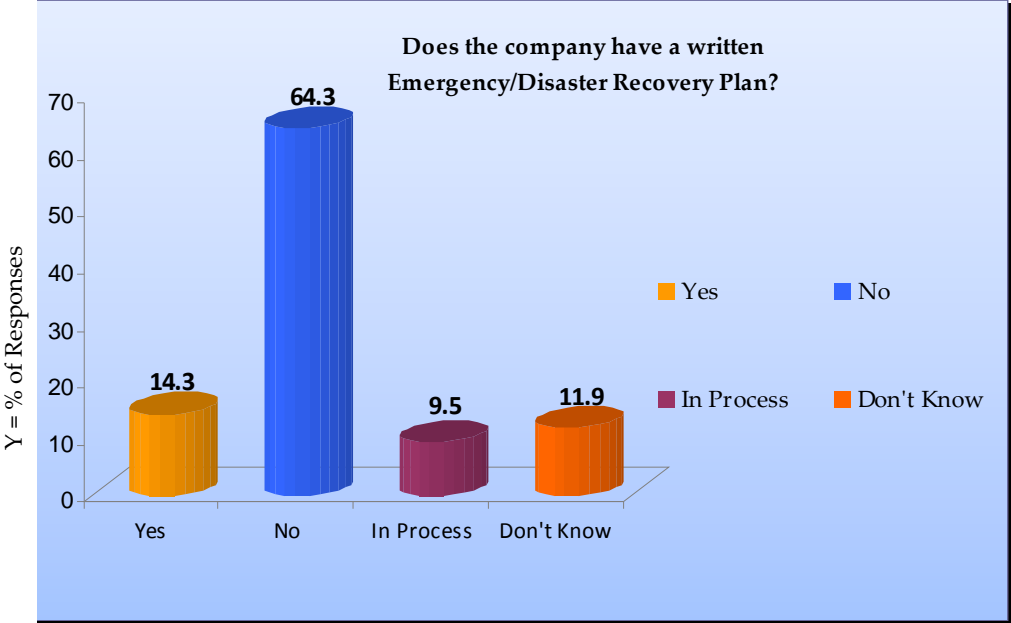


Figure 15. Does the company have a written Emergency/Disaster Recovery Plan?

4.2.2 When asked why the company does not have a written plan, 34.9% stated that they need help; 17.5% stated that they did not know why; 14.3% have no time and 15.9% does not have the staff (Figure 16).

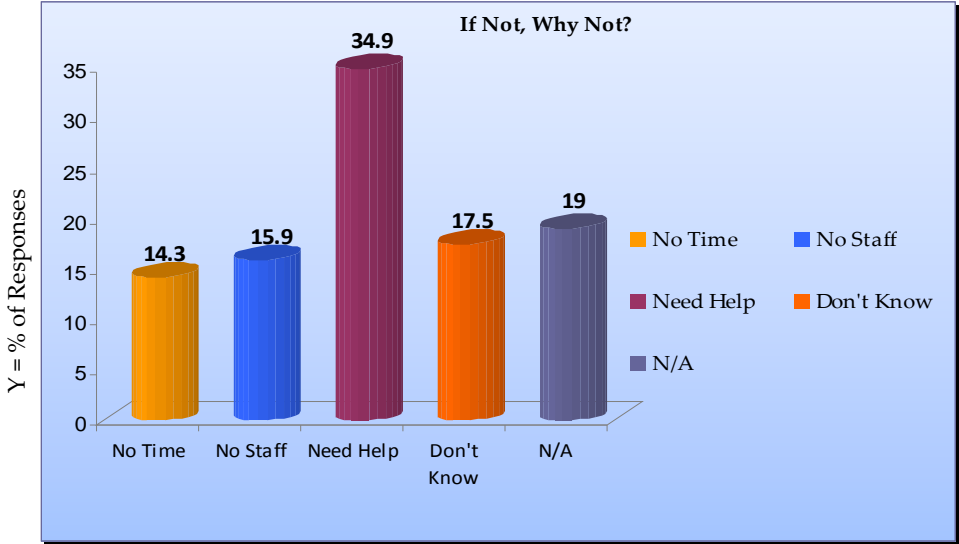


Figure 16. If not, why not?

4.2.3 When asked whether the company had conducted an assessment of risks and threats of disruption to its services, 33.3% had conducted the assessment and 48.6% had not. On the other hand, 12.5% say they are in the process (Figure 17).

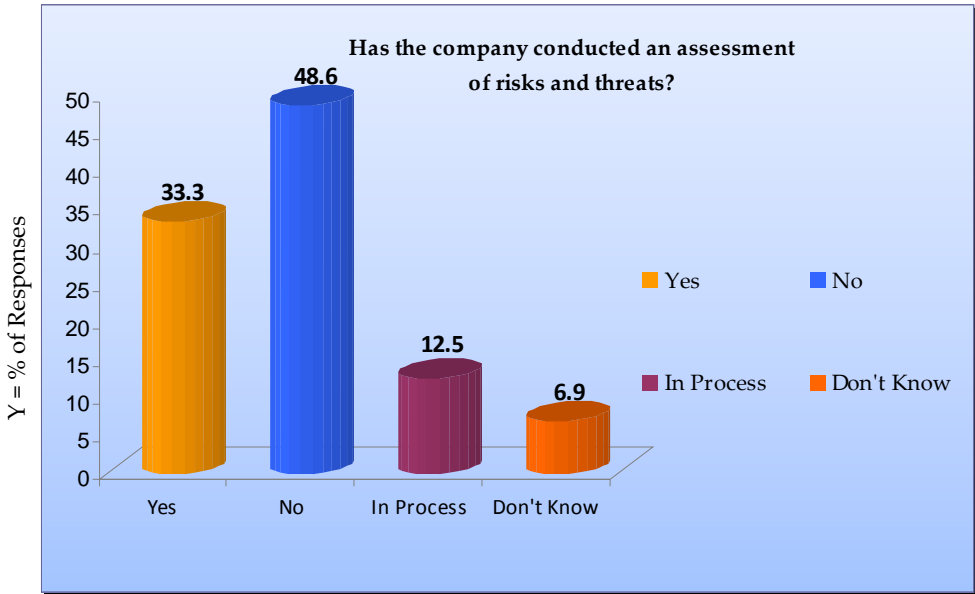


Figure 17. Has the company conducted an assessment of risks and threats?

4.2.4 73.2% of SDBs in the survey have business insurance.

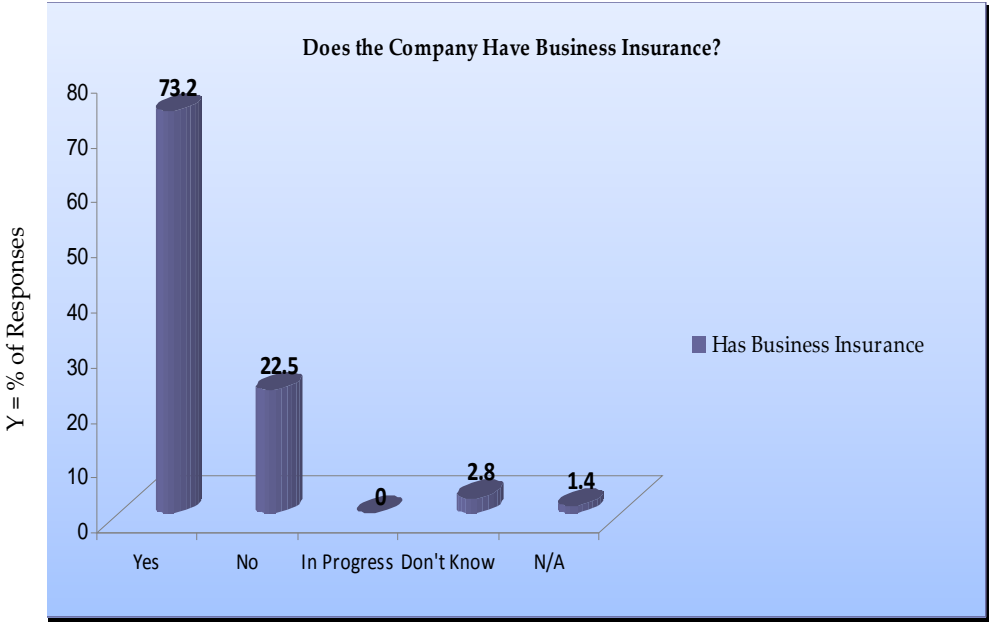


Figure 18. Does the company have business insurance?

4.2.5 When prime vendors were asked what information about their companies would better prepare SDBs to continue service/product delivery in the event of a disaster, 66.7% cited the disaster communication plan as the most valuable information (Table 11).

What Primes Say Would Help SDBs Continue Product Delivery to Them in the Event of an Emergency/Disaster	
Types of Information	Response Percent
Disaster communication plan	66.7%
Disaster procurement process / operations	58.3%
Alternate site delivery process	58.3%
Planned inventory levels	50.0%
Joint disaster planning / preparation activities	41.7%
Improved communication and information flow	41.7%
Order forecasting techniques	33.3%
Pre-established pricing contracts	33.3%
Computer systems integration	33.3%
Understanding contract management processes	16.7%

Table 11. What information about your organization would help SDB suppliers be better prepared to continue service/product delivery in the event of an emergency/disaster?

4.2.6 When asked what information received from prime/major vendors would assist them to continue product delivery in the event of an emergency/disaster, 45.8% of SDBs cited improved communication and information flow as most valuable information.

What SDBs Say Would Help Them Continue Product Delivery to Primes in the Event of an Emergency/Disaster	
Types of Information	Response Percent
Improved communication and information flow	45.8%
Online data back-up and recovery	41.7%
Disaster communication plan	39.6%
Computer systems integration	37.5%
Alternate site delivery process	35.4%
Disaster procurement process / operations	25.0%
Understanding contract management processes	22.9%
Joint disaster planning / preparation activities	14.6%
Pre-established pricing contracts	14.6%
Planned inventory levels	14.6%
Order forecasting techniques	9.4%

Table 12. What information from prime vendor customers would assist your ability to deliver service in an emergency/disaster?

4.2.7 The prime vendors were asked to list their greatest risks with SDB suppliers' ability to provide product/services in the event of a disaster. The majority rated sustainability and adequate staff (71.4%) as the greatest risk factors (Table 13).

Greatest Risks with MBE/WBE Suppliers to Provide Products/Services in the Event of Disaster	
Risks	Response Percent
Sustainability	71.4%
Adequate staff	71.4%
Adequate inventories	50.0%
Response time	50.0%
Disaster planning / training	35.7%
Communication / information flow	35.7%
Supplier location	28.6%
Lack of technology	21.4%

Table 13. What are your greatest risks with SDB suppliers' ability to provide products/services in the event of a disaster?

4.2.8 Table 14 indicates that while primes and SDBs understand what would improve SDBs reliability and the concerns held by primes, they do not generally coordinate to address these perceived risks. Almost 67% of primes and 60% of SDBs do not communicate around disaster preparedness.

SDBs and Primes Coordination on BCP		
Response	Percent of SDBs	Percent of Primes
Yes	13.6	11.1
No	60.3	66.7
In Progress	5.9	0.0
Don't Know	11.8	16.7
N/A	8.8	11.1

Table 14. Do you coordinate with your prime customers/SDB suppliers around BCP?

4.2.9 Table 15 indicates that SDBs and Prime Vendors were generally not aware of the preparedness of their suppliers.

Awareness of Suppliers' BCP		
Response	Percent of SDBs	Percent of Primes
Yes	20.8	0.0
No	19.4	16.7
In Progress	2.8	5.6
Don't Know	43.1	77.8
N/A	15.3	5.6

Table 15. Do your suppliers have a BCP in place to continue to supply you in the event of an emergency/disaster?

4.2.10 Results from both Memphis and Nashville indicate an alarming gap between prime vendor coordination with local government/EMA and SDBs coordination.

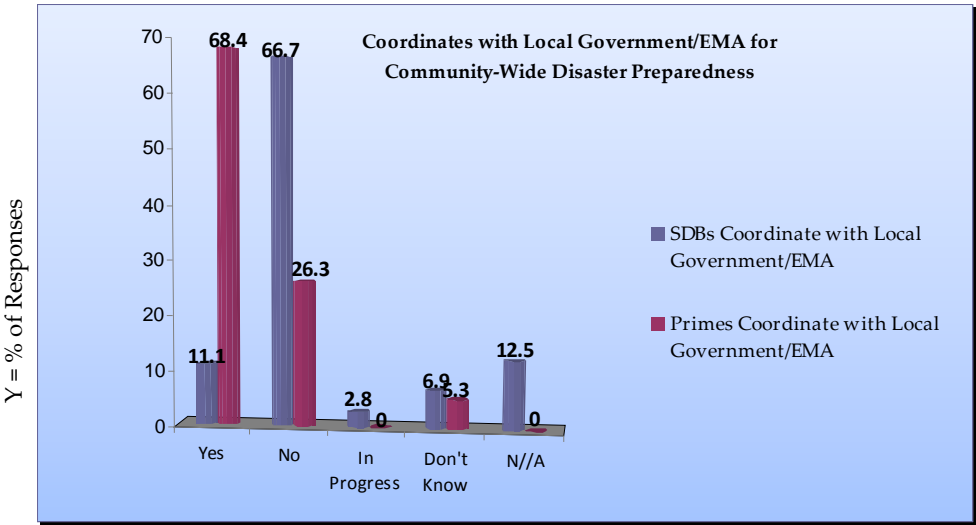


Figure 19. Does the company coordinate with local government/EMA in preparation for community-wide disaster preparedness?

4.2.11 SDBs receive considerably less information from local government or local EMA than do their prime vendor customers, as reflected in Figure 20.

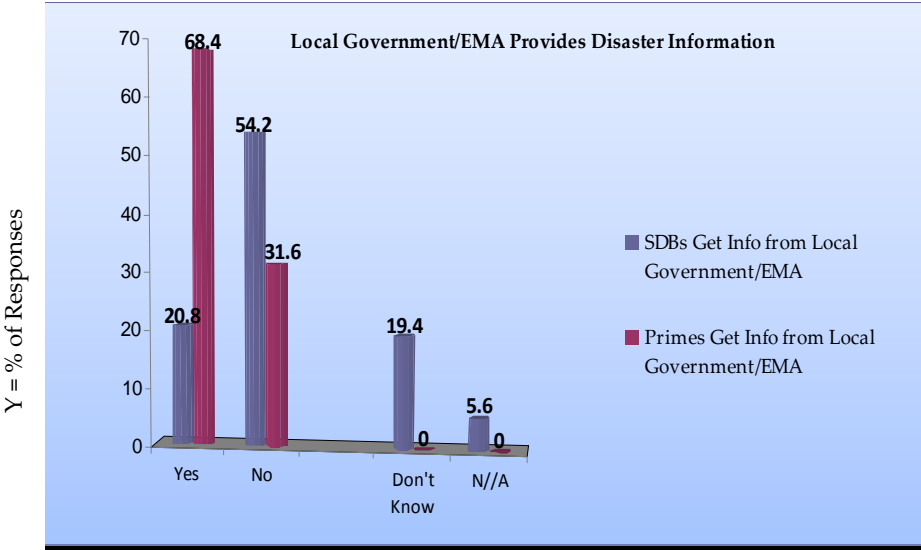


Figure 20. Does local government or EMA provide disaster information to organization?

4.2.12 54.2% of SDBs do not have an evacuation plan and 50.0% do not have an alternate site to recover operations in the event of a business disruption.

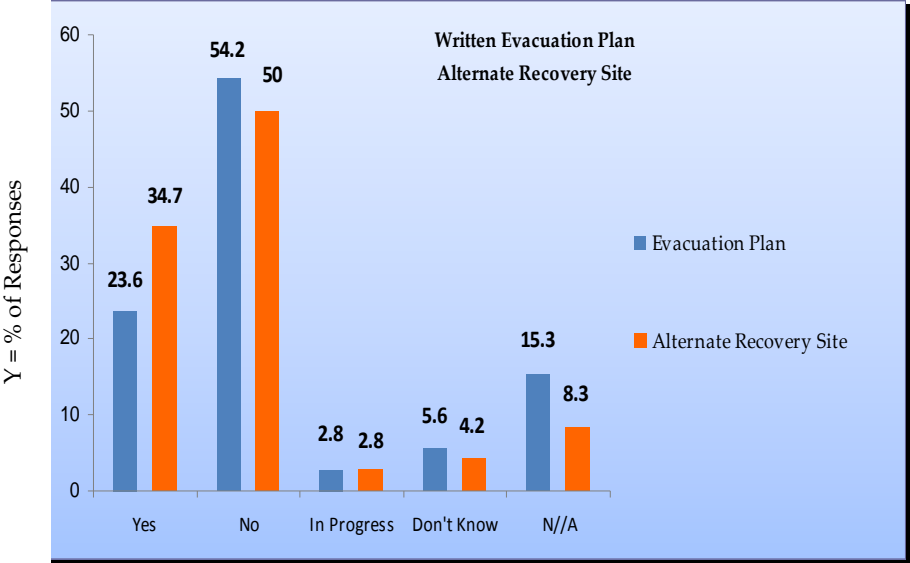


Figure 21. Does the company have an evacuation plan and an alternate recovery site?

5. BEST PRACTICES AND MITIGATION STRATEGIES

One area of interest is to better understand the critical success factors necessary for small disadvantaged, minority-owned, and women-owned business enterprises (SDBs) to become more resilient in the aftermath of an emergency or disaster. The goal is to develop recommendations of best practices for BCP most appropriate, applicable, and effective for implementation by SDBs. The literature also suggests that SDB actions alone may not be sufficient to be most effective and produce the type of mitigation strategies that foster recovery and resilience.

Not many people have focused their attention on why businesses fail or succeed following natural disasters (Alesch, 2001). According to Alesch, conventional wisdom suggests that failure is a function of direct and indirect losses, so most advice to small businesses



Project Kick-off Meeting at LeMoyne-Owen College

and not-for-profit organizations has focused on strengthening buildings against the hazard and buying adequate insurance. We have been convinced, based on what little prior research that exists, that the reasons for failure or recovery are much more complex than damage suffered from the event. Marginalized victims of disasters are in much more need of federal financial assistance as they are often uninsured and without significant financial reserves. Yet peculiarly, government aid programs are more likely to be successfully accessed by middle and upper class victims. Minority populations are often ineligible for SBA loans and unsuccessful obtaining other federal grant funding from FEMA (Seidenberg, 2006). She urged that creating or building greater cultural competence within structural reforms or best practices integration, contributes to resilience of SDBs and the communities they support.

The following recommendations resulted from a review of the literature, and from workshops conducted with respondents in Memphis and Nashville. Attendees discussed results of the survey, their current practices, identified areas in which assistance would be helpful, and identified gaps in their current state of preparedness and where it needs to be. The workshops also included breakout groups in which SDBs and prime vendors brainstormed ideas to close the gaps revealed in the survey results.

SDB Mitigation Strategies

These mitigation strategies are directed toward companies with less than ten employees, as were the majority of the companies responding to our surveys and that attended the workshops. It is important to make this distinction, because much of the literature prescribes outsourcing or creating teams to handle activities after an unplanned business interruption.

These resources are not necessarily available to a small business — one with ten employees or fewer. However, these may be the companies most likely dissolved after a disaster. It is clear that there are steps that can be taken to mitigate a complete business failure. Most of the following strategies cost less than \$200 to implement.

1. Include key positions when you put together a Business Continuity Plan (BCP). Include employees knowledgeable about your equipment, hardware/software, payroll process, and vendors. There are several publications that provide guidelines and templates that help SDBs navigate the process. Two that are referenced in this report include: Ready.gov, and National Institute for Standards and Technology. Their website addresses are listed in Appendix C.
2. Establish procedures for succession of management during an emergency.
3. Also involve your suppliers, shippers, and others with whom you regularly do business.
4. The BCP should define management procedures and individual responsibilities.
5. Make sure those involved know what they are supposed to do. Employees should know where all the emergency exits are located. A safety coordinator could be appointed — someone who will take responsibility for making sure all the fire extinguishers work, planning safety drills, developing evacuation plans.
6. Implement redundant or alternative power sources, communication links, data back-up technologies, and data recovery methods. Information stored on paper and computer, should be copied and saved on both the hard drive and on backup drives at an offsite location away from the main business site, if possible.
7. Determine what production machinery, computers and other essential equipment is needed to keep your business open. Be ready for utility disruptions with a portable generator. Most businesses have just a few truly key functions or processes, but resources can be targeted more effectively by understanding what exact requirements are needed in those areas. You can approach this analysis by asking two types of questions: 1) Where is your business most vulnerable; and 2) What would be worst for your business? The table on the following page can help SDB owners walk through this analysis and begin the process of determining major areas of focus *if* and *how* the business is to survive a serious disruption.

On a scale of 1 to 5	Which are the mission critical activities? What is essential to the running of the business?	Are you prepared? On a scale of 1 to 5
	Is it the people you employ?	
	Is it the goods you sell?	
	Is it the services that you provide?	
	Your location?	
	One major client?	
	One especially good supplier?	
	Do you use specialist equipment which you must be able to use to function?	
	Do you have insurance if you cannot gain access to your equipment?	
	Do you have agreements in case you need to replace your equipment urgently?	
	Do you operate from specialist premises that are hard to replace?	
	Does your company rely on time-sensitive processes?	

8. Find escape routes from the business and establish meeting places. Make sure everyone understands the emergency plan before the storm hits or a fire strikes. Designate a contact person to communicate with other employees, customers and vendors.

9. Review your insurance coverage to make sure you understand what is not covered. Most policies don't cover flood damage. Disaster Recovery Journal (2010) had these recommendations to reduce the cost of insurance:
 - a. Present a sanitized version of your BCP to the insurance company.
 - b. Give special attention to the frequency of tests and the results, as well as any research that was produced regarding the likelihood of each risk.
 - c. Having an up-to-date BCP often qualifies the company for discounts and can be used in cost negotiations.

10. The National Flood Insurance Program provides coverage to property owners. Go to the NFIP Web site at www.floodsmart.gov for information on commercial insurance coverage.

11. Consider business interruption insurance. It covers operating expenses, like utilities, and compensates you for the income lost after a temporary closure. Meet with an insurance agent who understands the needs of your business. Business-interruption insurance—which replaces income lost when a business suffers downtime becomes of a covered peril—should be a consideration. Normal hazard insurance doesn't cover floods, so make sure you have the right kind of insurance. Make sure you know what your insurance does not cover.

12. Install fire detection and suppression systems.
13. Purchase and maintain adequate reserves of food, water, batteries, and medical supplies.
14. Meet with and share information with other businesses in your building or industrial complex. Are they doing something that you overlooked? Could you possibly rent space in their building or unit if yours was damaged?
15. Develop relationships with other companies to use their facilities in case a disaster makes your location unusable. The firms that survived and attained viability (Alesch 2001) within the new environment were those where the owner/operator adapted, consciously or unconsciously, to the new realities surrounding them.
16. Develop professional relationships with more than one company to use in case your primary contractor cannot service your needs. A disaster that shuts down a key supplier can be devastating to your business. As the business owner, you should ask yourself the following questions: Am I prepared to relocate temporarily? What would happen if my suppliers shut down? Do my employees know what to do in case of an emergency?
17. Create a contact list for existing critical business contractors and others you plan to use in an emergency. Keep this list with other important documents on file, in your emergency supply kit and at an off-site location.
18. Scrutinize your key vendors and make certain they have a business continuity plan in place. It is important to include opportunities in the assessment, such as spikes in transaction volumes, new acquisitions and mergers, or highly effective marketing campaigns.
19. Talk with first responders, emergency managers, community organizations, and utility providers. Ask them what you need to know to get your business up and running as soon as possible.

6. EXPANDING AWARENESS OF BCP AND ITS IMPACT ON COMMUNITY AND REGIONAL RESILIENCE

As we examined the resilience of SDBs, it was critical to avoid the tendency to view the economic resilience of SDBs in abstraction from social resilience factors. As such, a number of the following literature citations, observations, and recommendations integrate economic and social resilience.

- 6.1 Providing direct encouragement and incentives to SDBs to develop business continuity plans (BCPs) as part of their business plans would make it part of the process of “doing business.” Non-governmental organizations (NGOs) that support SDBs could implement programs to assist development of BCPs, or provide incentives tied to certification for plans meeting specific criteria:
 1. Training could include sample BCPs, manuals, leadership and employee training.
 2. Information about disaster planning and its benefit could be made available along with the application for a business license.

- 6.2 Business schools could design and deliver a course in BCP development. Business schools could:
 1. Conduct workshops for SDBs to develop the BCP framework. As a result of its participation in this pilot, LeMoyne-Owen College’s Business Development Institute will include a week-long module in its 10-week disadvantaged business development program, focused exclusively on BCP development. The module is described thusly: “In this module participants will learn why it is important for every business to have a coordinated Business Continuity/Disaster Plan. Officials from various Emergency Management Agencies (EMA), including the Office of Homeland Security and Shelby County Office of Preparedness, will be available to share their expertise on Business Continuity/Disaster Plans.”
 2. Offer practicum experiences to interns in support of SDBs specifically for BCP development in return for course credits or summer positions. According to Reardon (2008), with a modest amount of funding, DHS could create a small grants program, similar in size and scope to the U.S. Department of Housing and Urban Development’s former Community Outreach Partnership Program, to encourage campuses with relevant academic departments to establish or expand their disaster preparedness and recovery planning programs to introduce their students, faculty, and staff to principles of good practice in this rapidly expanding field; train an interdisciplinary core of campus faculty who, along with their students, could be

mobilized in the event of major disasters; and fund the travel and field-based volunteer expenses of students, faculty, and staff who participate in this emerging form of national service.*

3. Provide marketing support to position having a BCP as a competitive advantage. According to Bates (1989), serving a mixed-race clientele reduces the chance of business failure among African Americans due to the income base of the customers served. The problem, however, is that minority firms often have less access to white customers and more lucrative markets due to ethnically concentrated neighborhoods and white aversion to black businesses. Access to more lucrative markets is important to the development and formation of minority-owned businesses, in that revenues are likely higher for businesses that serve a mixed-race clientele.

6.3 SDBs need help with BCP certification. One way is through the Small Business Administration (SBA). The SBA could offer “credits” for BCP certification. Insight offered in FEMA’s Recommendations for an Effective National Mitigation Effort suggested that opportunities where a mitigation action actually produces more important non-disaster related benefits could also be sought. For instance, making mitigation-related land use decisions that *promote* economic opportunities or environmental benefits can be very effective.

1. SDBs having BCPs could be granted “credits” when bidding on SBA set-aside contracts.
2. Encourage bank loans to SDBs having plans that meet specific criteria.
3. Coordinate with FEMA PS-Prep accreditation program in formulating small business criteria.
4. Provide support for SDBs enrolled in the PS-Prep self-assessment process.
5. Work with the insurance industry to offer premium rate discounts for BCPs. Insurance industry representatives that participated in workshops in both Memphis and Nashville indicated that a premium discount of up to five percent is offered to companies with BCPs in place, **but only if the company informs the insurance agent of its existence**. This could be made a **standard industry discount**.

*Kenneth M. Reardon (University of Memphis), Marcel Ionescu-Heroiu (World Bank), and Andrew J. Rumbach (Cornell University) wrote the report appearing in *Cityscape: A Journal of Policy Development and Research*, which described how grassroots activists and community leaders representing poor and working class residents of New Orleans worked with planning students and faculty from three research universities to overcome racial, class, and cultural barriers to collaborate on a comprehensive Hurricane Katrina recovery plan for the Ninth Ward.

- 6.4 Encourage local EMAs and municipalities to:
1. Partner with SDBs and small businesses in a modified *Disaster Resistant Community* initiative. FEMA has initiated a comprehensive effort to help communities to improve emergency management. The Disaster Resistant Communities Program attempts to include large and small businesses in emergency planning and mitigation efforts in the community. The concept of “disaster resistance” is based on the ability to resist, rather than the ability to recover from misfortune, as “disaster resilience” connotes. The emphasis for SDBs should be *mitigation*, so as to be better able to recover.
 2. Engage SDBs in disaster preparedness, response and recovery. Improve communication, information and coordination with SDBs, including them in local planning activities and exercises.
 - a. Based on the Louisiana Business Emergency Operations Center (B-EOC), a public-private-academic partnership, SDB business associations can be engaged in education and training using the Emergency Operations Center (EOC).
 - b. The partnership could define education and training requirements, identify education and training gaps, and establish education performance metrics.
 - c. Skilled and knowledgeable SDB business association representatives can be trained in how to understand and “plug into” the EOC, undertake disaster resilience responsibilities, and increase emergency management capacity.
 3. There is an opportunity to build greater cultural competency within local government and emergency management agencies, as these agencies build relationships with small business associations and the community of SDBs.

In view of the absence of a “body of literature” addressing SDBs, a recent report Seidenberg (2006) found that charity representatives reported to the GAO that despite FEMA’s attempts to coordinate charity efforts, such “systems were not as important to coordination efforts as pre-existing relationships.” California’s Office of Emergency Services suggests that in addition to contracting with NGOs, government at all levels must involve them in pre-disaster planning, willingly take advice from local groups, and include them in disaster exercises. Jamie Campbell, Managing Attorney at Southeast Louisiana Legal Services, likewise urges from her Katrina experience the establishment of a “culture where community-based organizations are listened to,” and FEMA officials on the ground feel comfortable working with them as partners. In addition to formal contract relationships, FEMA and coordinating governments should network with community leaders and neighborhood organizations in order to facilitate cooperation in an emergency, but more importantly, to develop cultural competency. Cultural competence training programs work particularly well when they are provided in collaboration with community-based groups that offer expertise or technical assistance in cultural competence or in the needs of a particular culture. Involving such groups not only

enables program staff to gain first-hand knowledge of various cultures, but also opens up the door for long-term partnerships.

4. Investigate ways that existing programs can be enhanced to include information relevant to emergency planning for SDBs, such as risk assessments, on-site Community Emergency Response Team (CERT) training, etc.
5. Conduct workshops with SDBs and agencies critical to mitigation, preparation and recovery. Key questions and topics that could be addressed could include:
 - a. How will your organization's operation be impacted indirectly by a natural or chemical disaster? Could you be inundated with requests for services or products? Could you make plans for expanding your services or products in a disaster? Would your resources (suppliers), customers, or clients be adversely impacted by a disaster? Does your business continuity plan include strategies to address these issues?
 - b. The initial losses experienced by a small business or not-for-profit organization depend on four factors (Petak and Atkisson, 1982). The first of these is **Exposure**. Exposure is the extent to which an organization's assets are subject to experiencing the effects of a natural hazard event. The second factor affecting the amount of initial losses to a natural hazard event is **Vulnerability**. Vulnerability is the extent to which a building or other structure, equipment, and inventory are subject to damage from an event of a given size. The third factor affecting direct and immediate loss to the organization is the **Intensity and Duration of the Event**. The fourth factor to consider is the **Amount of Warning Time** the owner/operator has to prepare for the event.

Cutter (2006) argues that socially created vulnerabilities are less studied by hazards research because they are inherently difficult to measure [*and address*]. So when Rose (2004) defines economic resilience as the inherent and adaptive responses to hazards that enable individuals and communities to avoid some potential losses, if socially created vulnerabilities are inherently more difficult to address, then what is the most appropriate structural level at which they are addressed? Chang and Shinozuka (2004) are among the first to point out that the analysis of community resilience to catastrophes must look beyond monetary losses and look at the complex multidimensional fabric of technical, organizational, social, and economic factors.

7. SUMMARY

It is beyond the scope of this report to describe the overall process that will lead to a comprehensive business continuity plan for SDBs, given that the structure of such a plan depends on local contexts. However, on the basis of the reviewed literature, it is recommended that an emergency/disaster recovery plan include a sequence of mitigation, planning and preparedness, and response and recovery activities (Brudney and Gazley (2009).

To this end, Brendan Read said it best: “Not enough businesses are looking at their plans as living, breathing documents that can save lives, reduce injuries, and protect properties and investment and enable businesses to survive.”

In this pilot, an alarming 65% of SDBs admittedly do not have Business Continuity Plans in place. The most often cited reason is the need for help and the lack of staff. Nearly 50% have not conducted an assessment of risks and threats associated with a business disruption, while only 24% have an evacuation plan. However, nearly 70% of the businesses have a method for notifying employees concerning work status during and after an emergency/disaster.

A more positive 73% of participants in the survey maintain business insurance. How would conducting a risks and threats assessment impact the amount and type of insurance carried by these businesses?

Coordination efforts with local government in preparation for a community-wide disaster are less than sufficient. SDBs appear out of the communication and coordination loop in terms of receiving information from local government or emergency management agency.

While prime vendors and SDBs understand what would improve SDB reliability in the event of a business disruption or disaster, they do not communicate with each other; they do not coordinate around BCP, and are not even aware whether their suppliers have a plan in place. How does this lack of coordination and joint planning impact the long-term viability of the SDBs and the supply chain of these prime vendors?

The pilot highlights the need for improved planning and preparation for disasters of various types, sizes, and proximities. Hanson (2007) further complicates this process by suggesting that a new disaster recovery plan be developed after each emergency event and should include lessons learned from implementing the previous plan.

7.1 Moving to a “Push-Pull” Methodology

Federal, state, local and tribal efforts to encourage, mandate or fund mitigation actions are important and necessary. However, when the targeted recipients of these messages – small, disadvantaged and women-owned businesses – are not treated as full and complete partners, many choose not to act, resulting in wasted federal and state actions.

This “push” methodology by federal and state government needs to be combined with or shifted to a “pull” approach, initiated by the targets of the messaging and funding that result in implementing critical preventive, protective and resilient measures. If the SDBs for which the mitigation activities are targeted actually create the *demand side* of the investment equation, then an environment of *satisfying* mitigation needs would be created, rather than a top-down attitude of dictation and enforcement.

7.2 Investing in Mitigation for SDBs

Cutter (2008) addressed barriers to resilience planning in CARRI Research Report 1. There are three primary constraints in planning for resilience identified in the literature. These include state and federal barriers to planning in general, flawed and reactive federal policies towards hazards and development, and a crisis of commitment among governments at all levels (Berke and Campanella 2006). For example, only half of the states in the United States even mentioned natural hazards and disaster loss reduction in local comprehensive plans (Schwab 1998) prior to the passage of the Disaster Mitigation Act of 2000. Moreover, only 11 states mandate pre-disaster or post-disaster assessments as an element in a comprehensive plan or in the form of hazards-related content within the plan. Planning as a means of creating disaster resilience is therefore nonexistent in many places.

In view of that assessment of state and national planning efforts, is there any wonder that heretofore, no focus at all has been placed on mitigation efforts for SDBs.

This report is added to that of a NEMA, FEMA 2009 report which stated mitigation is not an isolated or unique activity for any single level of government, private-sector, or funding source. Mitigation is a pervasive activity that needs to include the broadest range of participants, making widely available the most current and accurate hazard identification information. Mitigation should be demand-driven from the communities where it makes the most difference. It is in the interest of decision-makers at the higher levels of government to use their dollars to *promote and incentivize* [emphasis added] a comprehensive and systematic approach for mitigation to be implemented at the local community level. Although the benefits of mitigation are clearly proven and supported by research and experience, more effective communication and articulation of these values is necessary to convince policy makers and the public that mitigation efforts are worth the investment.

Responses to the surveys and workshops in this pilot revealed that at least 70% of SDBs admittedly do not engage in BCP practices or risk assessments. More longitudinal studies to develop, analyze and build a repository of best practices for SDBs would increase the strategies and resources available to this group.

In its longitudinal study, *Organizations at Risk: What Happens When Small Businesses and Not-for-Profits Encounter Natural Disaster*, Alesch et al concluded that the extent to which businesses become viable in the disaster aftermath depends on:

- The extent to which they can recover assets lost in the extreme event;
- The extent of adverse effects of the event on their customers and suppliers; and
- Their ability to adapt quickly and appropriately to the new realities of the post-event environment.

When the small business owner/operator is able to make a match between the resources needed and the resources available to reopen following the event, small businesses have a good chance to recover, other things being equal. In short, the business owners who become viable in the new context do so because they take precautions ahead of time and they respond quickly and appropriately to changes in the community, suppliers, and their markets.

8. REFERENCES

- Adkins, Gabriel L., Thornton, Tyler J. and Blake, Kevin, *A Content Analysis Investigating Relationships between Communication and Business Continuity Planning*, University of Oklahoma, 2009.
- Aker, J. (2008). Survey Says: 42 Percent of Small Businesses Lack Disaster Plans. *Buildings*, 102(11). p. 18.
- Alesch, Daniel J., *Organizations at Risk: What Happens When Small Businesses and Not-for-Profits Encounter Natural Disaster*. Public Entity Risk Institute, Oct. 2001.
- Andrews, Donald R., Andrew Muhammad, Ashagre Yigletu, and Albert Clark, *Disaster and Black Business Development: Recovering from Katrina*. 2006, p. 11.
- Baker, T. (2009). When disaster strikes, Part 3: Your preparedness plan. *American Agent & Broker*, 81(6). p. 16.
- Brudney, J. (2009). Planning to be Prepared: An Empirical Examination of the Role of Voluntary Organizations in County Government Emergency. *Public Performance and Management Review*, 32(3), p. 372.
- Castillo, C. (2004). Disaster preparedness and business continuity planning at Boeing: An integrated model. *Journal of Facilities Management*, 3(1), p. 8.
- Chang, Stephanie E. and Masanobu Shinozuka, "Measuring Improvements in the Disaster Resilience of Communities," *Earthquake Spectra* (20-3, 2004), pp. 739-755.
- Clas, E. (2008). Business Continuity Plans: Key to Being Prepared for Disaster. *Professional Safety*, p. 45.
- Cutter, Susan L., "The Geography of Social Vulnerability: Race, Class, and Catastrophe," (<http://understandingkatrina.ssrc.org/Cutter>, 2006). Accessed June 18, 2008.
- DMG Consulting (2008). News Analysis: Contact Centers Unprepared for Disasters, Disruptions. *Customer Interaction Solutions*, 27(6), p. 32.
- Hanson, A. (2007). A Response to 9-11: Critical Elements of a Crisis Response Plan. *Business Renaissance Quarterly*, 2(1), p. 47.
- Hewlett Packard (2007). Survey: Business continuity and availability solutions a high priority for corporate spending in 2007 (Press release). Retrieved from <http://www.hp.com/hpinfo/newsroom/press/2007/070326a.html>
- Louisiana Business-Emergency Operations Center, Stephenson Disaster Management Institute at Louisiana State University.
- National Emergency Management Association, FEMA, *Recommendations for an Effective National Mitigation Effort Report* (p.9)
- Pine, John, Associate Professor, Institute for Environmental Studies and the Management Department, LSU. *Looking Beyond the Obvious Risk: How Small Localities, Businesses and Non-profit Organizations can Assess and Manage the Ripple Effects of Disasters*. Public Entity Risk Institute, 2004.
- Pitcher, Eric, *Disaster Recovery Journal* (Winter 2010), *Profiting from a Business Continuity Plan*. 23(1) p. 28.

- Reardon, Kenneth M., Marcel Ionescu-Heroiu, Andrew J. Rumbach (2008). Equity Planning in Post-Hurricane Katrina New Orleans: Lessons From the Ninth Ward, *Cityscape: A Journal of Policy Development and Research*. 10(3), p. 72.
- Rike, B. (2003). Prepared or not that is the vital question. *Information Management Journal*, 37(3), p. 25.
- Rose, Adam, "Defining and Measuring Economic Resilience to Disasters," *Disaster and Prevention Management*, (13, 2004), p.307-14.
- Seidenberg, Jennifer, *Cultural Competency in Disaster Recovery: Lessons Learned from the Hurricane Katrina Experience for Better Serving Marginalized Communities* (01-2006, pg. 24)

APPENDIX A. SDB SURVEY QUESTIONNAIRE

APPENDIX A. SDB SURVEY QUESTIONNAIRE

Welcome to BCP MWBE Survey

About Your Company

1. Does the company have a written Emergency/Disaster Recovery Plan?

Yes No In Progress Don't Know

2. If not, why not? (Check all that apply.)

No Time No Staff Need Help Don't Know N/A

3. Has the company conducted an assessment of risks and threats of disruption to its services?

Yes No In Progress Don't Know

4. Which business functions would be most affected and which least affected by an unexpected emergency or weather event? (Rate all functions.)

	Most	Least
Customer Service/Sales	<input type="radio"/>	<input type="radio"/>
Supplies/Inventories	<input type="radio"/>	<input type="radio"/>
Computers/Networks	<input type="radio"/>	<input type="radio"/>
Software Applications	<input type="radio"/>	<input type="radio"/>
Records/Files/Data	<input type="radio"/>	<input type="radio"/>
Equipment	<input type="radio"/>	<input type="radio"/>
Facility/Building	<input type="radio"/>	<input type="radio"/>
Design & Development	<input type="radio"/>	<input type="radio"/>
Product Delivery	<input type="radio"/>	<input type="radio"/>
Marketing Ability	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="text"/>	

5. Has the company identified equipment, hardware and software critical to recover the business and all of its functions?

Yes No In Progress Don't Know

6. Does the company have business insurance?

Yes No In Progress Don't Know N/A

7. Does the company maintain an emergency contact list of all its suppliers?

Yes No In Progress Don't Know N/A

Welcome to BCP MWBE Survey

8. Do your suppliers have a plan in place to continue to supply you if they experience a disaster?

- Yes No In Progress Don't Know N/A

9. Does the company maintain a list of alternate suppliers?

- Yes No In Progress Don't Know N/A

10. Does the company have a method of notifying employees concerning work status during and after an emergency/disaster?

- Yes No In Progress Don't Know N/A

11. Does the company have a written evacuation plan?

- Yes No In Progress Don't Know N/A

12. Does the company have an "alternate site" for recovery operations?

- Yes No In Progress Don't Know N/A

13. Does the company coordinate with local government in preparation for community-wide disaster preparedness?

- Yes No In Progress Don't Know N/A

14. Does local government or the emergency management agency provide disaster information to your company?

- Yes No Don't Know N/A

About Your Major/Prime Vendor Customers

15. What industry segment(s) do you serve? (Check all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> Government (local, state, federal) | <input type="checkbox"/> Transportation/Logistics/Delivery |
| <input type="checkbox"/> Banking | <input type="checkbox"/> Retail |
| <input type="checkbox"/> Commercial/Industrial | <input type="checkbox"/> Wholesale |
| <input type="checkbox"/> Construction | |
| <input type="checkbox"/> Other (please specify) | |

Welcome to BCP MWBE Survey

**16. What principle products/services do you supply to your customers?
(Check all that apply.)**

<input type="checkbox"/> Accommodation and Food Services	<input type="checkbox"/> Janitorial
<input type="checkbox"/> Accounting Services	<input type="checkbox"/> Chemical Products/Supplies
<input type="checkbox"/> Advertising & Public Relations	<input type="checkbox"/> Information Technology
<input type="checkbox"/> Architectural & Engineering	<input type="checkbox"/> Legal Services
<input type="checkbox"/> Beverage Manufacturing	<input type="checkbox"/> Management and Technical Services
<input type="checkbox"/> Construction	<input type="checkbox"/> Publishing and Broadcasting
<input type="checkbox"/> Civil Engineering	<input type="checkbox"/> Real Estate
<input type="checkbox"/> Education Services	<input type="checkbox"/> Retail Trade
<input type="checkbox"/> Electrical Contracting	<input type="checkbox"/> Staffing
<input type="checkbox"/> Food Manufacturing	<input type="checkbox"/> Transportation and Warehousing
<input type="checkbox"/> Healthcare and Social Assistance	<input type="checkbox"/> Waste Management & Remediation
<input type="checkbox"/> HVAC	<input type="checkbox"/> Wholesale Trade
<input type="checkbox"/> Other (please specify)	

17. At which supplier level do you primarily provide services to your customers?

Prime Contractor/Tier 1 Subcontractor/Tier 2 Sub-subcontractor/Tier 3

Other (please specify)

18. Do you coordinate with your major/prime vendor customers on emergency operations/disaster preparedness?

Yes No In Progress Don't Know N/A

BCP MWBE SURVEY_LOCCDC

19. What information from your prime/major customers would assist your ability to continue product delivery to them in the event of an emergency/disaster? (Check all that apply.)

- Order forecasting techniques
- Planned inventory levels
- Computer systems integration
- Improved communication and information flow
- Understanding contract management processes
- Alternate site delivery process
- Other (please specify)
- Online data back-up and recovery
- Disaster communication plan
- Joint disaster planning/preparation activities
- Disaster procurement process/operations
- Pre-established pricing contracts

20. Would you attend a free follow-up workshop with other MBE/WBEs and prime vendors to share these survey results and identify disaster planning strategies?

- Yes
- No

If No, would you tell us why not?

Company Demographics

21. Business Category:

- MBE
- WBE
- SDB
- SOHO

22. Business Structure:

- Corporation
- Partnership
- Sole Proprietorship
- LLC

23. Employees:

- 0 - 10
- 11 - 20
- 21- 50
- 51 - 100

24. Avg. Revenue:

- \$0 - \$99K
- \$100K - \$249K
- \$250K - \$499K
- \$500K - \$999K
- \$1.0M - \$2.9M

APPENDIX B. PRIME VENDOR SURVEY QUESTIONNAIRE

APPENDIX B. PRIME VENDOR SURVEY QUESTIONNAIRE

Welcome to Prime Vendor BCP Survey

About Your Organization

1. What industry segment(s) do you serve? (Check all that apply.)

Government (local, state, federal) Transportation

Banking Retail

Commercial/Industrial Wholesale

Construction

Other (please specify)

2. Does the Company have a written Disaster Recovery or Business Continuity Plan (BCP)?

Yes No In Progress Don't Know

3. If not, why not? (Check all that apply.)

No Time No Staff Need Help Don't Know N/A

4. Which business functions would be most affected and which least affected by an unexpected emergency or weather event? (Rate all functions.)

	Most	Least
Customer Service	<input type="radio"/>	<input type="radio"/>
Sales	<input type="radio"/>	<input type="radio"/>
Suppliers/Inventory	<input type="radio"/>	<input type="radio"/>
Workstations/Network	<input type="radio"/>	<input type="radio"/>
Software Applications	<input type="radio"/>	<input type="radio"/>
Records/Files/Data	<input type="radio"/>	<input type="radio"/>
Facilities	<input type="radio"/>	<input type="radio"/>
Design & Development	<input type="radio"/>	<input type="radio"/>
Distribution/Logistics	<input type="radio"/>	<input type="radio"/>
Marketing	<input type="radio"/>	<input type="radio"/>
Other (please specify)		

Welcome to Prime Vendor BCP Survey

5. Does the company have a method of notifying employees concerning work status during and after a disaster?

- Yes No In Progress Don't Know N/A

6. Does the organization have an alternate site for recovery operations?

- Yes No Don't Know

7. Does the organization coordinate with local government in preparation for community-wide disaster preparedness and recovery?

- Yes No Don't Know

8. Does local government or the emergency management agency provide disaster information to your organization?

- Yes No Don't Know

About Your MBE/WBE Suppliers

9. Does the organization maintain an emergency contact list for all its MBE/WBE suppliers?

- Yes No In Progress Don't Know N/A

If N/A, please explain

10. Do your MBE/WBE suppliers have a plan in place to continue to supply you if they experience an emergency/disaster?

- Yes No In Progress Don't Know N/A

If NA, please explain.

11. Does the organization maintain a list of alternate suppliers?

- Yes No In Progress Don't Know

Welcome to Prime Vendor BCP Survey

12. What principle products/services do your MBE/WBE suppliers provide? (Check all that apply.)

- Accommodation and Food Services
- Accounting Services
- Advertising & Public Relations
- Architectural & Engineering
- Beverage Manufacturing
- Construction
- Civil Engineering
- Education Services
- Electrical Contracting
- Food Manufacturing
- Healthcare and Social Assistance
- HVAC
- Other (please specify)
- Janitorial
- Chemical Products/Supplies
- Information Technology
- Legal Services
- Management and Technical Services
- Publishing and Broadcasting
- Real Estate
- Retail Trade
- Staffing
- Transportation and Warehousing
- Waste Management & Remediation
- Wholesale Trade

13. Does your company coordinate with your MBE/WBE suppliers on emergency/disaster preparedness?

- Yes
- No
- In Progress
- Don't Know
- If N/A, please explain

14. What are your greatest risks with MBE/WBE suppliers' ability to provide product/services in the event of a disaster? (Check all that apply.)

- Sustainability
- Adequate inventories
- Adequate staff
- Communication/Information flow
- Lack of technology
- Other (please specify)
- Transportation
- Disaster planning/training
- Pricing
- Response time
- Supplier location

15. What information about your organization would help MBE/WBE suppliers be better prepared to continue service/product delivery to you in the event of a disaster? (Check all that apply.)

- Order forecasting techniques
- Planned inventory levels
- Computer systems integration
- Improved communication and information flow
- Understanding contract management processes
- Alternate site delivery process
- Other (please specify)
- Disaster communication plan
- Joint disaster planning/preparation activities
- Disaster procurement process/operations
- Pre-established pricing contracts
- Supplier partnering

16. Would you attend a free follow-up workshop with other prime vendors and MBE/WBEs to share these survey results and identify disaster planning strategies?

- Yes
- No

If No, would you tell us why not?

Company Demographics

17. Business Type:

Corporation Partnership Limited Liability Corp. Public-Sector

18. Employees:

101 - 499 500 - 1000 1001 - 5000 5001 - 10,000 10,001+

19. Operations:

Local Regional National Global

20. Avg. Revenue:

\$5.0 Mil-\$10.0 Mil \$10.1 Mil-\$30.0 Mil \$30.1 Mil-\$100.0 Mil \$100.1 Mil-\$999 Mil \$1.0 Bil+

APPENDIX C. DISASTER PLANNING RESOURCES

DISASTER PLANNING RESOURCES

- Business Continuity Institute – www.thebci.org
- Contingency Planning (free, subscribe online) – www.contingencyplanning.com
- Contingency Planning and Management Magazine, Flemington, New Jersey: Witter Publishing Corporation. Available at www.contingencyplanning.com
- Disaster Resource Guide – www.disaster-resource.com
- Disaster Recovery Journal (free, subscribe online) – www.drj.com
- Disaster Recovery Journal, The St. Louis: Disaster Recovery Institute. Available at www.drj.com
- Global Portal for Business Risk and Continuity Planning – www.globalcontinuity.com
- Institute for Business and Home Safety (small business disaster planning toolkit) – www.ibhs.org/business_protection/
- Lewis, Steven, Disaster Recovery Yellow Pages, 12th Edition, Newton, MA: The Systems Audit Group, 2003.
- Read, B. (2009). Planning for Action. *Customer Interaction Solutions*, 28(5), p. 10.
- Small Business Administration - www.sba.gov/index.html
- <http://www.ready.gov/business/plan/planning.html>
- http://www.sba.gov/idc/groups/public/documents/sba_homepage/sba_dp_spot_tips.pdf
- <http://www.contingencyplan.com/>



Southeast Region Research Initiative

National Security Directorate

P.O. Box 6242

Oak Ridge National Laboratory

Oak Ridge, TN 37831-6252

www.serri.org

