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本特定研究プロジェクトの趣旨

専任研究員 近藤民代

2005年8月末に米国メキシコ湾岸を襲ったハリケーン・カトリーナ災害はルイジアナ州、ミシシッピ州などにおいて強風・降雨・高潮による死者約1700名、住宅被害約120万戸（ニューオリンズ市約18万戸）という甚大な物的被害をもたらした。昨年度末の2006年3月に人と防災未来センターで行ったカトリーナ調査（調査団：大野副センター長、永松伸吾、越山健治、近藤民代、近藤伸也、安富信、DRI 調査研究レポート vol.13 ハリケーン・カトリーナにおける米国地方行政の災害対応に関する研究を参照）は、地方政府の災害対応を時系列的にインタビューすると同時に、州ごとに設置される現地合同調整所（JFO）における連邦政府による支援と調整について明らかにした。本特定研究プロジェクトはそれを受けて、各専任研究員らがよりテーマを絞り込んで調査研究を実施している。

人と防災未来センターでは、設立以来、「地方自治体における効果的な災害対応とは」を探究してきた。平成18年度に実施した図上演習ではその理想的な災害対応モデル案を明確に打ち出し、それを実行できる人間の能力向上を目指した演習を実施している。このような「お手本」となるような効果的な災害対応の研究を進めるのと平行して、本特定研究プロジェクトは行われた。効果的な災害対応を進める上で、世界的なスタンダードとなっている Incident Command System を無視することはできない。DRI の図上演習の目的である①明確な対応方針をもつ、②状況認識の統一をする、③能動的な広報を実施する、はすべて ICS においてもその重要性が指摘されているルールである。

ハリケーン・カトリーナ災害は全米での標準的な危機対応システムである National Incident Management System(NIMS) への移行期間に発生した全米史上最大の経済被害を出した超巨大災害であり、そこで ICS がどのように機能したか、ICS 活用の実態とその適用の困難さなどの実態を明らかにし、わが国における効果的な災害対応の理論化、お手本づくりにつなげることができるのではないかと考えている。本特定研究プロジェクトは、基本的には各々の研究員の研究テーマで構成されるが、参加メンバー全員で米国の災害対応の仕組みや作法に対する共通の理解をもち、それに基づいた仮説を設定することによって同じ視点から各研究テーマに迫れた点は本特定研究プロジェクト大きな成果であったのではないかと感じている。

近藤民代専任研究員は、前回調査で複数の組織が連携して災害対応を行うときに、「組織の枠を超えて連携するためには目標に向かって全組織が動いた」という危機管理担当者の言葉に着目し、目標管理型の災害対応が日本における災害対応の問題点を解決するマネジメント手法として注目した。永松専任研究員は、過去2回の現地調査に基づいて災害対応と政治に着目して研究を実行した。事例のみにとどまるのではなく米国における ICS や災害対応に関する既存研究レビューを中心的に実行し、それを踏まえた災害対応と政治の理

論化に向けて取り組んだ。近藤伸也専任研究員は、前回調査において GIS を活用した災害対応やミシシッピ州ハンコック県において民間企業が行っていた情報支援に焦点をあて、今回の調査ではそれをより詳細にヒアリングして、災害対応業務を支援する一元的な情報システムについて考察を行っている。平山専任研究員は、専門である水道事業体の被害や災害対応、そしてセンターで実施してきた災害廃棄物の問題に迫った。これらは災害対応に関する研究であるが、今回は災害から 1 年 3 ヶ月経過していたことからニューオリンズ市の復興計画の策定状況とその内容に関しても調査を実施した。

なお、本特定研究プロジェクトを進めるにあたっては、Jopseph R. Matthews, Director Chief, Office of Emergency Preparedness, New Orleans Fire Department、Richard Winder, M.S.W., Director, Department of Human Services, City of New Orleans、Mr. Brian Hooty Adam, Director, Emergency Management Agency, Hancock County, MI, Mr. Crystal Gordon (Chris), Mr. Mac Allen, Ms. Carey, Mr. Joe, Mr. Brice Phillips, Broadcast Division Director, Hancock County Amateur Radio Association, Inc., Craig Harvey, CIO, Executive VP, NVision Solutions Inc., Joel Lawhead, Program Manager, NVision Solutions Inc., Brian Hooty Adam, Director, Emergency Management Agency, Hancock County, MI、Mr. Jason Higginbotham, Emergency Manager, Sewerage and Water Board of New Orleans, Mr. Jack Huerkamp, Sewerage and Water Board of New Orleans, Mr. Bob Moenian, Sewerage and Water Board of New Orleans, Mr. Gabe Signorelli, Sewerage and Water Borad of New Orleans、Dr. Mike D. McDaniel, Secretary, Dept. of Environmental Quality, State of Louisiana, Dr. Bijan Sharafkhani, Administrator, Office of Environmental Services, Dept. of Environmental Quality, State of Louisiana, Mr. Lenny M. Young, Administrator, Office of Environmental Services, Dept. of Environmental Quality, State of Louisiana、Concordia Architecture and Planning, Mr. Steven Bingler and Ms.Bobbie Hill、Dr. Marla Nelson, University of New Orleans には、ご多忙中にも関わらず、ヒアリング調査にご協力を頂いた。ここに記して、謝意を表す。

現地調査の日程

2006 年 12 月 10 日（日）～17 日（日）

12 月 11 日 （月）	被災地の現地視察 Lower 9th Ward,17th Canal Street 周辺の Lakeview 地区,London Ave. Canal 周辺
12 月 12 日 （火）	<ul style="list-style-type: none"> • ニューオリンズ市都市計画局：都市復興計画 • ニューオリンズ大学：都市復興計画 • ミシシッピ州 Biloxi, Waveland の被災地視察 • Association of Community Organizations for Reform Now , ACORN
12 月 13 日 （水）	<ul style="list-style-type: none"> • ミシシッピ州ハンコック郡危機管理部局（Hancock County Dept. of Homeland Security）：災害対応 • Office of Planning & Development, Donna A. Addkison 氏：経済復興
12 月 14 日 （木）	<ul style="list-style-type: none"> • Department of Human Services Richard A. Winder：ESF#6 に関するヒアリング • Sewerage and Water Board of New Orleans • New Orleans Office of Emergency Preparedness, Director Chief Joseph R. Matthews • Concordia Architecture and Planning, Steven Bingler and Bobbie Hill, coordinator for the New Orleans Unified Plan (UNOP)
12 月 15 日 （金）	<ul style="list-style-type: none"> • ハンコック郡民間企業 NVision • ミシシッピ州ハンコック郡危機管理部局 Hancock County Dept. of Homeland Security • ハンコック郡(ESF#2, ESF#6 担当者) • St. Bernard Parish, Department of Homeland Security • The Louisiana Department of Environmental Quality：水害廃棄物

ニューオリンズ市の復旧と被災地の現状

専任研究員 近藤民代

(1) ニューオリンズ市の復旧

第2章ではニューオリンズ市における復旧状況と2006年12月に行った被災地の調査に基づく被災地の様子を示す。復旧状況に関しては、THE BROOKINGS INSTITUTION による Katrina Index Tracking Variables of Post-Katrina Recovery (2006年10月) や Louisiana Recovery Authority が一年後にまとめた報告書(2006年8月)がある。これに加えて、Greater New Orleans Community Data Center ではオンライン上で被災地の復旧情報や地域のデータがまとめられており、復興にかかわるすべての主体によって非常に有益な情報サイトとなっている。カトリナ災害から1年半が経過したニューオリンズ市の今を知るために必要な情報を以下に掲載する。

◆ 死者および被害状況

IMPACT

- Over 1,100 lives lost
- Over 785,000 residents displaced
- Over 215,000 homes destroyed
- Over 835 schools damaged
- Over 40 schools destroyed
- Over 18,700 businesses destroyed
- Over 220,000 jobs lost
- Over 100 square miles of wetland destroyed by storm surge

LOSSES

- Temporary relief services..... \$15 to \$20 billion
- Property and infrastructure..... \$75 to 100 billion
- Economic losses..... \$50 to 70 billion
- Government revenue losses..... \$8 to 10 billion

出所) LOUISIANA RECOVERY AUTHORITY (LRA), 2006 Initial Quarterly Report

◆ 住宅被害戸数

Housing Unit Damage Estimates as of February 12, 2006*
Hurricanes Katrina, Rita, and Wilma - Total Housing Units with Damage

	Owner-Occupied Housing Units				Renter-Occupied Housing Units				TOTAL
	Insurance Status			Owner Subtotal	Type of Structure Unit Located			Renter Subtotal	
	Hazard & Flood	Hazard Only	No Insurance		Single Family	Multifamily (less than 10)	Multifamily (10 or more)		
Homes with flood damage									
Homes in FEMA 100 yr. fl plain									
Minor Damage	6,206	2,406	1,897	10,509	4,981	1,763	2,634	9,378	19,887
Major Damage	26,682	7,585	5,498	39,765	13,981	3,012	6,660	23,653	63,418
Severe/Destroyed	36,293	7,645	8,042	51,980	24,947	3,932	6,469	35,348	87,328
Subtotal	69,181	17,636	15,437	102,254	43,909	8,707	15,763	68,379	170,633
Homes outside 100 yr. fl plain									
Minor Damage	1,629	3,730	1,759	7,118	4,048	728	1,527	6,303	13,421
Major Damage	7,152	13,211	3,743	24,106	9,310	1,420	3,915	14,545	38,751
Severe/Destroyed	7,512	5,542	3,719	16,773	7,961	1,117	1,730	10,808	27,581
Subtotal	16,293	22,483	9,221	47,997	21,319	3,265	7,172	31,756	79,753
Homes with no flood damage (generally wind damage)									
Minor Damage	91,374	330,300	204,526	626,200	161,994	31,461	39,427	232,882	859,082
Major Damage	8,452	26,300	18,418	53,170	12,255	3,174	8,610	24,039	77,209
Severe/Destroyed	834	1,839	4,353	7,026	2,333	359	1,104	3,796	10,822
Subtotal	100,660	358,439	227,297	686,396	176,582	34,994	49,141	260,717	947,113
TOTAL	186,134	398,558	251,955	836,647	241,810	46,966	72,076	360,852	1,197,499

* See Methodology for explanation of how these damage estimates were calculated

◆ 被災者の避難先

Locations of Displaced Louisiana Citizens²

Out of State (Top 10 States)

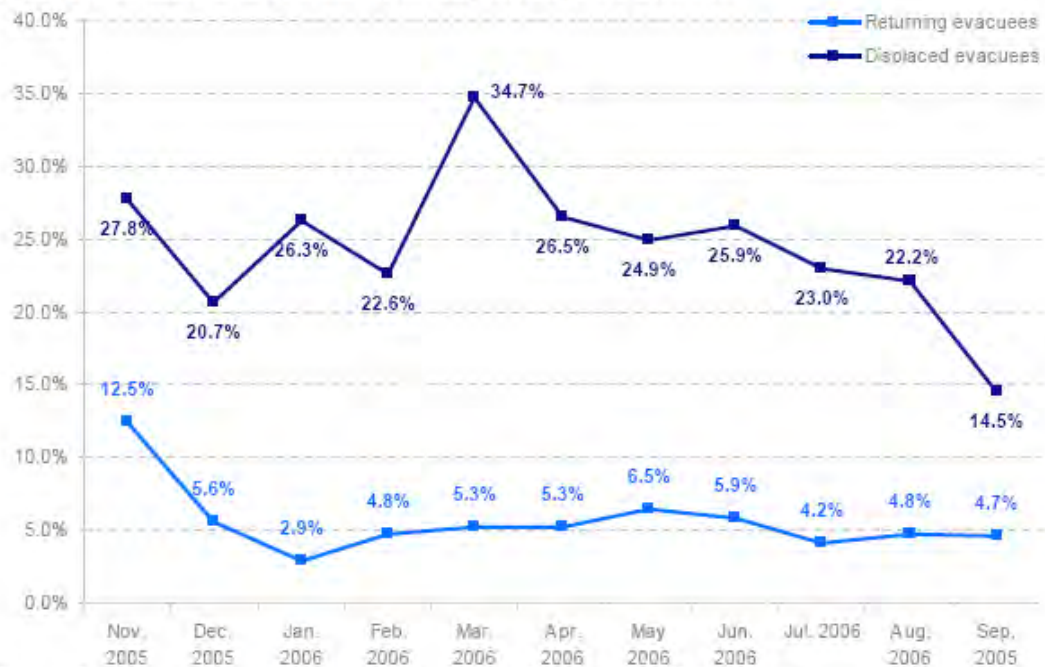
<u>State</u>	<u>Number</u>	<u>Percent</u>
Texas	90388	43%
Mississippi	18966	9%
Georgia	18229	9%
Florida	12393	6%
Alabama	9206	4%
Tennessee	7778	4%
California	7447	4%
Arkansas	6309	3%
North Carolina	3073	1%
Illinois	3057	1%

Currently there are approximately 210,000 FEMA applicants from Louisiana with out-of-state mailing addresses.

Louisiana Recovery Authority, HURRICANE KATRINA ANNIVERSARY DATA FOR LOUISIANA, 2006 年 8 月

◆ 被災者の失業率（市内と市外）

Figure 11. Unemployment Rates for Returning and Displaced Evacuees



Source: Brookings Institution analysis of data from the U.S. Bureau of Labor Statistics.

THE BROOKINGS INSTITUTION, Katrina Index Tracking Variables of Post-Katrina Recovery

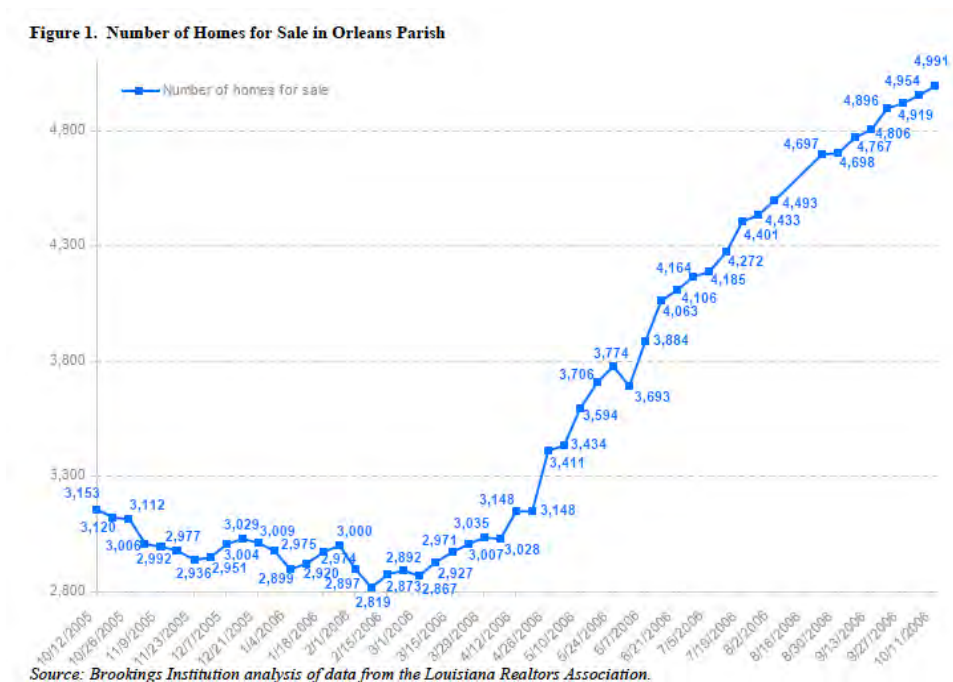
Updated October 11, 2006

◆ 住宅再建の状況

HOUSING				
Indicator	Statistic	As of	Geography	Source
Damage to homes				
Housing Units with major damage	98,000		Katrina/Rita	FEMA / HUD
Rental units	30,000			
Houses (owner occupied)	50,000			
Housing Units with severe damage	106,500		Katrina/Rita	FEMA / HUD
Rental units	43,000			
Houses (owner occupied)	63,500			
Total homes	204,500*		Katrina/Rita	FEMA / HUD
Rebuilding homes				
Road Home registrants	more than 101,000	August	statewide	LRA/OCD
Orleans parish	55,520			
Jefferson parish	12,252			
St. Bernard	14,779			
Plaquemines	3,664			
St. Tammany	6,875			
Calcasieu	1,968			
Cameron	1,040			

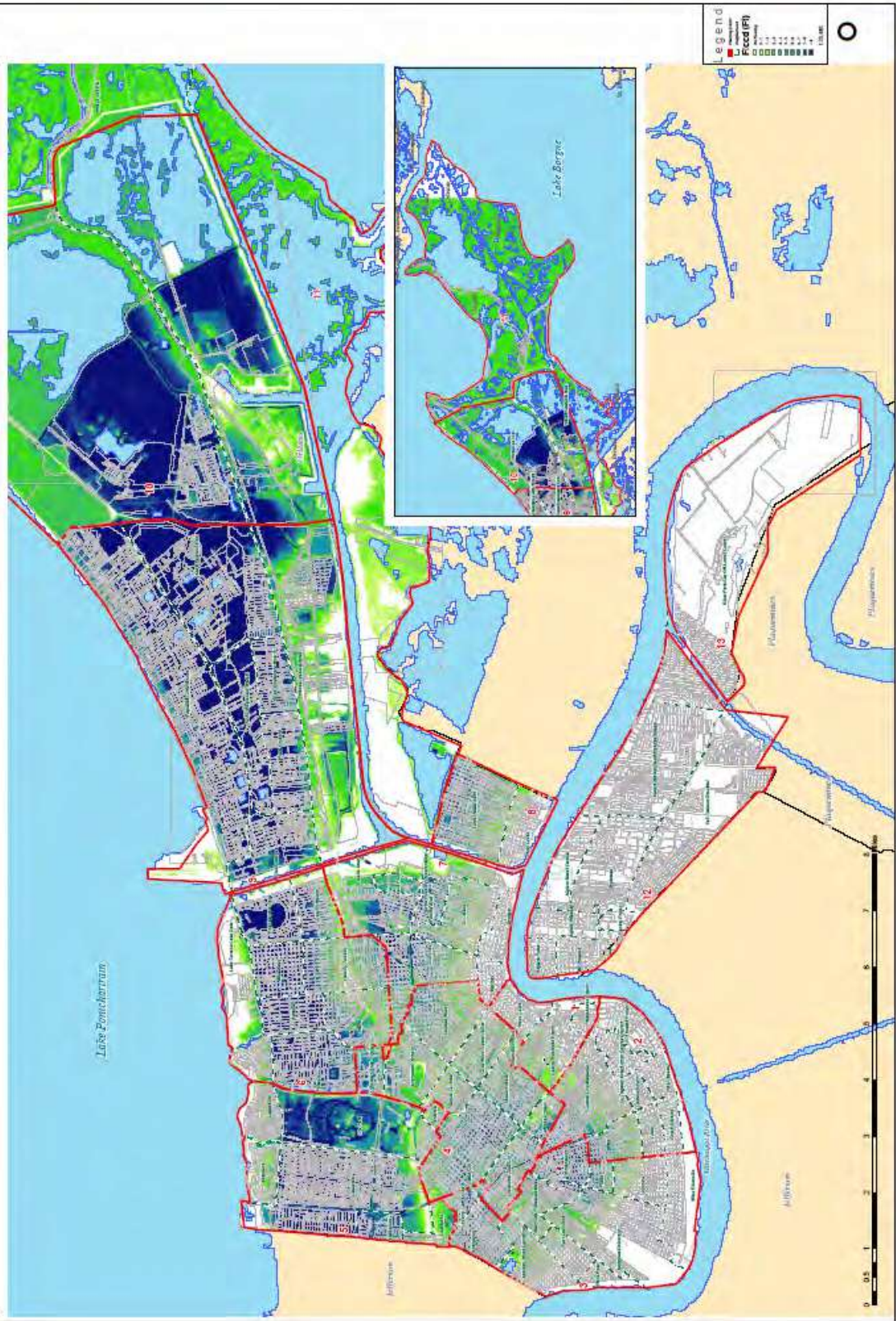
Louisiana Recovery Authority, HURRICANE KATRINA ANNIVERSARY DATA FOR LOUISIANA, 2006 年 8 月

◆ 住宅の売却戸数の推移



THE BROOKINGS INSTITUTION, Katrina Index Tracking Variables of Post-Katrina Recovery
Updated October 11, 2006

City of New Orleans Hurricane Katrina Flood Depth

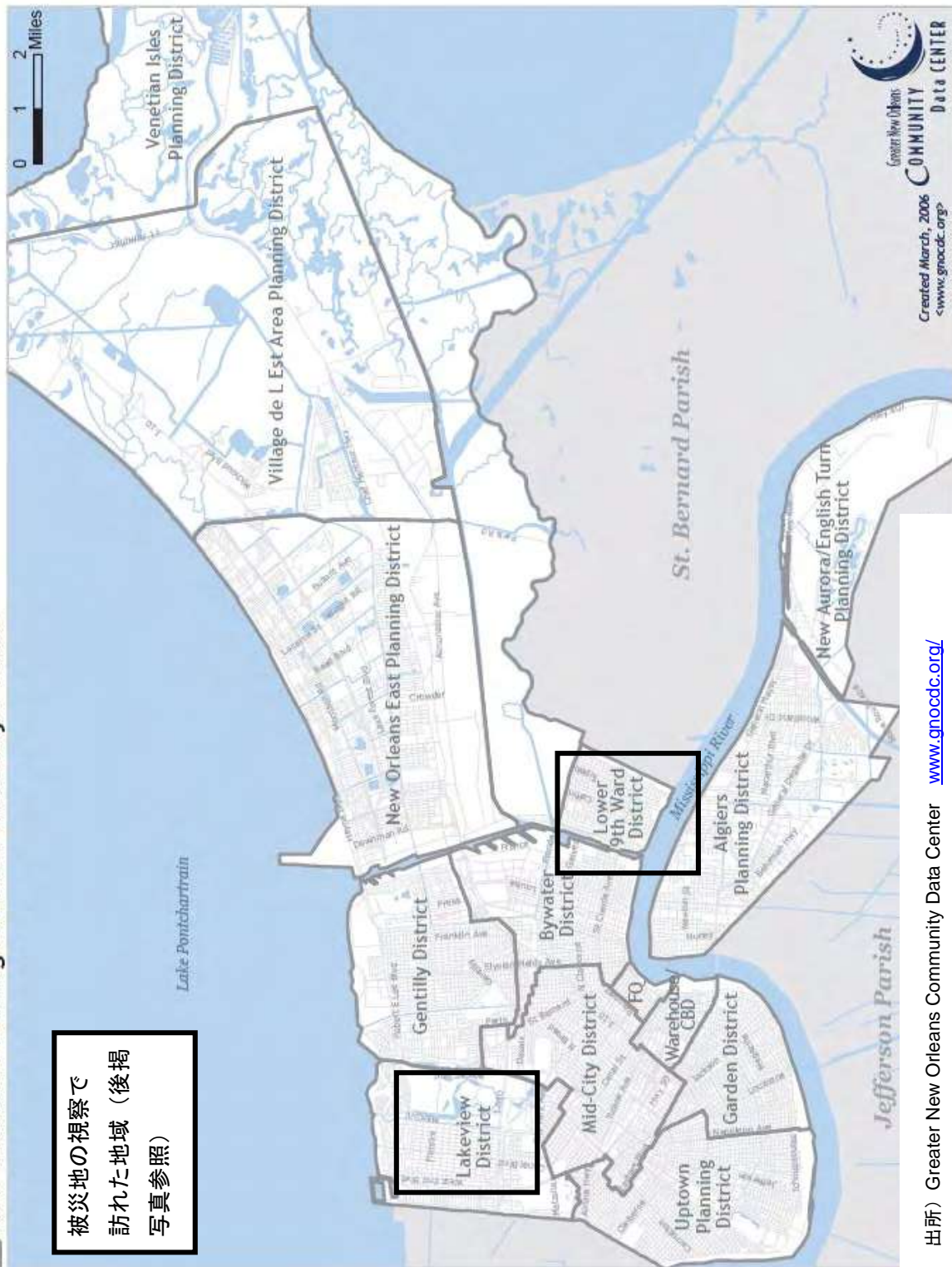


出所) City of New Orleans & GRC and Associates



出所) Action Plan for New Orleans: The New American City January 11, 2006 Bring New Orleans Back Commission Urban Planning Committee

□ New Orleans Planning Districts with major roads



出所) Greater New Orleans Community Data Center www.gnocdc.org/

HUMAN IMPACT

<u>Indicator</u>	<u>Statistic</u>	<u>As of</u>	<u>Geography</u>	<u>Source</u>
Total number of deaths	1,464 ¹	Initial	Katrina	DHH
Total number of citizens found alive	10,746	August 14, 2006	Katrina	DHH
Total number of citizens remaining missing	135	August 14, 2006	Katrina	DHH
People displaced	1.3 Million 900,000	Initial October 05	Katrina / Rita	Analysis of USPS change of address, ESRI & ERI, and FEMA IA
Number of occupied FEMA trailers	81,688	August 18, 2006	statewide	FEMA
<ul style="list-style-type: none"> Private sites Commercial sites Group sites Industrial sites 	65,443 5,635 7,348 3,262			

Population Estimates (As of July 2006)

	June 2005 Benchmark	July 2006	Estimated Loss
Orleans	455,000	230,000	225,000
Jefferson	453,000	450,000	3,000
Plaquemines	29,000	22,000	7,000
St. Bernard	65,000	19,000	46,000
St. Tammany	220,000	235,000	-15,000

5 Parish Total 1,222,000 956,000 266,000

Note: St. Tammany parish has an estimated gain in population from displaced residents in the southern parishes.
Source: GCR Inc., Census Bureau

¹ DHH has updated this number from 1,580 at the beginning of August.

EDUCATION

K-12 Schools Open (statewide)

Pre-Katrina: 1,484 As of August 2006: 1,409

Total Reported K-12 Students (statewide)

UTILITIES AND TRANSPORTATION

<u>Indicator</u>	<u>Statistic</u>	<u>As of</u>	<u>Geography</u>	<u>Source</u>
Percent of former customers in NOLA using electric	60 percent	August	New Orleans	Entergy New Orleans
Percent of former customers in NOLA using gas	41 percent	August		Entergy New Orleans
Public Transportation			New Orleans	Brookings
Operational Bus and street car routes	49 percent of pre storm	August		
Operational Buses and street cars	17 percent of pre storm	August		
Louis Armstrong Airport		August	New Orleans	Conv. Visitor Bureau

ENVIRONMENTAL

<u>Indicator</u>	<u>Statistic</u>	<u>As of</u>	<u>Geography</u>	<u>Source</u>
<u>Debris Generated</u>				
Debris estimates		initial		DEQ
Katrina	55 million cubic yards (22 million tons)			
Rita	2.6 million tons			
Perspectives:				DEQ
22 million tons of Katrina debris is:				
<ul style="list-style-type: none"> Enough to fill the Superdome more than 13 times 25 times as much as the ruins of the World Trade Center Enough to fill the Empire State Building 40 times The largest landfill in Louisiana typically processes about 1 million tons of garbage in one year. 				
Debris Removed and Processed	39.9 million cubic yards (15.9 million tons)			DEQ

(2) 被災地の状況 (2006 年 12 月)

2006 年 3 月の現地調査に引き続き、Lower 9th ward や Laleview 地区を視察している。以下でカトリーナから 1 年 3 ヶ月が経過したニューオリンズ被災地の写真を掲載する。

Lower 9th Ward



2006 年 3 月にも Lower 9th Ward を訪れた。変わったことといえば

- ・倒壊家屋や災害廃棄物がきれいになくなっていた
- ・電信柱が新しくなっていたことぐらい・・・



写真では伝わりにくいですが、あたり一面が広大な更地に



1 時間ぐらい滞在したが誰とも会わなかった。住民は Lower 9th Ward に戻ってくることができるのだろうか？

Lakeview District



Lower 9th Ward と同様に 2006 年 3 月にも Lakeview 地区を視察している



2006 年 3 月に比べて
トレーラーハウスの数が増加していた



再建の意思がある被災者たちが
徐々に戻ってきている感じであ
った



Debris



Lower 9th Ward

1年3ヶ月が経過しているが、
いまだに水害廃棄物が残っ
ている。



再建されずに残された被
災家屋

解体処理しなければなら
ない被災家屋が3万棟あ
り、さらに、再建するか
どうか不明なままの被災
家屋が8万棟残っている。

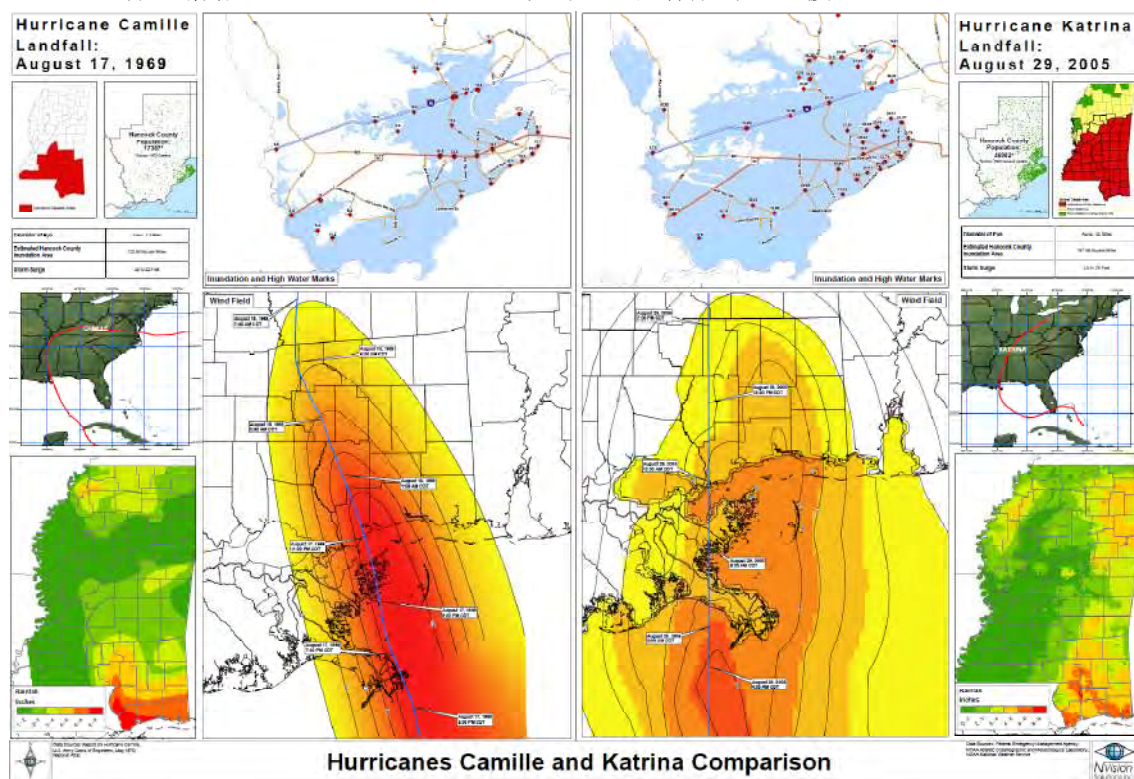
Debris Management Site



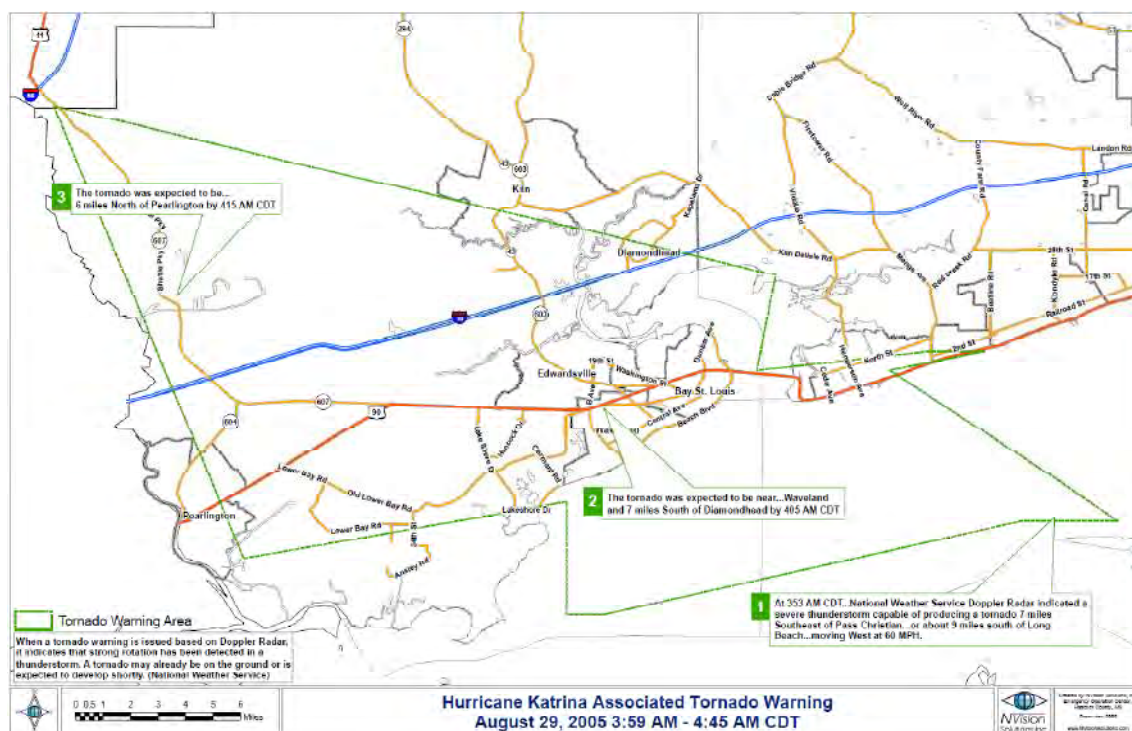
水害廃棄物処理場におい
て粉碎された水害廃棄物

災害対応を支援した情報システム

- ◆ IT 企業が情報システムを用いて地方政府の地図作成等を支援した



ハリケーン・カトリナ、カミールとの状況比較



ハリケーン上陸による竜巻警戒区域

米国行政の災害対応システムの批判的検討：カトリーナ災害を題材として

専任研究員 永松伸吾

1. はじめに：米国行政の災害対応とその批判的検証の必要性

ICS とは、Incident Command System の略であり、米国における公的機関の危機対応の標準的システムとされている。ここでシステムとは、用語や手続き、意志決定のプロセス、報告様式など、危機対応の具体的方法論を指しており、個々の対応従事者、あるいは組織が従うべき危機対応の「作法」と言っても良いだろう。

我が国でも米国に倣い、ICS のような標準的手法を導入しようという動きが何名かの研究者を中心として始まり、いくつかの重要な成果を挙げている。また行政の側も、たとえば内閣府が「大規模災害発生時における国の被災地応急支援のあり方検討会」の中で、特に組織構造のあり方について米国流の災害対応について参考にすべきことを示唆している。また消防庁は「地方公共団体における総合的な危機管理体制の整備に関する検討会」（平成18年度～19年度、継続中）を立ち上げ、地方公共団体の危機管理のあり方について検討を進めている。この中間報告書では ICS や米国の災害対応については言及されていないものの、危機事象を問わず、統一的・総合的な危機管理組織のあり方について今後検討が進められることから、ICS についても検討の俎上に挙がるものと思われる。

しかしながら、一般に行政制度・社会環境・文化などが全く異なる国の手法をそのまま移植するということは、その国で成果を挙げているからといって我が国で成功することを保証するものではない。そもそも ICS とは何であり、それは米国固有の政治・行政制度のどのような部分に依存して成立しているだろうか。こうした ICS を支える制度的な背景について考察することは、今後の議論をより生産的なものにするために重要である。

そして、さらに重要なこととして、本当に ICS は米国の災害対応において有効に機能しているのだろうか。2005 年のハリケーン・カトリーナに対する米国の災害対応のお粗末さを見れば、そのような疑問が湧いて出たとしても不思議ではないだろう。結論を先取りして言えば、ICS は危機対応において万能なツールではないとする研究が、カトリーナ災害以前から少なからず発表されていたし、現在もそのような研究が行われつつある。ところが、我が国において、米国の災害対応はある意味「模範」としての位置を占めており¹、それを批判的に見る視点は欠如しているように思われるのである。

以上のような問題意識に基づき、本稿ではカトリーナ災害を題材として、米国の危機管理体制に対して批判的な検討を加える。また、米国危機管理行政の根幹にある ICS は、米国行政に固有ないくつかの特徴によって初めて機能するものであることを示し、我が国で

¹ たとえば金重(2002)では、危機管理に対する日本のアプローチを「原因管理」米国のアプローチを「結果管理」として、一国一秒を争う事態においては米国のアプローチに優位があるとしている。

の行政の危機管理体制のあり方について考慮すべき事項を明らかにする。

2. 米国の防災行政の展開と ICS

米国の災害対応の中心を担う連邦危機管理庁(FEMA)は、カーター政権のもと 1979 年に設置された。しばらくは目立った業績を上げることはなかったが、クリントン政権下で J.ウィット長官による FEMA 改革が結実し、災害対応だけでなく、復旧・復興、被害軽減、事前準備の分野にも力点を置き、危機サイクルのすべての段階を所管する「全サイクルアプローチ」と、自然災害への備えを基本として、テロ対策についても対応する「全危険アプローチ」を採用することなどによって、FEMA はきわめて効果的な災害対応組織に生まれ変わった。1994 年に発生したノースリッジ地震や 1995 年のオクラホマシティのビル爆破事件などでの対応などはマスコミなどでも好意的な評価がなされている。

9.11 以降、テロ対策がブッシュ政権の最優先課題となり、2002 年に国土安全保障省(DHS)が創設され、FEMA はそこに編入されることとなった。これによって、FEMA は他の省庁と対等な独立の組織ではなく、DHS の一部局となったことで予算と人員が縮小され、職員の士気が低下したこと、また自然災害よりもテロ対策に軸足をおいたために、自然災害対応に向ける予算が著しく削減されたことなどが、カトリナ災害の背景にあったことはすでに多くの先行研究が指摘するところである²。

FEMA の DHS への統合後、それまであった連邦対応計画(FRP)と他の計画を統合・修正する形で国家対応計画(NRP)が 2004 年に作成された。この計画の主要な目的は、従来 FRP が連邦の諸機関の間を調整することを目的としていたのに対し、NRP は州政府や地方政府、民間企業、非政府組織など国内のすべての災害対応組織の調整と統合により効果的な災害対応を目指すことを目標としている(DHS, 2004)。また、この NRP により、すべての災害対応機関が採用すべき危機対応システムとしたのが全米危機対応システム(NIMS)である。それまで FEMA や一部の州において、標準的な危機対応手法として採用されてインシデント・コマンド・システム(ICS)が採用されていた。NIMS はこれを州政府や地方政府なども含めた米国内のすべての組織が従うべき災害対応ルールとして標準化したものである。地方政府への適用は 2006 年 9 月からとされていたため、カトリナ襲来時は州政府や地方政府によってその適用度合いはまちまちであった³が、理念的には、すべての組織が NIMS という標準的な災害対応システムを採用することによって、災害対応は統制のとれたものになるはずであった。しかし、以降述べるように、カトリナ災害における連邦政府の対応は、おおよそそのような理想にはほど遠いものであった。

² FEMA の歴史については Sylves and Cumming(2004)に詳しい。また日本語による包括的な文献としては村上(2006)がある。

³ これまでの筆者の現地調査によれば、ミシシッピ州についてはルイジアナ州に比して NIMS に忠実な災害対応が行われていたように思われた。

3. カトリーナ災害と NIMS

2005 年 8 月 29 日にルイジアナ州に上陸したハリケーン・カトリーナは、1300 人以上の死者を出すという、ここ数十年の米国では最悪の自然災害となった。災害のトリガーとなったのは、一つには暴風雨、二つ目にはハリケーンに伴う高潮、そして三つ目にニューオリンズ市街を取り囲んでいる堤防(levy)の決壊による洪水である。高潮による被害はメキシコ湾岸の広い範囲に及ぶが、特にカトリーナによる被害を大きくしたのは、堤防決壊によるニューオリンズ市内の浸水である。市街のほぼ 9 割が浸水したと言われるこの街には、市外に避難する手段を持たない多くの人々—その多くは黒人や貧困層であったとされる—が取り残されることになった。

実はハリケーン上陸時には、すでにニューオリンズ市民の約 8 割が市外へと避難していた。この避難なくては、カトリーナによる人的被害は文字通り桁違いになった可能性がある。市外への避難については、ルイジアナ州ブランコ知事やネーギン市長の避難命令の遅れたという指摘はあるものの、かなり成功したというのが正当な評価であろう⁴。

それにも関わらず、カトリーナ災害が米国の災害対応の失敗事例と見なされる理由は何か。いくつかの具体的事例を挙げてそのことを明らかにしてみたい。

市中に取り残された被災者をめぐる混乱

世界中に注目されたのは、スーパードームに取り残された多くの被災者であろう。

ほとんどの市民がニューオリンズから避難する一方で、市内には低所得者など自らの移動手段を持たない人々が多数取り残されることになった。その結果、市中心部にあるスーパードームには最大で 3 万 5000 人以上の被災者が集まることとなった。

みるからに不衛生で十分な水と食料も与えられていない被災者の惨状はテレビを通じて世界中に配信され、ドーム内では略奪やレイプが横行し、救援の不足から多くの人々が死に至っているといった報道がなされた。これらのほとんどが誤報であったことは程なく明らかになったが⁵、ゴミや汚物が散乱する中で救援を求める被災者の姿はこうした報道を信じさせるのに十分なほど酷いものであった。

市や州の計画では、ハリケーン避難は市外に逃避することが原則であり、市内のスーパードームはあくまで「最終的な避難所(refuge of last resort)」という位置づけであった。このため、3 万 5000 人もの被災者が長期に生活できるほどの備蓄も設備も備えていなかった。このためスーパードームからの被災者を再避難させることが急務であったが、ヒューストンへの被災者の移送が始まったのは 9 月 1 日になってからであった。

実はスーパードームの状況はまだましな方だったと言われている。ミシシッピ川堤防に近いコンベンションセンターは比較的標高が高いため、浸水が始まった 8 月 29 日に自発的

⁴ Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina(2005) でも、ルイジアナ州の市外避難については比較的肯定的な見方を示している。

⁵ Time(2005)によれば、スーパードーム内で死亡したのはわずか 3 名だった。

に1万9000人ほどの被災者が集まってきたという。しかし、コンベンションセンターは公的な計画では避難場所として想定されていなかったため、電気も水も食料もまったくない状況であった。スーパードームの状況悪化が深刻化した8月31日に、ニューオリンズ市長のネーギン氏は、病気の被災者らに対しスーパードームに程近いコンベンションセンターに移動するよう指示をしているが、連邦政府はコンベンションセンターに被災者が避難していることについて全く知らされておらず、ブラウン長官がこの事実を知ったのは9月1日であるとされている。

このような連邦の対応の遅れについて、米国下院の超党派委員会のレポートでは、ハリケーン襲来後の避難計画がそもそも作成されていなかったことを指摘している。すなわち、緊急事態の中で移送計画を作成せざるを得ず、その調整に時間を要したことが主たる原因と結論づけている。この指摘はある意味正しい。連邦政府も州政府も市政府もニューオリンズの脆弱性は前々から認識していたし、地元紙ピキューンも2年ほど前に特集を組んで大規模水害の危険性に対して警鐘を鳴らしていた。加えて都市の貧困層の問題がどこよりも深刻なニューオリンズ市にとっては、堤防が決壊すれば今回の事態のように市内に取り残される人々が存在することはある程度想定されてしかるべきだったであろう。

しかしながら、災害は常に想定通りに起こるとは限らない。そうした想定外の事態に対して臨機応変な対応がなぜ困難であったのだろうか。本稿の関心はむしろこの点に存在する。

「命令と統制」の欠如が問題なのか

前述のレポートでは、「命令と統制」という独立した章を設けている。その中で、地方政府、州、連邦、その他の機関の間に一元的な命令系統が存在せず、統制がとれなかったことが災害対応の混乱を招いた大きな原因の一つだとしている⁶。

しかしながら、災害対応が一元化されれば効率的な災害対応が可能だったのだろうか。現場で起こった問題の中には、むしろ一元的な命令と統制を機能させようと現場に介入した結果生じた混乱も聞かれる。たとえば、多くの医療支援チームが、バトンルーージュなど被災地の外縁で足止めをされた。ようやく FEMA の許可をもらい現場に入ると、そこにはたくさんの支援ニーズが存在したという(Olansky, 2006)。また、我々のヒアリング調査のなかで、ニューオリンズ市上下水道局は、FEMA を非常に強い口調で非難している。すなわち、FEMA は上下水道部局を一義的な災害対応機関とはみなさず、排水作業に必要な予算も資材も応援人員の派遣もしてくれず、警察や消防ばかりを支援したという⁷。上下水道部

⁶ その一つの例として、スーパードームからの避難についてブランコ知事が FEMA を通さずにアメリカ北方軍(northern command)に対して支援要請をしたことで、FEMA による救援活動の重複が出たことを紹介している(p.193)

⁷ その具体例として、排水ポンプの復旧に必要な技術者を確保し、彼が行う修復活動のためにヘリコプターを利用していたところ、救助活動のために連邦政府にヘリを取り上げられたことなどを述べている。

局としては、一日も早くポンプの復旧と排水をしなければニューオリンズの復旧はできないと主張するが、その声は FEMA には届かなかった。しかも他地域からの応援も、FEMA の許可がなく実現しなかったという。

それでもなお、連邦政府は、NIMS の不徹底とそれによる一元的な危機管理の失敗がカトリナ災害の最大の教訓の一つと考えているように見える。それは 2006 年に連邦政府により制定された「カトリナ後の危機対応の改善に関する法律」(Post-Katrina Emergency Reform Act of 2006)にも現れている。この法律のねらいは次の二つである。第一に、DHS 統合後失われていた予防面での機能を、他のいくつかの部局から FEMA に移管することによって強化することを狙っている。これにより DHS 統合後に失われていた「全サイクルアプローチ」「全危険アプローチ」が復活することになった。第二は、国家統合センター(NIC)を創設し、ここで NIMS についての研修機能を強化し、NIMS のいっそうの普及徹底を行うことである。

しかしながら、州政府や地方政府が NIMS に慣れていなかったというのは今回の災害に限った話ではなく、過去の災害でも同じはずである。NIMS が徹底されれば災害対応がうまくいくはずだというのはやや問題を矮小化しているようにみえる。

4. ICS とは何か

そもそも、NIMS については学術的観点からの批判は決して少なくない。そもそも ICS は、カリフォルニアの消防組織が現場における複数組織間の調整を可能にするために開発したものであり、論者によって力点の置き方が異なるものの、一般的には次のような特徴を持つ組織運営手法であるとされている。

(1) 一元的な指揮命令系統(unity of command)

ボスは一人であり、命令はボスのみによって行われる。また報告もボスだけに行う。

(2) 複数現場の統一指揮(Unified Command)

行政界をまたぐ事案であったり、複数の場所で同時発生する事案の場合であっても、それらは統一的に指揮される。

(3) 統制の原理(span of control)

一人のボスにつく部下は 5 人前後である。

(4) 4 つの機能による組織構成

一人の指揮官(commander)のもとに、事案処理部門(operation)、計画部門(planning)、後方支援(logistics)および財務部門(finance)が設置される。このうち、指揮官と事案処理部門をライン、計画部門・後方支援部門・財務部門はスタッフとされる。

(5) 戦略計画および目標による管理

組織は、一定時間ごとに作成または更新される戦略計画に基づいて行動する。戦略計画においては一定期間内に達成すべき目標(objective)が掲げられると同時に、その目標達成に責任を負う組織も割り当てられる。

(6) 統一的な用語と様式の使用

業務用語や、報告などに用いられる様式は統一される。

消防の分野においては、細かな議論はあるものの、基本的に ICS が効果的な組織運営ツールであることに関して異論はない。また、FEMA についても、ウィット長官のもので ICS に基づく組織運営で成功を収めている。このような実績が NIMS の採用へとつながったことは疑いない。

5. ICS と NIMS に対する批判

しかしながら、ICS については、様々な批判も同時に浴びせられている。それらの議論を以下に整理したい。

災害対応に従事する様々な組織にあつては、ICS がうまく機能しない組織も少なくない。たとえば警察は、そもそも他の組織と連携して行動することがほとんどないため、ICS を採用するメリットが少ない(Howitt and Leonard, 2005)。これは ICS とは消防という組織を統合し効果的に動かすために開発された組織内計画であり、組織間調整のツールではない(Wenger, Quallantelli, and Dynes, 1990)とする見方である。

さらに、組織のミッションも重要である。ICS は、明確に定義され、矛盾なく明らかに順位付けされた目標を有する組織においてはよく機能するが、目標がそもそも明確でなく、しばしば矛盾やトレードオフを含むような組織では機能しない(Howitt and Leonard, 2005)(Buck, Trainor and Aguire, 2006)。たとえば州政府の福祉部局については災害弱者の救援などが最優先事項であろうし、産業部局については早急な経済復興を最優先に掲げるであろう。しかし州政府全体としての方針を定めるとき、予算付けなどにおいてどちらに優先順位を置くべきかという問題には誰もが合意できる解はない。仮に指揮官がその優先順位を裁定したとしても、組織がそれに合意して一糸乱れぬ活動を行うということはある得ないであろう。

そもそも、ICS の組織原理であるところの「命令による統制」が、災害対応組織において一般的ではないとする指摘もある。Waugh and Sylves(2002)によれば、消防などの組織は確かにこうした組織原理で動いているが、ほとんどの組織はそれほど厳格な業務分掌もなく、上からの命令や権威よりはむしろ関係者の合意と信頼に基づいて行動するとし、様々な専門家やボランティアによる協力を得ながら組織の目的を達成しようとしているのであって、命令による統制はもはや一般的な組織運営原則ではないとしている。

また、対象となる事案の性格によっても ICS の有効性は異なるとする研究もある。Buck et al.(2006)によれば、事案が空間的に限定され、周辺の立ち入り規制が可能であり、災害対応に参加する組織や人員が管理できる場合には ICS は有効に機能するとしている。他方、国境を越える災害、時間的・空間的な広がり大きい災害（停電、伝染病、核による事故など）については ICS は限定的にしか機能しないとしている。

彼らが指摘するもう一つの重要な要件は、災害対応技術に関する一般的な了解の存在で

ある。災害によって発生する対応需要をどのように解決するかという戦術が確立されており、関係者間で合意されている必要があるとする。従って、大規模な災害であったり、新しい災害現象が生じたり、ボランティア組織などが新しく登場するような局面において ICS の機能は限定的であるとする。

Harrauld(2005)は、災害対応における組織の敏捷性(agility)を重視する。極限的な事象に対応する組織は、様々な組織と情報をやりとりすることのできる開放性と、予期しない事態や状況の展開に対して分権的に意志決定し、即興的に対応を求められるが、命令と統制を重視する NIMS はむしろ災害対応組織の「官僚組織化」を招くと批判している。

以上述べたような ICS 批判に共通する見方とは、Waugh(2003)によって代表することができる。すなわち、危機対応において有効な組織原理は、上級官庁や上位の職権者の権威に基づく「命令と統制」ではなく、むしろ様々な対応組織や人々の間の信頼に基づく「ネットワークと調整」であるという考え方である。Kettl(2005)もまた災害対応を水平的ではなく垂直的にみる見方を「時代遅れの戦術(obsolete strategy)」と呼び、連邦と州政府、地方政府の関係を指揮命令の連鎖でつなぐのではなく、連邦制の下ではむしろそれぞれの機能を生かして水平的に協力する体制を作ることが重要だとしている。

6. 我が国の行政における災害対応への示唆

こうした批判は、すべてが科学的に検証されたものではないが、論理的に頷けるものも少なくない。このような議論とカトリナ災害における米国災害対応の混乱を見ると、米国のシステムについて批判的な視点で見ることは、今後の我が国の災害対応を考える上できわめて重要であろう。

なぜこれを強調するかといえば、縦割りと擲揄されがちな我が国の行政組織は見方を変えれば省庁間の水平的な関係を前提として構築されているともいえるからである。たとえば災害発生時の公共土木施設の復旧は、それぞれの所管官庁で制度化されており、災害対策本部において知事や市長の指示を待つまでもなく、自動的に被害把握と復旧への作業がスタートする。水道、下水道などについても同様である。災害ボランティアや医療支援についても、行政の指揮命令とは全く独立したものとして活動している。

もちろん、我が国のこうした現状を全面的に肯定するつもりはない。しかしながら、こうした水平的な災害対応には、一元的な命令と統制には存在しないメリットがあることも事実なのである。医療応援チームが FEMA に数日間も足止めにされたり、FEMA の了解がないために上下水道の復旧ができないといったことは基本的に我が国のシステムでは考えられないことである。すなわち一元的な指揮命令系統とは、指揮者が失敗すればすべて失敗してしまうという、ある意味脆弱な部分を有しているのである。無批判な米国式災害対応の導入は米国と同じ過ちに陥りかねない。そのことを我々はもっと自覚すべきである。

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地方政府の災害対応の実態と課題

－目標管理型のマネジメントと指揮命令に着目して

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1. わが国の災害対応に対する問題認識

(1) わが国の災害対応に対する問題認識と課題

米国の災害対応を対象にして研究するにあたって、まずわが国における災害対応に関する問題点を指摘しなければならない。課題の抽出に当たって、材料としたものは3つあった。第1に実際に発生した災害における自治体の災害対応であり、これは全庁的な災害対策本部の組織体制や災害対応に対する振る舞いなどである。新潟県中越地震においては兵庫県と人と防災未来センターの職員が新潟県の災害対策本部会議に同席した例もあった。ただ大抵はその現場に居合わせて観察することはできず、貴重な分析材料となったのが災害対策本部会議の議事録とそこで活用される本部会議資料である。近年本部会議を公開する例が多く、議事録や特には音声までウェブサイト上で公開する自治体が増えてきた。また、本部会議資料は自治体がどのような方針で災害に立ち向かうかという意思決定をするための現状把握、将来の見通しを含めた状況認識の統一をすることを目的として本部事務局と被災地で実際の対応を行う各部局がまとめた資料を閉じたものである。本部会議での本部長の指示や本部員である各部局長の報告内容、そしてそれらが要約された本部会議資料をみると、さまざまな災害対応の問題点が浮かび上がってきた。第2に、全国的に熱心に実施されている自治体での図上演習や人と防災未来センターで実施している図上演習などにおける防災担当職員の振る舞い作法をみれば、実際の災害と同じような対応が行われていることがよくわかる。第3に、人と防災未来センターが実施している災害対策専門研修や特設演習などの場を通じての防災担当職員との意見交換、大大特成果普及事業（平成16年度～平成18年度）における近畿圏の自治体職員との分科会などを通じての巨大災害における広域連携や情報マネジメントに関する議論も大いに役立っている。全国的な防災担当部局とのネットワークを構築し、実務者のニーズや災害対応に対する問題意識をどこよりも幅広く深く捉えているセンターならではの強みが活きていると自負している。

以上のような検討材料を元にして、4-1(1)ではわが国の災害対応の問題を「過去の災害事例と図上演習に見る災害対応の作法」と「災害対策本部会議と本部会議資料から見えてくる災害対応の問題点」に分けて示す。無論、これらがすべての災害現場や自治体職員において一般化しているとは言い切れないが、少なくとも研究を行う際の問題認識として位置づけられる。

【過去の災害事例と図上演習に見る災害対応の作法】

① 災害対応全体を計画的に進めていこうという発想に欠ける

これは災害対応という避難所の運営、緊急物資の手配・配給、ライフラインの復旧などの多様な業務全体を時間で区切って進捗状況を管理しながら業務の改善を行うという目的思考、計画的な業務管理が行われていないことである。現状は発生した一つ一つの事案に対する個別的な対応である。メディアからの批判でありがちな「場あたりの対応」というのはこのことである。

② 全庁的に力を結集する方向でみんなが動かない

災害時における各種業務は行政に求められる被災地に対する社会サービスであるはずである。しかし、現状は災害時の仕事は防災担当部局の仕事だという行政部局の意識が根深い。それでも災害の規模が大きくなれば防災部局で対応はできなくなるので、各部局が事前に地域防災計画に定められた事務分掌にしたがって仕事をするようになるが、その時の視点は国の所管官庁に向いている。被害状況の報告や復旧に要する費用などは所管省庁に報告することが求められる。自治体におけるすべての部局が被災地をどのように元の状態に戻すかという目指すべき方向を設定し、同じ方向をむいて力を結集していくような対応ができていない。これによって積極的に部局が連携することによって全体的な効果を高めることにつながらないという問題が発生する。

③ 将来的な状況予測が不十分で後手に回る

これは①とも関係しているが、災害対応をする際に将来的な状況予測を行わないために先手をうった対応がとれないという点である。具体的な例をあげると、ライフラインの復旧に時間がかかりそうである、という見込みによって予測されるのは、住宅被害のなかった被災者も自宅には戻れず避難所に滞在し食糧や生活物資に対する需要が高まるということである。このような予測を行わず、避難所にいる人間だけを必死で把握しようとしているだけでは、対応が後手に回るのには目に見えている。これは災害対策本部資料をみれば如実に現れている。すなわち、被害状況と実施した対応、という過去の情報しか記述されないことがほとんどである。このようなメディアによる批判は「行政、後手に回る対応」となる。迅速で適格な意思決定を行うための第 1 ステップでつまづいていると見ることができる。

④ 事務分掌に基づいた平時の業務が災害時には弊害になる

阪神・淡路大震災の教訓を生かして、多くの都道府県・市町村で地域防災計画の全面的な見直しが行われている。改善点は多岐にわたるがその一つは、各部局が災害時に行う事務分掌を記述し役割分担を明確にした点である。ある兵庫県内の市地域防災計画をみると、保健福祉部の担当は避難所における物資調達である。事務分掌は、a)部にかかわる情報の収集および報告に関すること、b)救援に必要な医薬品、資材および車両の調達に関すること、c) 医療品、生活必需品、建築資材その他日常応急物資の調達及び斡旋に関すること、d)応急食料、物資の調達及び配送に関すること、と定められている。これにしたがって動くや

り方が平時の業務を進める仕組みとして行政職員に根付いているのでやりやすいのであろうが、保健福祉部が災害時の目指すべき目標は何なのかがよくわからない。目標が明確にないため、a)～d)に書かれていない事柄以外を実施してもよいのか、実施したほうがよいのかの判断もつかないことになる。計画やマニュアル策定の時には最悪の事態を想定して書くことは鉄則であるが、それでも予想とは異なる様相が発生するのが災害の特質である。その時の環境、状況に応じて対応していくためには、事前に定められたことをきっちりやる、という仕事のやり方ではなく、その時に被災地に求められる社会サービスを明確に示し、それを現場で実行するといった目的思考の仕事ではないか。

【災害対策本部会議と本部会議資料から見えてくる災害対応の問題点】

①自治体がおかれている状況と災害の全体像がイメージできない

現状の本部資料は、各部局から担当業務に関する情報が記述され、それを閉じたものである。それは各部局が実施した業務を把握することには適しているが、そのような現場での対応が本部レベルで協議し検討される事項なのか疑問も残る。先日の 2007 年 3 月 25 日に発生した能登半島地震において石川県災害対策本部会では本部長は記者のインタビューに対して「初期の段階では情報に軽重をつけず、ダブリがあってもいいから細かく挙げさせるほうが大事と考えた。抜け落ちがあるよりはいい」と発言している。本来、求められる本部資料は、発生した災害に対する全体像を理解し、今後求められる対応がイメージできる資料でなければならない。この資料を作るのは本部事務局に求められる役割であり、これを作成することこそが、災害対応全体を取りまとめ方向付けを行う災害対応のマネジメントにつながるはずである。つまり、本部会議の目的は情報共有にとどまっており、発生した災害に対する全体像や今後の推移の変化、求められる対応などを含めた状況認識が全庁的に統一することができないのが現状である。

②首長およびすべての部長に報告すべき内容か？

過去の災害における本部資料をみると、たとえば避難所の一覧表と避難者数や仮設住宅の建設予定地、住戸の配置図なども含まれている。これらは実施部局にはもちろん必要であるが、これを本部全体として情報共有する必要は必ずしも無いのではないか。①でも述べたが、本部会議では、各部局の対応状況と今後求められる対応、これに基づく当面の目標とその戦略などを報告し、目標・戦略レベルで首長の判断を仰ぎ、今後の対応方針を意思決定することが求められるはずである。

③供給量だけが記述されている

本部会議資料に共通してみることができる特徴のひとつは、行政の業務リストが書かれており、それに基づく物資などの供給量が記述されている点である。供給側である行政の視点によって資料がまとめられており、需要側になる被災者の視点ではない。これに関して新潟県中越地震において新潟県知事は「行政の供給側の論理の資料ではなく、サービスを受けているほう（被災地、市町村）が満足しているかどうかについて示した情報を集約

しないといけない」と非常に重要な指摘している。応急対応期に行政に求められるのは被災者の暮らしをできるだけ早く平時と同じレベルに戻すということにほかならず、この目的を達成するために被災地のニーズを把握することは当然求められることである。また、業務リストという、「すべきこと」の羅列では、実施した災害対応によって被災地がどのように改善されたのかという評価ができないという問題も発生する。

(2) なぜ ICS に着目するのか？

このような問題認識の下、着目したのが 1970 年代に米国の森林火災の現場で生まれた Incident Command System(ICS)である。「緊急時対処組織の構造が多様である」、「権限の境界がはっきりしていない」、「さまざまな機関の間で計画を連携させる構造がない」などを背景として消防業界が開発した。ICS には図 1 のような様々な特徴がある。これらは二つに分けることができる。一つは複数の行政組織が連携して対応を行うために必要なルールである。用語や組織編制が標準化されていることによって連携がスムーズになる、複数の組織を動かす際の指揮方式に関するものである。

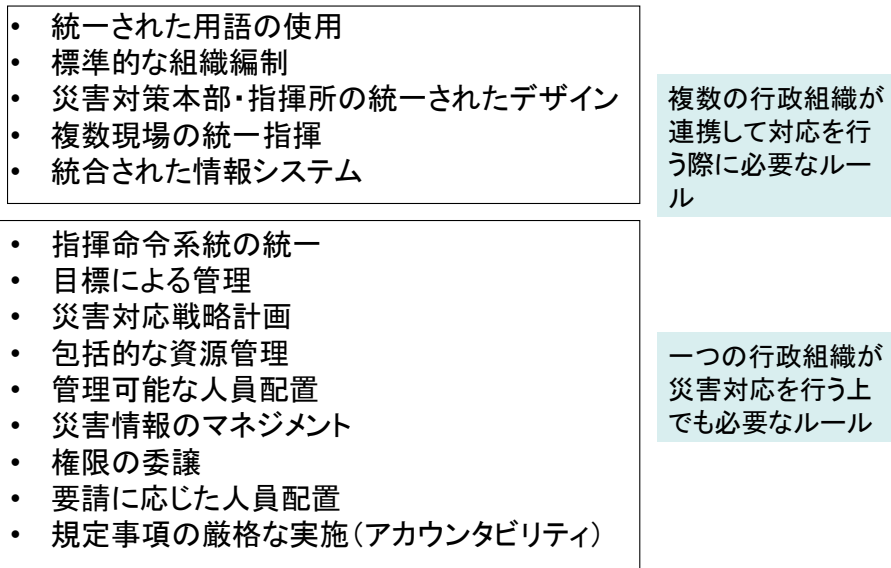


図 1 ICS の特徴 (出所) Emergency Management Institute(EMI) , Incident Command System Review Materials, 2005

もう一つは、単一の行政組織で災害対応を行うときにも求められるルールである。目標管理というマネジメント手法や指揮命令系統の統一、現場への権限委譲などであり、本研究ではこちらを対象にした分析を行っている。

カトリーナ災害後に公表された政府の報告書をみると、対応が失敗した理由として ICS を適切に実行しなかったから、ICS を理解する人材が少なかったから、などという指摘が多いが、本当にそうであろうか。「何が失敗したか」、「なぜ失敗したか」ということに焦点をあてるのではなく、災害対応に責任をもつ (first responder)である地方政府の災害対応に着目し、そこが全体の災害対応をどのような組織体制 (権限) で動かしたかという全体のマネジメントについて明らかにしたのが本研究である。

2004 年以降 ICS を根幹とした一元的な危機管理システムである NIMS をすべての連邦機関、州政府、地方政府に義務付けているが、これに対して行政学者を中心に批判的な論文が近年多く見られるようになってきた（詳しくは、第 4 章永松論文参照）。それらの指摘は 3 つに分類することができる。第 1 に軍隊は敵を倒す、消防は火を消すという単一の明確な使命があるのに対して行政組織が行う災害対応は被災者に対する支援（すまい、生活、食糧など）、ライフラインの復旧、医療や保健など広範にわたる点である。行政においても直後は人命救助という明確な優先業務があるが、時間の経過につれて行政組織内部でも被災地でも達成すべき目標についての価値観の相違がでてくるという違いがある。前者は指揮官となる本部長の発意によって意思決定を行うことが比較的容易であるが、行政の災害対応はそうはいかないのではないかと指摘である。第 2 に、軍隊や消防は使命を達成するための技術や方法論が確立されているのに対して、行政が扱う災害時業務は業務体系が明確でない点である。前者は目標が明確でそれを達成する手段が確立していることによって、方法論に対して現場での迷いは行政組織に比べると少なく、その点においてトップの命令に従いやすいのである。第 3 に稟議制や合議制を慣習とした平時の行政のルールが命令・統制型の災害対応が馴染みにくいのではないかと指摘している点である。

以下では、(1) で示したわが国における災害対応の問題を解消する要件として、ICS の特徴である以下の 3 点が求められるのではないかと立場にたち、各々の考え方を示す。

①一元的な指揮命令系統とトップダウンの意思決定

第 1 の特徴は指揮本部長であるコマンダーが指揮命令決定の権限者であり、そこから現場レベルまでの命令系統が一元化されている点である。わが国と比較すると、本部長である首長はもちろん権限を有しているはずだが、それ以外にも平時の部局における上司からの命令にも基づいて現場は動いており、命令系統が複数ライン存在しているのが実態である。ICS はもともと消防の現場で誕生した仕組みであり、またその方法論は軍隊に学んで開発されている。軍隊型の指揮官によるの命令・統制型（Command & Control）の関係に基づいて開発されたものであり、行政組織には馴染みにくいという指摘も少なくないのが現状である（第 3 章参照）。わが国の災害対応事例では自治体の全体的な対応方針を明確に打ち出したものは見当たらないが、時間や資源が制約されている災害時にはトップの意思決定となる対応方針に基づいて現場が動くことができなければ部隊全体をコントロールして資源の最適配置を行うことは困難となる。命令・統制型の災害対応が行政組織にも求められる根拠はここにあるのである。

②本部長を補佐する戦略作戦部門の機能

第 2 の特徴は、トップの意思決定を支える戦略作戦部門が明確に機能として位置づけられている点である。ICS における Planning Section がこれを担当しており、災害の全体像や今後求められる方針をトップに打診することが求められている（図 2）。トップの意思決定には個人の判断能力や意思決定能力の向上ももちろん必要とされるが、個人の資質や能力向上だけでは災害は乗り切れない。災害対応に求められるのはトップを長とした組織全体がその組織力によって対応することである。わが国では防災部局が担当することになる本部事務局にその役割が求められるところであるが、それを適切に発揮できていないのが現状である。

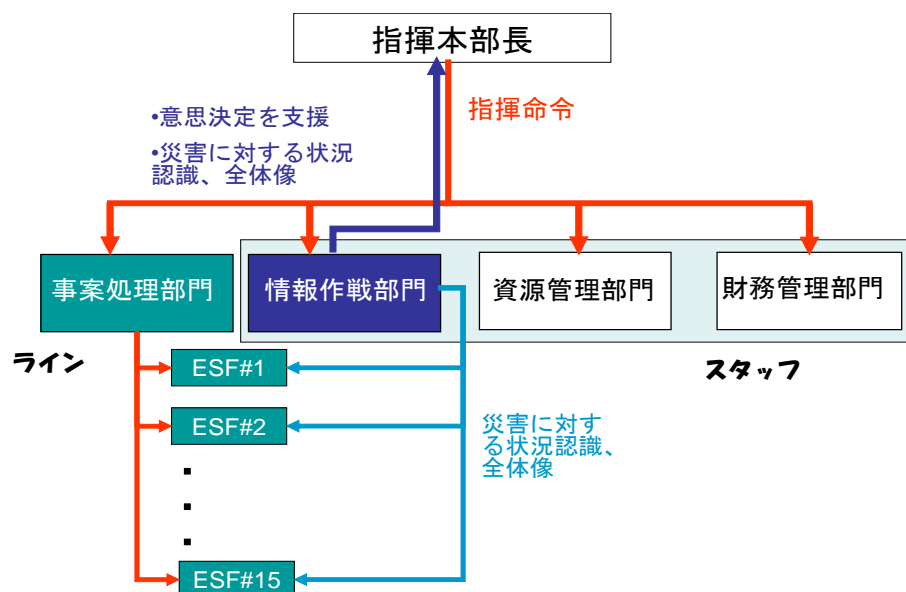


図 ICS の組織体制と各々の関係（筆者作成）

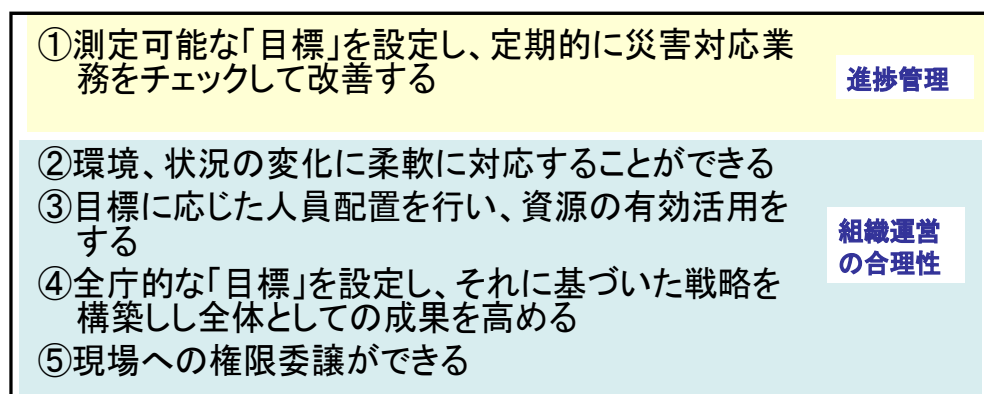
③目標管理型の災害対応

第 3 の特徴は、被災地における災害対応の全体の方向付けを行い、それに応じて資源配分を行っていくような全体の調整機能であるマネジメント機能がしっかりしている点である。これは（3）以降で詳しく述べることとする。

（3）目標管理の仕組みと災害対応における有効性

目標管理は組織の生産性を向上させるための企業の経営理念として 1950 年代ごろにピーター・ドラッカーなどによって提唱された理念である。組織の大目標に沿って、上司と部下が共通の目標を確認し、期待される成果とそれぞれの責任を明らかにして、目標によって仕事を管理するという考え方である。よって目標を達成するための仕事の内容やスタイルは個人の創意工夫の余地が残され権限委譲されており、この自己管理こそが生産性の向上のポイントとなるという考え方である。これは仕事の手順と役割を詳細に定めて職能

別に責任者をおくテイラーシステムの問題点を解決する経営手法としてもてはやされた。ICS に基づく災害対応の背後にあるのがこの目標管理の考え方であるが、災害対応ということに限って目標管理の効用を整理すると以下の 5 点に集約されるのではないかとと思われる（図 3）。筆者はこれらはすべて（1）で示したわが国の災害対応の問題点を解決する方策として有効ではないかという立場にたっている。この 5 つの視点からカトリナ災害におけるニューオリンズ市とハンコック県の災害対応を分析したのが 3-3. である。そこでこれらの考え方を概説し、実際の対応について分析を行っている。



→ この5つの視点からケーススタディ

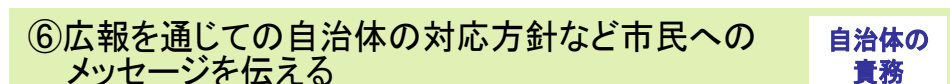


図 目標管理型で災害対応を行う効用

2. カトリーナ災害において求められた災害対応の概要

(1) ルイジアナ州ニューオリンズ市

ニューオリンズ市はハリケーン・カトリーナの上陸による降雨と突風による被害と水位上昇に伴う堤防の決壊という二つの災害による対応が求められた。堤防の決壊によって中心市街地の約8割も浸水し、家屋建物とインフラに甚大な被害を与えた。8月29日の上陸一日前の28日に48万人の市民に対して避難命令を行うことによって約9割が市外に避難したが、避難に遅れた人々が30日の堤防決壊によって多くの命を落とした。カトリーナ通過した後は市街地の浸水に対する対応、避難所における環境改善と緊急物資の提供、治安の回復などの対応に追われた。

(2) ミシシッピ州ハンコック県

カトリーナはルイジアナ州だけではなく、ミシシッピ州にも甚大な被害を与えている。ミシシッピ州メキシコ湾沿岸の3郡(ハンコック、ハリソン、ジャクソン郡)では暴風および洪水により甚大な被害を受け、電力、通信ネットワーク、道路、下水設備、水処理プラントなどの公共的インフラは壊滅的な被害を受けた。最大で9mの高潮が押し寄せ、高潮による死者が発生した。ハンコック県もニューオリンズ市と同様、ハリケーン上陸前の避難命令、被災者の避難所への容と物資の提供などの対応を行った。

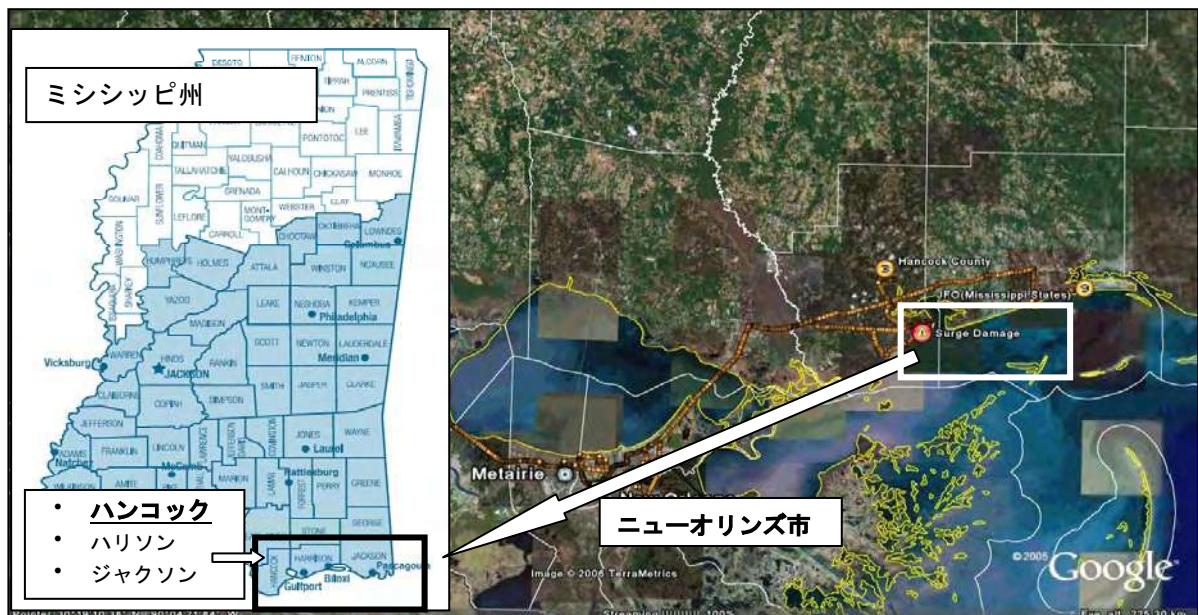


図 調査対象としたニューオリンズ市とハンコック県の位置

この 2 つ地方政府の危機管理部局が今回のヒアリングの主な対象であるが、災害対策本部の運営をリードした危機管理担当だけではなく、現場での災害対応業務に携わった部局にも聞き取りを行っている。ICS という枠組みの中で本部長の指揮の基で部局がどのように業務を実施したのかということをはっきりとすることによって、平時体制と非常時体制の切り替えについての考察を行うこととした。対象としたのは災害時に特有の業務である災害対応機能 ESF#6 被災者支援(Mass Care：シェルター、被災者への食糧、こころのケア)の主担当となる福祉部局である。

3. 地方政府における目標管理型の災害対応の実態

以下ではニューオリンズ市とハンコック県における災害対応を事例に、5 つの視点から目標管理型の災害対応がどのように実践されていたかを示し、目指すべき災害対応を実行する上での困難さや適応方策について明らかにする。

(1) 業務の進捗管理

ICS では本部会議を行う目的が「会議は目標に向かって関係する情報の共有と目標達成のための障害を伝え、今後の方針について決定すること」と明確に定められている。ハンコック県においては、災害対応業務の分野（Emergency Support Function, ESF 後述する）ごとに、これまでの目標、目標の達成度、今後求められる課題、今後の目標を数分で報告することが求められていた。被害状況や個別の実施業務の報告ではなく、目標レベルで報告されている。ニューオリンズ市においてもこのような本部会議は定期的に行うことが徹底されていた。また、いずれの場合も、事前に両地方政府がそのようなルールで本部会議を行うことを決めて訓練したわけではなく、これは被災地に支援に入ったフロリダ州などの災害対応のプロの助言が生かされた。ICS という決まった災害対応の作法、方法論があるからこそ、応援側が効果的に災害対応を支援することができたとみることができる。

(2) 環境、状況への柔軟な対応

ICS では通常 12 時間である責任担当期間（Operational Period）ごとに、その時の状況や予測される状況に対して対応をしていく当面の計画を策定することが定められている。上記（1）のもと、これは徹底されていた。米国では先述の災害対応機能 ESF ごとに業務計画が定められているが、日本の地域防災計画ほど詳細な事務分掌ではない。よって、その都度、定期的に計画を策定している。ただし、事前に定めた役割分担ではなくその時の状況に応じて計画をしたほうが効果的であるという実証はなかなか難しい。理論的な枠組みを構築するという方向ではなく、過去に発生した阪神・淡路大震災のような巨大災害を事例とした状況付与に基づいた図上演習を行うことが有効であろう。

(3) 優先順位に応じた人員配置

これは全体的な目標、優先業務によって非常時体制における資源の動員と配置を行うという考え方である。カトリナ災害の事例では、自治体内部の部局を超えた人員配置は確認することができなかった。ただ、災害対応機能 ESF ごとの拡大、縮小、撤収という仕組み

みを通して業務に基づく人員配置を行っていた。ESF とは “A grouping of government and certain private-sector capabilities into an organizational structure to provide support, resources, and services.” と規定されており、災害対応を機能別に分類したものである（表 1）。災害時に被災地で顕在化する問題を被災者の視点から機能分類したものであるといえる。機能ごとに主担当部局と副担当部局が設定される。また、行政組織だけではなくボランティアや非営利組織、赤十字、教会などもこの枠組みに基づいて仕事をする。

表 Emergency Support Function(National Response Plan)

ESF #1 – Transportation	交通
ESF #2 – Communications	通信インフラ
ESF #3 – Public Works and Engineering	復旧にかかわる公共事業
ESF #4 – Firefighting	消火
ESF #5 – Emergency management	危機管理
ESF #6 – Mass Care, Housing, and Human Services	被災者支援
ESF #7 – Resources Support	資源の動員
ESF #8 – Public Health and Medical	公衆衛生と医療
ESF #9 – Search and Rescue	捜索救援活動
ESF #10 – Oil Spill, Hazardous Materials, and	石油流出、危険物質、放射性物質
ESF #11 – Agriculture	農林
ESF #12 – Energy	エネルギー
ESF #13 – Public Safety and Security	治安と安全
ESF #14 – Long-term Community Recovery and	長期の復興と被害軽減
ESF #15 – External Affairs	渉外

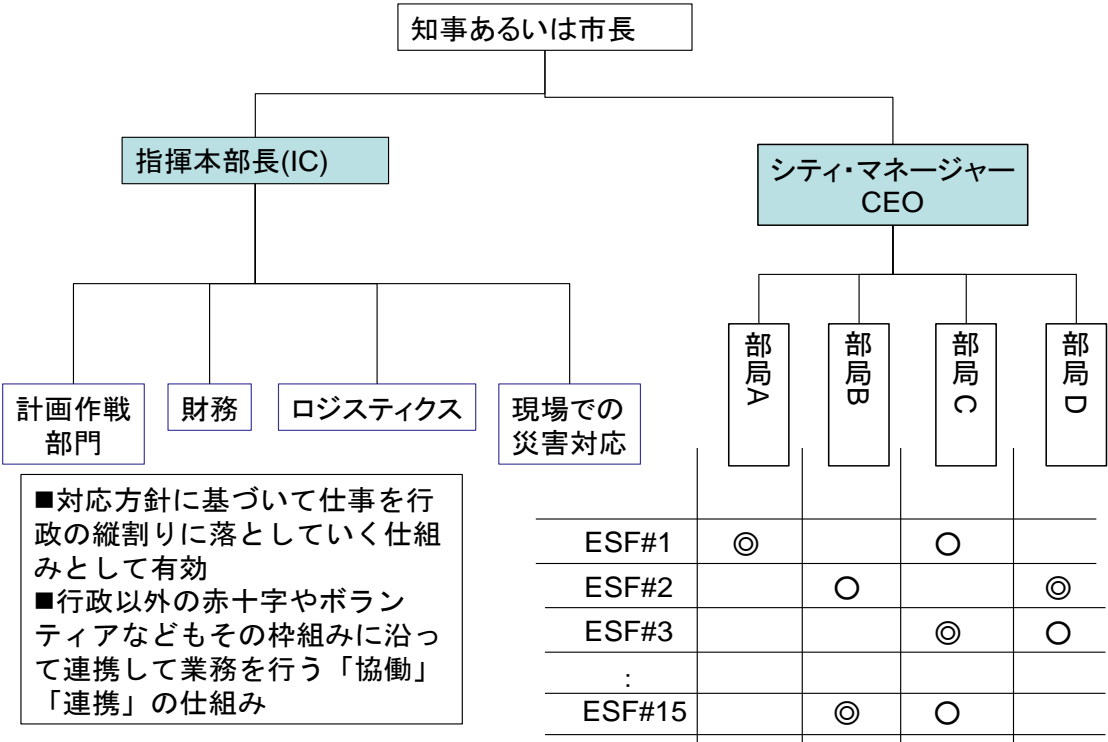


図 米国の災害時における非常時体制

(4) 全庁的な目標に基づく災害対応

これは全体の目標に基づいて戦略を構築して現場が動くというトップダウン型の部隊の運用のことである。これが実践していかどうか確認するためには、災害対応戦略計画の策定プロセスと計画体系をみればよい。

ニューオリンズ市では計画の体系はトップダウン型で全体目標とその目標を実行するための任務が記述されている。作成者は全体計画を書いた人と同一人物であり、全体と個別の計画の整合性がとれ、全庁的な目標に基づいて組織が動いたと一見思われる。しかし、実際の目標や目標を実行するための任務分担の内容をみるとそうではないことがわかる。全体目標の中身には 24 時間のローテーションを敷く、日報を 13 時まで提出するといったことも含まれており、到底組織の全体の方針とはいえない。また任務分担の内容をみても、水道や交通を担当する機関に対して復旧状況と現状のサービスについて報告するようという内容である。つまり全体の目標を達成する上での各部門への指示になっている。すべて目標ではなく「することリスト」に留まっているのが現状であった。これに対してハンコック県では全体の目標と ESF ごとの目標で構成されている。まず全体の目標をみると ESF ごとの個別の業務を束縛する内容でない。また、各業務を調整する内容でもない。それは方向性を示す程度のものであった。ESF ごとの目標の中身をみると、全体目標を考慮するわけではなく個別の ESF ごとに独自で目標を設定し、これを本部会議で報告していた。

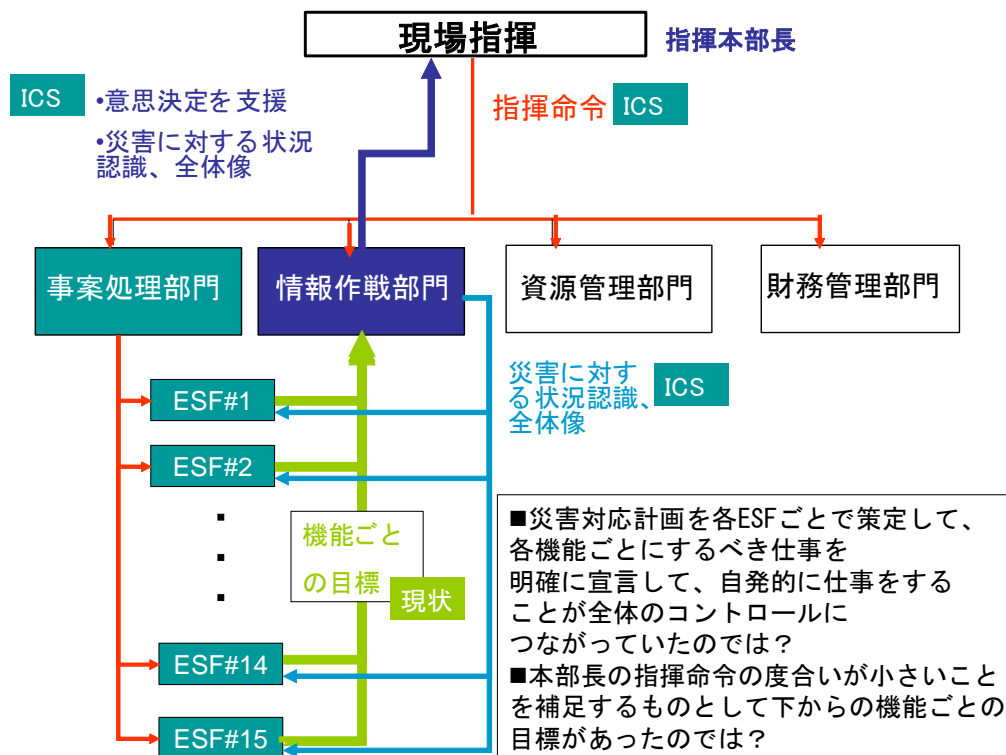


図 ハンコック県における災害対応のマネジメント

ニューオリンズ市とは反対で、全体目標の書き手は計画部門の代表者、ESF の目標は ESF の担当者と異なっている。ハンコック県の場合は、ESF が自立して自己の目標設定や仕事の管理が行われていたのである。全体からの方針が徹底されないかわりに、このような仕組みが全体の業務をコントロールする上で重要な役割を果たしていたのではと考えることができる。

(5) 現場への権限委譲

ICS ではコマンダーがすべての意思決定権限をもち、その方針の発案は本部長が参謀（計画部門）の補佐をうけながら行うこととされている。ただ、方針に基づいて現場レベルで進める業務の方法や内容は、現場の ESF に任されている。現場への権限委譲によって、迅速な業務遂行を行うというのがポイントである。

ニューオリンズ市やハンコック県のいずれの場合も、本部長は災害対応機能 ESF ごとの専門性を尊重し、それごとの仕事の内容や目標設定は ESF に委ねていたことが確認できた。そこでのコマンダーの役割は ESF ごとで設定された目標への修正、承認であり現場に対する権限委譲が行われていたことがわかる。また、先述したように全体の方針は ESF の活動を方向付けるほど縛りはきつくなかったのが現状であった。軍隊や消防と比較して行政組織が扱う災害対応の領域は広く、それらすべてにコマンダーが目標を設定するということは現実的に難しいのではないかとということが伺える。

4. 米国地方政府の災害対応から見てきたもの

ここまで実際のカトリナ災害における地方政府による災害対応の実態と ICS のルールである目標管理型の災害対応や指揮命令系統の一元化などについて検討してきた。このような実態から浮かび上がってきたわが国における効果的な災害対応を検討する上で重要だと思われるポイントについて述べ、本章のまとめとする。

(1) 「共通の目標に向かって協働する」（目標管理）は「命令＋統制型」の補完概念ではないか

ICS では指揮官の命令は絶対的でありこれは組織全体の資源を効果的に運用する上では有効であるが、行政組織では実行がやや困難な状況であることが伺えた。これを補足するものとして、現場における自発的、創意工夫による業務の実行があり、ボトムアップ型の目標設定を行い、本部レベルでは調整と合意を行うことを通して組織全体のコントロールを行おうとしていたのが実態ではなかったか。上から下への命令・統制だけではなく、下から上への目標の報告が行われていた。つまり、目標管理が軍隊型の命令・統制型の災害対応を補完する概念として定着しているのではないかと考えられる。

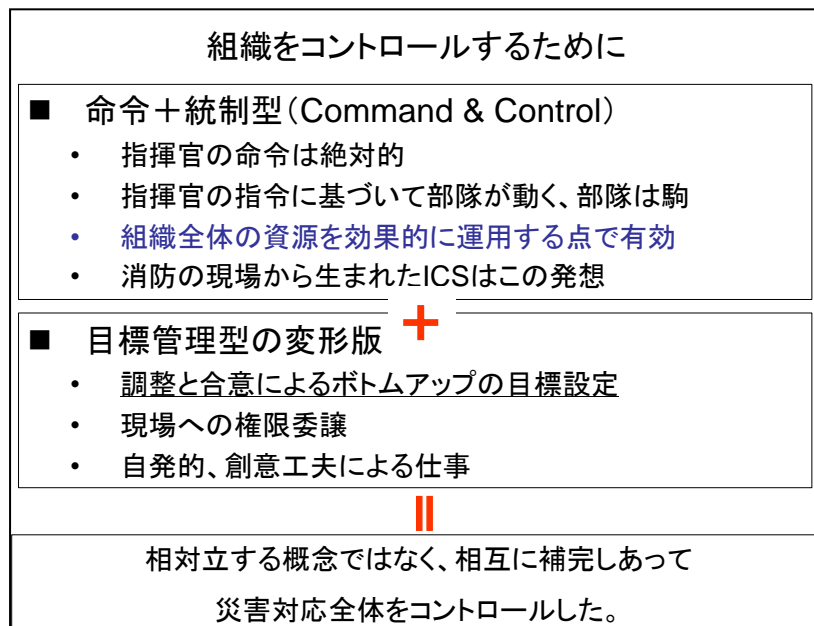
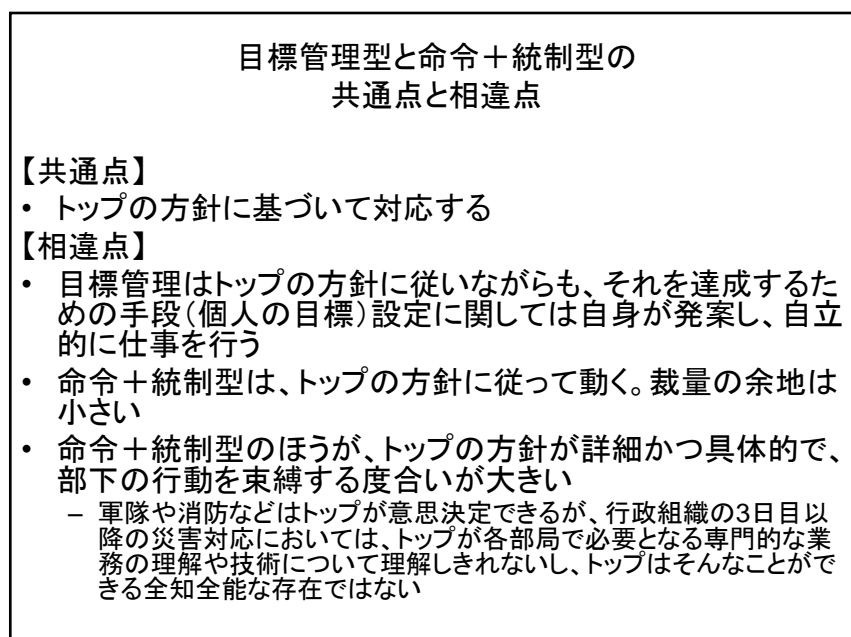


図 命令・統制型と目標管理型の補完概念

(2) 行政組織における本部長は、軍隊における指揮官ではなく、ある一定の現場への権限委譲を行ったコマンダーである。

先述したように、カトリーナ災害における実態は、本部長は軍隊における指揮官のように厳格な命令を行って部隊を動かすのではなく、現場における災害対応は各々の専門である主体に一定以上の権限委譲をして意思決定を行わせていることが明らかになった。本部長の意思決定はトップの発案だけではなく、現場の「調整と合意」に基づいて行っている。



（３）災害対応機能（ESF）ごとの個別の目標設定によって、組織全体の対応コントロールにつながっている

先述したように災害対応機能ごとに目標を設定し、仕事を管理することによって全体のマネジメントをやりやすくしている。しかし、これをわが国でも適用した場合、以下のような米国では成立されている前提が条件として求められる。

① ESF という業務体系が確立されていること

平時の部局に災害対応業務をはめ込むのではなく、被災地において求められる災害時の社会サービスとしての機能によって業務体系が確立されているため、その枠組みによって関係組織が協働する仕組みが成立している。その機能が達成すべき目標によって関係機関が連携するため、わが国の場合と比較すると災害対策本部レベルでの調整が少なくてすむ。

② ESF ごとに業務計画（目的、対象、体制、関係機関の明記）が定められていること

ESF は NIMS において 15 に分類されているが、州ごとによって少々異なっている。分類は異なるが、いずれの場合もその機能ごとに目的、対象とする業務、実施体制、関係する機関が明記されており、平時から関係機関の調整や連携について定められている。

このような被災地に求められる機能、言い換えれば災害時に求められる社会サービスを体系化することは、現場への権限委譲を行い、そこでの自発的な業務遂行を進める上でもわが国でも求められてくるであろう。

（４）災害対応のフェーズによって、求められる組織のコントロール手法は異なる

これは至極当然のことであるが、発災数時間後と数週間後では組織のコントロールする手法は異なるのではないかという点である。人命救助という明確な優先業務がある時期は現場においては消防の現場で生まれた ICS が効果的であると思われるが、時間がたつにつれて命令・統制型のトップダウンの組織コントロールでは動かず、現場への権限委譲を行ってトップでは活動の調整などを行うコーディネート型の対応が求められるのではないかということである。また、災害現場において

謝辞

現地におけるヒアリングを行うにあたって、ニューオリンズ市の **Office of Emergency Preparedness** の **Matthew** 氏にはインタビューに応じていただくと同時に市部局担当者（福祉部局、水道部局）を紹介していただくという多大な協力をいただいた。またハンコック県の危機管理監のアダムス氏には 2006 年 3 月、12 月と 2 回にわたる調査に対して、数週間にもおよび災害対応戦略計画の提供や長時間におよぶインタビューに親切に応じていただいた。2006 年 3 月の現地調査では京都大学防災研究所林春男先生を団長とする文科省の突発災害調査に D R I チームが合流させていただいたことは貴重であった。また、わが国における災害対応の問題点を整理するに当たっては、行政の防災担当者との意見交換があり、ここが本研究の出発となった。最後にカトリーナ調査を共同して行った人と防災未来センター専任研究員と彼らの国内における現地支援事業活動などの積み重ねがある。このような多くの方々のご協力があり、本研究は成立した。この場を借りて謝意を示したい。

災害対応を支援する情報システム

専任研究員 近藤伸也

発災後の状況は規模や経過時間に伴って変化する。災害対応に関連する組織は、被災社会から組織内部までの現状および今後の見通しなど災害状況を認識し、必要な業務と業務量を推定してから、グループごとの役割分担を明確にして災害対応業務を実施しなければならない。この環境は情報マネジメントによって支えられている。情報マネジメントとは、平時から情報を現場や他組織から入手して、紙やデータベースなどで管理し、地図など災害状況の認識や業務の遂行に必要な情報として利用者が使いやすい形に加工して、利用したり伝達したりする一連の流れである。現在多くの自治体に導入されている被害推定や情報収集などの情報システムは災害対応を直接支援するものではなく、あくまで情報マネジメントを支援する一つのツールである。

しかし、現状の多くの自治体では情報システムに関する問題点があるために、災害対応業務が後手にまわっている。例えば部局ごとにそれぞれの業務に必要な情報を独自の手段（システム）で入手してから管理、加工した上で災害対策本部に報告している。そのため災害対策本部では部局ごとに独自に加工された情報が蓄積されるために全体の状況を認識することが難しくなっている。また組織で統一した情報システムを設置した場合でも、それぞれの役割で変わる必要な情報を入手するためにシステムは多機能化する。その結果、システムの画面に載せられる情報量が過多になり、利用者側が内容を理解することが容易ではなくなる。そして情報システムを整備することによって情報マネジメントの省力化が図られると考えられているが、システムへの情報入力には多大な人工が必要である、システムの構築、維持管理にはコストがかかるなどから誤解であることがわかる。

本研究では、以上を踏まえて災害時における情報マネジメントを支援できる情報システムについて考える。今回は米国ハリケーン・カトリーナ災害での地方政府の災害対応を支援した情報システムについて調査した。そしてその活動を整理して、我が国の災害時における情報マネジメントに必要な項目について検討する。

1. 地方政府を支援した情報システム

ミシシッピ州ハンコック郡の災害対策本部では、ハリケーン上陸後約5日後から NVision Solutions Inc. (NVision) という IT 技術を持った企業が、地理情報システム（以下 GIS）を用いた地図の作成を通して、郡の災害対応業務を支援した。NVision は 2002 年に設立され役員 3 名、技術者 14 名で構成されている。主な技術としては GIS、リモートセンシング、データベース、Web アプリケーションの 4 つであり、これら技術を組み合わせて情報システムに関する問題を解決している。

今回は当時ハンコック郡の災害対策本部で中心となって支援した NVision の役員 1 名、技

術者1名を対象とした聞き取り調査を行った。その結果、彼らの支援の主な特徴として「情報の一元管理」、「需要に応じた情報の加工」、無償での協力ではなく活動を維持できる環境を整備する「システムを維持できる体制」であることが明らかになった。

表1 ハンコック郡で管理した情報

大分類	中分類	小分類
基盤地図	行政界	市境
		郡境
		消防担当地域
		公有地
		学区
		ステニス宇宙センター緩衝地域
		ステニス宇宙センター用地
		アメリカ国内地図との対応区域
		州分割の全国地図
		郡分割の全国地図
	標高	10mメッシュの標高
		5mメッシュの標高
		2フィート等高線
		10フィート等高線
	交通	橋梁
		鉄道
		道路
	河川・湖沼	間欠河川
		河川
		水位計
		湖沼
	画像	農業画像プログラム提供
		FEMA提供
		USGS地図
	地籍	建物図面
		筆
通常業務で利用する情報	人口統計	平均1500人区域(人口(人種、年齢区分)、空き家...)
		平均4000人区域(人口、世帯数)
		町丁目
		郵便番号
	地理的特徴	地質
		地盤種
		湿地帯
	地籍	土地被覆
		用途地域
	重要施設	企業
		消防署
		病院
		マリーナ
		警察
		学校
	その他	ガスパイプライン
		送電線
	環境	米国環境保護庁のスーパーファンドによる浄化事業地区
		米国環境保護庁によって規制されている地区
		産業廃棄物処理業者
		有害物質排出事業者
災害対応業務で使われる情報	避難	避難バス バス停
		避難地域(カテゴリー別)
		避難経路
	重要施設	協力組織
		災害対策本部
		避難所
		物資配給所
		支援組織
	洪水データ	基本洪水位
		最高水位(ハリケーン・カミール)
		浸水域(ハリケーン・カミール)
		想定浸水域(カテゴリー別)
		水害危険度(FEMA)
災害時に調査で得られた情報	廃棄物処理	廃棄物集積地(ハリケーン・カトリナ)
	被害状況	最高水位(ハリケーン・カトリナ)
		浸水域(ハリケーン・カトリナ)

2. 情報の一元管理

災害発生後に対応業務を円滑に実施するためには、道路、建物など多岐にわたる情報を、災害状況の認識または業務への利用が可能な情報に常時加工できるように管理する必要がある。ハンコック郡ではカトリーナ上陸以前は、道路情報等を地図に代表される紙媒体で、土地課税台帳に必要な情報を GIS で管理していた。そのため高潮による浸水被害によって情報を活用できない環境になった。

NVision は、紙の地図等で散逸した情報を加工できる形式に変換してから保存する場所を整理することにより、業務に必要とする情報を一元的に管理できる環境を整備している。今回は情報の加工を GIS で行っていたので紙の地図をソフトの規格に適合する形式 (shp ファイル) に変換する必要があった。そこで建物分布や避難所の場所など郡が管理していた紙の地図による情報はスキャニングしてから、shp ファイルに変換した。また行政界等、他組織でも利用される情報については、国内の統計局 (U.S. Census Bureau) 等で提供されている shp ファイルを用いた。情報の保存場所については GIS ソフトで管理することにより、常に保存場所を把握することができる。また作成した shp ファイルが引き継ぎ等の作業により散逸しないようリストを別途作成している。

管理している情報の内容は、限られた時間で情報を変換することを考慮して、必要最小限にとどめている。内容を分析すると表 1 にあるように地図情報として認識できるために最低限必要となる「基盤地図」、通常業務から積極的に利用する「通常業務から利用する情報」、平時から計画しているが災害時にはじめて利用する「災害対応業務で利用する情報」、被害状況など災害時に調査することで初めて入手できる「災害時に調査で得られた情報」の 4 つに分類できる。これらの情報を一元管理することの意義は、被害状況や対応状況などの外部環境を空間的に認識できる情報を作成する際に、必要とする情報の所在を把握して、容易に加工できることである。例えば「基盤地図」に「災害時に調査で得られた情報」の浸水範囲を重ねることで、災害時に管轄地域の被害状況を空間的に認識できる。さらに「通常業務から利用する情報」を重ねることにより各部署で対応すべき業務を把握できる。

日本の自治体では、災害対応時でも通常の部署を基本として対応業務を実施するため、災害時においても「道路」に関する情報は土木部、「廃棄物処理」に関するものは環境部など情報を通常業務に関連する部署が管理している。その形式も紙媒体の地図、リストから GIS で用いられる shp ファイルなど自治体とその部署によってバラバラである。そのため所管の被害状況などの各部署で管理されている情報は災害対策本部会議で報告されるが、その自治体の職員、あるいは居住者など頭の中に空間配置を認識できなければ外部環境を把握できない。今回の調査結果を踏まえて災害対策本部全体で外部状況を把握するためには、事前に必要となる情報を抽出して、その所在と保存形式を整理する。それを踏まえて紙媒体やホワイトボード、情報システム等加工できる方法を検討することである。

3. 需要に応じた情報の加工


情報は内容ごとに管理しているだけでは対応業務に役立てることは難しい。需要に応じて管理された情報を組み合わせて状況を認識できる、または業務で利用できるように加工することにより初めて対応業務に利用できる情報になる。しかし、我が国の災害対応において、以下のような課題があるために情報を容易に加工することが難しい。例えば事前に定められた様式に従って、その意図をくみ取ることなしに加工しているために、様式に情報を埋めることが業務の目的になっている。また状況を空間的に認識するために有効なツールである地図を用いて、需要に応じた情報に加工できる技術を持っていないため、状況を認識できる情報の利用が容易ではない。

今回の支援で NVision は、部署ごとに必要とする情報を把握し、自らが情報を加工することにより、管理している情報を需要に応じたものに加工できる環境を整備している。彼らは各部署が必要とする情報を、災害対策本部の業務の流れを観察して作成した、専用の調査用紙（写真 1）に記入してもらい、その内容に適した地図情報を自ら作成している。調査用紙の項目は、部署、理由、枚数、地図のサイズ、詳細説明の 5 つである。NVision の技術者は、調査用紙に記入されている項目の内容から、該当する地図情報をカスタマイズして作成している。写真 1 は、Waveland 地区の建物被害情報の地図を作成してほしいとの要求を調査用紙に記入したものであり、この要求に基づいて作成した地図が写真 2 である。

需要に応じた情報は、調査用紙で把握した需要に加えて、利用する組織のレベルや周囲の状況に応じた条件を考慮して、該当する情報を機能を駆使して情報を加工することにより作り出される。特に同じ質問でも組織のレベルによってその答え方が変わってくる。例えば「今回の災害で何人被害を受けたのか」という質問の回答は、「何丁目何番地の〇〇さん」という情報の積み重ねによって作り出されるが、ここで大統領は州ごとに集計された情報が必要であり、郡のレベル（我が国では市町村レベル）になってはじめて「何丁目何番地の〇〇さん」という個人単位の情報を用いる。また周囲の状況を考えて、管理されている情報を組み合わせるだけでなく、それを補足する情報を付記する必要がある。災害時には警察、消防、FEMA からボランティアまで全国からハンコック郡に支援に来た。彼らには土地勘がないので支援する場所を示す地図を作成する必要があった。通常は建物と道路、支援すべき施設の場所に関する情報を組み合わせて作成するが、地図に目印になる建物が記載されていても高潮により洗い流されて判別することが難しく、目的地にたどり着くことが容易ではなかった。そのため主要道路だけではなく細い路地や農道を加えた詳細な道路地図を作成し、さらに施設周辺地域を拡大表示することで、施設の所在地の把握を容易にしている。図 1 は例としてハンコック郡の医療施設を示した地図であり、外部の間では認識が難しい施設は周辺地域を拡大表示していることがわかる。

この結果を日本の自治体の災害対応に応用するためには、需要を把握して情報を加工できる人材を確保する必要がある。そのためには技術を持った職員の育成、または IT 技術を持った企業、自衛隊など情報を加工するノウハウを持っている組織の協力の確保が考えら

れる。

 **Nvision**solutions inc

Map Request Form
(Must be filled out completely)

Date: 10-17-15 Time: 11:30

Name: GILL JOHN-104 Organization: HANCOCK
ERC PUBLIC WORKS

For Official Use:
Request: _____

Position (Please Circle One):

ESF 1 Transportation	ESF 9 Search and Rescue	ESF 17 Animal Control	Incident Command
ESF 2 Communications	ESF 10 Hazardous Materials	I.A. / Unmet Needs	Planning
<u>ESF 3 Public Works</u>	ESF 11 Food and Water	FEMA	Logistics
ESF 4 Fire Rescue	ESF 12 GIS	MEMA	Fire & EMS
ESF 5 Information	ESF 13 Military	Red Cross	Finance
ESF 6 Mass Care	ESF 14 Public Information	Hancock County	Support
ESF 7 Resources	ESF 15 Volunteers and Donations	Bay St. Louis	Hancock County Schools
ESF 8 Public Health	ESF 16 Law Enforcement	Waveland	US Coast Guard

Justification: _____

Quantity: 1 Map Size: 8½x11 11x17 17x22 22x34 34x44

Description: MAP of WAVELAND BUILDING DAMAGE

Only sign upon receipt.
Received by: [Signature] Date: 10-17-15 Time: _____

写真 1 需要の把握に用いた調査用紙



写真 2 需要に応じて作成された地図

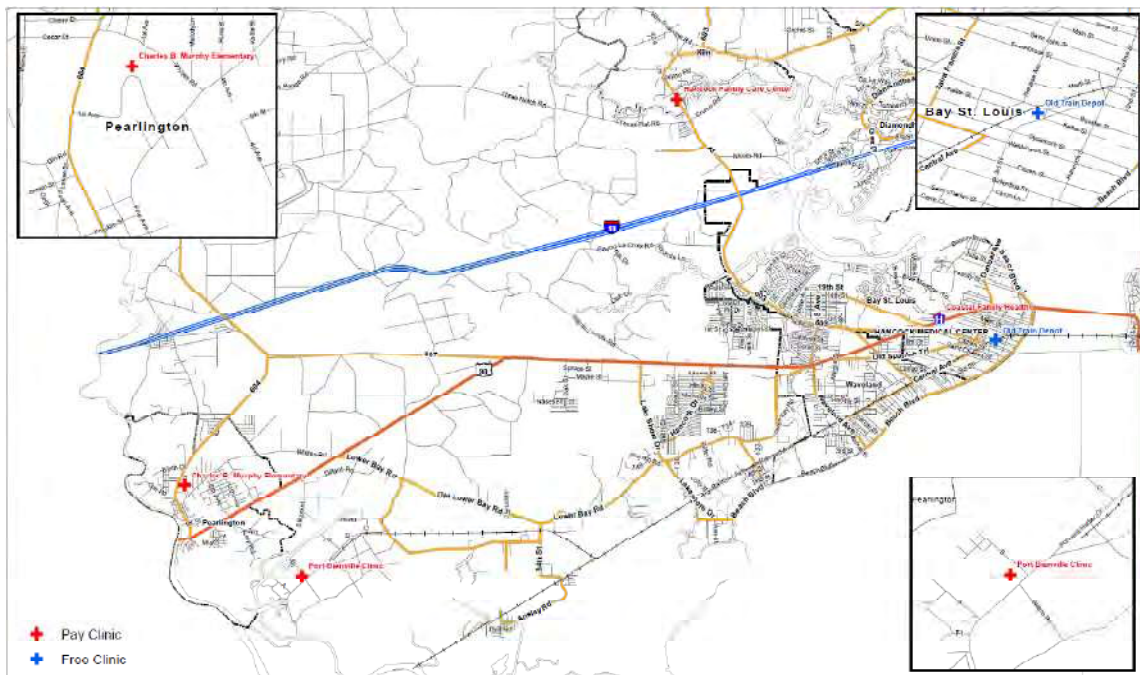


図1 需要に応じて作成された地図の一例

4. システムを維持できる体制の整備

これまでに述べてきた情報システムによる災害対応の支援は、設備にかかる費用、人件費の面からコストがかかるため、無償で実施するには限界がある。そのためシステムを維持できる体制を支援される地方政府（日本では市町村）、もしくは上のレベルの州（都道府県）、連邦政府（政府・省庁）のレベルから整備する必要がある。しかし研究者グループが研究活動の一環として自治体の対応を支援する、リモートセンシング等の特殊な技術を持った企業が自治体に情報を提供する等の無償での支援が主になっており、情報システムによる継続的な対応の支援につながらない。NVision は今回の活動で約2万枚もの地図を作成したが、その活動には表2で示すような設備と人材が必要であった。資金の面で見てもソフトウェアとハードウェアだけでもあわせて約10万ドルかかっている。彼らの通常業務を考慮すると、ボランティアとして復旧期の対応まで支援することは難しかった。

そこでハンコック郡の災害対策本部や FEMA によって災害対応業務における彼らの位置づけを明確にして、資金面での支援を受けられるようにした。彼らはハリケーン上陸5日後から近くにある地方政府を支援する目的から、ボランティアの立場としてハンコック郡の災害対策本部を支援していた。資金が不足して長期支援が難しくなるとの判断から、MEMA に対応を支援するよう声を上げていたが、MEMA は彼らに支援するよう動かなかった。ハンコック郡の災害対策本部で新しく ESF15（GIS 部門）を設置し、NVision はその立場で対応する位置づけになった。そのため支援開始時に基盤情報を紙の地図からスキャニングする際に、フロリダ州からの支援チームや他のボランティアの手を借りることができ

た。3週間後になって FEMA がミシシッピ州に関連する地図作成の業務を外部委託する形で契約している。そのため彼らの活動の位置づけが、ハリケーン・カトリーナに関する対応だけではなく、引き続きその後のハリケーン災害に対する情報システムによる支援業務を請け負うことができた。実際に 2006 年度においてもハリケーン災害に対して、避難に関するハンドブックの作成や、居住地の特性に合わせた避難計画の策定などの対策を実施している¹⁾。情報の入手に必要なとなる人的資源と設備を確保でき、システムを維持できる体制を整備できた。

この結果を日本の自治体に反映するためには、人的資源の確保と資金の確保の二つの視点から検討しなければならない。人的資源の確保に関しては、災害対策本部内の人材配置を時系列的に変化する部署ごとの仕事量に応じて弾力運用できる制度を作る、情報入手に特化した臨時職員を雇用することが考えられる。資金面に関しては、情報システムを整備した企業に引き続き維持・運用に関連する契約を行う。政府・省庁のレベルで基盤地図の整備に協力する企業に資金を援助することが考えられる。

表 2 情報システムに用いられた設備・資源

大項目	設備・資源	金額・人数
ソフトウェア	GISソフト:6ライセンス	約10万～11万ドル
ハードウェア	ワークステーション6台、サーバ1台 プロッター、プリンター数台、スキャナー	
人材	フロリダ州からの支援チーム、臨時雇用者、ボランティア、Nvisionの技術者	約150人

5. まとめ

本研究では、米国ハリケーン・カトリーナ災害での地方政府の災害対応を支援した情報システムについて調査し、その活動を整理した。今回はミシシッピ州ハンコック郡で情報システムを用いて支援した企業の活動について調査した。その結果、彼らの活動の特徴は図2のように「情報の一元管理」「需要に応じた情報の加工」「システムを維持できる体制の整備」の三つであることが明らかになった。そしてこの成果を踏まえて我が国の災害時における情報マネジメントに必要な項目について検討した。

今後は、今回の成果の中で特に「情報の一元管理」と「需要に応じた情報の加工」を自治体の災害対策本部事務局で実現できる手法を DRI の災害対策専門研修特設コース「図上訓練・広報研修」を題材にして検討していきたい。

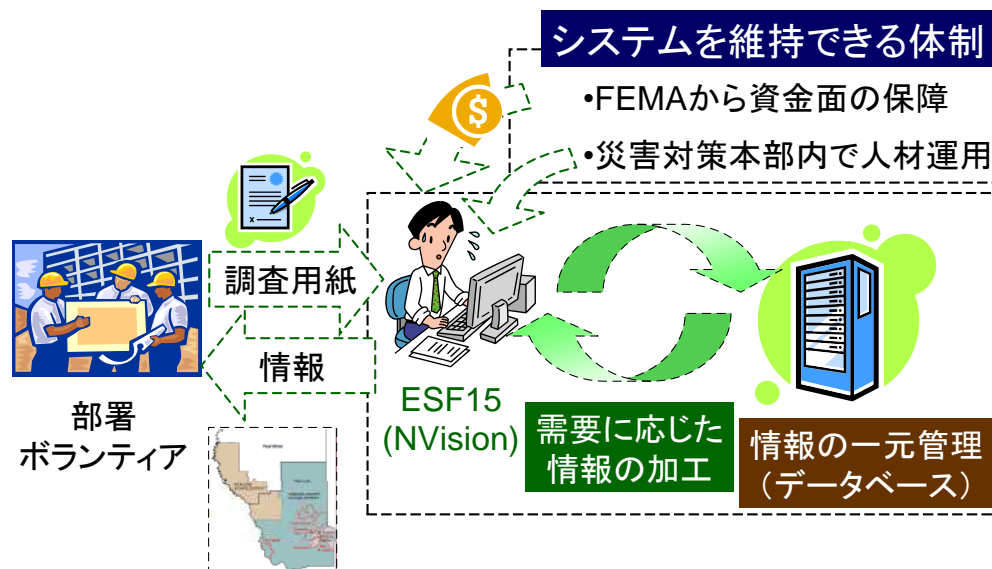


図2 ミシシッピ州ハンコック郡における情報システム

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米国ハリケーン・カトリーナ災害における上下水道部局の災害対応

専任研究員 平山修久

1. はじめに

阪神・淡路大震災、新潟県中越地震といった地震災害や 2005 年台風第 14 号災害などの風水害といった水道施設が被災する自然災害が発生している。また、西南日本外帯における南海トラフに沿うフィリピン海プレートの沈み込みによる巨大地震である東海地震、東南海・南海地震、あるいは首都直下地震の切迫性が指摘され、その発生が危惧されている。さらに、2000 年東海豪雨災害などの大都市における大規模水害に対しても、政府中央防災会議の専門調査会において、その対策について検討がなされている。水道事業体は、市民生活や社会経済活動を支える重要インフラであり、大規模災害時においても効果的な災害対応を求められている。

以上の観点から、本研究では、大規模災害時の水道事業体における災害対応について検討することを目的とする。ここでは、大規模災害として米国ハリケーン・カトリーナ災害を取り上げ、米国ハリケーン・カトリーナ災害における地方行政の災害対応業務マネジメントに関する研究の一環として、大規模水害時における水道部局の災害対応について、ニューオーリンズ市上下水道局（Sewerage & Water Board of New Orleans、S&WBNO）に対するヒアリング調査を行う。その中で、1）施設に対する被害状況と対応、2）他部局、他機関との連携、3）ESF（Emergency Support Function）と ICS（Incident Command System）、4）情報提供手法、5）復旧、復興施策、という 5 つの視点から上水道部局における災害対応について整理する。

2. 被害状況と対応

ニューオーリンズ市はミシシッピ川により 2 つの地域に分かれており、ミシシッピ川の左岸のミシシッピ川とポンチャートレイン湖の間にある市街地域と、右岸のアルジェ（Algiers）地域がある。ニューオーリンズ市上下水道局は、市街地域に供給する処理能力 44 万 m³/日（115 million gallons per day）のカールトン浄水場（the Carrolton Water Plant）と、ミシシッピ川右岸のアルジェ地域に供給する処理能力 3.7 万 m³/日（10 million gallons per day）のアルジェ浄水場（the Algiers Plant）により上水を供給している。

ハリケーン・カトリーナ災害では、S&WBNO 供給能力の約 9 割の処理能力を持つカールトン浄水場が完全に浸水する被害が生じた。カールトン浄水場は 13ft の堤防で囲まれている低地に立地しており、ハリケーン・カトリーナにおいては、17ft の高潮が発生したことから、完全に浸水し、機械や施設の屋根等を残して、完全に浸水した。図-6.1 に浄水場の位置とニューオーリンズ市におけるハリケーン・カトリーナによる推定浸水深を示す。

排水ポンプをヘリコプターで施設の屋根の上に設置し、浄水場に浸水した水を排水した。

浄水場は、被災後 2 日間は運転を止めなかった。これは、S&WBNO のシステムに特徴があり、カールトン浄水場は 25 ヘルツの発電機能を有していることと、浄水場に取水するポンプと配水システムに配水する高揚力ポンプを動かす電力を確保することができたことによるといった。

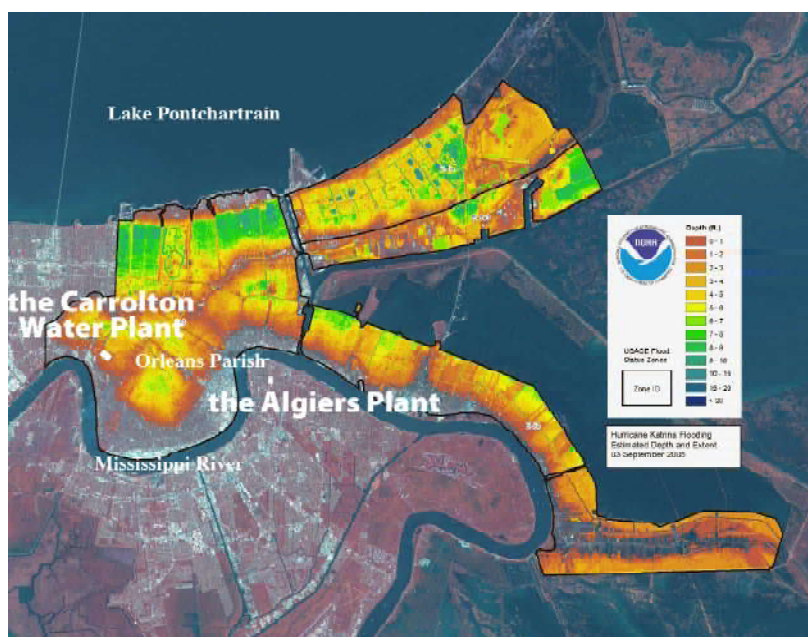


図-6.1 S&WBNO の浄水場と推定浸水深

1 週間以内で、浄水場内で電源を確保し、浄水

を再開した。しかしながら、塩素消毒を行っていなかったため、飲用には適さない水であったが、消火用水の供給を目的として再開した。

その後、11 月 18 日に飲用可能な水を供給することが可能となった。しかしながら、ニューオーリンズ市全域で飲用に適した水を供給できていることの the State Health Department による認証を取るのにさらに時間が必要であった。また、堤防の決壊により、カールトン浄水場のボイラー室が浸水し、変圧器の復旧を行った。その際、ヘリコプターを活用したが、S&WBNO が維持管理のために ICS における調整を行うこととなった。

下水道システムへの被害については、ほぼ全てのポンプステーションが浸水し、ポンプ設備、電気設備の被害が生じた。2006 年 12 月現在、65 のポンプステーションのうち、30 のポンプステーションが機能していないか、もしくは非常用ポンプによる運用している。

排水システムについては、大部分のポンプ場が浸水被害を受けたが、1 つのポンプ場の管理棟は堤防と同じ高さであり、排水場に発電機を持っていることから、運用することができた。しかし、システムが浸水してしまったため、停止することし、設備を引き揚げた後、救助活動となった。8 月 29 日（月）にステーション 6 の運転を停止し、8 月 30 日（火）早朝にステーション 1 を停止し、8 月 31 日（水）朝に発電所を停止することとなった。堤防が決壊したことがわかったことで、ニューオーリンズ市東側の排水ポンプを稼働できる地域に集中することができた。そして、ポンプを稼働させるためには冷却水が必要であったが、運河の水を冷却用に使用していた。また、ポンプを稼働させる燃料は 3 日間の備蓄をしていたが、燃料の確保が困難であったが、なんとか確保することができた。

また、浸水した設備においては、塩分を含んだ水であったことから、たとえ洗浄し、完全に乾かしたとしても、長時間使用するとショートにより使用不可能となった。2006 年 12

月現在の 15 ヶ月後においても、そのような修繕作業が続いている。

3. 他部局、他機関との連携

AWWA (American Water Works Association、米国水道協会)、ポートランド水道局、オレゴン水道局とは大変効果的に協働することができた。AWWA は、応急復旧と再建過程において S&WBNO を支援した。ポートランド水道局、オレゴン水道局は、S&WBNO のニーズを把握し、理解し、サクラメント、サンフランシスコ、オクラホマ、シアトルなどの協定している都市のリストを提供するとともに、米国内の事業体に呼びかけ、電気技術者、機械工、エンジニアなど人的な支援を行った。それは、1) the same knowledge、2) the same understanding、3) the same principle of focuses を持つことができたからであった。つまり、災害対応業務について、同じ言語でコミュニケーションすることができ、かつ共通の状況認識を得ることができたからであった。また、災害時の相互応援協定を結んでおくことが重要であった。

ニューオーリンズ市の他部局とは、ICS protocols により対応を行った。つまり、上下水道局、City Manager、Support Staffs とのコミュニケーションは、ICS に従って行うことで、ニューオーリンズ市での災害対応業務における共通言語によるコミュニケーションが可能であったといえる。

一方、the State EOC (Emergency Operation Center)、つまり州政府レベルの災害対応本部では、上下水道部局のシステムや業務を十分に理解できていないことから、必ずしもコミュニケーションがうまくいったとはいえない。一例として、the State EOC が、必ずしも上下水道システムの特性、複雑性を理解しておらず、災害対応のための S&WBNO 職員の人員配置の必要性が理解できなかったために、堤防が決壊したために浸水した排水ポンプ場の S&WBNO 職員の救出計画を、上下水道局が検討しなければ検討しなかった。また、S&WBNO は、ライフラインである排水、下水、上水における災害対応は初動においても重要であり、自分たちが消防、警察と同様に first respondent であると考えているが、FEMA (Federal Emergency Management Agency、アメリカ合衆国連邦緊急事態管理庁) をはじめとする連邦政府はそうには考えていなかった。

以上のことから、災害時に組織間を超えて効果的な協働を実施するためには、the same knowledge、the same understanding、the same principle focuses、the same language が必要である。つまり、災害対応業務に関して、共通認識を持ち、共通の言語によるコミュニケーションが成立しなければ、災害時に効果的な協働を実施することができない、といえる。また、災害後 72 時間は、外部からの援助が来ないものとして、水道事業体のみで対応できる体制を持つことが重要である。

また、外部応援機関においては、2、3 週間で人員が交代することが多いことから、現状での問題が何であるのかを理解し、学ぶことが重要である。

4. Emergency Support Function #3 and Incident Command System

ルイジアナ州における Emergency Support Function #3

の目的は、災害時、危機時においても Public Works and Engineering（公共・公営事業）によるサービスを確保することであり、災害時、危機時に、電気、ガス、上下水道、廃棄物処理というサービスをいかに確保する

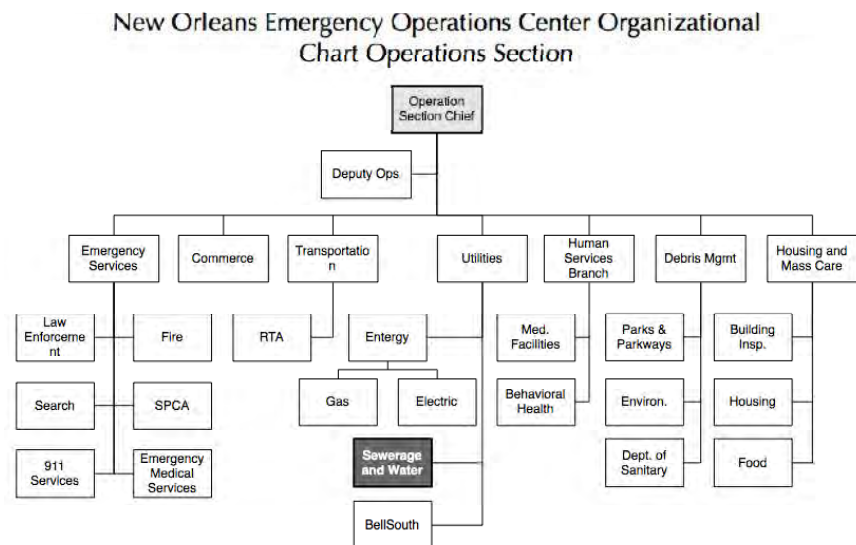


図-6.2 ニューオーリンズ市の EOC の組織図¹⁾

のかについて述べた対応計画である。

上下水道局は、ニューオーリンズ市の ICS の一部として機能しているものである。図-6.2 にニューオーリンズ市の EOC の組織図を示す。そこでは、公共事業におけるライフラインを復旧するという共通の目標があり、City Hall で ESF#3 のもとでコミュニケーションを行い、アクションプランや実施計画を一緒に作成していた。しかしながら、ESF#3 は災害時の実施計画であることから、S&WBNO、電気、ガス、BellSouth で調整、協働するのではなく、それぞれが活動中の状況報告を行い、質疑応答を行っていた。したがって、電気事業者、ガス事業者など他の公共事業体、市の危機管理部局に対する状況説明を行う必要があるが、復旧プロセスなどは、必ずしも、協働する必要はないといえる。

つまり、上下水道部局は、ニューオーリンズ市の ESF protocol に基づく operations section の一つであるといえる。

一方、ICS においては、権限を持つ機関の指揮官（the first section of commander）が、それぞれの分野のニーズ、方針を理解したうえで、意思決定をしなければ、ICS における unified command も機能しない、といえる。

5. 情報提供手法について

6-4.に述べたように、上下水道局は、ニューオーリンズ市の ICS に従って災害対応業務を行い、ESF protocol に基づく、Operation 部門の一つとして活動していた。ICS protocol は、当局からの信頼できる情報であることから、市の EOC の職員に対して、毎日の要約と最新情報（daily briefs and updates）を ICS protocol に従って提供していた。災害対応中においては、3 時間ごとに、市の EOC の一人の人間と S&WBNO の Emergency Manager とで、状況、

ニーズの共有を行っていた。

したがって、他機関やニューオーリンズ市民、報道機関に対する情報提供は、ニューオーリンズ市の COP (Common Operational Picture)、いわゆる災害対策本部資料を通じて行っていたといえる。つまり、上下水道局が直接市民に状況を情報提供するのではなく、ICS protocol に従って、Assessment Rollup とい

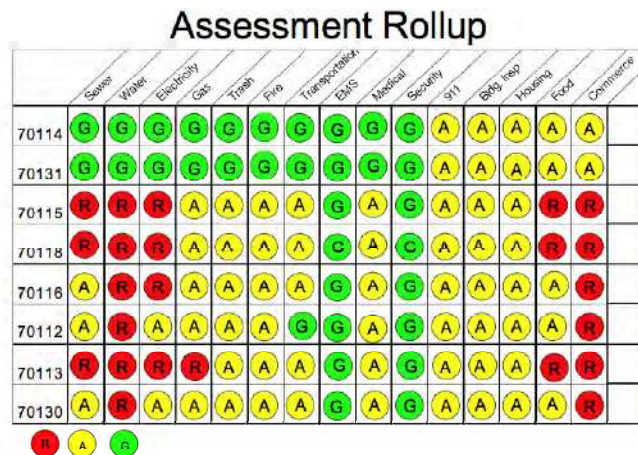


図-6.3 ニューオーリンズ市の Assessment Rollup¹⁾

う共通言語で、危機管理部局に状況説明、報告を行うことで、市民、報道機関、外部組織への情報提供を行っていた。図-6.3 にニューオーリンズ市の Assessment Rollup を示す。

このことは、危機管理部局が、上下水道局、電気、ガスなどの公共事業体の状況（内部環境状況、外部環境状況）、今後の状況予測、目標、対応（Action Plan、Operation Plan）を一元的に把握することができ、現在、被災地の状況がどんな状況であるのかという全体像を把握することが可能となるシステムであるといえる。また、各部局、公共事業体は、災害対策本部資料を参照することで、その地域がどのような状況が容易に把握することが可能となり、それぞれの今後の対応計画に、状況を反映させることが可能になる、といえよう。

6. 復旧・復興計画について

S&WBNO では、CAS Works というプログラムを用いて、管網の復旧を行っている。

FEMA では、災害対応において、mitigate、prepare、response to the disaster、recover from the disaster というサイクルとしているが、上水道事業は、他部局と比較して災害対応（response to the disaster）が長期にわたるといえる。つまり、他部局が復旧期（the recovery stage）に移行しているにも関わらず、S&WBNO は、応急復旧といった災害対応期（the response stage）にとどまっていることとなる。

米国では、災害復旧に係る費用の権限を FEMA が持っており、優先度により、災害対策費を各組織に分配することとなっている。つまり、FEMA が評価し、FEMA が認めたものについて復旧費が支払われるという仕組みである。また、FEMA は、ESF に対して必ず費用を支払うというものではない。一方、AWWA 等が災害復旧に係る膨大な費用を持っているわけではない。

排水施設、下水道施設の復旧に係る費用については、FEMA から米国陸軍工兵隊に対して提供される。一方、S&WBNO の施設は、ポンプ場だけではなく、ポンプ場からポンプ場への送配水システムもある。しかしながら、ハリケーン・カトリナ災害により地下に埋設された配水管も被災したにもかかわらず、地下配水管の復旧費用に関しては、配水管網が 100 年以上ものシステムであることから、復旧資金は支給しないとの判断がなされていた。また、中央政府、州政府のそれぞれの Emergency Management Association に対して、管路復旧の必要性や排水ポンプ場機能の回復方策について理解が得られるように働きかけを行った。そして、復旧計画、復興計画においては、1) 過去の災害の教訓を活かした計画とすること、2) その計画を改善しようとする、ことが重要である。

7. まとめ

本研究では、大規模災害として米国ハリケーン・カトリナ災害を取り上げ、ニューオーリンズ市上下水道局に対するヒアリング調査を行い、大規模水害時の上水道部局における災害対応について整理した。

その結果、得られた知見を以下に示す。

- 1) 施設の浸水対策などのハード的対策とともに、人員、電源、燃料、食料の確保とその運用計画というソフト的対策を、事業継続の視点から取り組むことが重要である。
- 2) 災害後 72 時間は、外部からの援助が来ないものとして、水道事業体のみで対応できる体制を持つことが必要である。また、外部組織、機関との協働という観点からは、共通認識をいかに持つことができるのかが重要である。
- 3) 大規模災害時には、今後の状況予測、目標、対応を一元的に把握することができ、現在、被災地の状況がどんな状況であるのかという全体像を把握することが必要である。
- 4) 復旧・復興計画においては、過去の災害の教訓を活かした計画とし、その計画を改善していくことが重要である。

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米国ハリケーン・カトリーナ災害における水害廃棄物処理マネジメント

専任研究員 平山修久

1. はじめに

水害などの自然災害時発生時には、家屋建築物の倒壊や被災住宅より家財等の廃棄物が大量に発生する。災害時の廃棄物処理施策を的確かつ合理的に策定するためには、まず、災害廃棄物発生量の推定が必要となる。自然災害における災害廃棄物処理対策という観点からは、災害廃棄物処理で適用された処理技術について検討したもの¹⁾や、災害廃棄物の特徴、その処理における課題について検討したもの²⁾がある。

一方、水害廃棄物という観点では、平成 16 年 7 月福井豪雨に伴う水害廃棄物の量と組成について調査したもの³⁾がある。また、平山、河田⁴⁾は、水害時に被害報における住家被害を用いて、限られた情報しか得られない災害初動時においてもある程度の精度で、かつ実務的に使いやすい水害廃棄物発生量の推定手法を提案している。

現在、平成 16 年新潟・福島豪雨、福井豪雨、台風第 23 号水害、平成 17 年台風第 14 号による水害、平成 18 年 7 月豪雨災害等、我が国においても集中豪雨・台風による大規模な災害が頻発している。しかしながら、これまでのところ、迅速かつ適正な処理を可能とする水害廃棄物処理施策策定のための科学的知見の導出、体系化まで至っていない。また、政府の中央防災会議「大規模水害対策に関する専門調査会」においても、大規模水害時の水害廃棄物処理対策の重要性が指摘されている。

以上の観点から、本研究では、大規模水害として米国ハリケーン・カトリーナ災害を取り上げ、水害廃棄物処理について、ルイジアナ州環境省（The Louisiana Department of Environmental Quality, The Louisiana DEQ）に対するヒアリング調査を行い、1）水害廃棄物発生量、2）水害廃棄物発生量の推定手法、3）水害廃棄物処理マネジメントの視点から整理する。そのうえで、大規模水害時の水害廃棄物処理の課題について述べる。

2. 水害廃棄物発生量

ハリケーン・カトリーナ災害による水害廃棄物発生量は、ルイジアナ州で 55 million cubic yards (4,205 万 m³) であり、2006 年 12 月現在では、50 million cy (3,822 万 m³) のがれき処理が完了したとのことであった。また、ハリケーン・カトリーナの約 3 週間後に 9 月 24 日にルイジアナ州西部で被害が生じたハリケーン・リタによる水害廃棄物発生量は、6 million cy (459 万 m³) であった。

しかしながら、未解体の被災家屋が 30,000 棟あり、さらに、未だ再建するかどうか判断されていない 80,000 棟もの家屋があることから、更に 12 million cy (917 万 m³) のがれきが発生するものと推定されている。したがって、最終的には、ハリケーン・カトリーナによるがれき発生量は、67 million cy (5,123 万 m³) と推定されている。

米国では、災害廃棄物発生量の推計は、cubic yard、つまり体積で行っており、重量には経験式による変換を行っている。ここでは、災害廃棄物の処分場として、埋め立て地の処理能力を体積で検討することがから、cubic yard、体積で災害廃棄物発生量を扱うこととしている。一方、州政府の多くの部局が廃棄物を重量ベースで扱っていることから、体積ベースで災害廃棄物発生量を推定し、体積から重量に変換することとしている。なお、家屋解体によるがれき（Construction & Demolition、C&D）については、5 cubic yards で 1t に、植物系廃棄物（vegetative debris）、木質系廃棄物（wood waste）については、12 cubic yards で 1t に変換している。ハリケーン・カトリーナ災害によるルイジアナ州の水害廃棄物発生量は、重量ベースでは、2006 年 12 月現在、2,200 万 t であり、最終的には、2,680 万 t に達すると推定されている。

図-7.1 にハリケーン・カトリーナと日本における 1995 年以降の大規模災害時の災害別の災害廃棄物発生量を示す⁵⁾⁻¹²⁾。これより、ハリケーン・カトリーナ災害による水害廃棄物発生量は阪神・淡路大震災よりもさらに 1.34 倍多くなっていることがわかる。また、日本においては 10 万 t 以上の災害廃棄物が発生する災害は地震災害のみであり、水害では 2000 年東海豪雨による 8.0 万 t が最大であり、ハリケーン・カトリーナは、2000 年東海豪雨による水害廃棄物の 335 倍もの膨大な廃棄物が発生している。

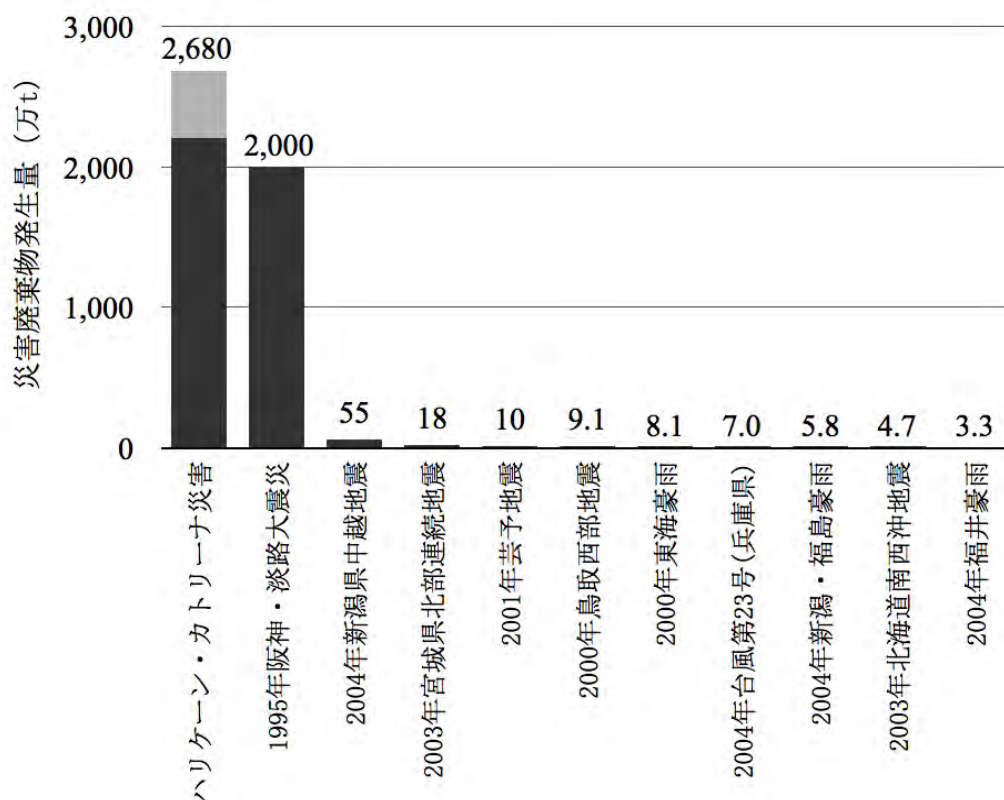


図-7.1 大規模水害時の災害別の災害廃棄物発生量

3. 水害廃棄物量の推定

米国においては、ハリケーンをはじめとする自然災害による災害廃棄物の推計手法として、米国陸軍工兵隊（U.S. Army Corps of Engineers）の Emergency staff が開発した、ハリケーンによる災害廃棄物に関するコンピュータモデル¹³⁾がある。このモデルは、気象レーダー（Doppler Rader (National Weather Service Broadcasts)）と GIS を用いて、1）水害廃棄物発生量の推定、2）水害廃棄物の仮置き場、処分場の要件の算定、3）水害廃棄物の種類による発生量の推定を行うものである。

水害廃棄物発生量の推定においては、世帯数、ハリケーンのカテゴリー係数などを用いて次式により算出する。

$$Q = H (C) (V) (B) (S)$$

ここに、**Q** は水害廃棄物量（cubic yards）、**H** は世帯数、**C** はハリケーンのカテゴリー係数、**V** は植生係数、**B** は土地利用区分のうち商業用の割合による係数、**S** は降水量係数である。つまり、世帯数が **H** = 160,000、ハリケーンのカテゴリー4 で **C** = 50、植生が HEAVY であれば **V** = 1.5、商業用地利利用密度が HEAVY であれば **B** = 1.3、降水量係数が MEDIUM TO HEAVY であれば **S** = 1.3 となり、**Q** = 160,000x50x1.5x1.3x1.3 = 20,280,000 cubic yards of debris or 20 million cy と推定される。

推定された水害廃棄物発生量に基づき、水害廃棄物の仮置き場、処分場の要件を算定する。さらに、水害廃棄物の種類により、木質系廃棄物（Clean wood debris）と家屋解体によるがれき（C&D）の発生量が推定される。ハリケーンによる水害廃棄物では、30%が木質系廃棄物、70%ががれき類となり、70%のがれき類のうち、その 42%が燃えるごみ、5%が土質廃棄物、15%が金属、38%が埋め立て処理とされている。図-7.2 に水害廃棄物組成別の割合を示す。

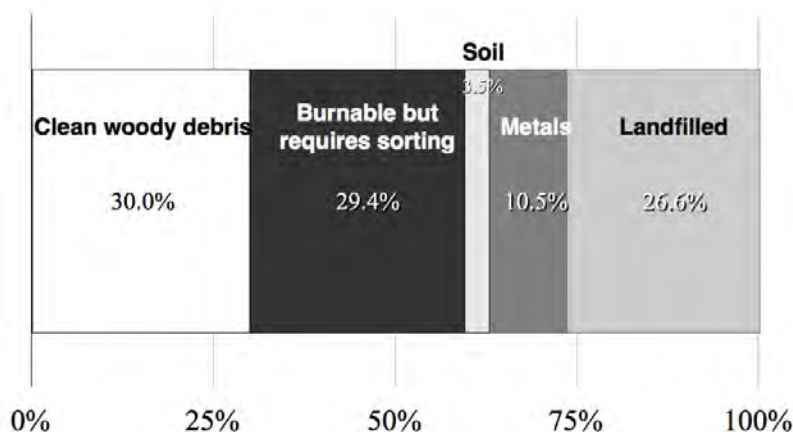


図-7.2 水害廃棄物組成別の割合

なお、この水害廃棄物の推定式は、経験式であり、1979 年ハリケーンフレデリック、1989 年ハリケーンヒューゴ、1992 年ハリケーンアンドリューでの観測データに基づいている。

そして、ハリケーン・カトリナ災害では、一般的に 1 棟当たりの水害廃棄物発生量は 300 cubic yards (229 m³)、つまり、体積・重量換算で 60t としている。

水害廃棄物発生量推定結果は、それぞれの行政区分 (parish) において、どの程度の量の災害廃棄物が発生し、被災地全体としてどのように災害廃棄物処理をマネジメントしていくべきかという計画策定に活用されている。

阪神・淡路大震災以降、自然災害による災害廃棄物の発生原単位の検討はなされてきている。高月ら²⁾は、阪神・淡路大震災での木造家屋の廃棄物重量原単位を $0.40\sim0.61\text{t}\cdot\text{m}^{-2}$ と推定している。渡辺¹⁴⁾は、阪神・淡路大震災での廃棄物発生の見積もり方法について調査し、大阪市での 800 棟の解体実績から、廃棄物発生量を $96\text{ m}^3/\text{戸}$ であったと推定している。また、住宅作業解体処理業連絡協議会など業界で得られている値として、 $39.7\text{t}/\text{戸}\sim44.7\text{t}/\text{戸}$ と報告している。また、2004 年新潟県中越地震では、実績ベースで算出した 1 棟あたりの解体廃棄物発生量は、長岡市が 85t/棟、小千谷市が 67t/棟、見附市が 62t/棟、川口町が 57t/棟と報告されている¹⁵⁾。つまり、ハリケーン・カトリナ災害においては、地震災害による解体家屋で発生する災害廃棄物量とほぼ同程度の水害廃棄物が発生したこととなる。

一方、ルイジアナ州南東地域での推定被災世帯数が 16 万世帯であることから、全壊による水害廃棄物発生量原単位 $12.9\text{t}/\text{世帯}$ を用いてハリケーン・カトリナ災害によるルイジアナ州の水害廃棄物発生量を推定した。図-7.3 に推定結果を示す。これより、平山、河田による水害廃棄物発生量推定式⁴⁾を用いたハリケーン・カトリナにおける水害廃棄物の推定量

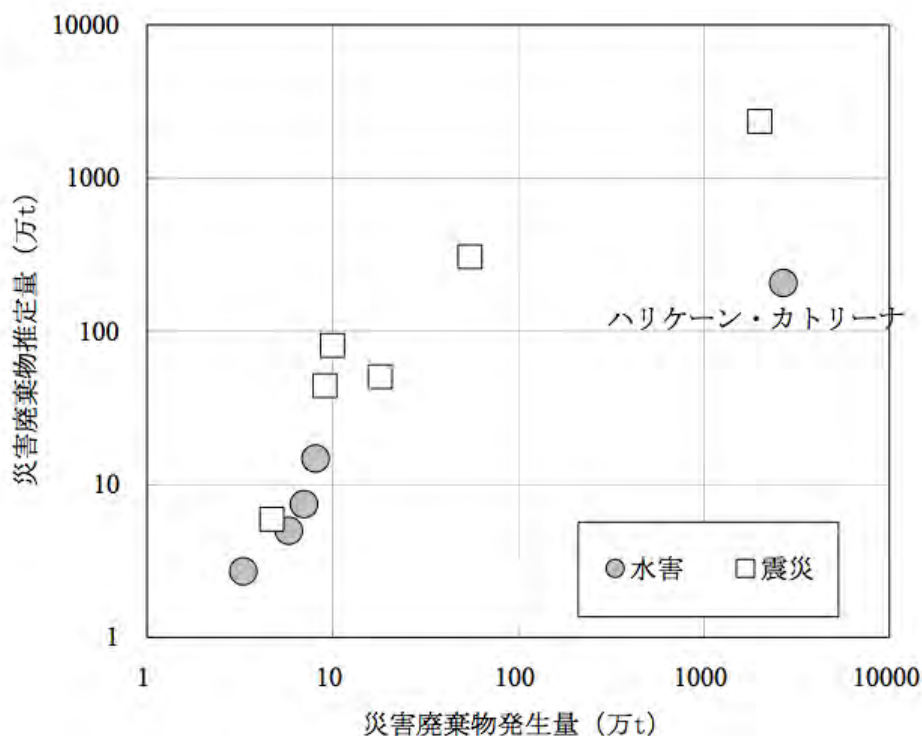


図-7.3 水害廃棄物量推定手法を用いた水害廃棄物発生量の推定結果

は 206.4 万 t となり、実績値と大きく異なることがわかる。これは、Lower Ninth Ward における被災状況と比較すると、2004 年の我が国における集中豪雨、台風災害とハリケーン・カトリーナ災害との災害規模、被災規模が異なること、日本と米国の住宅様式が異なることなどがあげられる。つまり、わが国においても大規模水害発生時には、これまでの水害による発生量原単位推定値を上回り、地震による全壊家屋から発生する災害廃棄物発生量原単位程度にはなりうる、ということである。

4. 水害廃棄物処理マネジメント

ルイジアナ州政府における水害廃棄物処理担当部局である The Louisiana DEQ は、Debris Management Plan を 2005 年 9 月に草案を出し、ハリケーン・カトリーナ災害の約 1 ヶ月後の 2005 年 10 月 14 日に、ルイジアナ州の地方政府、州議会に対して長官の教書として配布している。そこでは、ハリケーンによる災害廃棄物処理に関する情報をはじめとして、仮置き場等の Debris Management Site の設定条件、解体家屋により発生したがれき処理対策、オイルや危険物質処理対策、ボートや自動車のリサイクル対策、家電のフロン除去やリサイクル対策、漂白剤、殺虫剤などの家庭における危険物対策等が示されている。

また、ルイジアナ州における水害廃棄物マネジメントでは、Reduction of debris、Preservation of landfill capacity、Management of debris に注力している。つまり、焼却処分、粉碎処分、リサイクルなどの手法により災害廃棄物量を減量すること、埋立地の残存容量をできるかぎり確保すること、解体家屋や復旧過程における廃棄物マネジメントを行うこと、である。そして、ルイジアナ州の取り組みの一例として、以下のような活動を行った。

- ・ 100 万台以上の冷蔵庫から 22.7t (50,000 pounds) のフロンなどの冷媒を回収した。
- ・ 25 万台のエンジンをリサイクルした。
- ・ 10 万台の自動車、5 万台のボートのリサイクルを行う。
- ・ 家屋解体前に、家屋から家電、家庭有害廃棄物、アスベスト材を取り出し、プラスチックで梱包して埋め立て処分を行った。これにより、家庭有害廃棄物を 9000t (20 million pounds) 回収した。
- ・ ほとんどすべての植生系廃棄物を、リサイクルし、再利用した。

また、水害廃棄物の分別に関しては、The Louisiana DEQ 、U.S. EPA (米国環境保護庁)、Corps of Engineers にリサイクルのための訓練された専門職員がおり、彼らが最大 402 箇所の仮置き場において、埋め立て処分前に可能な限り分別を行った。つまり、市民は自宅の前の道路に水害廃棄物を排出し、指定業者が収集分別を行った。

以上のように、米国では、FEMA: Debris Management Guide として、

1. Local, Tribal, State and Federal Disaster Response Actions (対応業務)
2. Pre-disaster Planning (事前計画)
3. Debris Management Staff and Organization and Responsibilities (組織体制と責任)
4. Developing a Debris Clearance, Removal and Disposal (廃棄物処理)

5.Contracting Procedures（契約手順）

6.Special Demolition and Debris Removal Situations（特定条件での廃棄物処理）

7.Temporary Debris Storage Site Operations and Volume Reduction Methods（仮置き場での業務と減量手法）

8.Temporary Debris Storage and Reduction Site Environmental Considerations（環境負荷低減）

のように災害廃棄物処理業務が体系的に示されている。

5. 大規模水害時の水害廃棄物処理における課題

これまでに、ハリケーン・カトリーナ災害における災害廃棄物マネジメントについて述べた。ここでは、大規模水害時の水害廃棄物処理の課題について述べる。

現在、我が国においても大規模な水害が頻発している状況にあつて、災害対応に関する知識が、被災自治体の担当部局あるいは担当者個人の経験という暗黙知にとどまっており、水害時の廃棄物処理に関する知見の体系化については十分なされてきていない。平成 17 年 7 月に、環境省より水害廃棄物対策指針が示されているが、ハリケーン・カトリーナ災害においてみられたような体系的な水害廃棄物マネジメントシステムに基づいた水害廃棄物処理施策を行うことができるとは必ずしもいえない。したがって、水害時の廃棄物処理に関する暗黙知を形式知とし、災害対応の実践的、体系的な知見の蓄積や知識の共有を図るとともに、事前に体系的な水害廃棄物処理マネジメントシステムを構築しておくことが必要である。

災害対策基本法、地域防災計画、水害廃棄物対策指針で示されているように、都道府県、市町村は、迅速かつ適正な水害廃棄物処理を可能とする水害廃棄物処理施策を策定することが求められている。これまでに、水害廃棄物発生量の推定手法について提案してきたが、水害廃棄物の処理においては、その発生量だけではなく、被災地からの搬出方法、仮置き場や中間処理、最終処分での対応、焼却、リサイクルのための粉碎、選別手法、広域連携手法など、さまざまな観点からの検討が求められる。したがって、大規模水害時における水害廃棄物の迅速かつ適正な処理を可能とする水害廃棄物処理施策を策定する手法を導出することが必要である。

また、水害廃棄物の環境への負荷を鑑みると、いかに減量していくのかについても重要となる、したがって、被災者の視点を組み込み、Reuse, Reduce, Recycle を考慮した水害廃棄物の分別手法を明らかにし、自助、共助、公助の協働のもとで、大規模水害時においても、市民に対して環境衛生面から安全・安心を供与できる水害廃棄物処理対策を検討することが重要である。

6. おわりに

本稿では、ハリケーン・カトリーナ災害におけるルイジアナ州の災害廃棄物マネジメントと大規模水害時の水害廃棄物処理における課題について述べた。

水害後に市街地から水害廃棄物を取り除かれることは、被災地が復旧・復興に向けて踏み出すためには必要なことであり、水害廃棄物対策は、復旧・復興において主役となるべき市民に対して、環境衛生面から安全・安心を提供する都市インフラのひとつであるといえる。したがって、自助、災害ボランティアを含めた共助、公助の協働の上で、迅速かつ的確な水害廃棄物処理施策を実施することが必要であり、大規模水害時においても国、都道府県、市町村、廃棄物関係団体、市民、水害ボランティアが、それぞれの役割を積極的に担い、環境衛生面から安全・安心を確保することが可能となる水害廃棄物処理対策を検討していくことが重要である。

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ニューオリンズ市における都市復興に向けての計画づくりと課題

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1. なぜカトリナ災害の復興に着目するか？

2005年8月末に米国メキシコ湾岸を襲ったハリケーン・カトリナ災害はルイジアナ州、ミシシッピ州などにおいて強風・降雨・高潮による死者約1700名、住宅被害約120万戸（ニューオリンズ市約18万戸）という甚大な物的被害をもたらした。堤防の決壊によって、中心市街地の約8割が浸水し、大きな被害を受けたインフラの復旧や都市復興への道のりは長期化することが予測される。大規模災害後の復興においては、戦略的な計画枠組みの中で復興を計画的に着実に進めていくことが求められる。また先進国におけるこれだけ大規模な都市災害はそれほど多くなく、首都直下地震のような都市を襲う災害の発生が予測されているわが国においての都市復興計画の策定プロセスや手法などを考える上で、貴重な事例となる。阪神・淡路大震災を経てから、事前復興計画の考え方や復興マニュアルの整備などが東京都などを中心として取り組まれてきたが、全国レベルでそのような取り組みは一般化されていない。また、神戸市における復興のように既存の都市計画事業の枠組みに基づいた災害復興だけでは、都市の安全性の向上や復興を超えた魅力ある地域づくりへの展開は難しいと考えられる。本研究は、カトリナ災害から約1年半経過した今日において、ニューオリンズ市でようやく策定された復興計画の直後からの策定プロセスをトレースすると同時に、計画の体系と内容を分析したものである。研究の方法は、ニューオリンズ市都市計画局、市復興計画の取りまとめを行った建築プランニング事務所への現地ヒアリング（2006年12月）と同市の復興計画の分析である。

2. 復興計画を評価する6つの視点

著者は復興都市計画のあり方を考える上で以下6つの視点を設定している。

- (1) 計画の体系（戦略計画）
- (2) 都市復興と生活復興をつなぐ仕組み
- (3) 都市が目指す将来像・方向性
- (4) 計画策定の手続き・プロセス
- (5) 復興の理念
- (6) 計画策定に携わるプランナーの動員体制

ここでは阪神・淡路大震災における神戸市の事例を交えて6つの視点について概説し、8-3以降でニューオリンズ市における現状を説明する。

第1の視点は、復興都市計画の体系に関するものである。過去の災害をみると計画の目標と災害復興における都市の目指すべき将来像を出発点としてそれを実現するための事業を提案するという、いわゆる戦略計画型の計画を策定する計画手法と、被害を受けた地域

ごとに被害の状況に応じた事業を実施して、全体計画は地区ごとの計画を積み上げ型で統合するという二つのアプローチがある。先進国を襲った都市災害である阪神・淡路大震災（1995 年）では後者が採用されている。その背景には、わが国においては法定都市計画である土地区画整理事業や再開発事業といった既存の枠組み内にとどまった復興事業が実施されるのに対して、米国における都市の復興をみると、地方自治体における都市計画に関する権限が大きいこと、補助金も事業補助金だけではなく包括補助金として一括して支給されるため、地域の状況に応じた計画手法で復興事業を実施できるという点が日本との大きな違いである。

第 2 の視点は、都市の物理的復興と被災者の生活復興、主にすまいの復興を両車輪で同時並行的に進めていくことを実現するような計画であるかどうかという点である。被害を受けた都市のインフラを復旧して都市機能が回復したとしても、被災者のすまいを再建し、生活が元に戻らなければ、地域生活空間としての都市が復興したとは言い難い。すなわち、都市復興と生活復興をつなぐ役割を担う計画としての復興都市計画の評価が必要である。市長をトップとする委員会が 2006 年 1 月に発表した計画においても、復興計画において住宅に関する記述は一切なかった。第 3 は、災害後に都市が目指すべき将来像・方向性に関して、「都市の安全性」、災害前からの都市の文脈の「継続性」、そして復旧を超えてより快適で魅力ある都市へと再生する「発展性」という 3 つの要素が計画でどのようにして実現しようとしたかという点である。第 4 は、計画を策定する手続きやプロセスについてである。市民、地域、市民団体 N P O、行政、民間企業、プランニングの職能団体などの多様な主体が、どのようなプロセスで都市の復興像を描くかといった手続きの検証である。Healey(1998) は、Davidoff (1965) が提唱したアドボカシープランニング理論を継承し、計画の合理性や公共性、総合性は多様な主体が参加する適切な討議過程を通じて結果的に達成すると述べており、このような都市の公共性を実現するための計画手法をコラボレイティブ・プランニング（討議型都市計画）と名づけている。災害の規模、性質は大きく異なるが 2001 年の W T C 同時多発テロ後の再建においてはこの討議型都市計画の考え方に基づく実践が展開された。第 5 は、復興の理念をどのように形成したかという点である。阪神・淡路大震災後に兵庫県は、復興の理念は国内外を含めて復旧にとどまらない創造的復興を目指したが、それらが被災者の生活復興においてどのように寄与したか、という視点で評価しなければならない。また、復興への資金がどのような名目、根拠の下でどの機関から支払われたのか、という補助金の内訳についても明らかにする必要がある。第 6 は、復興都市計画の策定にあたって民間のプランナーがどのような体制でかかわったのかという点である。災害の規模が大きくなればなるほど、計画策定には地元の自治体だけで担うことは困難になり、プランニングの職能団体やコンサルタントなどがそれを支援することが求められる。カトリナ災害においては、半数を超える市民が市外へ避難したことから税収が激減したことによってニューオリンズ市の都市計画局（City Planning Commission）のスタッフは 20 数名から 10 人以下へと減られており、これをサポートするため米国都市計画家

協会や民間コンサルタントなどが大きく関与している。また、この点は多様な主体によって討議型で策定された計画を合理的、総合的なものに保障するためにも欠かすことはできない。

このような6つの視点から復興都市計画を見つめ、将来の災害に備えた復興都市計画学・手法を提案することが最終的なゴールである。これらのすべての視点で現時点でのニューオリンズの復興計画を評価することは困難であるが、長期的に多角的な視点でニューオリンズ市の復興を捉えていく必要があると感じている。

3. ニューオリンズ市の復興の現状

表1は2006年11月におけるニューオリンズにおける公共サービスや就業人口などの復旧状況や住宅の再建に向けての取組を示したものである。再開した病院は半数程度であり、また公立学校に関しては44%に落ち込んだままである。交通機関であるバスの運行数に及んでは、17%にとどまり平常時の生活を行うにはまだまだ支障があることが伺える。10万戸を対象とした住宅に対する修復補助金の申請に対しても、632件しかなく住宅再建はまだまだ進んでない実態が浮かび上がる。子供の学校が再開しない、バスも使えないという状況に加えて、ニューオリンズがどのような都市復興を行うのか、どのような都市像を目指すのかといった、復興計画が提示されずして市に戻るか否かの判断は行えないはずである。また、被災者にとっての個別の住宅再建は、地域への近隣住民の帰還状況やその地域の安全性がどのように確保されるかなども考慮しないと進めない。つまり、早い段階において行政が復興に向けての道筋を提示し、被災者が自立して再建しようという意欲をなくさせないことが復興へのスタート

には求められるのではないだろうか。鳥取県西部地震において片山知事が指摘した「被災者の暮らしをできるだけ早くもとに戻し、絶望を少しでも希望に変える」ことが求められている。災害からの回復力（resilient）をもった地域への再生とは、都市インフラの強化だけを意味するのではなく、広域避難によって失われた社会構成要素として市民が参画していくことが鍵となるのである（Campanella, 2006）。

表1 ニューオリンズ市における公共サービスの復旧状況

	被災前に比べた復旧率	
再開した公立学校		44%
公立学校の生徒数		32%
再開した病院		52%
バス運行数		17%
再開したホテル		90%
就業人口	教育・医療	59%
	観光・レジャー	66%
	商業・運輸・公益	74%
家屋の修復援助 (州全体2/12現)	申請	10万7739件
	交付	632件

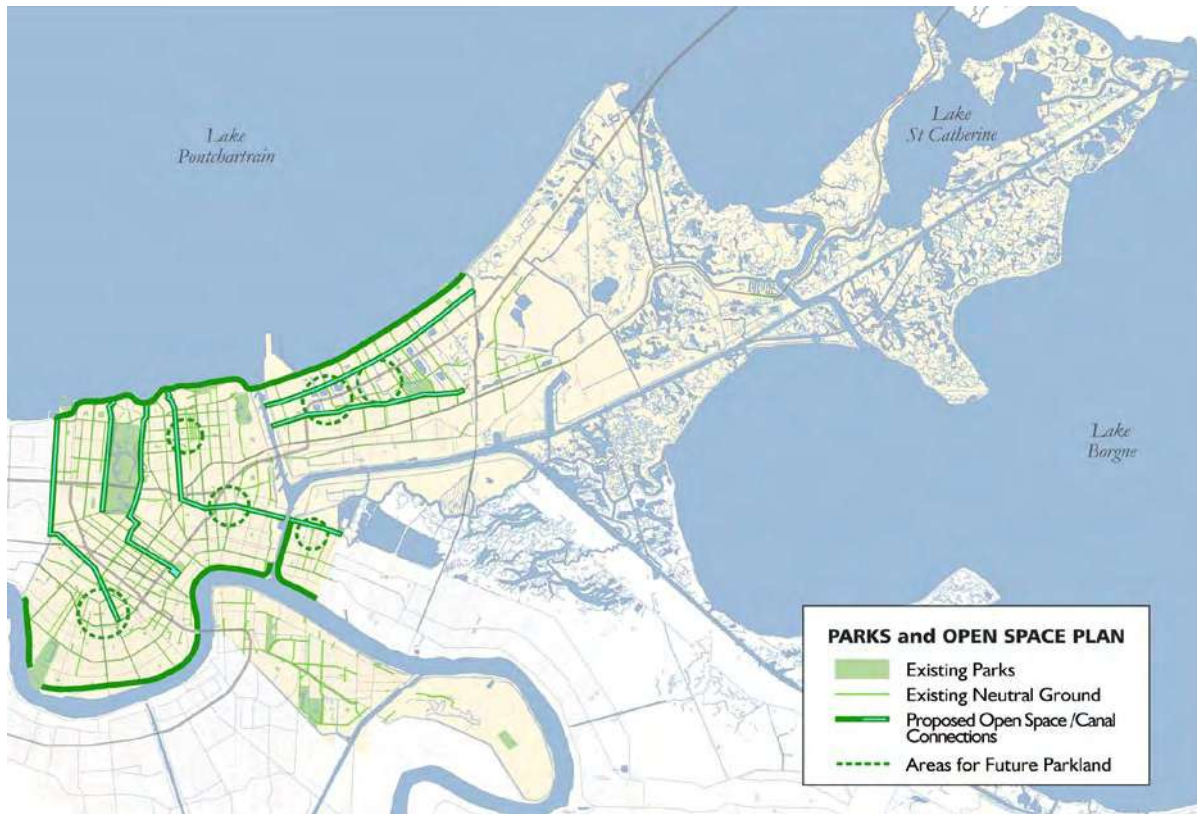
出所) Katrina Index Tracking Variables of Post-Katrina Recovery
Updated November 16, 2006, THE BROOKINGS INSTITUTION

4. ニューオリンズ市復興計画のプロセス

2007年1月によりやくニューオリンズ市全体をカバーするニューオリンズ市復興計画

(Citywide Strategic Recovery and Rebuilding Plan) がまとまった。3 月の都市計画審議会前に 2 回の公聴会を行い市民からの意見聴取を行った後に市議会、市長へと審議がうつる予定である。阪神・淡路大震災では都市計画決定は 2 ヶ月後であったが、ニューオーリンズ市では一年半もかかったのはなぜか。

現在審議にかけられている計画の前に、連邦政府の枠組みで州が行った計画策定(ESF#14, Louisiana Speaks)、市長をトップとする復興委員会(Bring New Orleans Back 委員会)、市議会による復興計画策定、など様々な主体による計画策定が行われてきており、それが統合されるかたちでようやく本計画にまとまったという経緯がある。この背景には、インフラへの甚大な被害と市民の広域避難による税収の減少によって市職員が直後に半数解雇され、同市都市計画局 30 名から 9 名へとスタッフが減少し、事実上中心となるべき都市計画局が機能しなかったことがある。ネーギン市長は復興委員会を立ち上げ、Urban Land Institute という全米有数のシンクタンクへの計画策定を委託し、委員会内にも都市計画部会、経済復興部会などの部会ごとに都市復興に向けての計画づくりを進めた。こうして 2006 年 1 月に公表された復興計画では、防災課題だけではなくライトレールの整備や文化の継承、医療サービスなどを含めた総合的な計画が提示された。ただ、この中で示された甚大な被害を受けた地域を公園にすること、建築制限をかけ個別再建を凍結させることなどの内容やなどの提案が市民から強い反発にあい、事実上この計画は白紙撤回に追い込まれた。これに続いて行われたのが、市議会主導の計画であり、コンサルタントの名前をとって通称 Lambert Plan と呼ばれている。同計画は、市議会がコミュニティ開発包括補助金 CDBG (約 300 万ドル) を活用してコンサルタントに委託し、堤防決壊により 2m 以上の浸水があった 11 地区を対象にしたものであった。ただ、いずれも場合もステークホルダーは市長指名の委員会および市議会といった単一のステークホルダーのみに限定されていたこと、専門家主導で行われたこと、計画の策定がトップダウンのみで行われたこと、特定の地域だけではなく市全体の計画が必要とされていたことなどの点において問題を抱えていた。こうしたことから、ルイジアナ州(LRA) や民間の都市計画プランナーなどの専門家が中心となってロックフェラー財団などに働きかけを行い、民間財団などの支援を受けて計画が策定される体制が整ったのである。2006 年 8 月に市長、市議会、都市計画局が 5 ヶ月間で復興都市計画の策定に向けて取り組むことでようやく合意した。5 ヶ月間で市全体の計画と市内 13 地区の地区別計画を策定することが決定された。市長委員会や市議会主導による計画づくりと決定的に異なるのは、Community Support Foundation という非営利組織の監督の下で計画を進めることによって政治と復興を切り離したこと、行政内部だけではなく、被災者、地域住民、コミュニティ組織などの多様な主体を巻き込んだ計画づくりを目指した点である。本計画への計画策定資金(約 750 万ドル) は、ロックフェラー財団、Greater New Orleans Foundation、Bush-Clinton Katrina Fund などの民間財団によって提供されている。復興計画策定に向けての体制、プロセス、仕組みが行政ではなく民間レベルで決定された点が注目される。



出所) Action Plan for New Orleans: The New American City

January 11, 2006 Bring New Orleans Back Commission Urban Planning Committee

5. ニューオリンズ市復興計画（UNOP）の計画体系と策定プロセス

（１） 計画体系（Planning Framework）と内容

UNOP は、ニューオリンズ市全体の計画と地区ごとの計画を策定で構成される。市全体計画は、復興ビジョン、復興に向けての目標、目標を達成するためのプログラム/政策/事業で構成されている。ビジョンは「より安全で強いスマートな都市」(Safer, Stronger, Smarter City)である。戦略計画の形式に従っており、まず復興に向けてのビジョンを描き、復興にむけての目標を掲げた後に、それを達成するためのプログラム/政策/事業が描かれている。特に被災者が重視したのが洪水対策、地域レベルでの復興方策、住宅、インフラ、医療や学校などの公共サービスであり、これらが専門家によって 14 の目標に編成された。このプロジェクトの中には、洪水リスクに対して地上げや被災地でバラバラの再建を行うのではなく、地域レベルでクラスターごとにまとまりをもって再建することを支援するプログラムなどが盛り込まれている。地域レベルでの復興に関しては、市長復興委員会による計画でもその重要性が指摘されていたが、トップダウンの強制ではなく、住民の意思で自立的に再建をしていくような施策を住民は求めた。また同市の復興計画におけるプロジェクトをみると、阪神・淡路大震災のように既存の都市計画事業の枠組み内に留まった計画手法に留まらず、都市の安全性を向上させるためのメニューの豊富さが光る計画となっている。この計画策定に携わったプランナーの力量の高さを示している。

（２） 計画策定のプロセス

市全体計画と地区別計画を策定するために、全体集会と地区別集会が平行して進められた。図 1 は計画策定のプロセスを示しているが、市全体計画と地区別計画が相互に連携しながら進められてきており、それをつなぐのが専門家の役割であった。全体集会はコミュニティ議会（Community Congress）と呼ばれ、この運営資金は市ではなく企画運営主体である非営利組織 AmericaSpeaks による民間からの献金によってまかなわれている。市内人口が半分以下に留まる中で特に多くの市民が避難したアトランタ、テキサス、ダラスなどの都市の会場でも行われた。各会場での中継映像が流され、計画への意見などの投票結果も同時に集計できる仕組みが用いられた。



第 2 回コミュニティ議会の様子（出席者 2500 名、五都市で開催）
提供）Dr. Rob Olshansky ,University of Illinois at Urbana Champaign

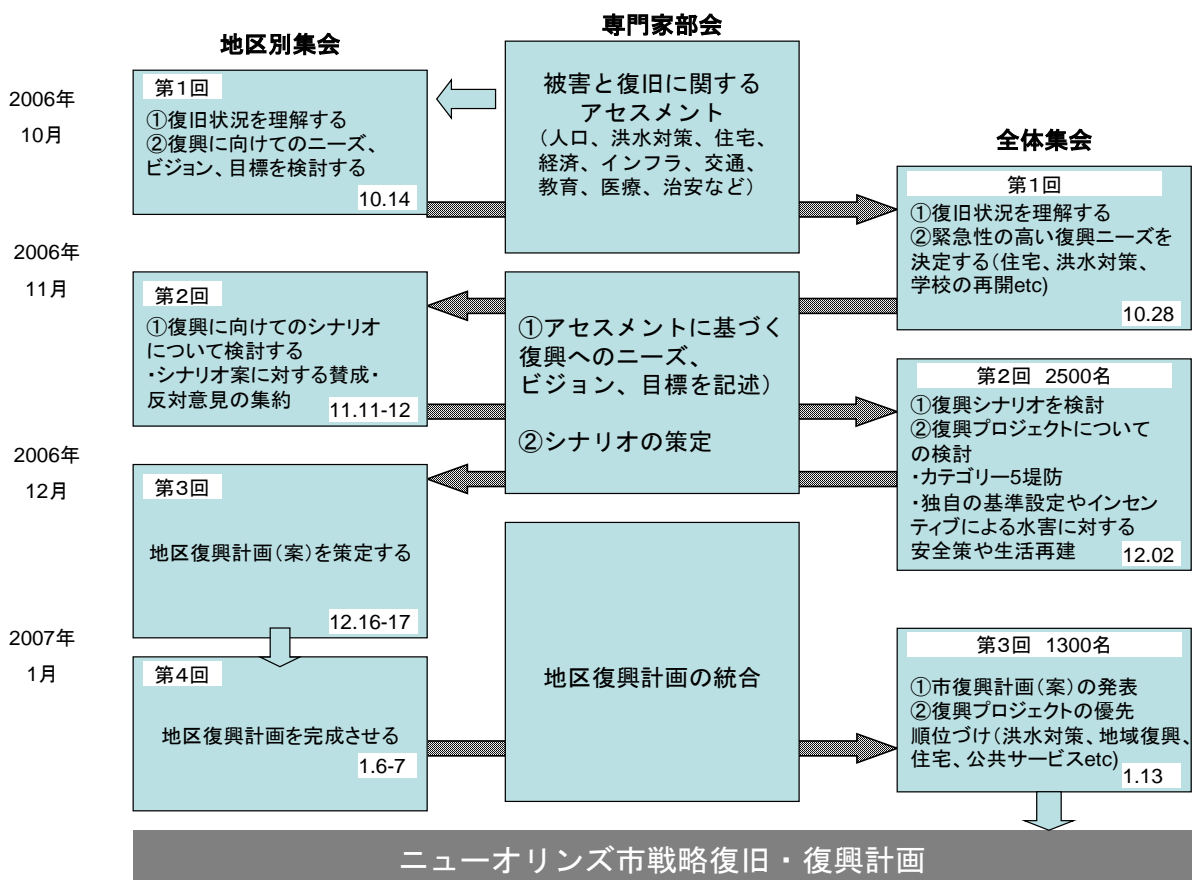
図1 計画策定のプロセス

まず専門家チームが市全体計画にあたっての被害や復旧のアセスメントを行い、その結果を第1回コミュニティ議会で発表している。復旧状況や被害に関するこの情報はすべてウェブサイト上で公開され、各地区が計画を策定する上での基本的な情報が入手できることが可能になった。

第 1 回地区集会と全体集会を経て、専門家がシナリオ案を策定し、それを第 2 回目の地区別ミーティングで披露し、そこでの住民の意見を踏まえたシナリオ修正案を第二回コミュニティ議会で発表している。この復興シナリオに対して、被災者が復興に向けて重要だと考える点は 3 つあることが明らかになった。第 1 に洪水のリスクを軽減すること、第 2 に地域が安全により災害に強い町をつくるためのインセンティブを与えること、第 3 にアフォードブル住宅の供給であった。市長復興委員会や Lambert Plan では見られなかった住宅に関する計画が盛り込まれている点が特徴であり、自らの生活再建に視点を置いた市民が計画策定に関与することによって生活復興と都市復興が初めてリンクしたといえる。住宅がない、また洪水に対しても安全が保障されない、学校などの公共サービスが再開されない、というニューオリンズ市に被災者が戻ることができるような政策を必要としていたのである。

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第3回地区別集会では、復興シナリオに基づいて地区ごとの計画策定が開始された。この地区別計画を積み上げて、市全体計画として統合している。平時においては全体計画があって、それに基づいた地区別計画が策定されるのが常であるが、時間的に制約があったこと、地区毎の復興プロジェクトリストを作成することが求められていたことからこのような手順になったと考えられる。第2回目のコミュニティ議会では、市全体と地区ごとに提案されたプロジェクトについて、復興の価値とコミュニティの関心度と地域へ与える影響・効果の2つの評価軸で10点満点の点数をつけて優先順位をつけている。



復興においては「スピード」と「十分な議論」を行うことが求められているが、これは常にトレードオフの関係にある。これを解消するには地方政府、州、連邦政府、そして市民による21世紀の参画型計画づくりが求められている (Olshansky, 2006)。これを目指しているのがまさにニューオリンズ市におけるニューオリンズ市復興計画 (UNOP) づくりであろう。

6. まとめと今後の研究課題

ニューオーリンズ市における復興都市計画は一年半になってようやく軌道に乗り始めた。この計画のねらいは、市の復興に向けての方向性を示すと同時に、具体的な行動を伴うプロジェクトリストを策定し、復興に必要な資金を連邦政府、州政府からひきつける事であった。市長や市議会主導で行われた計画とは異なり数多くの被災者が都市復興の将来像を語るというプロセスをたどることによって「住宅」が復興計画の中で明確に位置づけられた。また、公共教育システム、医療サービスの充実、老朽化したインフラの改善などの災害前から抱えていた地域の問題も復興計画に盛り込まれ、生活者が復興計画策定に携わることによって包括的な地域再生に向けて歩みだしたといえる。ただ、カトリナ災害という超巨大災害後の復興においては、単なる復興プロジェクトの積み上げではなく、市の総合的な視点からの成熟した都市再生という包括的な枠組みの中で復興を位置づけてくことが求められているといえる。地区レベルだけでは都市全体の安全性を向上させるような計画は実現することは難しいと考えられ、全体計画と地区計画の整合性をどのように確保していくことが今後求められている。2006年12月にニューオーリンズ市に復興本部が設置されそのトップにはオークランド火災やロマプリエータ地震の復興に携わったEdward J. Blakely氏が就いた。Blakely氏はこの職に就く前から、市長主導の復興委員会などは資本や都市インフラなどにのみを対象にしておらず、市民の生活も焦点をあて市民の復興に向けての参画が必要であると指摘しているLand & Danielsén (2006)。UNOPの計画策定には民間財団からの献金によって実施されたが、今後続いていく長期の復興に向けてはニューオーリンズ市、ルイジアナ州、連邦政府の推進体制をどのように構築していくかが問われている。ルイジアナ州においてもニューオーリンズ市だけではなく、セントバーナド郡のように大きななどの被害を受けていながら、郡の復興計画は一向に進んでおらず、ルイジアナ州(LRA)による技術的支援と連邦レベルからの資金援助が求められる。

災害多発時代に入ったわが国においても、災害からの復興や災害に向けての都市安全計画などのあり方についてはまだまだ残された課題が多い。復興計画の体系、策定プロセス、生活復興と都市復興をつなぐ計画、策定体制など多角的な視点から復興都市計画に関する研究を行う予定である。

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- The American Planning Association’s New Orleans Planning Assessment Team, Charting the Course for Rebuilding a Great American City: An Assessment of the Planning Function in Post-Katrina New Orleans, Nov., 2005

謝辞

本研究は数多くの研究者や実務者の協力を経て行われた。ニューオリンズ市復興計画（UNOP）づくりにおける National Advisory Team の一員であるカリフォルニア工科大学サンルイスオビスポ校教授 Ken Topping 氏や、ニューオリンズ大学の Ralph Tayler 先生には現地の実務者をご紹介いただいた。ニューオリンズ市都市計画局の副局長 Leslie Alley 氏、ニューオリンズ大学の Marla Nelson 先生、そして UNOP 計画のコーディネーター（Planning & Communications Coordinator）をつとめた Concordia Architecture & Planning の代表 Steven Bingler 氏、Bobbie Hill 氏には、復興計画の策定で大詰めを迎える最中に、快くヒアリングに応じていただくと同時に、巻末にヒアリングテキストを掲載することをご了承いただいた。ここで研究にご協力いただいたすべての人に謝意を示し、ニューオリンズ市の都市復興とできるだけ早い被災者すべての生活復興が実現されることを願う。



阪神・淡路大震災記念
人と防災未来センター

巻末 インタビューテキスト

Interviewee:

Jopseph R. Matthews, Director Chief, Office of Emergency Preparedness, New Orleans Fire Department.

Interviewers:

Shingo Nagamatsu, Ph.D. Research Scientist, DRI.

Tamiyo Kondo, Ph.D. Research Scientist, DRI.
Shinya Konco, Ph.D. Research Scientist, DRI.
Nagahisa Hirayama, Ph.D. Research Scientist, DRI.

Date:

10:00 -11:30 AM, March 21, 2006.

Place:

New Orleans Fire Department

Tamiyo Kondo

We will go – have two main questions for you for this interview. It is about coordination between state EOC and the local New Orleans EOC government, and our main topic is command and control structure in EOC, this EOC, local EOC. This is our main question, so would you start with your presentation and we will go back to the question, come back.

Matthews

Okay. [Unclear] ESF functions for. I think they have some of the ESF functions included in the...

Tamiyo Kondo

Okay.

Matthews

...you've matter of fact all the ESF functions included in the emergency operations guide.

Tamiyo Kondo

Guide. Okay.

Matthews

And the lead person, who takes the lead, what department takes the lead, all that in the...

Tamiyo Kondo

Okay.

Matthews

That's pretty much after the hurricane, we have to really...

Tamiyo Kondo

Is it a new one?

Matthews

Before the hurricane we didn't have a good organizational chart. Truthfully, I mean it wasn't well organized.

Tamiyo Kondo

Okay.

Matthews

And communications with the state wasn't very...

Tamiyo Kondo

Bad?

Matthews

...forthcoming. We didn't get a lot of replies on the request we made to the state.

Shingo Nagamatsu

Right.

Matthews

Hopefully we've taken care of a lot of those problems, but you all should see what we had before the hurricane and after the hurricane. These are mistakes we made and learnt.

[Male]

Lessons learnt.

Matthews

We also learnt a lot of lessons from Kobe. Okay. So, go head on, and this is just a general presentation that I had put together that may answer some of the questions that you have.

Tamiyo Kondo

Yeah.

Matthews

And I know you probably have some additional questions, you know, and it

KEY

[ph]: Short for "phonetic"; used to indicate transcribed text that we are unsure about.

[Unclear]: Indicates audio parts where we were unable to hear or understand what is spoken.

[Multiple Speakers]: Used when more than one speaker is speaking at a given time and it is difficult to transcribe what is spoken.

[Technical Difficulty]: Used to indicate bad audio and abrupt breaks.

shouldn't take that long. But basically Katrina, August 29th, 2005, you know, well, it was depicted [ph] as the perfect storm and what have you. You've probably seen some of the TV pictures and what have you, You know, as the Chief says it, "We made a lot of mistakes but we also did a lot of things right." And let me get into that, and this is the emergency, comprehensive emergency management plan. This is basically our document that we were operating under, and in this plan...

Tamiyo Kondo

Before the Katrina.

Matthews

...they gave us a copy of it. Yes. In here – and they do have all the emergency support functions included in there, and who are the leads. And basically during the storm and in our training we always tried to exercise under the IMS, the incident management system, which brings all of the different agencies into play, and form some type of a unified command, that way all command decisions are made jointly.

And this was the New Orleans Emergency Operation Centre organization chart, and it's in compliance with the incident command system. And basically this is the logistic section in the command and also the planning section in operation. This is the planning section, it was broken down. They just took it off the chart and they didn't put names into the various command positions.

And just to give you a brief history of New Orleans [Unclear] first time here, if you've been here before. But basically New Orleans is rich in culture, and we take pride in the city's historic neighborhoods, music, arts and diversity of lifestyles. And although mostly known for the French Quarter and historic architect, we have much more, the river fronts, Moon Walk, Jackson Square, City Park, this was pre-Katrina.

The riverfront, this is the river wall, bits of the river wall, the Queen and also the Natchez. Population of New Orleans has steadily declined. Just before Katrina we had a population of about somewhere around 460,000, just under 500,000 persons. In 1960, we had over a quarter of a million people, I mean over half a million people in the city of

New Orleans. A basic scenario of 180 square miles, about 25% of that area is marshland, and topography [ph] of New Orleans consist mostly of flat low lying area, poorly drained, and we are surrounded by lakes, by huge wetlands, and what it is, we use a system of levees to keep the water out just as in Tokyo in the Sumida area?

Nagamatsu

Sumida.

Matthews

Sumida area is below sea level and they use a system of levees also to keep the water out.

Nagamatsu

Yes, yes , yes.

Tamiyo Kondo

How do you know?

Matthews

Yes. And this is just a depiction [ph] of New Orleans, and you can see higher towards the river and the lake, those are the high points. And this is just another depiction of New Orleans. It shows that we've below sea level and we are average of somewhere about 5 feet below sea level, that is New Orleans area; some a little lower and some a little higher.

And this is the big challenge here, educating citizens on all facets of emergency preparedness. This is an important lesson when there is any type of evacuation needed. And as I said earlier, in the survey, and you will see some of the challenges that we have in trying to educate citizens. A lot of them refuse to evacuate because in 1965 there was a hurricane called Hurricane Betsy, and which – part of the city was basically inundated with water because of a levee breach.

The only difference between that – and the area was compounded [ph] to one part of the city, and the water was in and out in about 3 days, but with Katrina we had 80% of the city inundated and most of it for an average of about 17 days, anywhere from a week to 29 days, you know, water had settled.

But we did do one of the things that had never been done in the United States history, we had the most successful evacuation, about 85% of the citizens of New Orleans evacuated within

the time limit that we had set forth, and I will show you about that.

But some of the shortfalls is that when you evacuate – the major problem during evacuation, while several major highways pass through to parish, there are a limited number of routes out of the city, and as you are coming in you probably traveled the main route which is Interstate 10. You know, that is the main thoroughfare to get in and out of the city, and due to the younger population, what have you, a lot of them don't know the alternate routes in order to leave the city when there is an evacuation. And to get in and out of New Orleans – we are basically an island and you got to travel over water in order to leave the city. And as I said Interstate 10 runs East and West. And these are some alternate routes, but all the people don't use those routes quite often, they mostly use I-10, and because, you know, the route that you mostly use when you evacuate, that's the route that you tend to use. And it compounded the problem, and I will show you this. We have some low lying parishes like St. Bernard, Plaquemine Parish, and to certain extent also Jefferson Parish, they have to pass through New Orleans in order to evacuate, and because of that we came up with what we called a 50-40-30 timeline and I will show you that a little later.

And this basically demonstrates the routes. Basically this is I-10 right here, that is basically the main thoroughfare for getting in and out of New Orleans. And here are some other, see I-10 runs all the way back here, 55 once you get to I-10, I mean 59 and 55, you know. And another thing also is that we got to travel at least 80 miles, and we encourage everybody when it is time for evacuation, especially during a hurricane, the most probable or the most safest thing to do is to go north, but a lot of people like to go West. So, we encourage people to go north. Anywhere above this, we used to call as the cut-off point, that is Interstate 12. Anywhere north of I-12 is considered basically safe from flooding, of course you're going to get some wind and rain, but you won't have the inundation of flood.

And as you can see, this is New Orleans here, and how we are surrounded by water, from the gulf, the lake, and Lake Pontchartrain. And we used to tell people the best option in an impending storm is to leave, and these are

some of the reasons why we ask them to leave because...

Tamiyo Kondo

There is no shelter.

Matthews

..there are no shelters in New Orleans, because we can be faced with just what happened during Katrina. We can be trapped by the flooding waters, so that's why the best option is to leave. And emergency responders, police, fire, EMS, during tropical storm winds, we cannot risk our people's lives in order to go rescue someone because it would be defeating the purpose. If you get hurt or injured, you cant save anybody. So you won't have a [Unclear] nowhere below sea level and susceptible to flooding, and this is one of the key things here, out of the water that comes, enter the wards, it maybe rain water, flood water through hurricanes or levee breaks, it has to be pumped out of the city. It has very little gravity drainage, so the water comes in, it is like a big saucer you got to pump it out over the levees.

And we encourage people to have a plan for themselves, their home, their pet, and also I think there is – because just this year, the legislative, they required that we draw a plan to evacuate pets. Prior to that there was no pet evacuation planned by the City of New Orleans, but because there were a lot of stranded pets, and that is another reason why some of the people don't evacuate, because their pets become a part of their family and we didn't have a pet plan, and they say, no, I cannot leave my pet. So we don't have – if my pet can't go, I won't go. So a lot of people didn't leave. And there are several other reasons why they didn't leave also because they wanted to protect their property, they thought they had survived the worst with Betsy, they think their houses are sturdy enough or they are high enough that they can survive, but there are a whole lot of other challenges if you decide to stay back besides those.

And here we come, this is the plan that working in conjunction with the state, the state police, and the Department of Transportation and Development came up with a plan in order to get everybody out of the city because – where are you all leaving? In the city, you all have to leave out of the city today, because if

you are traveling down I-10 just a day would be something like this, so you can imagine if there is an evacuation call what type of traffic would be on the road, because on an ordinary day we got huge amounts of traffic on the interstate, and we call it the 50-40-30, phase 1, 2, 3 evacuation, and I have a couple of the pamphlets in here with this. And basically, I can depict it more, you know, showing this.

This will be the first area to evacuate. This is New Orleans here, and these are some of the low-lying parish areas, Jefferson – a part of Jefferson Parish right down here, Plaquemine Parish and also St Bernard parish, when they have to – when an evacuation is called those areas have to come through New Orleans, and we don't want to get out on the street trying to evacuate and take and leave these people back here who are more susceptible stranded. So that is why I've left – all the areas in red are supposed to evacuate first, that is at 50 hour. At the 40 hour, these areas here. And this is New Orleans and parts of Jefferson Parish at the 30 hour, that's when these last two areas are due to evacuate. And when they evacuate what we do, I-10 as you ride out you will be on one side, but once that 30 hour – we have what is known as contraflow. We turn the side that is coming in, we turn that out, so that all traffic is headed out of New Orleans, there is no incoming, and that helped us facilitate the evacuation for Katrina.

There was an exercise [Unclear] about training in July 2004, and that was called Hurricane Pam. And Hurricane Pam was a unique exercise because it was the first ever post storm exercise. It used a scenario based exercise to develop an integrated joint response plan for catastrophic events, especially hurricanes, and it was sort of a premonition because Hurricane Pam was basically what Hurricane Katrina was. The scenario was – Hurricane Pam was a strong, slow moving storm about 5 miles per hour, was a category three. Katrina was a category three that we find out now, with winds of somewhere, it was a strong 3 about a 128 miles per hour. It did really spawn a whole lot of tornadoes and what have you, but we were left with the majority of the city from 10,20, 22 feet of water in some areas. And it would be the costliest and deadliest hurricane in history, and you've truth of that. We lost our communication as you know, that was one of the first things to go, communication, even in

exercise we found that that's a huge challenge. Most of the structures were destroyed.

Metropolitan-wise, that's including all the areas that evacuated, was over – a 100 million people could not return home, and we are slowly getting back up 30 million. I think we had somewhere around 40 to 50 million cubic yards of debris, 44 million is what I am hearing, and 237,000 cubic yards of hazardous waste, and these are some of the predictions of about Pam.

[Multiple Speakers]

Matthews

One of the things about Pam though is that, it was estimated that over 10,000 persons will lose their life. There were some estimates of anywhere from 25,000 to 100,000 and – I will talk about that later about how we think. But Pam didn't anticipate levee breaches, the looting, successful evacuation, and the death toll being far less than a 100,000. As you know there was some of the looting and what have you going on because situations like that, I often say, brings out the best of people but it also brings out the worst of people. And in our [Unclear] plan...

Nagamatsu

Question, question. You didn't expect the – anticipate the levee breaches. How did you estimated death toll as much as 10,000?

Matthews

Well it was...

Shingo Nagamatsu

What made them to be...

Matthews

...anticipated that it would be storm surge, you know, not so much levee breaches, but a lot of the storm surge by water coming in and inundating the city. And they didn't count on the successful evacuation. And I'll tell you now, the Super Dome, you know, was basically one of the ways I think we saved a lot of lives, because once Pam – I mean Katrina was anticipated to hit New Orleans, because it hit on the 29th, but up until the evening of the 26th which was that Friday afternoon, it was anticipated to go towards Florida, but we advised people to evacuate, those who didn't have the means to evacuate were brought to the Super Dome. Now, if

those persons had not been brought to what we called not so much a shelter but a refuge, giving them a temporary safe haven. I think most of those people – we evacuated somewhere round 35,000 people, somewhere around 20-25,000 in the Super Dome and another 10-15,000 over in the Convention Centre. We believe that if we had not given those persons some type of safe refuge then they may have been the ones that were anticipated to have died during Hurricane Pam.

Nagamatsu

Okay, go ahead.

Matthews

And that's of course the Super Dome, where most of the people were, and at that time was battered and torn, and we had some reluctance about the roof, but we knew that the structure was pretty well sound, and there were some breaches which allowed water but nobody lost their life as a result of debris or inundating in the Super Dome. And you may have heard that there were hundreds of people dying, there were only three deaths in the Super Dome. Two of them were natural and one person committed suicide, that were the only deaths you know. And this basically depicts some of the levee breaches. This is the London Avenue where we had these two breaches here, and this is the 17th Street Canal. As you go on out to the airport – you all came in from Louis Armstrong Airport, as you go, you are going to see a big overhang, you know, as you are traveling, as you leave here, I guess about 5 miles, [Unclear] lot of kids like to put graffiti. But that was one of the challenges because once this broke it had water all the way here to the train tracks, but being – I-10 being a main evacuation route. It is also a main incoming route to bring resources, so that was basically shut off, we couldn't get more resources by I-10 because of that.

And this is down in the Lower Ninth Ward, the breaches, and is compounded situation. A couple of weeks after, about three weeks after Katrina, of course you know that, there was Rita. And this is just one of the pumps getting water out of the city. And this is just a map depicting where the breaches were. And I was in New Orleans, waiting for Sam [ph], inundated. Managing the storm, eventually we were up here on the ninth floor of City Hall in a very small room. This was [Unclear] managed because we had no real emergency

operation centre besides a little small room that you see here with a couple of other joining, but there was no adequate emergency operation centre, so this is the place across from City Hall. You went up to Ms Addison office [Unclear] City Hall. Well, right across from City Hall is the Hyatt Hotel.

Nagamatsu

Yeah.

Matthews

And what we did, we moved everything, our operations from over there to this large ballroom here, which is 10,000 square feet, over in the Hyatt. And in a matter of I think about 5 days, our technology people took and spawned [ph] this emergency operations centre. And this is where we had a unified command, we had police, EMS, [Unclear]. Back here, we had military – this is where everybody met on a daily basis to manage the storm. We also had the 911, which is our emergency operation centre where the calls come in for emergency, police, fire, EMS. And also we had over that a 311 which is the information non-emergency centre. And this was [Unclear] to bring back New Orleans condition, these were some of the things that you saw in the role of some of the things that we placed high priority on. And in an assessment role, we have the guidelines [Unclear]. And that's how we...

[Multiple Speakers]

Matthews

And in the early days, this was exactly what it looked like, all rain. It was challenging, no lights, debris everywhere, buildings with no people; it was scary. And eventually we began to see you know some light at the end of the tunnel, and eventually we got up to where we are now. As I said, you know, these were some of the critical infrastructures in areas [Unclear] whatever we needed, yeah. So you talked with Patrick Carter, [ph] he gave you a lot of that.

Tamiyo Kondo

I didn't talk with Patrick, I know.

Matthews

Oh, you didn't talk.

Tamiyo Kondo

No.

Matthews

Oh, okay, well. Yeah, and we met on daily basis. It originally started off, and we had each of the department heads or directors come by, Sewage and Water Board, and to talk with – we had – did you talk with Jason Higginbotham?

Tamiyo Kondo

Yes.

Matthews

Jason was there on a daily basis, for Fire we had Chief Pat [ph] or his representative. Each one of them would give us a report on where we were and what we can do to take and facilitate or speed up the process. If Sewage and Water Board needed electricity, then we had a representative from our energy people, and they would get together and they would help them with that. But that's how about that – but of course as we talked about, communication is always a problem, and we lost all of our communication, but prior to that [Unclear] what we've been talking about, because prior to that police could barely talk to fire, fire could barely talk to EMS, and none of us had the capability to talk with the state by radio. But that is one of the things that we are looking to eliminate and by next year we will have some type of [Unclear]. We will have one radio, and we can talk with fire, police, the state, and everyone that we need to talk with.

And of course as you know, no single jurisdiction, no one jurisdiction can handle a catastrophic incident of this size you know. It has to be a mutual agreement with state and also federal help coming in, and resources were all – especially at some of the hospitals, some of the things that – you need an adequate supply of generators because you got to use electricity. You're going to lose light, so you need generators, adequate amount of fuel for those generators. You're going to need food, water, not only for your first responders but also for those persons who fail to evacuate. So we've gone back and we've looked at all of these, and we're looking at ways to help those people who don't have the means to evacuate, ways to help them evacuate by whatever means possible, maybe by bus, emergency medical unit, may be by train, plane, go – whatever, we are looking at all possibilities. And as I said the City Assistance Evacuation

Plan is currently in the draft form and we want to move all of our people to safety, safety, the elderly, the disabled, the young, the pets, everybody, because if everybody evacuates that's less of a strain on police, fire, and EMS. Most of our job is done because everybody is going, and we can concentrate on the important things, police, security, protecting the property, fire. If there are any fires out there, we can concentrate our efforts there as opposed to trying to rescue persons.

And in that City Assistance Evacuation Plan these are some of the things we are looking at, having pickup points, several pickup points, have those persons go to those pickup points, and this is just a map depicting pickup points. Pick them up on a bus, bring them to a central location, and from that location transport them out of the city. And a lot more buses, which is the only thing that we have right now, we are looking at buses. One of the challenges is that the state does not have adequate sheltering for the people once they are evacuated.

Tamiyo Kondo

Pre-designated shelter, right?

Matthews

Yes, yes. Pre-designated shelters, right, because we can move them from the city but they got to have somewhere safe. In order to put them in, we don't have an adequate amount of shelters, at least 80 to 90 miles away. So what we have been talking to the state about is to have a huge, may it be a closed military base or something like that to bring the people there because it is secure and they usually have a lot, you know, adequate amounts of food and water at those facilities. So that is one of the things that we are looking at because right now the state and we don't agree with this plan. But I know it means, you go to key areas or locations and then from there you are directed towards the shelter, we told that does not work. You know you can tell, you go to the school or go to this church or go to this gymnasium, we don't think that's good. We need a shelter for massive amounts of people, and hopefully just one location because if it is pre-designated, if you know where you are going to go before evacuation, then you are more likely to leave, but to put you on the street with \$10 and take a guess and ride around looking for a shelter, that doesn't work. So we've been working with

the state, with our City Assisted Evacuation Plan, and hopefully they'll buy into it.

Tamiyo Kondo

Okay. So our interest is – we've visited this March 2006, and met with Colonel Ebert who is the director of Homeland Security...

Matthews

Right.

Tamiyo Kondo

...and he explained about the lesson learnt from Katrina, it is about the evacuation problem, the people without the transportation, and also he talked about pre-designated shelter problem.

Matthews

Right.

Tamiyo Kondo

And so we have learnt that and also we've learnt from the publication and report that – about the emergency operations thing. It is not our point this time. Our point is that you mentioned about EOC management. You told us in March that if there was 300 staff in EOC, and so our concern is that, it is about – so how did you manage this command and control structure in this ICS system?

Matthews

Right.

Tamiyo Kondo

And one thing is it's in the local EOC structure, and another topic is, also you mentioned that in Katrina case the resource is inadequate for just to...

Matthews

Right.

Tamiyo Kondo

...deal with a single jurisdiction.

Matthews

Right.

Tamiyo Kondo

So, it needs to be – to coordinate between state government and also ask from EMAC to support from other states, so we would like to ask you about the coordination between state level and the local government in New Orleans City. These were our concerns.

Matthews

Okay, yeah, basically you understand the process, the way it works, everything is managed on the local level, city level.

Tamiyo Kondo

Yes.

[Multiple Speakers]

Matthews

And then once you are let's say overwhelmed or don't have the resources and what have you, the request is put up to the state, that is their responsibility. Once of the local EOC does not have the resources, can't find them locally, then those requests are sent up to the state, and it is the state's responsibility to either find those resources state-wide, find those – if they cant get the resources state-wide or what have you, then they send the request up to the Federal Government. Once it is up to the Federal Government, then it is their responsibility to acquire those resources, may they have to purchase those resources, or if they already have them, sent them down to the state, and that state to the local, but that's basically the chain of events. If the local government can't get it done, it is sent up to the state, and in turn from the state to the Federal Government.

But there was a serious breakdown in that process during Katrina, because one of the things that the Federal Government often tell, you know, the state governments, that any municipality that gets a [Unclear] a hold is on from 48 to 72 hours. Then the state will be sending resources down, if the state don't have the resources they will be coming from the Federal Government to the state to the local government or what have you, but that didn't happen in this disaster [ph].

We went from that Monday, till we started seeing adequate resources and buses moving people out till about that Friday, Saturday. So it was - we were far more, we did far more with less than is expected in a catastrophic, a devastating event such as that. So, you know, somewhere along the line, the system failed, and because the failure of the system is why we had the type of incident that we had.

And any incident command system, what have you, the way you manage so many people,

because as I said earlier, you know, we don't have an adequate - we didn't have an adequate EOC because I was director over there then and I had a staff of four people. You can't manage with four people, and most of the people that I showed you that came in were people from as I said the military, state police, EMS, locals, but how you manage them through the incident command system is that, through the chain, at the top you've one person in command. From that person in command...

Tamiyo Kondo

You are here?

Matthews

...it breaks down, yes. I and Colonel Ebert were up there, and we had various other section chiefs, and these break down, where all of these persons here report to this person along with command staff which is liaison...

Tamiyo Kondo

Liaison.

Matthews

...safety, and the public information also. Those are the only persons that report to this particular person. We have what is known as a rule of seven. You can manage anywhere from four to seven people.

Tamiyo Kondo

Span of control.

Matthews

Span of control, span of control, that's right, with five being ideal. So, I just let these people answer to the command and that taken [Unclear] everybody in the EOC, in the emergency situation come in, bogging down this particular person, and it breaks down further. Under the operation you have sections, you have branches, you know, broken down as it goes a little further down, right. And rather than have all these people running up to the incident commander, you just had the incident commander dealing with these people and the command staff.

And that makes it a whole lot easier to manage if you've a limited amount of people within that span to deal with as opposed to this person having to deal with someone way down here and what have you. This person would answer to their section chief and

section chief in turn will bring it up to the incident commander.

Nagamatsu

So, what do you think that - our concern is the relationship between the state government and the city government. Do you think it is appropriate to grasp the situation, the relation as a chain of command between state and city government, or is it correct to rather horizontal relationship?

Matthews

No, it is vertical.

Nagamatsu

It's vertical?

Matthews

Just as the chain goes up, we cannot - it goes from I can say the Federal, which is FEMA, which is the [Unclear] and state EOC and the local. You go from here to here, way down here to here. They don't advise going from here to here because it hardly works.

Nagamatsu

Okay.

Matthews

Because if you go from here to here, then they are out of the loop, they don't know what is going on, and the same thing, they would - you know we don't advise going from here back here, although it is done in some situations or what have you, but that's not the ideal way for it to work. In order for it to work properly it must go, and this is from the local EOC, so you come from the local EOC - state EOC to the Federal Government and the same process should be used in coming down.

Nagamatsu

Where is the JFO located in this chart?

Matthews

The JFO, well, you can have two, you can have one located here, but during Katrina the JFO was here and then they eventually moved on, they moved several times. They were at the state, then they came down, and as a matter of fact they were the JFO and then they changed their name, and they are still down on this end now, because most - everything is local now.

But they had a JFO here and also at the airport, Louis Armstrong Airport, which they had an operation going on out there, and they had an emergency operation planned and adhered [ph] [ph] to it. And that was basically the transport service. You know, we had people come throughout to get I think something like 15,000 people. Come to [Unclear] guys, and sent them off to various areas.

Nagamatsu

So this relationship is regarded as unity of command. I think you have to report to only one person, right?

Matthews

Yes, that's it.

Nagamatsu

Who was that?

Matthews

Colonel Ebert.

Tamiyo Kondo

But Colonel Ebert is in the local EOC right?

Matthews

Right, right.

Tamiyo Kondo

Then Colonel Ebert report to whom?

Matthews

Colonel Smith, he is the Director of the Louisiana Office of Homeland Security and Emergency Preparedness.

Tamiyo Kondo

Okay.

Nagamatsu

And he is Colonel Jeff Smith.

Tamiyo Kondo

So many colonels.

Matthews

Yeah, another colonel, right. Yeah, right here myself and Colonel Ebert and right here you had Colonel Smith, and now, let me see, up here you had Director Brown. Director Brown, but now we have Director Parson [ph].

Nagamatsu

It changed?

Matthews

Yeah, it changed, Director Parson, and he is a retired fireman, the guy who is with FEMA man.

Nagamatsu

Colonel indicates that he is a military person, isn't it?

Matthews

Yes, yes, yes, Colonel Smith, yes, Jeff Smith. They are located in Baton Rouge, they are in Baton Rouge, the other state.

Nagamatsu

What is his position in ICS structure, Colonel Ebert?

Matthews

Colonel Ebert, well, he was the overall incident commander of the EOC, I was the director and Colonel Ebert, the way the city – let me see if I can just give you an idea of, you know – of course you got the mayor up there, and down here the mayor has a number of what you call executive staff, just like the incident command, and of course he has his PIO up here also. And on this level here...

Nagamatsu

What is PIO?

Matthews

Public information officer, that's the persons who deal with the media, okay, those type of thing, and right under the Mayor you've the chief administrative officer, and Colonel Ebert will be here, and you have the Director Ms. Attickon [ph], yeah, she will be along here.

Tamiyo Kondo

Attickon, here?

Matthews

Yeah she will be along here and also finance and what have you, about five or six people there. And right here under Colonel Ebert, the way is broken down.

Colonel Ebert has fire, that is the fire department, police, the local police department, and right now, Office of Emergency Preparedness, they come under Colonel Ebert, and for right now under the emergency, he also has EMS. Now that's our Colonel Ebert's department, break down and

go fire, police, office of emergency preparedness, and right now he also has EMS.

That's just the simple version of it and we will try to get you a more detailed version of the city's structure, operational structure chart.

Nagamatsu

That's why we want to know, because this way, this cannot be [Unclear]

[Multiple Speakers]

Matthews

Right, right, right. And now you'll say there is one somewhere around, but I haven't seen one in a while, like you said a couple of years. And each one is like a chief administrative officer as – I know finance, property management, and some others and also [Unclear] has the city – the health department also, so a number on that. Hope I didn't totally confuse you with that, but that's the way.

Tamiyo Kondo

Okay.

Matthews

But you are right, you can see it better if there was a clearly drawn our structure – organization chart for the city.

Tamiyo Kondo

So when we talk about relation between state and local, it is very important to share same common operational picture like the situation awareness, and we are very interested in this EOC update that you made in this EOC, and how did you use this EOC update with - between state government to share a common situation awareness for the Katrina?

Matthews

What it is, we didn't have a real link to the state, that's why we had representatives from the state.

Tamiyo Kondo

Liaison?

Matthews

Liaison right, right.

Tamiyo Kondo

He is attending to the operational meeting.

Matthews

Right, and we had several – we had basically the National Guard...

Tamiyo Kondo

National Guard, yeah.

Matthews

...which also worked in, and we had a representative from National Guard and also the State Police and DOTD. And each one of them, their agency will report the information to their particular – and in turn it would go up to the EOC and in turn to the Governor who is the head of the state, and from EOC and the Governor, they send it up to the Federal Government or FEMA.

Tamiyo Kondo

Okay.

Matthews

Yeah, But that's how we are basically going through their representative in the EOC because of the lengthy communication that we had in the EOC at that time.

But – and one of the things that we are working on now also is a program called RAMSAY [ph] which is a technical program, and I'm not really technical, but that is going to allow a lot more common operational picture and control and command and what have you. It will be done electronically.

Yes. And I was in Tokyo [ph], I had a chance to visit the emergency, the fire department. Yeah, went there and I saw some of their operational or whatever, able to look real time with cameras as to what was going on out in the field, you know, in the emergency [Unclear]. We don't have that capability as of yet but that is some of the things that we are pushing for and have to see, and that's you know very high on us getting that type of technology incorporated into our emergency operating centre and our 911.

Nagamatsu

My question is that I think the state government – I am sorry the city government is independent body from the state government?

Matthews

It is.

Nagamatsu

So is there any case that command – directive command is coming from state government to the city government during the emergency management?

Matthews

Request and recommendations. I don't think that there is anything that allows them to come in and just take over local government.

Tamiyo Kondo

Don't take over, just support.

Matthews

Support, that's the key word, you hit it, yeah, that's it. When they come in they basically support our efforts, yes, just as when the Federal Government comes in they support our efforts also, and lot of them come in and say, we are here to support you, you know, we are not here to take over command and take charge or anything like that, we are here to support, and that is the key word, support.

Nagamatsu

I see.

Tamiyo Kondo

Okay, well, you – we've heard in March that – about the unified command and I think that Colonel Ebert told us that there was a command structure and daily decision making structure coexisted in the emergency phase. And would you start with how or who was the unified commander in the Katrina case in the early stage? You said that there was the EMS and the military people.

Matthews

Yeah, right.

Tamiyo Kondo

And how about state people in the unified command?

Matthews

Yeah, in the situations that involve state we try to get all bodies to the table, let's say for instance a local, you know you have – if it's a local incident, originally we started off with fire, police, EMS.

Tamiyo Kondo

EMS is Emergency Medical Service, okay.

Matthews

Emergency Medical Service, property management, those are the people who kept with the facilities and what have you. We get all the necessary bodies in that unified command, so that they can – you know, you can make joint decisions and what have you. No one person, you know, makes a decision alone, even though command may change hands several times. For instance, if you are in a situation and it's fire related or [Unclear] situation, then fire used to lead, but if it's a terrorist threat, bomb threat, or some type of security, police takes the lead, so it changes dependent...

Tamiyo Kondo

Okay.

Matthews

...upon the situation and then once they say they've disarmed a bomb or something like that and there's a fire, then fire goes back in command. So it may change and then it may not, it may stay, you know, one particular person who is in command but decisions are made in a unified manner. And of course this breaks down, you know, as it does with the command system and what have you, with operations, planning, logistics, finance, and of course you've your [Unclear] command staff, but everybody up at the top, you know, that's where the unified command and [Unclear] operations for instance, there maybe a deputy person from these groups over here up into the [Unclear] of operations, because they come up with the strategy and attack is down here in operations.

Nagamatsu

Dependent [ph] strategy, I think that strategy is formed by the planning section?

Matthews

What should be done, okay, what do we want to do, the tactics and the strategy and what have you. And if do [ph] how we are going to do it. You know, they say, okay, for instance there is a building on fire, okay. We say we need to put this building – the fire out and protect the exposure. Then that's basically it. Then we turn it around to the tactic, you know, the guys down here in operation, they take over the tactical aspect of it. And even thought it is hard to do, a lot of times you try to stay, look at the big picture, stay out of the disc [ph] area, you know. Tell them to do it, you'll give them the directions of what – this is

what needs to be done, to qualify people, let them go off and do it, don't micro manage these guys down here, because you can get too involved, too bogged down to this area when you should be up here looking at the big picture, because you got to manage all these areas also.

Tamiyo Kondo

Yeah, so our understanding is that each ESF have to report in operational briefing about what is the situation now in ESF 6 for example, and what is the future need for it, and what is the objective for each ESF. And in ICS textbook, the incident commander said – hear all objective from each ESF and set priority for the overall operation. So how was your overall situation in Katrina case, in this?

Matthews

Because yeah, this person here is eventually responsible for everything that goes on from here on down, and you are right you do set up operational [Unclear] where you've you report, and there maybe four hours, 6 hours, 12 hours, 24 hours etcetera, because when we initially started with the ESF briefings they were every 4 hours and as time goes on and what have you, you can lessen because there is lot less to do.

We were doing it every 6 hours, and then we eventually went to 12 hours, and then we went to once daily in the morning at 9 a.m., and then from that we went to twice a week as opposed to seven times a week, and then we went to, well, five times a week, then twice a week, and then one time, once a week, but it is dependent upon where you are during the emergency.

Nagamatsu

And to go back to this topic and this unified commander is - this is kind of incident commander council or something like that, because so many bodies - entities are engaged in the incident, unified command structure, within this structure it is not a command and control structure but rather coordinative relation.

Matthews

Right.

Tamiyo Kondo

In here.

Matthews

In this, yeah. So that everybody would be on the same page when they make a decision, because this person may see something that this person don't see.

Tamiyo Kondo

Yeah.

Matthews

And what you want to do, you want to have your decision made jointly so that everybody would know what is going on and what have you. Because if you just got one person up here, let's say fire and police and EMS, all down here and fire, they are only going to be making decisions from the fire perspective, where as you may have to look at something else technical, from the police perspective also, because you may have a hostage situation and you may also have a hazardous incident or you may have a building on fire, so you got to look at all aspects, and that way you can make a decision jointly so that everybody will be on the same page.

Tamiyo Kondo

I see.

Nagamatsu

I think this is a little bit different from the textbook, isn't it?

Matthews

It's a lot different, you know, but it works.

Nagamatsu

Yeah, yeah.

Male

But you know some of the key things is that... See you know – and you are right, it is different from the textbook because it doesn't always work like this, and one of the key things is that knowing the people that you are dealing with beforehand through training, exercise, working together with them before an emergency happens, because as you know personalities can rise up, and all it takes is one person, and you know they can destroy the whole unified effort. But you got to have persons who are focused and people who are looking at the big objective, and people who can work together, because a lot of times you get in and one person, he could be a fire situation guy, the EMS trying to take it over and what have you. They got to realize their

limitations, and this will realize their limitations and what have you. And what's the overall objective, and it is good to also have training in the Incident Management System because a lot of times you don't have the training, you just come, you wonder what is going on, but you got a real head at this when you realize your limitations.

Nagamatsu

Okay, so, I am grateful that you answered very honestly. Then do you feel that the FEMA and state government support you properly?

Matthews

No.

Nagamatsu

Quick answer.

Matthews

Yeah, no. Well, basically resources and what have you, there was an extended delay in resources.

Tamiyo Kondo

Delay.

Matthews

And not only, after the incident there was a delay in resources but also during the recovery. We haven't got the overall support that we need in the area of funding, because once an incident has occurred then FEMA is supposed to supply adequate funding according to the staff at hand, you know, help us to rebuild New Orleans, and we haven't been getting the funding in order to do that. We still have schools that need to be refurbished, they haven't, we still have persons who need housing, even a trailer, some of them don't have that, we still have medical infrastructure that has been devastated, they haven't, you know, really came aboard and helped us with that, and the debris. You know, it has been a fight all along the way with FEMA, and you know just to be honest with you FEMA has gotten to be a bad word or what have you, because of their lack of response. And I'll go so far to saying that, I've always said FEMA should not be in the response phase of it, always said – and Colonel Ebert, probably heard this from him also. The department of defense got the personnel, they got the training, they got the discipline, they should be more into response. FEMA should come in afterwards with the purse strings to help in the

recovery, but as first response, FEMA should not be in response, and we think that's where the biggest breakdown was in trying to help us deal with Katrina.

Nagamatsu

So what made – so did you try to use any other channel to get support from the other agencies than FEMA?

Matthews

No, basically because they are the area responsible for that, you know, that's the way it is structured, that's the process, and that's the way it goes. And the military and what have you, all of it – see it's written as to who does what, and that's their responsibility, and to go outside the route, they would basically direct you back to the department or the agency responsible for it, so it would have been futile.

Now other avenues or venues, yeah, we tried the Director of Homeland Security [Unclear] and even the President, but other than that, no. Any other agency, no. So those are some of the things that the Governor and the Mayor, you know, the agent [ph] went right to the person over FEMA, and even the President to try to expedite or fasten the support or the resources that we were so badly in need of.

Tamiyo Kondo

This morning we went to see Mr. Richard, I forgot his last name in...

Matthews

Winder?

Tamiyo Kondo

Yes, Winder and who...

Matthews

Social service?

Tamiyo Kondo

Yeah, yeah, he was lead agency of the ESF 6 at that time, and we have talked that the local EOC, it works, and then we asked Richard that did you get training with – about ICS? But he said no. And do you have any difficulty that each ESF staff is not familiar with ICS in this structure?

Matthews

Yes.

Tamiyo Kondo

You did.

Matthews

Yes.

Tamiyo Kondo

Oh, I would like to ask ...

Matthews

What it is, the fire department has basically been using the incident command system for over 25 years, almost 30 years now, as you know how the incident command system came out of a fire school to the events [ph] where there were large forest fires and people were coming in, they didn't know who they were, where they were, and there were injuries, mortalities, didn't know what resources. So they developed the FIREScope, and it basically was formed into the incident command. So we have been using it, but other agencies had not been using it and Presidential directive, you know, required that in order to get funding that all agencies must be trained into the command, even the police you know had really been into the incident command system, and one of the reasons because most of them, they responded alone.

Tamiyo Kondo

Yes.

Matthews

You know they are alone.

Tamiyo Kondo

Same with Japan.

Matthews

Yeah, but fire we usually have a contingency of three to four people, so somebody has to be in charge, but when we try to impress upon the other agencies that even though you may respond alone, you are in charge of that situation until someone with better qualifications or higher rank, well qualified person comes there and relieves you. When [Unclear] fire department captain of the truck, once he gets there he is in charge of that, first arriving company is in charge of that situation, it is automatic, they know. So if persons of the same rank come in on that fire ground, we know that that first in company established a command and he or she is in command of that scene until a higher qualified ranked officer gets there, and that qualified officer may or

may not relieve the person who is already in command. It is his or her option to do that, but it is basically established within the fire department and it goes without even any thought whatever, we know, who is in command at a given time.

[Male]

So, very interesting to me that Richard told us that they report their – they report their operational chief, the – the situation and activities of the ESF 3 is reported to the operational section chief. But at the same time he was reporting to the CAO, so he said there is no unity of command without hesitation, here..

Matthews

And ...

[Male]

But what do you think, within it is completely different from the textbook of the ICS, but it is within your expectation I mean...

Matthews

They – it works like that or it should work?

Nagamatsu

Yeah.

Matthews

According to the Incident Management System you should have only one person that you report to.

Nagamatsu

But regular command system coexists.

Matthews

Right. Now, there maybe situations where it could work but according to NIMS that is not the way...

Tamiyo Kondo

Yes.

Matthews

...it should be. That would be like having a span of control of 10 people. It could work, but it is not the ideal situation. And that's why we try to basically adhere to the ICS system, Incident Command System, and once it starts exceeding that span of control or whatever, we start forming groups and sections, task force, that kind of things, yeah. But yet it is a tricky situation, but city

government doesn't always adhere to the ICS or NIMS. And that, you know, with – see in a lot of the departments like sanitation department, property management, health department, public works, all those agencies, you know, they've never really been brought into the incident command. So, they didn't know what the incident command system or NIMS was until it was required because basically they hadn't given it a second thought [ph] until it was mandated that all agencies be required to adhere to the incident and receive training in the Incident Management System, and it has to be documented, and given a certain time limit in order to have that training and documentation

Tamiyo Kondo

Yeah, yeah, we know that.

Matthews

For all departments.

Nagamatsu

But actually they – Richard is appointed by the Mayor.

Matthews

Yes.

Nagamatsu

And he is looking at Mayor not looking at the incident commander isn't it? So is it – do you think it is possible to make the New Orleans city government to shift the unified command structure?

Matthews

Yes, and we are going – yeah, we are gravitating to the requirements of the National Incident Management System. And as a matter of fact some of the fire department's personnel are training all of city government. And really they got to do it because it is tied to the funding, if you can't prove that all of your departments agencies have been trained within the NIMS system for a certain amount of time, then you are jeopardizing some of your funding. So yes, you know, and the Mayor, he is sold into it, but he has just taken a while to get around to everybody to train them. All fire department has been trained, we've been working with some of the other non-emergency agencies, but of course, you know, we work with police, fire, and some of the classes there's always a contingency of various agencies in the incident management

system training, but yes we are definitely going to adhere to the NIMS system.

Nagamatsu

It means that – that means you as an incident commander will take over the position of CAO.

Matthews

Yes, yes, once...

Nagamatsu

In case of emergency, okay.

Matthews

Once there is an incident or what have you – you have the Mayor in overall charge of the city government, but then below that it depends on the incident, who is going to be incident commander, you know. If it's a – I can say fire, terrorism, or something like that, then it would be law enforcement. Now the CAO can come in and make recommendations and set in – the powers to making the objective set in and what have you. But yeah it is going to be that one person, and it may even be the Mayor, who may want to be the Incident Commander because by his stature and executive privilege he can pull ranks and say, okay, I am the incident commander, I am calling the shots.

[Male]

So within the line of the Federal, state, and the local EOCs, where is the Mayor located?

Matthews

Oh the Mayor is local, right here.

Nagamatsu

No that's not what I am asking. We should've explained our background, in Japanese just for management structure, incident commander should – must be a governor or mayor.

Matthews

Oh, okay.

Nagamatsu

So that is quite different, that is why I am asking.

Matthews

Right okay sure, sure. No, no, the commander is a person who is overall in charge of that but it doesn't have to be an elected official, as it says you know, like Colonel Ebert if it is an

emergency, he is appointed, the Mayor is involved [ph] in it. The Mayor appoints all these people and in turn these people appoint the heads of all these. It is like superintendent was in here, he is appointed, I am appointed, Colonel Ebert is appointed CAO. So, by virtue of the authority, you know, they can be boss, but what the Mayor typically does is he allows the more qualified persons who deal with this to manage the incident because he feels that, okay, if I appoint you, you're qualified to run it, so you manage it, advice me, and I will give my opinion on what have you. But I am overall responsible for everything that goes in the city, and if I don't really agree with it then I do have the authority to say no, it is not going that way. But that's how you know...

Nagamatsu

I got the point. So we had the hypothesis that according to the interview so far, the – this is a regular command and control structure of the city government, it means that the CAO is a kind of a senior manager and below him or her there are some divisions like the healthcare division or department. And in case of an emergency, the director of emergency management, probably you, is to take over his position and the line of command switches from here to here, and then – this is our hypothesis. Your explanation based on the NIMS is something like that.

Matthews

Yes, pretty much, yes. Even though on a day-to-day operation they are in charge, but once there is an incident then there is someone, the incident commander, who is in overall charge of the incident and as I, you know, said dependent upon the incident, who will be in charge, you know, it may be Chief Riley, who is the Chief Of Police, if it is a law enforcement incident he'll have overall authority.

Nagamatsu

Okay. So in case of the law enforcement incident, there must be a police chief.

Matthews

Yes, he will be. He will be – yeah, by virtue of – he is the ranking police, often he is in charge and if it is a fire, HazMat incident itself, Chief Pere [ph], see because in ESF they set the lead, and if it is fire, rescue, HazMat, then the fire department is in charge and by virtue of the

fire department, he is the head of the fire department – he has the authority to be in charge.

Now, he may let one of his chiefs to be in charge but he has the right to be in charge, and by virtue of the Mayor's authority, the Mayor can say, give his advice or you know really take command if he wants to or whatever because he is the ultimate person, elected official responsible for everything that goes on within the city, part [ph] in the city chart.

Nagamatsu

I got the point.

Matthews

So yeah, that's how it works.

Tamiyo Kondo

And now we talk with Richard this morning and he said that Chief Matthews respected me as an expert in rescue [ph], and so my question is have you ever ordered or tell him, just like this is our overall priority in a city government, so do this way into like in rescue [Unclear]. Have you ever ordered something to ESF for each agency in this structure? No?

Matthews

No, no not really because as you say, they are the experts of what have you and may know a little about each ESF but not very expert in all the ESF, as you say, you know, limitations of what have you. They are the experts of consult with the experts in that way.

Tamiyo Kondo

Yeah, yeah.

Matthews

To get the experts opinion rather than a less knowledgeable person trying to interject what they feel and just mess everything up, but yeah.

Tamiyo Kondo

If so...

Matthews

You refer to the experts.

Tamiyo Kondo

If so, it is very confusing that what is command and control structure, what is command?

Matthews

Well, the command is overall responsible for the decisions that are made but you do consult with experts, for instance on the HazMat situation and what have you. Maybe a chemical that you don't know anything about, so you may have a university with a physics professor or chemist or what have you, and knew a lot about the product.

Tamiyo Kondo

Yeah.

Matthews

So what you do, you consult with that particular person and ask him, okay, what can I do with this particular product and what can't I do because they maybe able to give you some pertinent information that you never thought of because you are not dealing with that product on a daily basis where as he or she is, and once you get that information then the ultimate decision is left to the commander, it is not to that adviser or a consultant. Once you get all that information then that incident commander is going to have to make a decision based on the information that he gave and choose, he or she can choose to use it or they can choose not to, which I don't see why they would choose not to but their expert may tell them something that can help, because the overall plan is you want to mitigate it with as little impact on environment, no injuries, and no death. They are going to give you some valuable information you should take hold and do [ph] it. But you are going to have the incident commander make the overall decision, but yeah, you can and sure get advice from an expert because nobody knows everything, yes.

Tamiyo Kondo

So another point what do you think is the merit for each agencies to fit into this ICS structure, for them? What is the merit for them to – what is the good thing for them to fit in this structure?

Matthews

Qualifications, basically the appointed positions or what have you, they look at you know basically the qualifications, but the incident commander, we don't pre-screen, you know, the persons in the ESF, they are either appointed and the person doing the appointment, they have looked at the background and they know what educational attributes that they have or have got and what

have you. Except that once they are in that particular position, for instance ESF 6, Richard I think he has done his college or something like – then they put him in that position. So that's who you call on and what have you to do. But for setting the qualifications the EOC or the command, you know, don't set the qualifications.

Tamiyo Kondo

You are right.

Matthews

But they should've minimum training in what they are joining, and which I would think, you know, that they do like the guy with the health department, who is Dr. Stevens, you know. He is a doctor, a medical doctor and what have you, so these guys know all the training and everything, so yeah.

Tamiyo Kondo

Okay, so my other question is who made this EOC update? Is it one person that who prepared this EOC update for each operation up here?

Matthews

No, no, that's where we came together each morning.

Tamiyo Kondo

Each morning.

Matthews

Once we decided that we are going to – we agreed upon the procedures that we are going to use. I think we agreed [Unclear] 24% functional would be in red and from 24% to – I mean 25% to 74% was going to be yellow, and anything over 75% was going to be green. What we did every morning at 9'o clock, we came in and we got all the various agency representatives, and it was broken into zip codes.

Tamiyo Kondo

Yes.

Matthews

Broken into zip code and we were [Unclear], for instance gas, you know, what is the outlook on gas in 70117, and we will say, well, we still have a long way to go in there, it is less than 15%, so that would be red.

Same thing with water, you know. Jason was one of the representatives and there was another young lady [Unclear] know her name if you ask me now. But each morning we would come in and we will go with them, each individually, and ask them where are we with this? Is it above 25%, is it above 75%, and then what we would do we would change the roll up assessment color based on the information that we got from each particular agency.

Tamiyo Kondo

So each particular agency have to report in formatted way.

Matthews

Yeah.

Tamiyo Kondo

So red or green or yellow?

Matthews

Right, they come back, you know, after they go back – after the overall assessment, they go back to their department and what have you, and they work on it. And their members would constantly work in trying to bring infrastructures up to functional level, and they will say, okay, our department, our guys have managed to get it up to this percentage, and as they got up to those percentages they may report the next morning, and if it was still below 24% we'll leave it red.

Tamiyo Kondo

Okay.

Matthews

But if they had gotten above that 25% then we would change it to yellow, and it will stay there until they reach the next plateau of 75%.

Tamiyo Kondo

Okay. I heard that Patrick Carter prepared this update.

Matthews

Yes.

Tamiyo Kondo

Is he a planning section staff?

Matthews

He was in the planning section in a way.

Tamiyo Kondo

Okay.

Nagahisa Hirayama

Another question, he [ph] told me that this is administrated by the zip code.

Matthews

Right.

Hirayama

But I think that for example the utility company are administrating by using their own unit like some disregard, so there are any hesitations from them to use zip code to monitor this situation.

Matthews

Yeah, and there was some challenges with that, but you know we finally worked it out because as you know utility don't go and stop at that zip code or what have you. So we managed to work it out and in some areas we even had to break it up with 117, 70117 [Unclear]. This, we broke it down into lower, which is the L, and upper.

The upper, the Ninth Ward and what have you was on this side of the canal.

Tamiyo Kondo

Okay.

Matthews

And the lower, that was the most heavily impacted area where – right by that breach I showed you, the industrial canal, that was the lower. And this was one of the most challenging areas, so we found it to be most beneficial if we were to break it down or to look at the upper side of the canal and the lower side of it, Industrial Canal which was the median, so we broke it down like that and we thought that that would...

Nagashisa Hirayama

So in this case you have to command and order to use this.

[Multiple Speakers]

Matthews

Yeah, it was a consensus to that. Like, you know, the utility guys, they were the experts and what have you, and they will say [Unclear]. But we need to because if this side here, the lower Ninth Ward, is most heavily impacted and what have you, and the upper

which was on the other side of the canal was coming up faster, then that could've taken and given us a false sense of how fast the area was coming up because the Industrial Canal basically divides it. You got the lower Ninth Ward [Unclear] the upper Ninth Ward, and the upper Ninth Ward coming back a lot faster than the lower Ninth Ward. So we had to kind of break it up and we had to do that with all of them, not only the electricity, but the water, the sewer, everything in one [Unclear], and especially debris because most of the homes down in that area.

Nagamatsu

So the idea of the assessment roll up is brought by – for the TMO or you plan to do this way?

Matthews

No, no, matter of fact, we didn't plan to do it that way and we just came by consulting with people. And we had some guys from the military come in because this is basically a military type thing. You know, and I [Unclear] some military guys knew it, and whatever [Unclear] oh, it is military. But they came in and they gave us an idea, you know, of how to work and how we can get you know – but once they showed us the procedure then we just took it from there and we just started rolling, moving forward and what have you, and that's the idea.

But, yeah, Patrick was basically one of the persons in the planning section and what have you, and he would prepare and update it for us every morning, based on the information that we got from the various departments and the agencies.

Tamiyo Kondo

Also Patrick was the only person that – who types...?

Matthews

Oh no, no, no. When he was out, yeah, we had a substitute for him but he was the main person to do it.

Tamiyo Kondo

So how many people was engaged in preparing the EOC update?

Matthews

Just this? Let me see – we had Patrick, we had Jonathan, we had a number of people but...

Tamiyo Kondo

About 5 or 10?

Matthews

Not 10, but the information I was given – once we handed it and everything, as far as – once we got the format down, you know, it was just a matter of clicking and changing the colors, once they got...

Tamiyo Kondo

Oh, yeah, yeah.

Matthews

...once we really got to it and what have you. So, when Pat was out we had somebody else who can come and fill in for him. You know, based on the information we got, it was just a matter of clicking a button and changing it from yellow to green or from red to orange or yellow, maybe yellow. Yeah.

Tamiyo Kondo

Because I am asking you – why I am asking you, on the EOC update is that our local government, local government in Japanese government are very, very interested in this way.

Matthews

Okay.

Tamiyo Kondo

This way, which is very effective to see the overall picture.

Matthews

Right, right.

Tamiyo Kondo

In New Orleans so, that's why I am asking.

Matthews

But no, no Patrick wasn't the – he wasn't the designer...

Tamiyo Kondo

Okay.

Matthews

...of this and what have you. Basically we got it – we had some personnel from the military, they came in and I don't remember their

names, because this was the early days, early September and what have you. I forget the – another colonel, another colonel came in and they basically showed us how to get started with this.

But once we got it rolling and we knew exactly what we wanted, then it was just a matter of moving forward with it.

Tamiyo Kondo

So before early days in September, how was the situation before it developed in – it was just writing documents? No maps, no figure.

Matthews

No, because we didn't really have a whole lot of capability when we were over at City Hall and what have you. And as time went on, we began to get a little more technical, little more technology, and we were able to do things like this. But no, Patrick is not the author.

Tamiyo Kondo

Okay.

Matthews

I would like to give him credit for that and what have you, but no, he is very thorough, but no, it is basically military came in and they took consultation, briefing shows that the....

Hirayama

Well, is the assessment roll up – in assessment roll up, I think it is important to – all zip code areas to completely finish the assessment, and if one utility company not finished all areas of assessment, and when – you order to has to do assessment?

Matthews

Yeah, we had known [ph] about it and what have you, it is just lucky that we've just one utility, and our utility which is known as Entergy.

Hirayama

Yeah.

Matthews

Yeah. They have both the electric and the gas side, so that made it a lot easier because we didn't have multiple people with multiple utilities involved. We just deal with one, energy, and we had two representatives there – what was his name Patrick – Padricks [ph] and

another guy. You know, they were there all the time.

The same people, it makes it a lot easier dealing with the same people. Same thing for Sewage and Water Board, you know, they have the sewer, the sewage part of it and also the water. You know, but I have two different companies' departments dealing with that. Sewage and Water Board handles that. So it made it a lot easier when we are saying, where are we with the water, you know, how – is it potable yet, can we drink it, can we bathe in yet? So we had to, you know, just deal with Sewage And Water Board. Same thing with the sewer, where are we with the sewer? Deal with Sewage and Water Board for that. So that made it a lot easier.

Tamiyo Kondo

So this might be very effective not only in the local EOC but also from the other resources from outside of New Orleans to show...

Matthews

Right.

Tamiyo Kondo

...and also effective for the citizens, for the information how the utility...

Matthews

Yeah, so this is a lot easier, to look at this in a way it is broken down...

Tamiyo Kondo

Yeah, yeah.

Matthews

...than to try to read. I guess this would take at least 8,10 pages trying to go to read. I know you can look at it. And what we had also talked about one time is putting percentages within the centre.

Tamiyo Kondo

Okay.

Matthews

You know, this was like 17%, then we know it's 17%, we still have some percent to go before we can get to orange, I mean yellow. And the same thing between 24%, I mean 25% to 74% is a long race [ph], so we put in the urge. 60, we will know that that's at 60,

we would still need about 14% before we can really turn this from orange, I keep forgetting, yellow to green. So, yeah, we had thought about that whether then put the R because we know it's red, and green we know is green, it really is amber, but we call it yellow. But that's what the rules are. We know that, so that's one of the things. And I don't know later on if we had done that, you know, put the percentages inside of the circles.

Tamiyo Kondo

So levee is not – this is you mean the unknown? What does the...

Matthews

No. Yeah, because levees we've representatives in there, but levees, basically that is the Corps of Engineers, that is Federal.

Tamiyo Kondo

Federal, I can see.

Matthews

Yes, and basically it was hard to gauge that, so you know, they would tell us we couldn't put a percentage on it.

Tamiyo Kondo

It is all red still.

Matthews

Yeah, And we didn't want to give the citizens a false sense of security because if they say, okay, the levee has been repaired, we put green, and the citizens say, oh, okay, levee repaired, you know, we are good. So, we basically just included it, but we didn't want to mess with that.

Nagamatsu

Let me go back to the question about the command structure. The regular structures and the emergency structures all coexisted during the Katrina response, do you have any episode of the problem of the coexisting of the structures, because you are now trying to apply the NIMS completely to New Orleans City government even in the unified command.

Matthews

Well, but being in a type of situation that we were in where 80% of the city was impacted, we just couldn't really just isolate one small part of the city and say the emergency is here. Basically like Colonel Ebert – as I said, he was working and he was in direct

communication with the Mayor, and by being one of the executive staff and the incident commander that made it a lot easier, so we had very few if any conflicts between the original city and the emergency operation part of the incident command structure. It was very few, if any, I can think of, not right off you know. Colonel Ebert did an outstanding job and in his absence I filled in for him. I kept him abreast of what was going on, but he did an outstanding job and what have you, and he answered directly to the Mayor and made decisions, we made decisions based on that.

Nagamatsu

So why now you are trying to apply NIMS perfectly to your emergency management system?

Matthews

Okay, well.

Nagamatsu

Is it because you've no trouble during the Katrina?

Matthews

But it is required and if everybody buys into it and is trained in it, it makes it a lot easier because everybody knows what their part is in the incident management system. And as you say, you know, and it is a requirement and is based on funding and we wouldn't want to jeopardize it. It involved funding and is a system that's proven to work, and I think that's one of the reasons why everybody, even though they were in training probably heard about it, and they knew that it works. And I think that's why we had very few if any complications, you know, with others [ph], because a lot of the city government, you know, we work together, and some are trained together. But you know, and we realize the Mayor is in overall control and charge of the city, and if he wants he can take command, but in his wisdom he usually let the persons who are more qualified, you know, in that particular area – like he don't come on the fire ground and try to manage a fire because you see I got a fire chief for that, let the fire chief handle it, you know. And basically that works.

Nagamatsu

I see, okay.

Shinya Kondo

I thought about the EOC update, so I said – for situation awareness did you want another information for EOC update?

Matthews

Additional information?

Shinya Kondo

So, that EOC update, so assessment roll up with forecast, incident action plan, so many, many [Unclear], and so each ESF situation, so for your situation awareness so do you...

Matthews

Like the various – like the levees, police, and energy, did we have additional areas that we could've focused on, is that what you're asking?

Shinya Kondo

Yes, so other – so that information is enough for...

Matthews

Oh yeah – no, no, no. It wasn't enough, but what we did, we prioritized, you know, some of the areas that we needed to focus on in order to bring the city back up and operational as soon as possible and get citizens back, so we limited it to those – I forget it, how many 15 or so areas. You know, the focus on getting back up and running, but yeah there were some others but we prioritized and limited it too those because we felt like those were the most important ones at the time.

For instance, you know, the hospitals, mental health and what have you was another big portion, and we are still lagging behind in the mental health treatment of our citizens because that's still a big hole or void, something that needs filling because the medical side of that was totally devastated, you know, mental health aspect of it. That was another we would like to bring up, and there were some other areas that we would've liked to concentrate on, but we couldn't do all of them so we just focused on prioritizing a few and worked on those in order to get us where we need to be as fast as possible. But even today we are still working on some of those like the educational system even though we had it as being, I think we had it green at this time, you know, there are still a lot of schools that need to be fixed. And those are priority because we need lights, water, gas, sewer in order for people to start coming back.

Also economics, you know, was another big part because in order to really have people come back you got to have schools, because if you don't have schools people can't come back with their kids, because they are not going to come back if they can't put them in schools. They need jobs because you can't come back if you are leaving a place that, for instance Huston, if you have adequate schooling, you've a job to come back to New Orleans. Housing is still another big aspect of it, you need somewhere to stay, you need somewhere to work, you need somewhere to send your kids and even some of the businesses, you need somewhere to shop, you need somewhere to buy food, clothing, those type of things and what have you, in order to really come back up. And those are some of the things we may be at a [Unclear] we are still working towards that.

Nagamatsu

Another question that according to – no, as for the making Incident Action Plan, so we want to introduce the concept of the Incident Action Plan to prioritize the works during the emergency management, to our country, quite a good idea we think.

Matthews

Yeah.

Nagamatsu

But one big problem is that every department of Japanese local government claims that 'our work is the most important', so it is very hard to prioritize, it is very difficult within the bureaucracy. Did you have such kind of trouble during Katrina response?

Matthews

No, not really, and very surprised that we didn't because in EOC I guess basically we just took the bull by the horn and said, okay, identify these areas and say, without these we cannot start bringing people back, because we don't have water, you cant drink – okay, so, that is definitely important.

Now as far as putting water above electricity, now those two things, now you got to have water, got to have electricity, and you got to have security. You know it's police, and you've got to have police, EMS, and what have you.

Nagamatsu

So then the answer is 'everything is important', isn't it?

Matthews

Yeah, you are right, that's true [ph], everything is important.

Nagamatsu

How do you make the priority? What do you mean by priority? This question...

Matthews

We just identified all the areas and what have you that we really want to focus on, and because ...

Nagamatsu

Could you give some episode that you made priority between actions?

Matthews

Okay, it is important to have debris picked up, but it is not as important as having potable water to drink. We call it potable, yeah, water that you are able to drink. It is important to have debris picked up out of the streets, but not as important as flipping a switch and having lights on, because you can come and you can live in your house and repair your house. If there is some garbage on the street which is unsightly, it may cause some other problems but you can work towards cleaning that up if you got water, sewer, lights. Also, you know, when you get into – out of that little circuit [ph] there, you need medical attention because if you've hurt yourself then you need somewhere to go to get a bandage and get a shot, etcetera. So those are some of the things you really have to weigh in trying to meet those priorities. And, you are right it is difficult, difficult, but there may be a handful that you can really say you got to have these and what have you, you know. And what you are trying to concentrate on so is safety, safety being no [ph] more a priority, and part of that safety is security. You got to have police in order to watch over you and what have you if the bad guys come in. So, it's a toss up, you are right, and yeah, all this is equally important, everything is important.

Yeah, I know. So, I don't know if that helps you but, yeah, it's a tough juggling act and what have you. Because you look at one, it's important, then you look at the other because you know you can have lights and water and

gas, but if you don't have the security up here – safe and secure in the dark, you know, from the bad guys...

Nagamatsu

So this is my personal opinion that the basic concept of the ICS is - was born from the fire fighters right?

Matthews

FIREScope, yes.

Nagamatsu

The world of the ICS is something like that, incident commander know everything and he can make the priority of the jobs and command to the man, 'do this, do this, do this' – this is a very typical command and control structure.

Matthews

Right.

Nagamatsu

But the NIMS, the actual application of the NIMS is not like that, just see what is going, everybody see what is going and share the information and do what you have to do now.

Matthews

Yeah.

Nagamatsu

This is more...

Matthews

With the unified command.

Nagamatsu

Yeah, so I think that the pure ICS system is not working.

Matthews

Yeah, it depends on what have – you know, on the complications of the incident because let's say, for instance, just go back into the fire aspect of it, if you go to a house, one house is on fire and you just respond to that, just a house is on fire, small fire. You go there, you may need one truck or you may need two trucks, and there somebody is in overall command, you know. Basically it is working there because you got somebody in command, and in the incident command system one person can take on command, operation, logistics, and also planning, you know, if it is not a real large, complicated situation. But

when you get into a unified command it's large incidents and what have you that may exceed your capabilities, your jurisdiction, and also your resources, that's where the additional personnel, unified command comes in. But if it is a small incident or what have you. let's say like a house fire, like I said, the incident command system works perfectly, you know. [Unclear] respond, you know who is in command, you delegate the task out to be assigned and that's it. But when it is a large complicated incident, well beyond just one single individual then, yes, for instance like 9/11, you know that's where the unified – because that was well beyond any one agency's ability to manage that, because you needed a host of – you needed law enforcement, you needed fire, you needed medical, you needed people to come in and operate the heavy equipment, you needed people to come in and remove the debris, put it on the trucks, move it somewhere else. And that is where you needed the unified command because all those persons have to get together and come up with the operational plan, okay, this is the way we are going to do this. One person you know did – not that I know of one person that had the ability to do all those tasks.

Nagamatsu

So did you – so, so many volunteers and NPOs and NGOs take part in this response activities, isn't it, so did you take their works into consideration of the Incident Action Plan or something?

Matthews

Yes, yes. It was...

But I think most of them do not know what is ICS and most of the – the nature of the NGO is they don't like the command and control structures, isn't it?

Matthews

Right, yeah.

Nagamatsu

Did you face some difficulty to collaborate with them?

Matthews

I guess it was a unique situation because they give their advice, and if a better piece of advice come up then it was pretty much accepted. But you are right, sometime it can be a hard task and what have you.

Nagamatsu

So, but they are very cooperative.

Matthews

Yes, yeah. They were very cooperative and basically they took to their area of expertise and Colonel made most of the decisions.

Hirayama

I have one question about the assessment roll up again. Because my background is water supply engineering... it's important to do – for citizens to imagine your – imagine themselves - their life situation, and they can't drink, they cant do toilet, go to wash their hands, cooking, in their areas, and I think assessment roll up is the [Unclear] items, I think, you know, is rely on the ESF?

Matthews

Not, not totally. Not totally.

Hirayama

And this item is electric and water and gas, is not in the situation – and life situation, and do you think added to the assessment roll up, the item of the drink and washing hands and taking shower and toilet and cooking, do you think?

Matthews

Yeah, that's important, and that's why I say, you know, it is hard because that's very important you know to have that, you know, and that's why we have the water, but guess you are asking the priority of that, you know, where would it be in reference to utilities, something like that, it would be hard because you can cook, wash your hands, shower, but it was dark.

Yeah, it's real difficult, yeah, it is. It is very complicated, what have you, and they are all important, and they are all equally important. But as far as putting a 1, 2, 3 on them, you know, I couldn't, but you are right there, they are basically, you know, all important. But just on a note it reminds me when we were in the EOC and we didn't have any water and we had a generator operating the lights, and you know we, got in bottled water and we used the bottled water to wash, to brush, and everything. And even with the toilets would have – when the water was in the streets, but we got these cans, went out here, and poured it in, but we had a generator, so that operated the

lights and the elevator and all that, but they are all equally important, yeah. And for survival, you need them all and I wouldn't really want to prioritize them and what have you, like you say all of them are important, yes.

Nagamatsu

Thanks [ph]. I have another big question, it is not big, important question to ask. We are very interested in the – computer system does support your emergency management, so what kind of software or computer system did you use and what was the most valuable to you, GIS of course, isn't it?

Matthews

Yeah, yeah.

Nagamatsu

And more importantly the Power Point. Word, Microsoft Word, Power Point.

Matthews

Oh, yeah, yeah. But you [Unclear] about the real in-depth technical stuff, but we had a contingency of MIS, we call Management Information System guys, who work constantly. They set up all of the computer system and everything, put all the necessary programs on the system and they would have to help us operate the system on a daily basis.

And they are all city employees and what have you, and during the storm they were here because these volunteers they operate on a IP over Voice, and they needed to do simple things like keep them functioning and what have you, but they were here with us all the time throughout the storm in order to help us with the technical aspect of it.

Nagamatsu

You mean that the emergency support system was established during the Katrina response, what do you mean – is there any special computer system that supports your emergency management?

Matthews

Yeah, but that's basically City Hall and what have you, the servers, and all that and what have you, yeah, but I am not very versed on and what have you – that's where you know the technology guys, they basically handle that aspect of it.

Nagamatsu

You use the database to register the victims of the Hurricane Katrina?

Matthews

It's the work of FEMA.

Nagamatsu

Yeah. Do you have a database that of the dead or missing person?

Matthews

Yeah, we did have a database, and I think with the Urban Search and Rescue guys, they may have that database because we are a team [ph].

Nagamatsu

But they are administrated by each ESF or division?

Matthews

Each ESF, and that was ESF 9, Search and Rescue.

Nagamatsu

Okay, let's focus on the EOC itself. So, do you have any – did you use any other unified information system?

Matthews

No, no, we didn't, and as a matter of fact as I mentioned earlier that is one of the things that we are slowly gravitating toward, and that's a system known as RAMSAY, and that's – you know it has all kind of database, it has got GIS, it has got all kind of capabilities built within that system, but prior to Katrina, no, we didn't have anything of that sophistication, you know, in the EOC, we were basically antiquated, yeah.

Nagamatsu

So GIS was not useful for you at the...

Matthews

Yes, but we had to go out and physically do it and then get the lesson [ph].

Nagamatsu

No, no, so did you see the maps [Unclear] maybe I think you didn't use GIS system by yourself, but you can see any data by GIS like which area is doing or how...

Matthews

And shortly after that you know we had what is known as Pictometry, and we also used Google Earth and what have you, we have

been [Unclear] some areas. And we did have some GIS people in it doing that kind of thing, yes.

Nagamatsu

So the New Orleans City government has GIS specialist for EOC?

Matthews

Yes they – yeah, well, they are more contracted, you know, not city government but contracts, you know, hired in order to do this specific work.

Nagamatsu

So GIS section was activated very early stage of the [Unclear]

Matthews

Yeah, then like the following week when we got gravitated over to the Hyatt, you know, had necessary room and space in order to have the setup in there. But prior to it we really [Unclear] you know, we just had the regular technology people, who are everyday city employees, doing that.

Nagamatsu

Thank you very much for long, long interview, more than two hours.

Matthews

It's my pleasure. And I hope, you know, some of the information that you find [Unclear].

Nagamatsu

Thank you very much.

END

Interviewee:

Richard Winder, M.S.W., Director,
Department of Human Services, City of New
Orleans.

Interviewers:

Tamiyo Kondo, Ph.D. Research Scientist, DRI.
Shingo Nagamatsu, Ph.D. Research Scientist,
DRI.

Date:

10:00 -12:00 AM, Dec. 14, 2006.

Place:

Room #1 W 30 First Floor, City Hall, New
Orleans.

Richard Winder

I got it all over my Blackberry. I wasn't in town when we were going back and forth. Who was I talking to, I was talking to Mr. Condo [ph], O'Neil [ph], it's O'Neil, okay, I heard it as Condo, so I was talking to O'Neil and so I was talking to you back and forth. I wasn't in town.

Tamiyo Kondo

You weren't.

Richard Winder

Yeah, I was on my Blackberry, answering all emails, so it is wonderful that we have these things but it is also not so wonderful when you're trying to have a quiet moment or whatever but we are required to have these 24 hours, 7 days week, so because if you send an e-mail to me on my e-mail address I am going to get it on my desktop but I am going to get it also on my Blackberry, so wherever I am, so I answered you. So we don't mind that.

So I read some of it, now what I would think is you feel free to ask me anything relating to the hurricane and my role in the hurricane. I pretty much know where you are going with it but let me give you some background.

Tamiyo Kondo

Yes, please.

Richard Winder

As to how I wound up in this whole process and this is just a little, that's my card, I don't want it, that's a chair...

Tamiyo Kondo

Thank you.

Richard Winder

And that's release. You talk to hundreds of people and you say now who is this guy, well I have put my picture on my press release, so thank you.

The storm process for me, first of all I am the Director of Human Services and on the human services, which is a city agency, we are responsible for youth programs, and part of – youth. One of the largest youth programs that we have is the juvenile detention center, and it's, you know, a kid is arrested for a crime that if he was an adult he would got to the adult facility but because he is a juvenile, under 16, he would come to our facility and basically it's a jail for juveniles pending trial. The police officer would arrest the child and pending his detention here and pending his trial, they will come and say we will secure him, it's a secure facility.

The other programs that we operate are called emergency assistance. Emergency assistance in this instance is that if a person has trouble with their utility bill, electric and, you know, gas, and he had a cut-off notice, if I have money today, tomorrow I may not have any money but today I have money. I will assist them in keeping their power on until such time they are able to get money to keep it, you know, to keep it on continuously so the entity company which is called NCO of Louisiana has relationship with us to, if I call them, and say don't cut a person's electricity, because I'm going to send you \$300 if that's what we have, they won't do it until, because we will give them a promise that our agency will pay for it. Past due [ph] grants that I get one private corporation two years ago gave me money to do exactly that, and they felt that you know we need to do that. I don't know how much you know about New Orleans but

KEY

[ph]: Short for "phonetic"; used to indicate transcribed text that we are unsure about.

[Unclear]: Indicates audio parts where we were unable to hear or understand what is spoken.

[Multiple Speakers]: Used when more than one speaker is speaking at a given time and it is difficult to transcribe what is spoken.

[Technical Difficulty]: Used to indicate bad audio and abrupt breaks.

prior to Katrina we were a very poor city. Okay, 39% of the population lives under the poverty level. Post Katrina we are not as poor because all the poor people basically, they have been displaced, so now you are going to have a rise in economic condition of the poor because the people that can come back to New Orleans or were not really damaged by the hurricane, they'd either rebuild quicker, their jobs were intact, the flood didn't come to where they were or if it did come they had insurance and other capabilities to bring their houses back, so that's why we had a population of New Orleans being anywhere between 200,000 and 235,000. I tend to think it's the higher number, it's 235,000 of individuals who can maintain a job, they have income, they have housing to live in, so that they get more [Unclear] but I also have another set of people who are back now, who can't pay that, so that's the people that we are dealing with.

The third program that we have is we run an after-school tutorial program for adolescents, for youth, and so you see I am on both sides of the spectrum. We try to do prevention to keep the youth out of meal trouble alright then on the other hand I have the responsibility of making sure that the public is protected by securing these kids until such time the judge is there. So, but my function, and I have always been a member of the emergency management team because of the institutional nature of the jail, so because we are one of the few city agencies that have 24 hour, 7 day a week responsibility for somebody else's child I am going to have to be involved in what's going with emergency management.

Well Katrina expanded that role for me, because when we saw that the storm was coming, at first we thought it was going to Panhandle, Florida. As late as Friday we thought it was going to Panhandle, Florida. We made preparations, put oil gas in all the vehicles, made sure that we have enough food and supplies to get us through to three or four days we are used to. I have been through 15 different hurricanes since – I am a native of New Orleans, so I know about hurricanes just because I live here. So but Katrina and we have been open, the detention center, since 1959 so its 46 years. We never evacuated, never. It's a one-story facility. It sat on what we thought was high ground, and at a certain point you don't evacuate so we had 77

children in the building, 52 boys and 20 girls. Two of the girls were pregnant; they went to detention, so you just have to make a decision. Do you hunker down as we would like to use the term, you are going to hear that term, hunker down meaning you stay where you are, you protect yourself but you be in a safe place.

When I saw the size of the storm, which was by Friday evening I wasn't here. I was in Shreveport, Louisiana at a conference. So I had my deputies and all my assistants and I said make sure everything is safe, but it didn't look like the storm was going to go to Panhandle, Florida, it appears as it is going come straight to New Orleans, so I got in my car and my wife said why are you driving into the storm? Shouldn't we be going another way? I said well I have to be here, and I have been doing this for 28 years, I have worked for the city for 28 years so I have always had that role of either being the Superintendent of the jail or Superintendent of the boys home we used to operate and now the Mayor appointed me Director so I am in charge of all of those programs whereas in the past as you will see from my little resume that I was the superintendent of all of those facilities. Now I have other superintendents and now it's under my department.

So it was with much consternation that we drove into the storm and we got here Saturday night, that was the 27th. I told her to pack our bags, and go, that I am going to stay. So she packed her bags. Ironically, we had three Ghana students – students from Ghana who used to live with us, they baldhead [Unclear] their apartments, and of course they are afraid as to hurricanes and some of the things that we hear at New Orleans they just don't deal with at Accra. They have other things they deal with in Accra, but they don't, so we had three African students who used to live with us that were in an apartment may be two blocks from where we lived, and so she went, packed the car Sunday morning and got down and evacuated to my sister-in-law's house about 80 miles from here but away from the storm. So that was free, and I didn't have to worry about them. My daughter lives in Monroe who just called me. She is about 275 miles away, my son lives in Baton Rouge, he is about 90 miles away. So I didn't have to worry about children, they are adults, so I just had to make sure that my wife and part of what you have to deal with in emergency

planning is how does your staff take care of their personal issues first in order that they can concentrate on dealing with the emergency. So because we have been doing this so long my staff basically knew they had to get their families off, they have to get them to a safe place, you have to secure your home but you have to come to work, so you have to report.

So I went to the detention center at 8 o'clock and since that was the only major responsibility I had to do, I don't worry about buildings, I don't worry about chairs or anything. Human beings are a valuable commodity that you're out to protect in any storm. So we have to make sure that those human beings that you are in charge of, in my case 77 children in a locked facility, wouldn't drown or wouldn't get hurt so I had an arrangement with the criminal sheriff, the sheriff who runs the adult jail for the city. He has a high-rise building, five stories, and prior to Katrina we had an agreement that my first plan is to evacuate all together and go 140 miles west away from the storm. The second plan is for me to go 240 miles with – to avoid, going to the – maybe towards Texas, but you do that within 72 hours of the storm. 72 hours before Katrina, we thought Katrina was going to Panhandle, Florida, we never thought it would come here. So your third plan though is then if you have to evacuate, is to evacuate locally but to evacuate vertically. So I had my agreements with him. I met with him at 8 o'clock on the 28th, Sunday morning and I'd say Sheriff Gusman I am going to evacuate these children, and 46 years, we never had to move them and I said I don't trust the storm, the storm is humungous, it is wild, the water logging in five states across, it has category 5 potential, it scares me, you know, and I am again a veteran of 15 storms, so he said Richard come on. So we evacuated the children, put them in his facility which was five stories tall, so safe, secure, they were okay, no one tried to escape because they aren't offenders. My staff was there. No one got hurt so we were settled in. By 3 o'clock I was finished with that responsibility. I came back here and reported to the ninth floor which was what we call the emergency operation center to see what was going on. I was monitoring trends and the like, they had sleeping arrangements up there, but I didn't want to go there so this is my bed right here, so that's when I said, no it didn't flood here, thank goodness, it flooded right under it. So

this is my bed and sleeping bag, power pack, water, food. The electricity would have gone off, I have a little small self-contained power pack that I can plug in the TV, so. One of the reasons why I don't have that for hurricane but I mean I am an outdoorsman, I like camping and being in the woods, so all I did was transferred all of my personal stuff to here and had a set up so when the power went out in all the city whole, I was the only one with a TV, you know, and it was interesting that the generators were on but when the water came, Katrina came August 29th, about 6:28 it hit the city.

I woke up at about 5 o'clock in the morning from here, met my friend who is one of the security people in the front, and we just watched the storm from a safe distance and the wind was blowing and just devastating automobiles and I have to remember we were across the street from the Superdome and you know who was in the Superdome. We had over 30,000 people in the Superdome. So we were watching this mass exodus of people running from the storm and I remember no water, no water just yet, they were just running from the storm. The Superdome was supposed to be a place of last resort that you had no place to go, it was not a shelter, you bring your own clothing and the like, but it was just – temporarily hold you, keep you out of harm's way, and remember what our mission is. Our mission is not to lose anybody's life. Now the conditions may have been bad, they may have been horrible but the whole point was to save your life, so and we lost only three people in the dome. Only three out of 30,000, only three, one drug overdose, one apparent suicide, but we think the man may have been intoxicated and he flipped over a rail and one elderly person passed. But out of the 30,000 people that were in that dome we can only say three people died in there.

So we are watching this exodus of people. The water is now here, right here and we are watching the wind. We saw all the cars that were parked along the street. They were totally devastated. All the windows were broken and twisted and whatever. So at about 10 o'clock we say, oh we dodged another bullet, as we say in New Orleans, meaning the storm came through, we are not going to have some power for a little while, we are used to that, you know. So Katrina came through but it wasn't as powerful as they thought it was

going to be. So and the media reported New Orleans dodges another bullet, you know this is the 29th.

At 11 o'clock I started hearing reports from my boss's Chief of Security that, he knows where I live in New Orleans. He said Rich your whole southern region is full of water, is underwater and there are bodies in the water and I'm saying don't joke like that, you know so. He said no we don't know where the water is coming from and again we don't have a clue as to what was going on. Some people do but down here we don't. So the water came from the eastern edge from roughly Lake Maurepas, I'll give you some local landmarks, what we call the Mississippi river gulf outlet, the Gulf of Mexico and all of that water, if I am – it moved eastward and I live in the eastern part of the city and it pushed all the water to Lake Ponchartrain so then there is the sloshing effect, so all the water that went into Lake Ponchartrain had to go somewhere, so what it did was just pushed into the city and not necessarily over top of the levees because we didn't have any overtopping, [Unclear] they just collapsed because there were some areas in the famous, I am sure you guys have done your research on the 17th street canal.

Tamiyo Kondo

Yes, we have visited it.

Richard Winder

Here, and there was still 3 feet of lift from the water level to the height so it didn't go over, it literally just inroaded [ph] from the bottom, they collapsed. The water that came in from the east that destroyed my home and home of 80,000 – other 80% of the city came from the Gulf, from the lake and pushed in. The water that we wound up having here right as we speak came from the 17th Street canal and London Avenue canal and that water just cascaded from the, I would say, the northwest corner section of the city and just pushed into downtown New Orleans.

Historically, the areas that flooded were areas, which we would have flooded if we didn't put the levees. The areas that did not flood in the 300 years we lived in New Orleans didn't flood because the original city was built along the banks of the Mississippi River, and obviously is high ground to keep natural height to keep the levees – to keep the river from flooding the city. So there are pockets if

you get a map of New Orleans there are pockets where there was no flooding. There was loss of power, roof wind damage and the like, but there was no water and what we call the osiny [ph] that's why the French quarter didn't flood, that's why the area from roughly I am pointing towards the Mississippi river but along that that, the whole card along the river all the way to what we call river band which is nearly New Orleans didn't get any water but that is the original city as it was developed, and we did not develop New Orleans East, we did not develop the Gentilly area, we did not develop the areas around the 17th Street canal until 60 years ago, really, where you had large areas of population. They figured out how to drain the swamp. They figured out how to put veil in, and of course we use pilings and my house sits on 35 foot pilings has gone into the ground using a grade-level slab, and you put my house on a slab. And that's how we built the new city. Whereas the old city was sitting on above ground.

Now that was the reason why they built those houses and then we've seen them for gotten up [ph] history as terms of why we did not have any grade-level slabs in the old part of the city and that they were built above ground and just in case the flood would come from river which was what we always thought about but it didn't flood, and Katrina literally knocked and destroyed all of the levees that kept the new city dry. So it wasn't the storm per se that did it, it was really the failure of the levees, the US Corp. of Engineers taking responsibility for that. How they compensate me and my family, and I can personalize because I have lived through it and talked to as many people as you can that lived through it, not to people that came in after the storm, talked to the people that were here before the storm, during the storm and the like, because as you look at any city you have to think about the persons that are left, okay so we are left, 80,000 – 80% of the city is under water and now we have to come up with a plan to deal with immediate things.

First of all, where [Unclear], where you found the members, did they all make it out, what's the condition of my personal property, and once you get that pretty much settled then you can concentrate on dealing with the masses of problems that you are going to have. So the city had 2 feet of water in it for two weeks. Some areas had water for four weeks, you

know, of 6 to 7 feet. My house, my personal home had, can you imagine it, you are sitting in your house, now in Florida the water comes and it goes like a tsunami, water comes and it goes, in New Orleans because we are in above, we're in above, it's that, and you notice the water lines still, and I don't know if you have still noticed the water marks on buildings but that was just an indication of where the water had settled not how high it was, because you know and it just gave you, just like you would take up a tree in cutting, you can tell the age of the tree by the number of rings on it, well we knew how long the water stayed, in New Orleans it's about a number of rings on outside of each building.

And as we are recovering, and it has been 15 months since the storm there are some places that you don't see that have any remnants of it but there are still large dikes [ph] of this city that you can still see water marks, you can still see damage to the building where nothing has been done so that is the most discouraging piece of that. Where are these people, are they going to ever come back, will they ever rebuild where they were. We know the answers. Some are going to rebuild. Some will never come back. We as a government agency are going to take some of those houses and just have to demolish them because they are health hazards, they are a danger, so, we have to deal with that, but. So that got you, and I have to give you their backgrounds for you to understand what it is, how we want [Unclear], you can stop me please if you have a query.

Tamiyo Kondo

Yeah, so would you let me ask a different point? You told us that you got to the [Unclear] EOC on Saturday?

Richard Winder

On Sunday morning.

Tamiyo Kondo

On Sunday morning, on 28th?

Richard Winder

28th.

Tamiyo Kondo

Now when you get in the EOC which portion you fit in this structure. This is the Hancock County's EOC structure but you might be in this post.

Richard Winder

I would be ESF6.

Tamiyo Kondo

6, yes.

Richard Winder

I would be 6.

Tamiyo Kondo

And what our interest is how you as a leading agency as an ESF6 get into this ICS structure which is management by objective and which has a characteristic such as command and control system. It is different from the daily business structure in city government and how did you fit into the ICS structure and...?

Richard Winder

Well, it's funny. I fit into it because I was the only one here. We laid off 2800 [ph] employees so the logical person and before this whole structure this wasn't as defiant before Katrina. You know it was in theory this is how it should work, you know, we had drills but in actuality it did not come to fruition until post Katrina so literally all of the structures that we had that FEMA and the government puts out for you theoretically existed, you know, and I will share all of our emergency services functions and I will share that with you in terms of that but you know who were involved in it. But from September 1st to roughly 28th of September we were in an emergency mode, literally dealing with water still being in the city, law enforcement was at [ph] within. We didn't know who was in the city. We didn't know what the condition of the city until later on. You saw our Mayor make an appeal nationally for the federal government, President Bush to come down to see what's going on, so it would have been ideal that after the storm passed you could fall into your operation but the city was flooded.

So when salt water has inundated your city the normal things that you think are there are no longer there. So we realized that, as a governmental agency, that under the ESF6 function, the non-profit agencies, the faith-based agencies, the churches. Non profit meaning...

Tamiyo Kondo

Like Red Cross?

Richard Winder

Like Red Cross, right. All of the major people were here. Red Cross Salvation Army they came in but the local people that operated services like housing, food distribution, clothing, mental health services, they were totally destroyed. The whole infrastructure that we depended on prior to Katrina – because government alone can't do it, you have to have partners, so you have to have Salvation Army, you have to have Red Cross, you have to have Family Services of Greater New Orleans, you have to have United Way agencies, you have to have churches in New Orleans that are doing social services inside to help their communities and the communities surrounding them.

So New Orleans is a city that had thousands of churches in each pocket of neighborhood that would take care of the people that were in their immediate neighborhood and/or their congregation. So the pressure on us to figure out how are we going to replace all of it, it was just tremendous. How are we going to help the small businesses and the other agencies that were destroyed along with us? So Katrina didn't skip, the water didn't skip, I am just going to drown this person or I am just going to fire [ph] this person. It inundated the whole city and everything in it, so you know we look at the function on the command structure but for a month you are trying to survive. You are trying to figure out how are we going to get power to the city, how are we going to get sewage working, how are we going to make sure that people were protected that were here, where are you going to get clean clothes, and is it unimaginable, you know, that one event and when we say it is the most catastrophic event in the history of United States that 's what we mean, because every structure, every institution, every system that you can think about, that you depend on now think about it as being gone, think about a totally dark city with no lights, no air conditioning, no running water, what we call potable, no potable water anywhere, so imagine that's the structure that we are dealing with to get the point. So it was a triad model, to me it was a triad model, in that you had to do whatever was necessary to make everything work. Now for the ESF function, the agencies and other large organizations within the city government started to come back, and it was almost an apocalyptic type event in that you hear that well somewhere

from the school system is now in town. Someone from the Sewage and Water Board, you know they are beginning to gear up. We lost all of our vehicles, we lost all of our facility, of the 350 organizations and buildings that we actually control, I mean, the city government, 300 were destroyed – 348. All of the staff that supported the city is gone. All of the staff that supported the non-profits and the faith-based organizations, all those have gone and all of their facilities have gone.

So I was the one before [ph] each one's back so it fell upon me pretty soon to take charge of what we could call the ESF6 function. The other person that really was valuable to us was a person named Delma French [ph] and Delma French is the liaison between Orleans Parish School System and all of their schools were destroyed and our agencies, so the two of us, and we were friends before the storm, so we formed the basis of the very first ESF6 structure to work with command and also to start pulling – getting the non-profit agencies back and the faith-based agencies back. So this, I would say the inaugural of our very first meeting with just three people, my assistant who was with me, Delma French and myself we decided at that point that the structure was there. In the meantime the administration had all the things going.

Like Captain Mathews [ph] was doing what he had to do, Cynthia Sylvain-Lear represented all of those areas in terms of having, what was our progress in terms of potable water, what was our progress in terms of electricity, what was our progress in terms of cable, street conditions, the conditions of the street, so the whole area – the whole system began to meet everyday, seven days a week, and we would literally have to get reports on everything, something and she did it. And if you have a chance to meet with her or to have Chief Mathews share how system was, it was a series of dots and every function had a dot, so if it said schools, if it said public safety, if it said parks, condition of food, condition of the water, it was red, the whole board was red. We had nothing then pretty soon it became yellow which means we are almost there, then it became green, green meant that it in this section of the town we had electricity and in this section of town we had nothing, and we would divide the city up into different areas. New Orleans East, Gentilly, central business district where we are now, uptown and alike,

and you can see that this section of the city got green first because this is the safest, of course, it didn't have water in it, so we were able to bring up everything up there. So all of the players and that's the...

Tamiyo Kondo

That was it you were talking about this, there's blue, there's red.

Richard Winder

Exactly. So we started to bring all of those people, all of those players both on a city level or on a state level to come to the meeting and hear reports. Now food preparation and making sure that food is safe falls on the State of Louisiana, so Jerry represented the state of Louisiana because he would be the inspector to say, you know, can we have volunteers coming in by this time, I mean, well meaning but they were cooking in unsanitary conditions and they were feeding people, and it was a literally [Unclear] in and that they would take a green space like this, put tents up and start cooking, and then the people that were in town either wandering around they couldn't leave or beginning to drift back to see what was going on. Remember there are no grocery stores, there are no supermarkets, there is no Wal-Mart, none of that so they would find themselves going to these spontaneous places to get food but we wanted to make sure that we didn't create another problem by having them serve unsanitary, cook food in unsanitary conditions.

So normalcy took a while, but every day we knew that more and more people were coming back but we also knew that everyday this was bigger than anything we had ever had to deal with in our lives and that it wasn't going to be taken care by Christmas. And you know in my mind, and I am going to agree with the Mayor, he says anywhere between 5 and 10 years for us to, and I am leaning towards 10. Some people were able to make quick decisions about what they were going to do, they just decided they don't want to come back at all and they left everything, the house, everything as it is, leave it to government to destroy the house and do whatever, I am not coming back. Other people said well I am going to come back and I am going to rebuild, using my insurance money and my own money and regardless of who else is back I am going to go back into my house.

Other people like myself decided early that I did not want to rebuild my house. It was a two-story house. First floor had five feet of water in it and everything on the first floor was destroyed. Second floor was intact believe it or not, no mold, no damage. When the rescue people came to my house to see if anybody was in my house they were in a boat and they pulled themselves up to my balcony which was on the second floor and they kicked in my bedroom door which was led out to a balcony into the double door and when they kicked it in, it didn't allow fresh air to go in so it had a canopy on it so no water from rain because it didn't rain for a long time after Katrina, and you know, god blessed us on that, but it allowed the fresh air to stay. So I have four bedrooms upstairs, and all my furniture was intact, all my clothes was intact, but everything else was there. But those are the things that as you progressed to October we had meetings every day, as you started doing the command structure, each group started to break away from the command structure because we had to do our own work.

[Multiple Speakers]

Richard Winder

We had to do our own work. We can't just sit in a meeting and listen to what they said. We had to do our own work so pretty soon the ESF6 function became what's called Mass Care.

Tamiyo Kondo

Mass Care and not the ESF6, not the number.

Richard Winder

ESF6 is our designation but we operated on what we called Mass Care. Mass Care meant that we were going to deal with two things. We were going to deal with the rebuilding of the systems to provide human services and then we want to deal with once we got systems straight, we wanted to deal what we call long-term care, long-term needs of individuals [Unclear] you have to work with the organizations to make sure that all the organizations are beginning to get everything that they needed to get straight but when the people come back what are you going to do with them.

So we formed what's called long-term care committees and we were able to, and I am going to give you that, this function, I am

going to give you also the function of care, that systemically we were able to deal with our functions, you can take it, with our function system to make sure that housing was available, people could get food, medicine and medical and all of that.

On a long-term basis though how do you deal with that individual who is now back and that's different from that because now you have to take every individual, Charles [Unclear] I have money to run an apartment but beyond that I don't know how to get any money for food, or how can I get any clothing, I don't have a job so that's where long-term care of individuals come in. So it's a bigger function because it's what – it is one person at a time that you are dealing with individually so that's why we have what's called a case management system.

Katrina Aid Today, and United Way and Salvation Army, and Red Cross and a lot of other organizations provided case management work, case workers, case management to come in and what we tried to do as opposed to having that person go to ten different places and get ten different answers, it came only to one case – and that case manager followed that person throughout the whole process, so that he won't get confused with having to go here or here or here, so and all of the information began to flow into that one case manager. And what we call CANS is the term and you're going to see it somewhere in there, and so it seemed like you got everything we have, and that it is a coordinated effort in a network of information. So once that person gives you their name and their social security number its going to be computerized and that case manager knows that well he has already talked to someone at this place so there is no need for me to deal with that particular issue again.

What we found post Katrina is that the person would come in with a need, money for clothing or like, but often times they wanted to just keep telling the story over and over again so they would get what they wanted but then they would go to somebody else and some people just want to keep talking about it. The biggest challenge for us 15 months after Katrina is not necessarily, housing is the biggest challenge but I am also concerned about the whole mental health and emotional state of the people that are here and the trauma

that they experienced. Some people were able to handle it through denial and rationalization, you know, well I am okay, I am alive but a year later, you know, either at holiday time or this is our second Christmas post-Katrina and we are aware that people are going to get more depressed that they are going to have more stressful situations in their lives because Christmas is not the same because it used to be in his house in the Lower Ninth Ward and now the house in the Lower Ninth Ward is washed away in the Gulf of Mexico somewhere. So between the housing question in terms of how are we going to deal with that and dealing with the emotional trauma of the citizens that are back, and my focus is not only on the citizens that are back but how is my staff and all the people that work in city hall dealing with this because, you know, you get it twice, you get it from the person who is telling you their problems then you say I have those same problems why aren't I getting some help.

So we came up with, and I did this in December when we started noticing that staff, we lost two policemen to suicide in the week of Katrina. They killed themselves, because I didn't have a house, and we didn't have a house, we were all homeless. So imagine being homeless trying to bring a city back. So, I don't know if you know but they put two cruise ships here. One was called the Sensation and first responders in my staff we all lived on a crew ship about five minutes away from here for 5 months. So my house – my living arrangements were basically the size of this office. The food was good and the view was nice, we were parked on a river, it was docked on a river, but you know we had a house at one point, so we just lived there, so we lived in there 5 months. I was able to find an apartment, two-bedroom apartment for my wife in a live-in which was real nice. Half of my staff lived in trailers and you all have seen the proverbial streamer trailers, right, 8 feet by 28 feet, and they have been in those trailers for almost a year now, but they come to work, they serve the population and they have to serve but they don't know, you know, what's going to happen with their own homes and the like, so they live in the conditions that [Unclear] live in so we are always concerned about the whole mental health piece of that.

Tamiyo Kondo

Okay, so would you go back to the point in September case because you said that in October you got out of the command and control structure?

Richard Winder

Right, and we started meeting...

Tamiyo Kondo

But we would like to ask about in September case which was you were in the command and control structure, and how did you fit in the ICS structure and how you made a decision and how the incident commander ordered you, what you have to do? I think in the catastrophic disaster you have to, in the ICS textbook it said that you have to go into the ICS structure and you have to fit in the command and control structure but how do you feel about to work in that kind of structure because it is quite different from the daily business work so would you explain about the actual case in Katrina?

Richard Winder

Sure. We had no problem with working in the structure, but we knew that those of us that were in charge of ESF staff and was involved in social services that we were the co-experts of what needed to happen, so we would meet, there would be one general meeting, let's say Wednesday at 9 o'clock where everyone would come together, and we would give reports and the like, but outside of that structure we would meet and formulate all those things that we have to do. Now we would pass it on to the command but you have to remember they depended on us to make things happen, and it was not as rigid of a structure that you would think because number one, I am a social worker, I am a psychiatric social worker, I used to have a practice and everything else, start worrying for the city but our structure allows us to be as creative and think quickly on your feet.

Tamiyo Kondo

Yes.

Richard Winder

Because everyday also within a book, that's fine, but everyday a new challenge that's not in a book so when you hear us say we will be able to write a new book on post-Katrina and how we handled the operations of that city, it's going to be a little different in the book

that we had prior to Katrina because there were things that no one had ever thought of, excuse me ma'am, no one had ever thought of that would happen of the whole issue of the water not being potable, not being good enough to even take a bath in 50% of the city 4 months after the storm. No one ever had, in a major metropolitan area in United States of America, one of the richest countries in the world, you have a city where only half of the people have water that they can drink or take a bath in or 80% of the people had no place to come to and they are part of what the term you use diaspora but they are in Houston, they are in Memphis, and the like. So we were part of it, we got approval for everything that we did but and I don't want to give the impression that we are renegades, I will use that word, but you do whatever is necessary to get...

Tamiyo Kondo

That's right, you have to.

Richard Winder

You have to.

Tamiyo Kondo

But do you want to?

Richard Winder

Well, had to.

Tamiyo Kondo

Oh, you had to.

Richard Winder

Yeah, I had to, not because, I mean, anybody had to told me to do it, we knew we had to get it done and when we knew that there were pockets of people that couldn't get water, let's say, we took it upon ourselves and made sure that everybody that was responsible for transportation, that was responsible for distribution, to get it to the people that needed it would get it. One of the interesting things is that when the FEMA people and other folks from the outside came in they didn't understand how unique the geography of New Orleans is. So they would say well, they would look at a map, and they would have their little GPS thing, oh, yes, we can put it here and someone like me would say no you can't exactly put a warehouse there because if it rains again without a hurricane it's going to have 6 feet of water there without the hurricane, because we know it floods, and there were areas in the city of New Orleans

that flooded before the hurricane. We knew exactly where the floods would be because either [Unclear] pumps were slow, the pumps were broken and the like, so we had to educate the non-New Orleanian as to how we are going to do this recovery because they did not know the city and it took them a while because again what they were going by the book and you can't go by the book sometimes.

Tamiyo Kondo

So you mentioned that you have to attend the meeting and you'll sit, and what do you have to report to the incident commander in that meeting and how often was the meeting held?

Richard Winder

Yeah, early on it was three days a week, at the beginning it was everyday.

Tamiyo Kondo

Everyday okay.

Richard Winder

It was everyday. Then we'd say, no let's take Sunday off, okay because we thought, as you started making more progress that you weren't operating in that crisis mode as you were in the very beginning, so we all agreed that five days a week everyone went with your report then eventually it got down to three days but what was happening though is that subgroups of the structure started to do their work and the work was done not inside the command structure. The work was done outside of the command structure so that you can take your teams, and we would meet, my group would meet three times a week maybe just to see that, you know, we are helping this agency get back on their feet, we are doing this. We also, as things started progressing, you were dealing with recovery but we also started dealing with well we are in a hurricane season again, so we started dealing with the next hurricane while we were in the recovery from the last hurricane and now on January 17th we are having a training for all community-based organizations and non-profit organizations, faith-based organizations to have them to review their standard operation procedures in terms of evacuation.

So we are anticipating the upcoming which is our third one now, hurricane season, and having them to come, show us what their evacuation plan is, how are they going to secure their computers and the like, refresh

them on what we have to do, so we have one, for this season on April 9th, for the season coming up which is right around the corner, you know, we don't look at calendars in New Orleans by the way everything is based on hurricane season, you know, our calendar is hurricane season. So we are going to have a training in January, and we want to do it early so that we can have a good feel of how people are going to be prepared for it. We all hope and pray that it doesn't happen again, but now we are at a point now and we have a structure to – actually it's by all of the non-profits you know in town to have them to bring their plan and, you know, Chief Mathews and the colonel, all of the colonels, we have got a lot of colonels around here and myself and a few others will go through that training for them so we can get them prepared for that. So that's, that's just in aside, but, so what's your next question?

[Male]

Have you ever experienced some training of the ICS course or have you ever trained as an ICS specialist or...?

Richard Winder

No.

Tamiyo Kondo

No?

Shingo Nagamatsu

You never know how ICS works?

Richard Winder

No, just did it. We did it. No one and you know there were people inside, and for me pertinent no but you know Chief Mathews and the colonels and all that staff, of course they had wide range of experience in dealing with that, some of our national volunteer people, they were in Florida for all of their hurricanes, they were in Oklahoma for tornadoes, so these people are bringing and they are here, they are still here, they are bringing wide range of experiences to us but for us that was on the ground, that, you know, I am just operating my little department, you know, and hail Katrina you just learn on the fly what it is you have to do, but the instinctual and it's really, you work on your instincts, your instinct is that you know what you have to do, you do it, there is no tomorrow, certainly [ph], we have to solve these problems today. There is no planning session, you know, there is no

retreats, you know, there are no symposiums. You have to solve it today, right now and deal what comes tomorrow because guess what there is going to be another set of problems that you have to deal with, so it's that can't lose fear, you , if you can't view that lexicon, if they can't lose fear, that made us do it, and I was season [ph] group yesterday, and it was a meeting of our, this is the list, let me talk about that.

This is a list of all of the organizations, and I will explain all those acronyms to you, but post Katrina and it is really, and people are saying this is how amazing how you were able to this, post Katrina as part of what we thought was our ESF6 function we now created a calendar, everybody has one, of how we deal with both the recovery piece and also how we deal with from a systemic piece, but also how we deal with the individual long-term care needs.

So if you look at the calendar for, let's say, December, let's go to December, okay, and yesterday was the 13th, December 13th, that GNODRP stands for Greater New Orleans Disaster Recovery Project. What we did was took all of the social services, human services, human needs programs in New Orleans, St. Bernard Parish, we don't have counties in Louisiana, Plackman Parish which was totally devastated by the Katrina, St. Bernard was totally devastated, New Orleans, Jefferson Parish, St. Charles Parish and we formed what was called a regional partnership with the goal of making sure that we all participate in the recovery, bringing all of our resources together. So that meeting was held yesterday and we have been meeting regionally to help to get ourselves together since November.

When you see Care, when you go to, that is, Care is the group that we formed to take care of the long-term needs of individuals for New Orleans – for New Orleanians, and we meet every other Monday. Case managers are there. They bring cases to meeting, and we were able to, with everyone being there that's there, churches that are doing social services, faith-based organizations, I mean, the community-based organizations are doing social services, the private and the for-profit agencies all come together and the structure that we were able to maintain post our crisis time was exactly that so that when you get through with the crisis you have a, what, a structure that's in place

that's going to continually be there long after I am gone, because we know that this is not going to go away. We use this structure to get funding and we have to still convince the nation that we need help down here. Some people think because the Superdome is open, you know, it's all good, it's all well. There are some national organizations who are withholding funds and donations because they are not sure how the money is being spent or they think everything is okay, because they will look at what's going on with Bourbon Street and the French quarter, they will look at the Saints and they will look at all of the good things that's happening, but they don't do what you did. You go to 17th Street canal, you have gone to the Lower Ninth Ward?

Tamiyo Kondo

Yes.

Richard Winder

You go to the Lower Ninth Ward, you still smell the city, you still see the city, and you know that we have a long way to go. So we use these organizations to be able to get there. Okay, but that's part – but this came out of ESF6, that we created – we created this infrastructure to keep all – and got all these other groups that are meeting. We have a rebuild committee. The rebuild committee does just that, rebuild, you know so rebuild committee is pulling all that, so you can keep those. Okay.

Shingo Nagamatsu

So is ESF6 still open?

Richard Winder

We meet once every two months, okay, because the structure is so well maintained. We had our meeting last – few weeks ago, we are going to pick it up again in January when we do our training, January 17 is our training. When you see ESF6, when you think ESF6 because I have a little cubicle up there, but, you know, my cubicle, my real work is here, okay, and then that's that dual role that you have to do, that you have to do your job because you've got these guys in the council, life goes on for them, you know, they all went through Katrina, but you know they are politicians and they have to make sure their constituents are happy. So the day to day, mundane things that I dealt with before Katrina are still here but post Katrina you take on a new role. I was telling the group

yesterday at the meeting of all the regional people that I announced that I am semi-retired and they say what? You are semi-retired, I say yeah. Right after Katrina I had 10 jobs now I have just got 5, and they say, oh, okay, they got, but then that's true. You know, I coordinated volunteer management, I coordinated all of the volunteers that came through to New Orleans in April, March, I am going backwards, February, March, and April. In April we had 22,000 college students that come to New Orleans at some time or the other and because we had to lay off the volunteer coordinator for the city, guess who wound up coordinating all the volunteers.

So my function through being Director of Human Services had a specific role, which is enough to keep me busy for a lifetime, but because of the catastrophe you do whatever is necessary to do that, so the biggest thing that we found with volunteers, and you guys are going to see it, is housing, they would come, they would be willing to work but they would also say well do you have a place for our students to live, and of course we don't want to be bad hosts but the answer always is we don't have any place to live. I am homeless so where are we going to put 1500 college students who want to come down here for a week to good houses, so and as I say housing is still our problem. What we did and FEMA through their coordinator, volunteer coordinator is social [ph] coordinator, Mary Sutton, Mary is a native of New Orleans but she works for FEMA, and Mary and I have been friends for 29 years, but she wound her work for FEMA for the storm and it was really good that we took a federal employee who knew about New Orleans who was also a social worker like myself, and she understood our problem in terms of housing so what they did was formed what's called a base camp, and it was called [Unclear] base camp and FEMA paid for 1500 spaces, they were big air conditioned tents, kitchen, restroom facilities, showers, cafeteria, you know, bays and alike, it was really nice but it cost us millions, and at the point that FEMA decided that they couldn't do that any more, the base camp was disbanded. All the national organizations and the local organizations that are here now are taking care of the housing needs of their volunteers like Associated Catholic Charities.

If a volunteer from Associated Catholic Charities, that's from Nebraska, want to come

volunteer in New Orleans, Associated Catholic Charities know that they have to find housing for them that the government meaning whoever is represented by us will not provide volunteer housing for them. We are in too much of a stressful situation now and that it was good that they came, we worked with them, we worked miracles to get this done and now September no volunteers, because they are back in school. So in October, now we are going to seeing them again around the spring, so when they have what they call spring break and Mardi Gras, a lot of students like to come to New Orleans to volunteer but they also like the fact that, called Mardi Gras which is our carnival is here and they participate in that.

Shingo Nagamatsu

So according to your story we realize that the members of the ESF6 is not fixed, all the NGOs came in, some NGOs went out and they were changing every phases of the disaster, was it right?

Richard Winder

Exactly. But we have a structure that is fixed though and that it may not be me and I put it at the top, we know that the lead agency is going to be New Orleans Human Services at the top, okay, whether that, whether it's me or not, we also have the New Orleans Public Schools, okay, and that's one of our biggest partner, the United Way of Greater New Orleans, which has a lot, number of agencies under it, they are coordinating, the Salvation Army which is a national organization has a seat on it and American Red Cross. So when you have American Red Cross, Salvation Army, United Way of Greater New Orleans, the school portion which is a major, major feature of New Orleans in my department, you pretty much cover the leadership of it, and everyone else under it will follow it and align to it.

So regardless if we wound up being the face of the ESF6, later with the public schools Delma French, but our United Way people are great, they are still working very hard. Salvation Army is still here because they have local chapters in New Orleans but their national group was very instrumental in mobile feedings, you know, how they have their trucks, and their trucks would all into the devastated areas and feed people that may have been working on their houses or they may have been working, they would just give

you free food, free meals to feed those people that were working.

Red Cross, you know, was just tremendous in terms of bedding, in terms of supplies and the like and then they are still here, [Unclear] water its just amazing how we were able to coordinate, how we got water, and pre – fixed meals you know the MREs, which I didn't eat by the way, I prepared my own, people would eat it, and then they'd say no I am not going to eat that but so, yes, so it has a fixed structure but it may not be the individual, the individual may not be the same person but on into the future when I retire eventually they will know that however is sitting in this chair will be the ESF6 person, okay. Does that answer your question in terms of the – there's stability in that whole structure, it just may not be me personally, okay, but somebody would be able to step up there, because the function is written, the function is now in the document, the command, and then they understand, and we created this post Katrina, we tailored this for Katrina, okay, that's why I say we can write the book now.

Okay, so this is just a summary of in terms of, how to do deal with sheltering, what our role would be in sheltering, what our role would be in mass feeding, what our role would be in special needs unit, so, you know, I think that that answers a lot of the questions in terms of the specific things, in terms of what it is that ESF6 did.

Tamiyo Kondo

Okay.

Shingo Nagamatsu

So these several agencies were chosen based on your experience?

Richard Winder

They were chosen based on our experience, a, and the fact that they were here...

Tamiyo Kondo

Okay.

Richard Winder

They were here, they were on the ground with us, they came in immediately after the storm, okay. The National Guard came and all the other folks, the Red Cross was here, the Salvation Army was here, the other group that's here and still here is a group called

Operation Blessing and I don't know if you know Rev. Pat Robinson with a 700 Club but this is his non-profit relief portion that's not tied into his religious piece in this whole Operation Blessing. They are operating the hospital for us in what we call New Orleans East or Rene [ph], they opened up the first hospital out there, free, they have provided repairs, electricians, free to any agency, they are ready for it. They have co-sponsored events that I have done by simply writing the check that we don't have. I don't know if Chief Mathews told you about the financial condition of the city government, it's bad, it's bad, we lost 80% of our tax base, we lost all of our business base, so and city government is based on how you collect taxes, so there is no one to collect taxes from, so to speak.

There is no money coming in, so the first five months of how we kept the city government afloat was that we borrowed \$120 million from the federal government, then we borrowed another \$50 million from banks, then we borrowed another \$120 million to get us through June, and we had to let 2800 employees go. We paid them for maybe three weeks after – four – six weeks after the storm in order that they would have some money to maintain some subsistence, it is bad enough, until you get your insurance together or if you don't have insurance at least you have this, but we couldn't afford after October to keep those many people on. So the decision was made that we all had to decide who is our – who would be all essential for us now with the formula that you have to cut 75% of those people, so I kept 20 people. And the 20 people that I kept had to multi-task, like I multi-tasked they had to multi-task. So you had to be able to run the detention center and work with kids in jail, you have to be a social worker, you have to be able to launch a community and work with the people, so our health department had 358 people, nurses, doctors, people like that, it now had 60. The only people that didn't get cut were the obvious ones, police department, fire department, and emergency management, people that drive the crash trucks and ambulance and the like, everyone else including the Mayor's office, the city council they all had to cut people because we had no money to pay them.

So we are a little better off going into '07 than we were going into 2006 than, going into '07.

We still balance the budget with borrowed money, though, so hopefully with more tourist coming to town and people spending money and our tax base increasing, people started going back into their houses, then we can charge them taxes for their houses that are now complete as opposed to having a half house, you can't charge full tax rate if all you have is a half a house or no house at all. So we are hoping that that's going to be there but it's, as our Mayor says, it's going to be a long circle, but we're here for the long haul.

Shingo Nagamatsu

So for the story of the money, so are there any distinction between the FEMA-funded work or the work which should be funded for your daily budget?

Richard Winder

A tremendous distinction. That's one of the battles that we have. FEMA is only going to pay for those things that are directly related to the disaster, okay. They won't pay for daily operation that they feel you should pay for.

So let me give you an example. I lost, I had \$3 million worth of damage at the juvenile detention center, okay. They may give me \$2 million to rebuild the structure, because they are going to say, well, obsolescence and wear and tear, you know, and you can't get full retail, because it's not – it weren't a new building. So we say okay. On contents we lost maybe \$700,000 worth of computers, desk, chairs, equipments. So they said they'd give us that \$700,000, that monies will only have – only those things to replace. They, I am going to show – give it to you visually.

FEMA hired a group called the Show Group [ph] to go to every building in the city of New Orleans. This stack is only the buildings that I control. The juvenile detention center, the boys' home and may be another program. And what they did was literally took a picture, thousands and thousands and thousands of photographs of the damage where they will consider the inventory and from there they decided how much money in replacement we would get, so you know this is just a stack. Gray one, Right. That's one of our other buildings that we had, the boys' home, which we are operating.

Shingo Nagamatsu

So this photograph is gathered in order for request for the assistance from FEMA?

Richard Winder

Right. Right, it's called – in order to form what we call the PW. You are going to hear the term PW. It stands for Project Worksheet. Yeah, that's right, so when you do your project worksheet you have to have that documentation and FEMA assigned a lady to us, a person to – just happened to be a lady that would go through all these books, and we would have to show her, since it was female, working with us what the current value would be by receipts and the like, she would take that information, the receipt information and then come up with a calculation as to how much money they are going to reimburse us. So and that's the bulk of how we get reimbursed for it.

The problem is even if we got past FEMA we don't get the money. The State of Louisiana gets the money because the rules are that federal funds will flow to the state government and the state government sits in Baton Rouge, so we not only had to go through all of this with FEMA to get to a point where okay it's 2 million as opposed to 3 million, the money sits in Baton Rouge now we have to go through what's called an audit process to show to the state that they need to release this money back to City Hall to New Orleans to prove that we need to spend the money. We had to borrow money to get projects up, our whole criminal justice system was destroyed. We didn't have a jail to lock anybody, we didn't have courts for the judges to have a court, there were no grand jury rooms, literally the whole process was destroyed. So, public safety is your number one concern when you are trying to get people to come back. So we took monies that we had in reserve for other capital projects and transferred those money with the permission of the council. You can't do that until they tell you can do it. We transferred that money that we had for other capital projects, let's say, rebuild a playground and got permission to rebuild a courthouse or to buy a police car or to buy an ambulance or something like that. Then once the money from the state is reimbursed to us we would take that money and put it back to where it is. So we are at the last of barring [ph] against it and we got one check for 110 million, I think, from the state but they owe us almost 350 million, and I think we got maybe a third of the money so its moving a little better, but

remember during the times that we were doing project worksheets and FEMA was out there taking pictures we were still trying to build the city back and the state had their problems with some of their infrastructure, so it was more regional in terms of that but once we got an understanding and our Mayor is a very verbal person.

He would tell you exactly what he thinks and he expects us to do that too. He basically said FEMA is holding us up and the State of Louisiana is holding us up and he said it last week, 15 months after the storm in New York City that we still don't have the monies that we need to rebuild, that there is just too much red tape and the like, so, he is a very, very, very brave man in terms of not trying to meet a politician and being, you know, correct and not wanting to hurt anybody's feelings. And we all tend to take on his mode that you have to get it done and you be creative and you think quickly on your feet. He accepts no excuses. When we were talking about the whole process of how it was written out, you know, not that many think [Unclear] you had to literally work and think quickly on your feet and to establish it, and then move on to the next crisis. So, and it's called crisis management, you don't want to be in crisis management forever but when the crisis is there you deal with it and you make sure that you don't walk away until the crisis has been abated, so that you have the energy enough to go and deal with the next one that's surely around the corner because, you know, you're either coming out of one crisis, you're in one or you are on the way to another one and that's how we deal with it.

Shingo Nagamatsu

So I have another question. Do you have your boss in daily, your business?

Richard Winder

Everybody is a boss. My boss is the Chief Administrative Officer of the City of New Orleans.

[Male]
CAO.

Richard Winder

Yeah CAO, Dr. Brenda Hatfield.

Tamiyo Kondo

Administration.

Richard Winder

Administration right and her boss is the Mayor, who is all above us. So the Mayor appoints me. Okay, he appoints me. He said Richard Winder will be the Director, Human Services.

Shingo Nagamatsu

We don't have the CAO system but probably I guess the CAO is a professional bureaucrat who appointed by the Mayor, politically appointed.

Richard Winder

Yes.

Shingo Nagamatsu

But he is not politically elected?

Richard Winder

No he is not. Only the Mayor is elected but we serve at the pleasure of the Mayor. So the Mayor may come in today and say I don't like the color of your tie, enjoyed working with you, appreciate what you did for Katrina, appreciate your 28 years with the city, bye, and I will shake his hand and say thank you for the opportunity and leave.

Shingo Nagamatsu

Okay. My next question is that during the hurricane who was your boss, it's the same, the CAO?

Richard Winder

Yeah, Dr. Hatfield and the Mayor.

Shingo Nagamatsu

The Mayor, how about the incident commander.

Richard Winder

No.

Shingo Nagamatsu

Emergency manager?

Richard Winder

No.

Tamiyo Kondo

Not Mathew?

Shingo Nagamatsu

No Mathew?

Richard Winder

No, we worked cooperatively. Okay.

Tamiyo Kondo

Okay.

Richard Winder

He was the person designated as the commander however the structure of the city in terms of government didn't change. Dr. Brenda Hatfield is still my boss, right, and the Mayor is still my boss. Now Chief Mathews had a lot of authority to do and say things, but – and I think we respected his position. We followed along with those things that you know were laid out for us but he had no authority.

Shingo Nagamatsu

Mathew?

Richard Winder

Yeah, Mathews had no authority. I will have to, you know, tell you different things but at the end of the day if my boss, Dr. Hatfield, or the Mayor say no you do it this way, that's the way we did. So...

Tamiyo Kondo

So for example, you as a director of ESF6 and you have to set priority for your operation for the daily basis, and does Mr. Mathews ordered or advise you about your priority activity or – we will like to know that.

[Multiple Speakers]

Richard Winder

Let me speak for ESF6 only. I don't know what 1 through 5 and 7 through 16 did, okay but for us he recognized that we were experts, okay, and we would present him with the plan and the commander would approve him within [ph], you know, administration and Chief Mathews and everyone else that was involved, but they depended on us tremendously to create what it is that we had to do. So there was no critique based on if we want to do it this way because we would do it within the confines of what the rules called for, of course, but we also were doing it in the confines of what the reality would be, and the reality would be that if this doesn't exist then you can't say this is how it should be done, because it's not there anymore. And I get the gist of your question, it just didn't work that way for us in terms of Chief Mathews and who was along with him, the person is colonel,

whatever the name is. We had a respect for his position. We cooperated 100% with what it is that we had to do but Chief Mathews won't pick up the phone and say Richard I need you to do it this way or that way. He would respect my expertise in the area that just I like I would – he is a fire administrator, yeah he is a fireman. I would not ever dare tell him how to be a fireman or how to understand, or how to set up his structure for being a fire captain and I would never do that. I wouldn't cross into that line so the mutual respect is that I have been here 28 years, I know my clientele. I know all the people that were involved in the process, all the faith-based. And basically it's hands off, you proceed on with what you have to do, you are working day and night on this. We submitted to them of course for approval, and if they look at it, they approve it, they say its great and we move on, so never – he would be a very powerful person in that structure if we allowed it and our structure doesn't allow for just that one person. The person that's in charge of everything in terms of recovery and emergencies is the Mayor. He is the boss of the bosses. Okay, and he would tell Chief Mathews, okay, what needs to happen, and even if Mathews would have some power so to speak inside of that structure we took our orders from the Mayor. The Mayor is the chief person involved in this process. Now under him is the City Attorney, he has a cabinet and let me see, maybe this was – he has what's called a Mayor Cabinet and inside the cabinet is the City Attorney, the Chief Financial Officer, the Chief Administrative Officer who I report to, his Housing and Economic Development Chief, the City Health Director who is in charge of all health issues inside the city and those are the five people he has as his core cabinet. Under the cabinet are the department heads, Human Services, Health, Public Works, Sanitation, things like that but the Mayor is the person.

Tamiyo Kondo

Okay so we understand that.

Shingo Nagamatsu

We had hypothesis that the structure between normalcy and emergency that this is Mathews, and this is the CAO and in the ordinary phases the command structure is right here, the boss of division of the mass care is probably you...

Richard Winder

Right.

Shingo Nagamatsu

And in case of an emergency Mathews take over the CAO of the emergency management works, so I think these two are equivalent positions.

Tamiyo Kondo

You don't say that CAO is the master.

Richard Winder

Yeah, well, I am going to tell you the, lets just say that when it comes to emergency operations, the Director of Emergency Management has a lot of control over what happens as we follow in terms of logistics and finance and the like and that keeps him very busy, okay.

Tamiyo Kondo

Okay.

Richard Winder

But the overall structure of the city doesn't change. The Mayor is going to be the Mayor and the CAO is going to be the CAO. So he has control over how the buses go to pick up people and the distribution points, all those things but it still doesn't supersede though any of that structure.

Shingo Nagamatsu

It means that the command structure coexists during the disaster.

Richard Winder

Yeah, exactly.

Shingo Nagamatsu

I see.

Richard Winder

Because the person who is going to have to deal with the media is not going to be Chief Mathews or the colonel, it's going to be Ray Nagin, the Mayor, and he has to be on the top. He is going to be the face of what's going on now. You also have here that the Chief of Police is autonomous. He works just like we all work with the emergency management director but the Chief of the Police is the Chief of Police. He can't tell the Chief of Police anything about law enforcement because he is the law enforcement expert, but the Mayor can.

Tamiyo Kondo

But at least, because Mr. Mathews has to understand the overall picture, situation awareness for the Katrina overall, just not ESF6...

Richard Winder

Exactly.

Tamiyo Kondo

So at least you have to report your situation, and what you have to do as ESF6, so what did you have to report to Mathews and what kind of document you have to show to Mathews in the meeting?

Richard Winder

Yeah, in the – number one you give a verbal report. In terms of what operations you have. Then you give your statistical report. Similar to that, right, in terms of we had these many people come in for lets say aid, for housing, lets say, we had 25 people come in for bed. We had 21,000 volunteers.

Tamiyo Kondo

21,000.

Richard Winder

Yeah, we gave them assisting [ph] 21,000 volunteers who came to our office who want to assist in gutting, and do needs assessments and the like, so he would get that report, and the key person, have you talked to Patrick Carder?

Tamiyo Kondo

No.

Richard Winder

Patrick Carder is the person that would update that for Chief Mathews.

Tamiyo Kondo

Oh, he made it?

Richard Winder

He made it, right, and he would be the person that would update everything in the meeting and Patrick is still working in EOC.

Tamiyo Kondo

Okay.

Richard Winder

So yeah, Carder and people seem to forget about Patrick but Patrick is the person that I thought that kept everything in line, made sure

everything was updated, you know, you had all the reports, so before you leave you talk to Patrick Carder. He is a very – Carder, and he would be the person that's operating the presentation, the whole presentation, he would update the presentations, he would be in charge of with the meeting schedules, he would know who is who and what's what and I am an administrator that recognizes the work of the people that's not necessarily in charge but the people who are behind the scenes actually pulling it all together and he would be a tremendous resource for you in terms of how all those meetings took place, what was discussed and the like.

So we would give a report to Chief Mathews, we would give a report and then there is another key person in this whole piece that you had mentioned that her name is Cynthia Sylvain-Lear. She is the Deputy CAO under Dr. Hatfield, who is my boss, and she was the lead person in the whole recovery piece in regards to running out, doing assessment roll-ups and the like.

Tamiyo Kondo

Okay.

Richard Winder

She was the person that ran the meetings. She ran the meetings. Chief Mathews was there but Cynthia Sylvain-Lear was the person that actually stayed with it day in and day out. So Chief Mathews was still the chief, but Cynthia Sylvain-Lear, representing the administration, made sure that all of this happened in cooperation with emergency management.

Tamiyo Kondo

Okay, so I will like to ask you the criteria to decide this is a red situation, is that you – that you send – report to Patrick that the food is red situation or is it Patrick that decides?

Richard Winder

No. It would be the administration and Chief Mathews that and what's based on a report that lets say we get it from sewage and water board. Sewage and water board will now say we have potable water in all of the Lower Ninth Ward, so that would change, so it would go from red to green. Okay but it would be based on the report that the person would give, not someone deciding that's not there.

Tamiyo Kondo

Okay.

Richard Winder

It would always be the person who is in charge of that process like if it's food in terms of how many food establishments are now open in the city, and one week it might be 300, the next week it might be 800, so that would show an increase. So we could say well we got over 50% of the food establishments in that area. So the color would change. It would go from red to yellow to green lets say. So when its green we know that we are online and everything is fully operational and the like, so, but it would be based on the information the person that's in charge of the area would bring to command, not command deciding you know that this should change.

Tamiyo Kondo

Okay.

Richard Winder

It would be based on data that we can prove that we can see that exists.

Tamiyo Kondo

Okay, what else do you have to report? You said that this is red is a current situation.

Richard Winder

Right, current situation.

Tamiyo Kondo

How about the future operation or primary needs for the next operation, did you report that the future need for the ESF6 or...

Richard Winder

On occasion, we just started dealing with the future until after we had some basis to make some projections. Our basis for operation as it is for everything is to bring something from zero to 50 or from 50 to 75 or to 100. So, what you are dealing with technically is future needs but the future was now, okay...

Tamiyo Kondo

Yeah.

Richard Winder

So we couldn't say well we have now, you know, we would need this, we would need that lets say next month or whatever, the future was now. So everything that we dealt with was what do we do to solve the problem now.

Tamiyo Kondo

Okay.

Shingo Nagamatsu

But our question is that probably Mathews request you to write incident action plan?

Tamiyo Kondo

Like a set objective.

Tamiyo Kondo

Did you report that?

Richard Winder

Yes, that's right. That would be there. That was reported.

Tamiyo Kondo

Is it based on document or is it verbal?

Richard Winder

No it would be – it was a document, I don't have it here. It would be turned into him.

Tamiyo Kondo

Okay.

Richard Winder

Yeah, and he would have the – a monster's book.

Tamiyo Kondo

Okay.

Shingo Nagamatsu

I see. So and the, on the same time you have to report your CAO the situation of your work isn't it?

Richard Winder

Right.

Shingo Nagamatsu

So you will have to report both?

Richard Winder

Yes.

Shingo Nagamatsu

The CAO is joining the meeting of the emergency operation centers?

Richard Winder

She would be there along with her deputy. Her deputy is the person I just gave you the name Cynthia Sylvain-Lear, okay. There was never a meeting either the CAO or the deputy

CAO will not be there. You have to remember the CAO reports to the Mayor, okay, and the Mayor has to know everything that's going on, everything, so regardless of what Chief Mathews doing the daily operation, these individuals, the CEO – CAO, its Chief Administrative, CAO and the deputy CAO would be in the meetings and actively involved in everything in order that the Mayor would know what's going on. The Mayor did not, Chief Mathews did not report to the Mayor.

Tamiyo Kondo

Okay.

Shingo Nagamatsu

No, no. He didn't report to him.

Richard Winder

Right, basically he did, but the information came from, you know, here, you know, like that. Now he may, they had a relationship, that line is right but...

Shingo Nagamatsu

But it's not formal?

Richard Winder

But it was not formal, right, because you know Chief, because the Mayor can fire Chief Mathews, the Mayor can fire all of us. He will say, he could move us from all of that, so there's a relationship and that's right, don't get me wrong on that but the planning was a team effort with all of these folks, [Unclear] CAO.

Shingo Nagamatsu

The deputy CAO is joining you in the meeting of the EOC?

Richard Winder

Yes, yes. There was never a differentiation between who could be at the meeting, who can't be at the meeting. The CAO and the deputy CAO and the department heads like myself could always be at the meetings.

Shingo Nagamatsu

So probably the emergency operation center is trying to making some decision for the disaster management. Probably they wanted you to do something more, they are demanding probably but do you have some cases that the deputy CAO will reject it or...?

Richard Winder

I can't think of any. She might still [ph] think of some, but and Chief Mathews may think of some but you know we were so focused on what our role was.

Shingo Nagamatsu

Okay.

Richard Winder

And we would – the discussion has gone on but, you know, meetings were fine, the communication was fine, you would have to meet 60 people at these meetings. Some people enjoyed meetings, I am not necessarily one of them, I like being out doing something and solving the problem and the like so...

Shingo Nagamatsu

So my question is that do you feel some conflict between the disaster management work and your daily businesses?

Richard Winder

No. They coexisted.

Tamiyo Kondo

Coexisted.

Richard Winder

They coexisted and there was never any conflict. You have to remember that those of us who survived both the storm and...

Shingo Nagamatsu

Okay.

Richard Winder

Survived keeping the city together. The responsibility of keeping the city government together fell on us, so, and that's an awesome responsibility. There was no one else outside of here and so we took pride in the fact that we worked together, we created things that didn't exist before. We made decisions on the fly that was best for the people that we had at that point and, you know, I would say it was harmonious as harmonious you can be especially under the stress that we were dealing with. Remember all of these people that are working are homeless too except for the people that came in from the federal government. You know, so imagine everybody being homeless, still working together and not, you know, having any conflicts, so no there was no – we coexisted.

Shingo Nagamatsu

Yeah I got the point. So this line is command and control basis, isn't it, and this line is rather coordinative, isn't it?

Richard Winder

Yes.

Shingo Nagamatsu

Because, he has little authorities.

Richard Winder

He has – he would be the person, based on this structure that would have the responsibility to make sure that all these things exist, okay, and that's his job okay. That's his job, however everything flowed — may flow here, but the CAO still has to take responsibility for those divisions and those individuals that work on those to make sure that that work is done but paramount to all of that in the structure is the Mayor. The Mayor is a powerful, powerful, powerful entity in all the city government. He controls the budget, they vote on the budget but he makes the budget. So he makes their budget, so they vote on and they can take things out and add things into it but the actual budget, let's say, the budget is \$407 million for the next year, the Mayor makes that budget and that's a very powerful person. So we can't – so he has his function, she has the custodian [ph] female, they have their function, we have our function but all of it is based on the leadership of the Mayor, whether C. Ray Nagin or whoever the Mayor was, I've worked for four Mayors, and at all times it is always the Mayor, it is always the Mayor that is the ultimate, the power. He is the ultimate power behind it and, that's, you know, and that's – and it works for us.

We had a clear duration of what we needed to do. We didn't get any conflicting information from anybody. There was no one telling us do one thing and somebody else telling another. We had clear lines of instruction and authority as to what we needed to do as it relates to the storm, and those directions came from the Mayor, through all those individual pieces that I talked [ph] but it was always consistent with what the Mayor wanted.

Shingo Nagamatsu

So do you have any political pressure from the Mayor directed to you?

Richard Winder

No. The Mayor – let me tell you, the Mayor appoints directors.

Shingo Nagamatsu

I see, and you were also appointed.

Richard Winder

I am appointed by him, right, and he says Richard Winder I want you to be the Director of Human Services for the city of New Orleans, and he appoints you and he knows that you have the expertise to do your job. He leaves you alone. He is not a micromanager. He tells you, this is you, this is what you have to, and his philosophy is you are an expert in your field, tell me what you need, I am going to give it to you. If you think I am doing something wrong that relates to your field tell me but he leaves you alone, he doesn't micromanage. I gave him a weekly report. I report to him weekly on everything that we're doing in writing or through e-mail, and he knows exactly what's going on. He reads everything. He doesn't just scan it, he reads word for word, because he will call and say well I see you've put this in your report, and I would say, yes, this is what, so okay. But he expects you to work hard, he expects you to collaborate and cooperate and he wants you not only to work inside the City Hall but the reason why I think part of how ESF6 has worked well is that we knew all the players that were in the community prior to the storm so it was very easy for them to recognize my face. I was the face of Social Services, I was the face of Human Services for the city, for the storm so when we write and say I need for you to come to a meeting, we have Mass Care, what we called Mass Care, housing and human needs meeting, they would come and they would participate, and we would collaborate and support each other because there were things that they could bring that I didn't have and there were things that we had that we could share with them, so but that all emanates from a collaborative and a cooperative sphere that leadership wants you to have, that he wants you to bring in people from the outside to make city government work, so, and yes he can make me or break me as we say.

Shingo Nagamatsu

So do you have organizational chart of the city of New Orleans which I can get, take?

Richard Winder

Not of the City of New Orleans, I have got one of may be my department but I think Chief Mathews probably would be the person that could give you that, okay, because he would have that, he knows...

Shingo Nagamatsu

My interest is here this way and probably here. Mathews has this kind of organizational chart, it's a kind of ICS, my interest is that regular one.

Richard Winder

Okay, let me see if I have it in the budget. Let me see.

[Japanese]

Richard Winder

You see here, no it's not in the budget. That's the budget.

[Japanese]

Richard Winder

My secretary is looking for it but it is not – I think Chief Mathews will have one somewhere around or somebody...

Shingo Nagamatsu

Your story is quite interesting to us because we thought that the ICS and United States Disaster Management System based on ICS is something quite different from ours that we thought.

Richard Winder

Okay.

Shingo Nagamatsu

It's quite same.

Richard Winder

Great, great.

Shingo Nagamatsu

Bureaucracy is bureaucracy.

Richard Winder

Bureaucracy is bureaucracy, and also keep in mind that if you go to Miami, Florida, let's say, Miami, Florida may be the opposite of what we are doing. You've to always remember now that we are speaking in the context of New Orleans, Louisiana, city government, that's my view and my view only, okay, because you may go somewhere else

and its going to be the opposite but also remember that even though the structure is there and its laid out and its well documented, formatted what happens in the real world in reality maybe somewhat different than what your faith – that you have in terms of your co [ph] textbook or your menu, you know. The actual environment changes and the words that we use will be that you have to be flexible. You have to be fluid. You have to be accommodating. You have to think quickly on your feet. You have to take challenges as they are and meet them head-on because, you know, like I said the future is today and not down the line.

So but again just always remember it's in the context of Katrina and the failure of the levees that changed the whole structure of what we are dealing with. So again, like I said if you go to Miami they may be following it that way, not us. Okay, any other questions? We did almost two hours. Alright.

Shingo Nagamatsu

Yeah two hours, thank you very much.

END

Interviewee:

Mr. Brian Hooty Adam, Director, Emergency Management Agency, Hancock County, MI
Mr. Crystal Gordon (Chris)
Mr. Mac Allen
Ms. Carey
Mr. Joe
Mr. Brice Phillips, Broadcast Division Director, Hancock County Amateur Radio Association, Inc.

Interviewers:

Shingo Nagamatsu, Ph.D. Research Scientist, DRI.
Tamiyo Kondo, Ph.D. Research Scientist, DRI.

Date:

10:00 -12:00 AM, December 13, 2006.
11:30 -14:00 AM, December 15, 2006.

Place: Hancock County EOC

Hancock County – Damages caused by Hurricane Katrina

Nagamatsu

Okay. Let's move on to the after the storm, yeah. And after the incident command team from Florida came in. So what did MEMA do, and how did you coordinate with MEMA?

Brian Hooty Adam

MEMA got back at our EOC, probably day two, because we were all watered in, nobody could get to us. They advised us that incident management team from Florida was coming in. Understand this, I have never dealt with an incident management team, never dealt with anything of this magnitude actually, so we didn't know what to expect. We used all the emergency support functions, but we never said ESF 1, ESF 2, we had transportation, we had – well, we didn't have all of them, we had most of them, we had everything, but we never said ESF1, 2, 3, 4, 5. We never used ESF. We used plain language.

You know you're transportation, you're law enforcement, you're fire, you're search and rescue. When the IMT team leader which had a female come in from Amite [ph], Florida. [Unclear] introduced, this gentlemen right here is Congressman Taylor. He is one of our Congressmen out of Washington.

Brian Hooty Adam

Chris has been a big part of helping us here.

Chris

Nice to meet you. Don't get up.

Brian Hooty Adam

I asked him to come in because he was a big part and helped us directly after the storm with Congressman Taylor, and I will get to that in a minute, was a big part of helping us get a lot of things that we overlooked. But the IMT team leader introduced herself and said this is what we need to do. Because, you know, understand this we lost all span [ph] of control. We were working – directly after the storm, since the winds died down enough we were able to start search and rescue with what people we had left. But when they come in, I mean, I had no building, I mean I had a building that waterlogged and no papers, no maps, no nothing, you know, all that got washed. And they were able to get us out into basically a trailer that they brought in, and we were basically able to set our incident command structure up. And at this time, people were starting to come in, so you know we were having a lot of problems, I mean it was people starting to come in, I am this, I am this, I am this. Well, I am telling you about the ESF functions, one gentleman introduced himself, I am ESF 2. I look at him and said, "What the hell is ESF 2?" Perhaps communications. We have a communications person, we never, just ever called that ESF 2, we just said, you're communications. And you could probably say we didn't follow the incident command structure by the letter of the law saying, you're ESF 1, ESF 2, 3, 4. But we followed it that we had all the functions.

One thing I learned out of – from Florida was you got to use ESF functions, the numbers. Because when people come in, such as Florida, and they are a great state that uses the incident command system and the ESF functions to a tee. And if I say I am ESF 2, first thing you got [Unclear] you need get marked by radio communications code [ph] and that's the thing. I mean, you know, using that and that's where they were able to get us back on track.

Tamiyo

Okay. But you said that ESF 15 is volunteer and donation, but Mississippi ESF 15 is external affair, so this is Florida.

Brian Hooty Adam

Yeah. It wasn't prior to the storm it wasn't, they just changed all this. ESF 15 prior to the storm was volunteers and donations. They just changed. And as a matter of fact they changed it after I finished these. And I have to go back and...

Nagamatsu

MEMA changed it or federal [ph] or they...

Brian Hooty Adam

The state – no, but actually the federal changed it and then it come down through the state.

Nagamatsu

So you said you don't use the number, but...

Brian Hooty Adam

I didn't prior, I do now.

Nagamatsu

So everything other than the name is the same structure of the ESF.

Brian Hooty Adam

Yeah. It was...

Nagamatsu

...the primary agency, and...

Brian Hooty Adam

Yeah, we had a primary agency. We just did not have – we just didn't put the ESF number 2. And we knew that we had to have all these and you know we just didn't take the time to memorize the numbers. This is what I am saying.

Nagamatsu

So the switching from name to the number is not so difficult.

Brian Hooty Adam

No, it is not, I mean, matter of fact it makes it a lot easier in my opinion. But when you actually never dealt with it – Florida fortunately has dealt with this so many times over the past five years with their storms and their state is pro emergency management. To me ours is not. And now, I mean no offence with that, because I will probably rankle some fellows at the state level, but they are not. Their emergency management law backs the EMA, ours doesn't, I mean we are – our state law needs definitely to be revamped like

Florida's, and I have been lobbying that – how long?

Nagamatsu

Since this [Unclear]

Brian Hooty Adam

Yeah, and I have even went to his boss, which is you know Federal Congress, and you know, of course unfortunately there we don't have a lot to say so at the state level. But yeah, the ESF function is a very critical and very important thing to know. You know if I come up to you and say I am ESF 1, if you come to me and say ESF 1, I know that's transportation. You know that is something I didn't know prior to the storm. If you had said ESF 1, I will say, hah, and I did you know, but I had transportation. I just didn't realize the numbers, and that's – that was – no, I would say ignorance on our part. It is just not every – how can we use the ESF numbers, and nobody around here does, not many people I have met in the state actually uses – that used the ESF numbers prior to the storm. Well, you can rest assured Hancock County will or the EMA will. Because it...

Nagamatsu

When was the last time that you were set up for any length of time. This was the first incident command structure in your tenure and...

Brian Hooty Adam

Well, a major. Yeah, we had some small ones, but nothing – this was the first major.

Nagamatsu

For any length of time.

Brian Hooty Adam

Yes. I mean, you are talking, we have only had tropical storms and stuff like that since I have been here. So, I mean we haven't actually used the system totally like this before. Hello. Okay. All right.

Chris

And I have four. Now you all understand City, City Government, County Government, State Government, Federal Government.

Brian Hooty Adam

I just – I already known [ph] Chris a lot, to help us, and I was hoping we had – I had one of my officers that worked in the EOC. He

was working – okay, on law enforcement, he was supposed to be here, but he must have got tied up, because he was a real big, real big help to us. His name is Crystal Gordon [ph]. He works for the congressman.

Chris

I am not a congressman.

Nagamatsu

Congressman Gene Taylor at IOC [ph].

Brian Hooty Adam

Gene is a local, at Bay St. Louis. He lost everything. He lived on the waterfront. Yeah, he lost everything. Two days – what day? When he showed up [ph] at the EOC, day after the storm?

Chris

I think it was Wednesday.

Brian Hooty Adam

Yeah. He showed up a day after the storm, and I have known Gene because I coached his son in youth baseball. He played baseball with me, so I know him. But a lot of people didn't know him, and Gene is one that dresses real casual, I mean, and I am talking casual. He gets in trouble all the time in Congress, because a lot of the time he dresses too casual. Well, he come –he showed up at EOC with a raggedy shirt on, raggedy shorts. It looked like he had been through a war, which he was because of Katrina. And somebody said, "Who is that?" I started laughing. He said, "What?" I said that's Congressman Gene Taylor. He said, "Oh, my God." But we were able to get a lot of things happen because of him. FEMA was able to shake a lot of trees because of him.

Chris

Actually the airport was – we had one satellite problem [ph], because he has been in Congress 17 years, he was the ranking minority member on military procurement, big military district down here. So he got on the satellite phone and called the National Guard, the General for the whole nation for the National Guard, and told them that the airport audio [ph] was clear because he had driven to the airport and knew that they could land, so they started landing these huge jets, probably within certainly a week, you know. But it just helped to having him around, so, and he is a

local guy, he is. If you saw him you would never know.

Brian Hooty Adam

That he is a Congressman.

Tamiyo

So would you go back to this questionnaire? And we have learnt that –we have a misunderstanding about the unified command and ICS structure in Hancock. I would like to ask you about the situation awareness in this EOC structure in Hancock County case. For example, this is called common operational picture, in State of Florida, which share the situation awareness among the every EOC staff in the local government level. Have you made this kind of file to share situation awareness in Hancock County? It shows like a EOC activation, it shows the sheltering, and it shows about the planning factor, what they have.

Brian Hooty Adam

No we are in a process of trying to do something just like that because of Florida.

Tamiyo

Did you make something like this kind document as a paper or Power Point file or...

Brian Hooty Adam

No, we are just gathering information right now. It is what we are doing and we are going to try to do something like this. Our awareness – and before you'll leave I will give you – I'll go find one of our books and you will see my operation plans, even though they are frequently revamped. And once it is revamped I can send you'll via a CD.

An updated version of it. But the command structure – yeah, this is Mac Allen [ph], he is one of my people in the EOC 2.

Mac Allen

Nice to meet you.

Brian Hooty Adam

But let me get back on the MEMA structure. And Mac probably has a few things to say. MEMA is here to assist us, once again they are to assist us. Mac they are under [ph] the assumption that MEMA and – we had a unified command with MEMA.

Mac Allen

This is all confusing, it's even confusing to me, okay. But they have a, what they call a – I can't remember the exact name...

Brian Hooty Adam

Forward Area Command.

Mac Allen

Forward Area Command. I was in Harrison County and they had their representatives there, so they had a group like that. Then they had the Jackson group, so we went through like that was the chain. So our guy would talk to the central guy and he had other counties coming in to him and then they forwarded it up to Jackson.

Brian Hooty Adam

Well, what Mac is basically is, here we are here, okay. And basically, what happens is, we have a MEMA representative here in the EOC. He talks to the Area 4 Command, which is here in Harrison County, therefore it goes to Jackson.

Mac Allen

Okay. And all that input, and he had Harrison County, he had Jackson County, Stone County Forrest County, whatever counties that were in that group, in this case it was the [Unclear] county. Feeding into this four [Unclear] command units.

So you had all the counties. Not only did you have Hancock, you had Harrison, you had Jackson County, you had Stone County, Pearl River County I think also went through there. And then they collected all the resource requirements and they went up to Jackson.

Chris

And we had to wait for Jackson to give an answer. The people at the Forward Area Command sometimes couldn't give us an answer.

Nagamatsu

We couldn't get the point.
MEMA send the person to the each...

Brian Hooty Adam

EOC. Yes.

Nagamatsu

...EOC, and they put together and discuss and report to Jackson.

Mac Allen

Report to the Forward Area Command Forward Area Command.

That's what we are calling it, it's like a following down of all the requirements for all the counties and then they send those requirements, total what have you, and you have to [Unclear] special requirements forward to Jackson. So it's like a clearing house in that area...

Brian Hooty Adam

[Unclear] a little bit clear for you all, real quick, a little bit quicker.

Mac Allen

I just don't remember what they call it.

Brian Hooty Adam

It was Forward Area Command.

Mac Allen

It was that. Okay, all right.

Brian Hooty Adam

MEMA, and then it breaks out to the counties. That's where we were getting you confused.

Tamiyo

Area command.

Brian Hooty Adam

So basically these are all the Counties, Hancock, Harrison, Jackson.

Chris

George, Greene.

Brian Hooty Adam

George, I mean if they had everything south of – they have done everything south of – they have...

Tamiyo

Several counties.

Brian Hooty Adam

No, actually everything south of Harrisburg. So it's a bunch of Counties. So, but basically you will see this is how it works and then the MEMA, MEMA rep at EOC. What we do is from here in our EOC put in a request to this guy here that's in our EOC, he then throws it to the Forward Area Command. If they can handle it they send it back down saying, yeah, we can give it to you. If they don't, it's got to go to Jackson, then back down. In a lot of our

requests, we got [Unclear] wait too long, because it had to go up here, back in, and a lot problems. From what I understand now, [Unclear] only could be, you'll only deal with the Forward Area Command. There can be no final [Unclear] into Jackson anymore, which makes sense because...

Chris

But first the decision that will back down.

Brian Hooty Adam

In other words, your decision makers have got be here. Because when we request and they don't put a decision maker in our EOC, they put a regular MEMA employee, what they call area coordinator.

Chris

What he does is pass the information up?

Brian Hooty Adam

Yeah.

Chris

He cannot say yes, he cannot say no. He calls the bigger guy, they need to generate. We may wait for six weeks to get it generated.

Tamiyo

Six weeks.

Chris

So, it is not – but I am...

Tamiyo

Just a coordinator.

Chris

Yeah. Yeah. Yeah. Because the people in Jackson didn't – weren't here. So they didn't know there was a real problem. There they got electricity, they have got air-conditioning.

Mac Allen

The police department for the [Unclear]. It was not until November then we got that trailer.

Brian Hooty Adam

We requested it all along.

Mac Allen

The request was carried on.

Chris

And it completely washed out.

Mac Allen

So, I mean those are the types of things. People make decisions. They have no idea what is going on.

Chris

September, October, November – to give police a trailer that they can operate.

Brian Hooty Adam

Okay. And that's how the decision goes.

It goes from – we will request it in our request, okay, from here it goes to this guy here, then it goes up. And like I said unfortunately you had to go sometimes to follow [ph] up and then that's when it got lost.

Chris

Hooty, I guess in all fairness there is got be a FEMA link there, up top somewhere, right.

Brian Hooty Adam

Yeah. FEMA.

Chris

Federal agency has to say yes too. Yeah.

Mac Allen

On the size of the request.

Brian Hooty Adam

Yeah, it depends on the size of the request. You are right.

Nagamatsu

So, where is the JFO..

Brian Hooty Adam

JFO, they are all field operations.

And you have to understand now, they probably do have the unified command in here with everybody, but the thing is, say with everybody with MEMA, FEMA, but there is no locals in here.

Brian Hooty Adam

We don't have the assets to send them, you know. That's why we try to follow the Incident Command System, because the Incident Command System says, you are going to operate whatever the Emergency Operations Center is for each county, and that's why to me they all have a decision maker in each EOC, I know it's hard too. But trust me, if you all ever have something, I

mean, yeah, which you are susceptible too, tsunamis and stuff like that.

Brian Hooty Adam

Typhoons. So I mean that if you are not prepared and you don't have plans you are going to find yourself in the same situation we was. And that's why I am glad you are doing this, so I mean it helps, and yeah we have a lot of stories, we'll sit here for days telling you all stories.

And the thing is your local government, I don't know how you all run it, but your local government has got to be prepared in your state, in your whatever, it has to be prepared.

And if they are not, you are going to go through the same thing we did. A lot of headaches, a lot of arguments, so, okay.

Chris

You know what, if I may? What I think is our county is – sometime after the storm, maybe two weeks, three weeks, we started having daily meetings, every morning, and all the Federal state, local county officials would be in these meetings and we would go around the room and each ESF [ph] function was called out, number 1 you got any problems?

Brian Hooty Adam

Situation.

Chris

And by communicating with all the state, local, federal people, Hancock County was, they want to get stuff done. Finally, I mean eventually it took a while, [Unclear] two meetings we had, a local kind of component in the evening, right.

Brian Hooty Adam

No, it was all the same thing. It was one in the morning at 6, at 7, and one at 5 in the evening.

Chris

Every day, for months, and that communication between all these people who had never really known each other before, that's what helped Hancock County actually come out of the...

Brian Hooty Adam

And that started one week after, when we finally got...

When we got settled into the second EOC up at a school and airport, and we were able to...

Chris

To set up those...

Brian Hooty Adam

To set up the meetings.

Tamiyo

So the operational period is 12.

Brian Hooty Adam

Yes, and that's what it was. It was the operational period meetings. It is basically what it was. It – we did what they called a incident action plan and that's where we got our information, from the incident action plans, is from these meetings. Each ESF function would say, we'd call out, the team leader would say, okay, ESF 1 what did you get accomplished today? He'd say this is what I got accomplished. He'll turn around and say, okay, what do you plan to accomplish for tomorrow?

Tamiyo

Yeah.

Brian Hooty Adam

And that would be the IAP.

Chris

And what are your hurdles?

Brian Hooty Adam

Yeah, what are the hurdles and all that.

Chris

What problems you got?

In that way if I could help manage [ph] this.

Brian Hooty Adam

Third drawer, see if you can give me one of my incident action plans, and I am giving them a brief show of that.

Chris

And one thing I need to say is, Hooty did allow some people to come in that probably wouldn't have been regularly allowed to come in. In some cases, their input was valuable, so I mean at some point we might have 30 or 40 people in the room.

Mac Allen

Well, that afternoon meeting with big.

Brian Hooty Adam

Yeah. It was – they had more than 40 people.

Chris

More than 30 or 40.

Tamiyo

So, how long does it take to finish off that meeting?

Brian Hooty Adam

The meeting, the meeting was about an hour and an hour and half. Well, it would start out to be right at an hour, and then some of the functions were getting to be a little bit too longwinded and we don't want the complete report. We want a basic overview of what you did? You send your form out, and this is what they would have to fill out, is one of these, MAC [ph] index which I filled out, right. And they turned that in.

Chris

And then, you know you are looking for, but first [Unclear] they got a roadblock with this, [Unclear] I need your help.

Tamiyo

For each ESF they have to fill out this.

Brian Hooty Adam

That's right, that's right.

Chris

That's where the focus was. It percolates, it percolates the problems to the top. It helps to prioritize. Generally communication?

Tamiyo

How do you unify this ESF objective form into one incident action plan?

Brian Hooty Adam

Yes, basically just like that. All they do is get it together. We had planning people that did this.

The planning, our planning group took it together and they would say, okay, I want your incident action form by what time, Mac?

Mac Allen

By 5 o'clock in the afternoon.

Brian Hooty Adam

Yeah, afternoon. I want your report at 5 o'clock. When you come in for the next morning, each person would give one of these.

Tamiyo

Okay. So these all are incident action plans?

Brian Hooty Adam

That's some of the older ones. After that, that is some [Unclear].

Nagamatsu

But I think this is a little bit complicated to make situation awareness, isn't it? To make a common operational picture, to make a consensus about the situation, this is somewhat complicated because of all these things.

Brian Hooty Adam

No, actually it is not, actually it is not. I thought so at first, and we all thought so at first, because we never dealt with this and I said, you know, you guys are putting too much into this. And they said you can understand this once you see it work, this is not complicated.

Because one, all you are doing? You are going to have a planning section. If you have a major catastrophe you are going to have a planning section, and that's their job.

Is to get this going, that's their sole job, is to get this, this plan done and plan out.

And it is not – do you all think it was complicated? I didn't.

Mac Allen

No, the issue is it forces you to plan. It forces you – you have to say I am going to deal with – this is my plan to accomplish these things. You know and they [Unclear] short term plans, with our tactical plans, that's what we are talking about. And then, what did you do, what you are going to do, so it forces you to plan what you are going to do.

Brian Hooty Adam

And this also helped with our 30, 60, and 90 day plans too. We can look back and say this is what was accomplished. This is what we want to accomplish for the 30, 60, 90 day plan, because we had to also do that.

Nagamatsu

Okay, so when this routine was established?

Brian Hooty Adam

A week after.

Mac Allen

Well, we got better at it [Unclear] a time.

Brian Hooty Adam

We got – yeah. Yeah, a week after, probably a week after, but at this point here, it was down to a size just about...

Mac Allen

We have built from the bottom up not from the top.

Chris

And record keeping is also...

Mac Allen

That's the important thing.

Chris

That is also a record keeping component. So you have a record.

Brian Hooty Adam

And we have everyone of these, matter of fact most are right there.

Nagamatsu

So how this system was established? It is the recommendation from the Florida team or it's a kind of the improvisation?

Brian Hooty Adam

No, no, the Florida team started it, theirs – the Florida started, the Kansas team come in, the third was – what, we had three Florida teams. So, but by fourth, fifth week, when Kansas come in – Kansas is actually the one got it down to a size. They had – but you got to understand Florida sent in emergency management teams from the EMAs. Kansas send in people that actually had planning capabilities and planning training. They just didn't say, hey, you are a planner. These guys are professional planners. They were in emergency management. They were professional planners, and that's something that we never looked at.

Chris

As far as the incident action plans that you get that's – I mean it says you need to do this, and we evolve into it, and we are taught how to do it. But through [Unclear] we did everything.

Chris

We did everything like that but we never were forced to do the planning side of it, which helped you sort of, yeah, okay, I made a mistake, I didn't plan right today, I didn't have

the right plan but now I know what it is because as you feel that [Unclear] back you find out what the real problems are.

Mac Allen

The situation awareness that you ask about, I am not an EMA, EMA guy, okay. But I can tell you from these meetings we had everyday, we knew how many cows were running loose, and I don't mean to be funny, we knew how many cows were running loose, we knew how many dead we had, we knew how many were missing, we knew who needed water, we knew who needed food, we knew how many people existed [ph]. Because of this morning meeting that we went around the room and that's where, I think we got, I got the situation awareness. It was truly real time, these are the problems we are having everyday.

Nagamatsu

I am sorry, I have a stereotype, that is, to raise the situation awareness we need Power Point and we need the maps, we need the GIS structure, that is my stereotypes, but this is not the case.

Brian Hooty Adam

Not for us, I mean...

Chris

But there is a need for that I think [Unclear].

Brian Hooty Adam

And we are trying to, you know, that we are trying to develop that.

Chris

But I mean his point is well taken though, there is a need, I mean if you had it all set up in the front [Unclear] the Power Point presentation and the maps, it will make your job easy to start with, you know that, that's my point. You can. Yeah, he is right about that, but really what you all might think, oh, now I'll put you down.

Brian Hooty Adam

And unfortunately, actually it is just like I told you all earlier, our state was no more prepared then we were, and the federal government was no more prepared than we were. So a lot of lessons learnt in this, but that right there is definitely the situation awareness, and what you all showed me a while ago is something that, yeah, we need to do. It's in here, in my plans, but like I said, them plans just got done

not even just a few months ago and they already are obsolete. I mean they are not obsolete, I just got to add a bunch more stuff to it. You know, yeah so I mean FEMA and MEMA changed in the ESF functions, some of the ESF functions. I certainly don't agree with some of the changes in the ESF functions. Why would you have long term recovery as an ESF function when they are not an response, this is supposed to be response related not long term related. So okay, but do you see where we are with the awareness? This here gives us all the awareness we need and...

Nagamatsu

If possible, we want to see the earlier phase of the disaster management and...

Chris

It's mostly a tough request.

Brian Hooty Adam

You know, I have it. I just – matter fact I was just looking at it last week. I don't know although where it's now [ph].

Chris

I had a dealing [ph] with your brother the other day. We went to that rotary club. I have learnt a lesson though, you cannot [Unclear] ten pieces chilled. Oh, man, I should have known that.

Brian Hooty Adam

Now you are going to see the difference that. Yeah, so you are going to see the difference the information compared to them.

Chris

Where is that from?

Brian Hooty Adam

That's from August, started in August, that's when Florida did it, and you will see that we had – but it wasn't as much and as good as them were.

Tamiyo

It's interesting. It is changing.

Brian Hooty Adam

Yeah, you can take anything you want, we can make – matter of fact, I'll make you some copies if you like. We will have them, but we'll do that for Friday. We can do it. Try and get it done for Friday.

Tamiyo

If possible, we would like to have this one. A week from – to at this stage from...

Brian Hooty Adam

I will get Ms. Merry to make the – try to make this whole copy for you.

Tamiyo

And how about the plan, is it operation?

Brian Hooty Adam

I got a book. Can you go ask Ms. Merry to give you one of my SOG [ph] books?

Tamiyo

And you said that the ESF staff will report their achievement to you, and is it the only time that the ESF people report to you – is operational meeting?

Brian Hooty Adam

No. We have our operational room, okay. All our ESF functions are in the operation room.

Tamiyo

Sit next to each other.

Brian Hooty Adam

Up front, is me. So basically, we are in there all the time. Actually, they are supposed, they report – they usually report to the deputy, however, I really didn't have a deputy, and basically when the IMT teams were here, their commanders ran everything and they reported to me. You know, so that's how it works, we are all in the same room. And early on, they probably didn't report to me as much as later on. It is because, you know, I was having 30 meetings, I also [ph] had 30 meetings a day, I mean, and that's not a lie. I mean it was like meetings after meetings after meetings, so I was not in the EOC a lot early on because of all the meetings we had on that. But basically, you have an operation center or what we call the war [ph] room, and that's where you are working out of, and you know unfortunately, we just didn't have a big enough one, okay.

Nagamatsu

Let me go back to this figure. And this is the command structure of the Mississippi state. And you have your command structure here, and what is the relationship between the MEMA structure and Hancock County

structure. Is it also unity of the command, it means that the relationship between...

Brian Hooty Adam

It was not very good during Katrina, that what did you say? Not very good, however now it is but it was a lot of bridges to jump, I mean it was a lot to the gap, you know there was a lot of gaps.

Nagamatsu

And why it was bad, I think that MEMA has wanted to have a command and control structure between the state and the county.

Brian Hooty Adam

Well, they are supposed to, but the problem is going back....

Mac Allen

One of the issues that you have, with any state and federal government it is a down – information comes down, you know, and we say, no, it's here locally, we need your help not down and up and that was to me, that was the relationship that we had trouble with. It's typically a down with them, and then we will say no, it's here, these are what we need, we need these resources. And I think that was the hard thing to get across at first.

Chris

It was a blessing I guess. But you know, still now if you would ask me about MEMA, I would say to you, I'm not real sure what their role was. Because it was confusing to me, for these guys would go to MEMA for something, six weeks later they'd say, Chris we don't have a generator, is there any way you can help us? And then we'll make a call and try and get something moving, but it wasn't smooth, you got to remember this was Katrina, I mean it was nobody...

Nagamatsu

So after several weeks later, the things going much better than before.

And in such a situation the relationship between the county and state is more coordinative rather than command and control.

Brian Hooty Adam

Yes. It was getting there and the only reason why is because they give us a veteran of their – MEMA gave us a veteran person that actually worked with us before, knew Hancock County, and knew storm related stuff.

His name was Mike Dill, passed away not long ago, but he was the best they had, and when we finally got him and he believed in what we were doing – the problem is, when we request stuff from MEMA, when we had the guys we had prior to getting this gentleman we happened to put pages and pages of justification to asking for search and rescue teams. Now, you know, that if these people up there would have been down here and solved that, they would have that, they wouldn't have questioned it. And MEMA wouldn't listen to their liaison in the EOCs, that was another problem. If you are going to have a liaison, and I tell them that in some meetings we had – if you are going to have, I mean, the EOC listen to them, if you don't, pull them out. Because they are not doing you and me no good, because I got too many headaches, everybody did with a request. Mac was requesting law enforcement, Wade [ph] was requesting search and rescue, you know, and then Chris was right, when we couldn't get it through them we go to them, for the Congress, I mean to the Congressman Taylor.

Chris

And that's not the way it should be?

Brian Hooty Adam

No, its not.

Chris

If they – obviously with Katrina they need search and rescue, they need law enforcement. You shouldn't have to write a 10-page justification of why you need law enforcement. You don't have any. It's all gone. You know if they were down here in south we wouldn't had those problems.

Brian Hooty Adam

And you are talking about a lot of, you are talking a lot of justification we had, and there was just, there wasn't much – it was – I tell you my problem I think with the coordination was, one, there was a lot of confusion between MEMA. We had an Area 4 Command, we had MEMA up there, and it was too much beginning [ph] and un-coordinating with this, and then you had the federals coming in, basically it was too many command and control sites, is what there was. We had Federal use our teams on the ground searching, and they not once checked in here with EOC. Now what, and he was over there, Wade was with the search and rescue. It was none, you

know, so they didn't, to me, file the [Unclear]. This is a good example of incident command, okay. Incident command has got to start coming down. When it come down, okay, the first thing that the state is got to do is get with the locals, the EOC, Emergency Operation Center, it got to get with us because that's where everything is run out of. Law enforcement is there, search and rescue is there, [Unclear] team, Even fire, congregation [ph], everybody is here. The problem is, you had them setting up base camps to where they were running people out of, and they weren't reporting to us. The left hand didn't know what the right hand was doing, and none of us knew what the right and the left hand was doing. And that is not trying to be facetious, that's giving you all heads up that if it don't come down right and you don't get the handle on it, you are going to be like us, you are going to be confused, you are going not know what people are at, you are not going to know what people are doing. Real quick, just recently we had a meeting with the state people who are doing search and rescue now. First thing they said was, they are going to run everything out of a base camp and we needed to provide them somebody at the base camp. I raised my hand and said, I am sorry, that's not going to happen. One, I don't have the personnel. And two, you fix [ph] and emulate the same problem we had. That's it. Why not you following the incident command? [Unclear] says, you go where the incident command structure is, at the EOC. And that's what exactly what they were going to do until we voiced our opinion on it. The problem is, they are going to ask the locals who went through all this, they are not doing that. They are only – couple of them [ph] flown over in helicopters think they know what they are doing? Now if you want to learn [Unclear] us, come down and sit with us for about a week. We can tell you more and do more that will help you in the long run, because it certainly helped us.

Chris

We learned by doing, we learnt by doing, we really did. Florida helped us work through that, Kansas helped us work through that, as you can see the progression in the plans, they got much better.

Brian Hooty Adam

Yeah. This was the beginning.

And that was right at the first of the year, and you can see the difference.

Chris

We had law enforcement setting up response cell [ph] sponsors. We really didn't know who they were, right.

Same thing for medical, we had medical folks coming in and just – they found a street corner, set up a tent, okay. And then as volunteers and resources came in, we had the same problems, so there was no way – I don't know if Hooty talked about this but one of the things he needs is to have some control over that, and if they don't come report to him and say, I got a medical unit, I am here, where do you want me, instead of flopping [ph] down on some street corner somewhere, and that was real important because we didn't know who was where and...

Mac Allen

Take the example, flopping down on the street corner, people – crowds collect, it becomes a law enforcement problem, you know, with traffic control and everything else just popping up, if it was planned...

Chris

Red Cross was giving out checks, and they had to move everyday, because the crowd got so bad that they would be there, so they would move the whole location just so people wouldn't gather up and fight and stuff, and that's what he is talking about, so it was...

Brian Hooty Adam

Anyhow Chris [Unclear] Hooty, that's my nick name everybody calls me by, that's my nick name that I have always been called since I was a young boy. So everybody don't really know me by Brian around here, they know me by my nickname [ph], if I wanted – who the hell is that?

Tamiyo

Okay.

Nagamatsu

So do you think there was a significant improvement in the way of running the EOC?

Brian Hooty Adam

Yes, absolutely.

Nagamatsu

So the finance state – this state is do you think – this is what is written in the textbook or do you think there was a significant improvisation which is different from the textbook?

Mac Allen

Well, I think that it became closer to the textbook. As we got through time.

Brian Hooty Adam

This was improvisations [ph].

Mac Allen

One of the issues is, and truly is, just like you said, the organization was computers. This was all done on one laptop and then that came out of a whole network, okay, and you had software, and you got to remember at the time we had nothing here, you know, handwritten pages and things like that. We didn't have the hardware here. In a bad disaster that's going to be the reality that you are not going to have the laptop and you are going to have to hand write and those types of things, but having the infrastructure makes a big difference. So if you want to plan to be able to use that you have got to be able to put that in your plan that we are going to have these laptops, these computers, these network already set up, so we can make these things, and another person in another county can be in your network and can give you the information that you need, systematically. The orders that we were placing for things that we need was put into a system, and we never got feedback on what was the status of it. So you had to have a system that would be able to handle these things.

Chris

To track the stuff.

Mac Allen

Track. That's a big deal.

Chris

If you put in a request, they wouldn't know where the request was, was it denied...

Mac Allen

And when it was coming to me [ph]?

Chris

Was anybody looking at it, whether they are getting the stuff? It didn't matter if it was ice,

personnel, whatever, the tracking was a real problem.

Mac Allen

You need a system for that. You needed to have a major system, and maybe it's on the internet, and if you have got the power and you got a computer, you got a satellite, you can communicate. But that was one of the things that fell out of this [Unclear], it was the tracking system. Yeah, we know, that was a major problem for us.

Tamiyo

So is this form developed by the NVisions or Hancock County officials made this? Because it said that – it's on the web.

Brian Hooty Adam

I think they basically took.

Mac Allen

It came right from Florida.
This form came right from Florida.

Mac Allen

We made it here, but it came...
The principle of it...

Chris

Come from Florida.

Mac Allen

The logic came right out of Florida, out of their book [Unclear].

Tamiyo

Yeah, because – it is very similar to the Florida one.

Mac Allen

Very similar, right, and that's where they came, right out of that. Now, we may have made it with our software, but the principle we've been leaving out on the web is anybody can head it from anywhere, that was the principle. And I think that is smart and that's the logic, I think it has to happen, because anybody can review it too.

Nagamatsu

Now this is Florida original. It is not the standardized form of the ICS, is it the same one?

Tamiyo

This is ICS 201.

Brian Hooty Adam

Yeah, the thing is Florida followed it prior to us actually using this.

Mac Allen

They had seven hurricanes.

Brian Hooty Adam

Yeah, we had less out here.

Mac Allen

And [Unclear] come across the same one, and they realized right on that they had to have something.

Chris

They have got lots of practice, just like we got better with one storm ...they got better with seven storms.

Mac Allen

And they brought their logic with them to us to help us go through. But you are right, you are going to see a lot of similarities from Florida, but it works.

Nagamatsu

They actually had the opportunity to test their plans.

Chris

Seven time.

Nagamatsu

I have another question. This is the structure of your county? According to the previous interview, I made this presentation that the switches of the command between the normal and emergency and probably in the normal phase you are just doing the daily work, and probably your county has CEO or City Manager of some kind?

Brian Hooty Adam

We have a county administrator.

Nagamatsu

County administrator, who is a professional over the public administration, he is not elected?

Chris

No, but yeah, he held two jobs.

Mac Allen

And we are a small county, we can't afford to have a county manager, and so he takes on part of that responsibility and he is elected officially, as [Unclear] Larger cities, larger counties, might have a county manager, but in this case we don't, okay.

Brian Hooty Adam

He is our Chancery Clerk which is a clerical code, and he is also the county administrator.

Nagamatsu

Do you have a President or [Unclear]

Brian Hooty Adam

We have a President of Board of Supervisors.

Nagamatsu

Supervisor. He is a political position? And county administrator is also the political position?

Brian Hooty Adam

In Hancock County only.

Chris

He does two jobs. He records all the land transactions, all the marriages, all that stuff, and then also he is a county administrator.

Mac Allen

In this case, now in Harrison County, they might have a county administrator, I think they do. That's a fulltime job there.

Nagamatsu

Anyway he has the responsibility for daily public administration, probably. And in emergency the authority has switched from here to you, probably. And this your command is delivered to the division of the Hancock County through ESF, is it true?

Brian Hooty Adam

I will have something for your file [ph], but we don't have enough time for me to print that because you all got to get going, if you are going to New Orleans. I will have my thing printed out for you all, and I will show you.

Chris

Structural flow chart.

Chris

The county administrator was at a lot of those meetings, so if he had input that's where he had his input.

Mac Allen

Then he also would pick up the information and carry it back to the [Unclear] too.

Next day

Adam

I did one of them off of a – but basically as you see on the left there at the top you see EOC recommendation group. Well, that is made up of myself and the two fire chiefs, which are the so called emergency managers for Bay St. Louis and Waveland. We decided to do a group where we can make decisions and come up with what we are going to do with evacuations and different things and bring it before the EMA Council, which is at the top. The EMA Council is made up of the two mayors and the president of board supervisors and the county administrator.

Nagamatsu

So it's not the president himself?

Adam

No, most people have what they call either board of commissions or board of supervisors that run their counties. Ours is called board of supervisors and he is just a president of the council.

Nagamatsu

They are appointed by the president?

Adam

No, the board of supervisors are elected officials. Yeah, they are all elected out of various specific geographic areas and only one of them sits on the EMA Council and that's the president of the board, and then the two mayors sit on the board. Let me write out so you can understand it. Each city, okay, has the mayor, okay, and then their council. Okay, and that's both cities, okay? The county has a board of supervisors, okay?

Nagamatsu

What is the board of supervisors? Is it like council of the city?

Adam

That's it. Yes, it's the same thing. It's the same thing with a different name. You know, it's the governing body for the county. This is the governing body for the city.

Adam

Basically these are the governing bodies, okay. So this is for the cities, this is for the county. The EMA Council is made up of one of him and one of each of the mayors.

Adam

Let's just say this – let me take our president. The leader of this group, this five of them, the leader of this group is on the EMA Council, okay. The mayor, who is a leader of this group, is the representative. The other mayor, who is the leader of his group, is on the EMA Council and the leader of this group is on the EMA Council.

Nagamatsu

Probably, I have misunderstood the system of electing mayor and the president. Mayor is elected from the council, isn't it?

Adam

No.

Nagamatsu

They're directly elected?

Adam

Okay, mayor is elected from county one, isn't elected by the people. The board of supervisors is elected by the people. The guy, who runs the board of supervisors, is elected between his other members. In other words, they have an election – after each election the board of supervisors will vote on who's going to run them and that's how it is.

Nagamatsu

And the leader of the board of supervisors is president?

Adam

Yes, president of the supervisors. And they are the lead governmental agency for the county.

Nagamatsu

This is quite a different system from the Parish and Louisiana.

Adam

Yes, oh yes, totally different.

Nagamatsu

That's the source of my misunderstanding.

Adam

Yeah. Well, I could have – like I said, to make it a lot simpler, you know, you have Bay St. Louis, which is a city, you have Waveland, okay, and then you have county, alright. The mayor and then down is their council, okay. Waveland is not called council; Waveland is called Alderman [ph]. It's a different type or form of government. In the two different governments, you have a council that means they basically have the power. In this type of government they have the power over the mayor. As with this one, the mayor has it over basically the council. That's just the difference and in the county the supervisors are the lead governmental agency, they are the ones that do all the things for the county and that's the difference, okay. This is what our next slide is, okay. So the EMA Council, we bring our recommendations to the EMA Council. The EMA Council decides yes or no in their decisions, okay. Then as EMA Director, which is me, I have to carry out their orders, okay, and my chart under me goes down to my administrative system, the deputy director, which is John [Unclear] now. It used to be Dee Lumpkin and then we have some out there where the National Guard reports directly to me during catastrophic events and then after that MEMA, which is Mississippi Emergency Management Agency, basically what I have done – this is – I didn't get this off of any chart. I basically – who's going to be in the overall organizational – the top organizational structure and all these groups that I have will work directly under my umbrella and then we come down and that's when you start breaking off into your operations groups, your resources, and different things.

Tamiyo

Let me confirm one thing. You do have a command and control authority for these or is it – this structure is a coordination structure, because, for example, National Guard is under control by the MEMA, right, state level. You have a control for the National Guard?

Adam

The National Guard is not controlled by MEMA.

Adam

Directly and we got to request to – everything we request goes through MEMA and that's kind of why they are out to the side because when the National Guard is here, they report

directly to me. I mean they report to MEMA basically if they need any request, but when they get here they are under me, and that's why I have them out to the sides. This shows that, yeah, they have other people they report to, but we get them when we request from them, and the same thing which you see down underneath the Congressional Liaison. I added that because he plans on being in the EOC with a [Unclear] for storms and – but that's basically... Well, listen, I will let you all deal with her and then I mean if you all have any questions on this we will go from there, but I know [Unclear] got a lot of information and we will work on getting Brice here because Brice, I suppose, will come and talk to you about the communications and a little bit about the radio station, but he has been probably here for long. Well, let me explain a little bit about Carey [ph]. She actually held more than one hat throughout this storm. She is my transportation guru. She is the one with all the transportation, but she also had to take over the mass care too because the mass care person left and so she's got the experience if you don't know anything about transportation that's the one I ask. She is – well actually, we depended very heavily on Carey with her knowledge and expertise [Unclear] and this is Brice, the communications person and the radio...

Tamiyo

Yes, thank you. So before coming here, we met with Director of Department of Social Health in New Orleans yesterday and asked him about ESF6 function, mass care function, so we would like to ask you the same question as we did in New Orleans.

Nagamatsu

So before going to this question I would like to ask you the familiarity to ICS before Katrina?

Carey

None.

Tamiyo

What we would like to know is how did ESF's each function fit into this ICS structure and how did you work with them?

Carey

Okay, well, let's start with how I got there. I have been driving school bus and big trucks for about 20 years. I was actually 19 years

when I started this. The day after the storm I went to one of the shelters. I was looking for someone and there was a gentleman in a school bus, an old gentleman, who just could not... He said, "I can't do this unless she drives the school bus." I said, "Okay." Next thing I know I was in that school bus driving people to different shelters and taking people out from the roads and the mud. I went to Hooty [ph]. I said, "Hooty, I will drive the school bus. This is what we are doing, okay." So that's how I got here and taking people to shelter. Again like I said get them out of the mud, taking them to shelters, taking them to other family members where they needed to be and the school bus is getting local transportation in here. That's how I got here.

Nagamatsu

So you mean that your regular work is transportation?

Carey

I didn't even work here before the storm. I came to Hooty the day after the storm on August 30th and I was driving a school bus and getting – they have the sheriff's department doing it and that's how I got here and as I got here that's where I got all my training.

Nagamatsu

So you were not a city officer before Katrina?

Carey

No, I was not a city worker before Katrina. And I have been here 18 months since.

Nagamatsu

So you mean that you don't have a regular work as a city officer, no?

Carey

No. But I have done all the mass care, the transportations. I also do ESF11, food and water. I have a lot of FEMA certificates under my belt. I have done a lot since I have been here, a lot [Unclear].

Nagamatsu

So you took care of the ESF1, 2?

Carey

ESF1, ESF6 and ESF11. Yes, I did all that.

Tamiyo

Transportations and mass care and food and water.

Carey

And food and water on the government side. I did all the ordering.

Tamiyo

Logistics with – for the local government employee is, is it for the citizen?

Carey

No, the food and water was actually unknown person that called from the mass cares. 11 and 6 are actually together because what would happen is I would get all the information from the PODs which would look like this. I would do a report, what they got, what we used in pallets, how many cars they have seen. So I knew they have used five pallets of ice there, I will order them five more pallets of ice depending if this number was the same like from the day before. I would call the government, FEMA, and I would tell FEMA, "Okay, I need this much water, this much ice and this many MREs and miscellaneous delivered to Gulf View [ph] POD, to Pearlinton POD, okay." Those were just some of those. But that's how we kept track of it. So in food, in the 11 that's how we found out what they needed, how to get it there, who needed what and also Red Cross will give us a report kind of the same way for Hancock County telling us how many meals and snacks had they delivered to the county that day. This is how we kept track of why did we still need meals served, while we were serving 538,000 meals, so we needed to have – you know that was the to-date number. This was the daily number. So we needed to have that many, that's how we kept track of things, as far as food and water and the government side that's how we initially got it here and kept track of it, okay.

Phillips

And it also goes across to, you know, how much MREs and everything is the POD size. Because you know, the relief agencies fulfilling that need immediately for hot meals you still had to have the sustainability for, you know, the other times too that would help to try and determine how many people were being served and then remove some of the relief, you know, from the supplies coming into the POD sites to remove some of the

burden off of, you know, the hot food meals from the Red Cross and see it all goes together.

Carey

So as I said, well, 6 and 11 are one. They really have to coincide with each other. If one doesn't know what the other hand is doing we can't get control of it and that's why they really had to work together and track how many people. As how many people we knew would be, you know, how many are coming back to the county. All of a sudden we are serving 3,000 meals on Saturday, but we only served 1,800 on Friday, why, you know, and then the 3,000 stayed and we knew okay, that's because we have this many people back into the county. That's how we knew who was coming back in the county.

Nagamatsu

I would like to go back to the basic question that we were very surprised that as I said outsider of the city government come to the ESF function and they can be a leader of each ESF. So my first question is that how many people are working under you in each ESF?

Carey

One, nobody, I was it. I worked for Hooty directly and ESF1.

Adam

All the ESF functions work under myself as the deputy director, all.

Nagamatsu

Tell me, how many persons are working in the Hancock County, or I say, Hancock County Government?

Tamiyo

He said 300.

Nagamatsu

300. So what they are doing to...?

My question is that the Hancock County government has mass care and health care department or a section?

Carey

Right, our mass care primarily is Red Cross, okay.

Adam

But mass care is – we didn't have a good relationship with Red Cross.

Nagamatsu

No, I'm talking about the government side.

Phillips

Right, like the health department.

Carey

They are different. If you look down here, health department is a different unit. They are ESF, okay.

Nagamatsu

Yeah, under ESF, the Department of Human Services.

Carey

When that all went [ph] they break it down so it's not overwhelming for one person to handle. That's why you have so many. The health department DHS is another, okay, because everybody handles something different, okay. And when you handle inside the EOC it gets dictated out to your governments and that's when they got to work because they are all busy trying to do their thing to keep, DHS okay, I'm going to tell DHS I need. This is how many shelters we have, this is what we need and these people need this at this shelter. They need food stuffs, they need medical. DHS goes and does their thing there. So I think that better explains it to you that we do have the government people, but they are doing something else out of direction of the EOC after it's passed through Hooty. I may go to Hooty and say, "Hooty, we have eight shelters... It took a long time to get there, but that's the best way to explain. There's somebody here that dictate your government or your local agencies and tell them where to go because he gets the information first and he passes it to his people in here which in turn gets passed outside.

Phillips

For decision making, right.

Carey

Yeah, okay, does that better sum? It sounds complicated – really it's not. It's keeping everybody working just at a different level and they take directions from here.

Nagamatsu

So you mean that the 300 people, who were working in the county government, are working under the different command – regular command structure.

Carey

No, you have – your course is different... You explain it.

Adam

No, stop. Let me explain it. You have the ESF functions, okay? This works directly under the Emergency Management Operation, okay. The county workers work directly under Tim Keller, the County Administrator, okay. We have a county administrator. Everybody else works under him.

Nagamatsu

He is a kind of CAO or CEO?

Adam

Yeah, basically. Some of them like the – what department he said a while ago, the health, not health department...?

DHS is working in the EOC with us, Department of Human Services. They are part of the mass care group, as you see underneath, somewhere underneath there is – should be over here. And they are working under that group, but all the workers are working – county workers that are not EOC related are working under the auspices of the board of supervisors and the county administrator doing what they tell them to do.

Carey

Right. But DHS and medical work under you, here. That's what we were talking about.

Adam

No, no, but he was talking about the 300 workers. That's why I said it. He said the 300 workers – they all don't work under us. They work under – unless their job is related to the EOC, if their job is related to the EOC they work in here. If it doesn't, they work in under auspices of the county government.

Nagamatsu

I will show you this figure two days ago and our hypothesis is that you were here [Unclear]? And, okay, this is a regular command structure like this is a county administrator, as you said, and there are 300 county people working for the CA, county administrator. It's regular command and in case of emergency you took over the county administrator and then all the activities are going through this command.

This right here tells you exactly how we operate. But I think that when I visited New Orleans this command structure coexists. They are working at the same time. I thought they were fixed.

Adam

No, basically you got the EOC over here which I got to report to the administrator, the county administrator, okay, but then over here, you have the county governor running the county government and that's where everybody else follows on here. It's not EOC affiliated.

In other words – whenever even in a bad storm like Katrina the county workers that they could get back had tasks to do, yes, some were more assigned to the EOC. Finance department was assigned to the EOC, but the rest of them like the road department, maintenance, they are not assigned to the EOC. They've got jobs to do outside and they are under the auspices of the county government.

Phillips

Yeah, but in an emergency, they must be tasked with task list from the EOC to do, okay. So it's basically, you know, when the information comes in through instructions and command then the command gives the order that we need this done and then they do that specific task tasked from – directive from here. Under normal circumstances that wouldn't be. It's just the directives come from the emergency operation command at that time. That's how that works and they're still doing their normal day-to-day job.

Adam

I just didn't want you all to get the county confused that they all follow me because they don't. It's just a...

Phillips

They are just operating in their own little circle and the directive command.

Adam

Yeah, there is a small interconnection. You said it a while ago that it does interconnect, okay, just like the road department, just like DHS, just like the health department. I mean, we all interconnect, but when you are operating out of here, you operate out of MAA [ph] premise.

Phillips

Directives.

Adam

That's right, and when you're outside they're working under the mayor or the county government so I mean, if that's just... Hi, Carey, you go ahead.

Phillips

Yeah, they are still working with county government, but they are being tested with a list from...

Adam

I wanted to clear about it because I saw he was getting...

Carey

Yeah, I was just going about it in a different way, that's right.

Adam

Well, now it's just the 300 people that's where the confusion is in people, so we have a second to...

Phillips

Yeah, they don't take a different role. They still do the same task that they do on a normal daily basis. It's just their directives and the task lists that they have to do is now rerouted through Hooty and then back through the emergency support functions to go back to them to their normal task.

Carey

And what started it was how I got here because I – before I was never a county worker. That's how that started, so that was the...

Adam

FEMA allowed us to hire temporary employees, which out of the temporary employees she was a god sent to me. She was a blessing. I didn't know her just like I didn't know NVision, and when she introduced herself I didn't know who she was. "Hi, I'm Carey Haws [ph]. I'm doing – I can do your transportation. I have some ideas," and said I told her, her background which is in transportation, so good. I needed somebody and it's basically the way it was.

Phillips

Yes, skilled to the function that she is going to perform.

Nagamatsu

So do you feel any difficulty to work as county workers because you were out of the command structure of the regular county?

Carey

See I didn't have to deal that because I would go through Hooty or he would depend on me to get people that I knew from my agency, which is a school bus company, to get drivers. So I would not directly have told the county workers I work with background with my agency so...

Nagamatsu

Yeah, it's through the transportation, but ESF6 do you have any trouble and conflict between you and DHS?

Carey

When I took this over, the report was already made. When I took over mass care, I had already known all these people and their functions because it had already been six or eight months into the storm. So I didn't have to open the door for – it was opened for me. I just stepped in, but when I did I had no problem because we knew what we were all supposed to do. I knew who to go to, knew which instructions to give, the only problems that we ever had from the beginning was with Red Cross, their response time. That was it. Everybody else knew pretty much what they needed to do and where we needed to go and how we needed to be, so I personally have had no difficulties. I don't think anybody else did either with the health or any – because we were all working here in the EOC and, you know, when we gave them a directive or asked them they would go to their own agency, so we had no difficulty because we were all here. So somewhere there was always a representative from one of these here that we didn't actually have to go to somebody outside.

Nagamatsu

So when the meeting of the ESF6, who was the representative from the DHS, the director?

Carey

Yeah, Wallace Bradley was director.

Adam

Yeah, he worked at EOC.

Carey

He was always here with us.

Adam

He was with us before the storm, he was with us during the storm, and he was with us until he retired after the storm.

Nagamatsu

If the more law positioned personnel take part in the ESF6 there will be some trouble, there might be...

Carey

Right, right and there would be because you need somebody to respond directly with the knowledge that they have, to call who they would know that has knowledge to carry out the task. So...

Nagamatsu

So who did you collaborate with in ESF11?

Carey

FEMA.

Nagamatsu

How about the county government, no section?

Carey

When it came to the food – ESF11 I mean, I didn't have to go through that money. We had a procedure that was followed that's right here, that's why these charts again are so important. We had to call...

Nagamatsu

In the morning?

Carey

It was a phone call where I would call Gerald Ford at FEMA to tell him what we needed. I am sorry; I don't have that right in front of me. We would tell FEMA and we would give them a bigger truck. This is from the beginning. This is the bigger truck, okay. We would tell them at coffee, we might say, "We need," – again I told you this before, "I need 31 pounds of ice, I need it twice a day, you know, I need it at [Unclear]," and that's all I had to do and they knew all the delivery. After we called them and set all these delivery points up with them, told them where they were, gave them directions, they would just bring it. I would just call them and tell them and they would

bring it and that was so easy with the government. You know, Hooty, if they had a question, they would get it verified through Hooty, but very rarely he would appoint somebody and say, "This is the only person you take these orders from," and at that point it was me. So the only person that could call up and order food and water besides Brian or Tim Keller was myself and that it was really fairly, fairly easy with these charts. Without the chart you wouldn't know what you are ordering, you wouldn't know where to send it to, you wouldn't know – you would have no idea.

Tamiyo

Is that used to collect these?

Carey

It's up to me to collect those.

Tamiyo

So you go to each area and...

Carey

They would have each person that would be a director at each place and at one point it was the National Guard. At this point, it was the National Guard. They would have a sheet and that would say exactly what these – it would say, food, water, ice, cars, miscellaneous cars, and they would have to document that all day long. They could call me in the middle of the day at 10 o'clock in the morning and say, "We are totally out of ice and we still have 500 people in line." I would call the government and then I would see who's got – I would have phone numbers for these people or he would get – I tell Brice, I need ice at Diamondhead. I need at least two pallets. He would call for excess. They save this and all of a sudden they had 50 pallets of ice that we needed over to Diamondhead and we have a truck. It's very, very important because you have people; as here we were affected more in the south than they were at the north. So our attention really got a lot of food, ice and water there, but there were points where they had run out. So, but we would be able to call the government twice a day, they would bring ice in the beginning, as you see, that's 9:19. So, but this data and communication is the most important thing that you will have and knowing how much because you want to look at this one to see how much it brought. Okay, this was in 11:23. We were down to four distribution points, but they were using five

pallets a day whereas Gulfport down here was eight or 17. So we were able to keep control of it.

Phillips

Yeah, yeah and that also would go through the data collection for how many people were coming back and then that information will be always the most important thing to make sure you try to be able to order, supply, and demand.

Carey

And same with Red Cross. They were letting us know that they were serving 19.57% of their totals to our county and Salvation Army would do the same thing. So when it comes to food and water, you know, it's a simple task. When your task was to get it here, but how do you keep control of it, and this is how – this is the only way to do it, and I'm sure that it could be perfected, but this was my only way to be able to take it from here and get it to here, you know, because after a while you got guys coming with coolers and filling up their coolers to go deer hunting, so. You know, you keep track of that, but we went from you know, 1200 to 200 cars, 73 cars.

Nagamatsu

So what did you coordinate with Red Cross and Salvation Army? What did they do?

Carey

They came in with hot meals. They would serve lunch and hot meals. They would serve it twice a day and we would tell them where our points of distribution were and they kind of went to Gulfview School. They were going on roads and that's when now mass care would come in because DHS would say, "We have four people on this street. That they will have no transportation, they are elderly, they need food." We would tell Red Cross, "We have four people on this street. Can you deliver down there," and they would, after we got coordinated they would. So the coordination of how many meals they were feeding, where they were feeding, how they were getting them to the people and where they should go. They would ask us where do we need it, the [Unclear].

Tamiyo

So you were the coordinator, not provider.

Carey

I wasn't the provider, no.

Phillips

All the ESF functions were coordinated.

Tamiyo

Okay, so I have another question. I got this incidence objective form yesterday from Mr. Adams [ph], and would you explain how did you report your ESF function, situation and objective to Mr. Adams?

Carey

Same as you say, well, I give them those reports. Everyday he got those reports, yeah, every single day he got those reports and this one is actually a report in ESF6. I will have to report it, but we had a planning thing, and we would go in and write our reports to planning, okay, this one is an ESF6 report of exactly what was done that day.

Tamiyo

So you wrote this?

Carey

I told them, you know, we got water delivered to Gulfview. They might have been having a problem, but we had to get it there. Crank Creek [ph] probably needed the water. We had one gentleman, Mr. Nikkeh [ph] on Fire Tower Road. He needed an assessment. Sometimes I would go out and do those, you know, to get them back, somebody up there from Red Cross, somebody from the health department, somebody from DHS, I have to see this person, but we reported that that's what we did and make sure that DHS went up there and they usually did and, you know, our project health recovery, but that's what we did. Tomorrow and that day I had to call Melinda [ph] at the health department about getting home health care from Mr. Nikkeh so same thing as everybody else. Gave these, gave her an objective – and certain objective...

12 hours. Yeah, we were under 12 to 24, correct. Yeah, we were under 12 to 24 period and same as everyone else and so all our functions reported.

Tamiyo

Has Mr. Adams advised you about your objective for tomorrow otherwise something to opt?

Carey

Yeah, or I'd get approved by him. I will go to him and we had a meeting at nine and he would have these and he would see that I was going to call Melinda and he objected to it. He would say, you know, you shouldn't do that or why are you going to do that? So he always knew what we were doing. His approval was always there.

Adam

It's great to have a small group like we had and a group that was so close within. We were close. I mean, you know, I'm not saying we really [Unclear] with each other and or get married to each other, but we were – I could tell Carey, you know, that which I never did, but I could [Technical Difficulty] and that's my prerogative as an incident commander, you know. Fortunately, I had – I trusted 99% of the people we had in here. I say 99 because, you know, because I didn't know everybody and – but that's one group. The ones you see in here are people I trusted with my life and so that helps to the incident command.

Carey

See even GIS did one, [Unclear] even they did one. We all did a report to say, we all did a report and anybody could [Unclear] and say anybody, but if Mr. [Unclear] he could pick this up and see exactly what was going on by EOC standards in the county which is his – you know, the county that he administrates to so... But if Hooty said, "On 10:14, what happened," I could go back to these and tell him this is what happened.

Adam

And that's why we kept them.

Phillips

And also developing for the next plan.

Carey

I think we could use a lot of these lessons learned and...

Nagamatsu

So before Katrina you were not familiar with the GIS system?

Carey

No. I could tell you about it now though.

Nagamatsu

But after Katrina I think as for the transportation, the GIS was very powerful too, wasn't it?

Carey

Yes, because I had to go to them when we were getting local transportation here on roads because I had to send the National Guard. We had a project hand-out bill when I had talked to them, water and ice where they would have to go north of the county where people just didn't have vehicles to get food and water up there so they gave me maps of that. When we go, again, the local transportation I needed to get those to the local transports because we never had local transportation here. They needed maps of the county. Even school bus drivers, when we were back at school, needed different maps of the county because of the roads that were not there, washed out or they were just closed or, yeah, there was just no houses there. So, yes, GIS played an important role for that. If I had somebody that was bedridden [ph] and I got a phone call [Technical Difficulty] two to three days, I could go to them and say, "I need a map. Where's the street?" You know, where is it and how do we get and they would, you know, pull that up and point it. Now AM [ph] Street, I never heard of it, where is it, and they would pull it up for me and I could send the driver there and advice where crossword is so.

Nagamatsu

So you request new maps for the GIS Council often?

Carey

Not often, but as needed I would get them. They usually have the local maps printed out so I could work off with those doing errands.

Adam

If you remember for Red Cross because they had a problem.

Tamiyo

What kind of problem?

Carey

They couldn't find the roads. There were no landmarks. There was no street signs. There was...

Adam

You know, I could tell you this. I am from here all my life, but when I went up in the

helicopter I didn't recognize where I was at that time, you know, until I could find a landmark and there weren't many of them left. You didn't have a clue where you was at.

So you know about it... If I didn't know my way these people coming from outside and all these Red Cross people that were grabbing these food trucks from outside. They weren't from inside. So and that's where she actually had it and it wasn't like she said, it wasn't everyday. It was just when they needed.

Phillips

That's [Unclear] GPSs to our advantage, okay, because what the map [ph] for GIS was doing. It has never been done before so now that we have that the next one that comes will be so much easier for people to be able to search and rescue and find – locate all that for geographic coordinates and we can work from that even if there's no street signs.

Carey

There was another thing we did with them, the longitude and latitudes we were able to get from them.

Adam

Pod distribution is the pods [Unclear] and that all was under the ESF6. Then through various methods of getting that because we had all the pod locations on the map. We knew exactly where they were. She spoke to them everyday, well, more than everyday. Everyday several times a day, and you know, to find out...

Tamiyo

Okay, I have another question. I am confused that this incident action plan was prepared by the planning section, but each ESF have to fill out this objective form for each operational period.

Adam

And send it into the planning.

Tamiyo

What does planning section do, just compiling?

Phillips

It's compiled, collected – compiled and collected and to give the report for him to review for the next day's plan for every ESF function, so you could know what everything is doing and just by looking at the paper. That's what planning does [ph].

Tamiyo

But can they talk with you directly or weekly [ph]? And also the planning section...

Phillips

They documented.

Tamiyo

Documentation and just compiling?

Carey

Yeah, but we have that meeting twice a day, morning and afternoon, so when I say, "I talk to Hooty everyday," yes, because he would pick. He would say, "Okay, ESF6," so I would stand up, I would give him my verbal report. I usually just read it off the sheet, give him my verbal report, my intents for tomorrow, so yes, and we spoke verbally to – individually to Hooty everyday. I may not come to his office, but in that meeting each and every ESF was supposed to have...

Nagamatsu

Everyday?

Adam

Yeah, within the EOC.

Carey

Yeah, well, I will say [Unclear] so he would hear from us hear from us everyday on an individual basis or he would have the chance to advice, correct or say no.

Adam

Planning compiled all the ESF function reports although I think they do the IAP, the Incident Action Plan. They compile the sheets that Carey sends in and Brice sends in or just a function of the IAP. Somebody's got to put it together and that's what planning does.

Phillips

Right and that's good for in case we had to expand one of the commands or another one that somebody coming in can review the last week to see where we were going and maybe told the needs to be able to expand it, see that's what that compiling did.

Carey

I don't know if that one happened.

Phillips

Because anybody from the outside could come in and jump right into controversy.

Carey

They would put the weather report and some of them may have, but you know we'd get the weather report. We'd get updates if there were any storms out in the gulf, yeah, we get. So planning was responsible for that.

Tamiyo

Oh, so you get this information from the planning section?

Carey

Yes, the weather and stuff, they would put that in there. Here's something from the planning department. Here's a message. They put a message in there for us. It was from planning on this certain day this and this is going to happen. Press releases, planning gets, they put them inside this booklet. They organize this. The organization will sign the list. Planning does that. So they put that so we all can go to this okay, who's in charge? Brice is in charge of the radio. US Coast Guard Lonnie Evans [ph] is here this week. So that's another thing that they would do.

Phillips

So anybody can walk in the door tomorrow. We have to have and they can jump right in and they know who or where the contacts are because of planning, compiling all the data for everything so that there's an action plan...

Carey

Recovery updates, they would put that in their reports, okay. Information [Unclear] that would all be in this so planning had more than just compile. They had to make sure that certain things were in there.

Adam

Planning and PIO [ph] did this.

Carey

See this one right here. It says, all you groups and who's staffing them. If I needed to know if there was a mass care report I'd go to this page and they would tell me to see the report or there was no report that day, so we don't flip through the whole entire thing looking. So it's the other thing that planning does.

Phillips

It also gives all the ESF functions knowing what another ESF function is doing for tomorrow and what they accomplished today.

Tamiyo

So the deputy director of EOC was Ms. Lumpkin and John Evans used to be evaluation management here?

Carey

Yeah, when he was here for EMAC or SMAC.

Tamiyo

He is a member of Florida State?

Adam

No, he is from Mississippi. He was a SMAC. He was not EMAC. He was SMAC. They eventually...

Carey

So that's some more of what they did. I have seen you had a little one and this one I got is quite large. It was from the beginning so...

Tamiyo

And this kind of weather information is very important for...

Carey

For everybody.

Phillips

That's what's given everyday. So everybody knew what the weather update was.

Carey

Yeah, if we have 40 mile an hour winds at 10 degrees outside. We know, because we have people in FEMA trailers.

Phillips

It's very important because that's working positions for the rest of the day.

Nagamatsu

So to whom you are reporting everyday? To whom?

Carey

Brian Adam. And on the food and water side, Brian Adam also but when I ordered I had to give numbers of what was used to the government which, you know, but that was the only other one I had to give numbers to was FEMA. I used a 136, I need a 136.

Nagamatsu

Do you have operational chief administrator or something?

Adam

Deputy Director is the operations chief. Technically, they will report to deputy director. Deputy Director would report to me.

The problem is our deputy director had a lot of personal problems right after the storm, losing her family, a grandbaby. She was really not that involved for a long time. She was there, but I mean, she suffered so much devastation at home, she lost – her grandbaby died not even three or four days after the storm, a week after the storm, so she went through a lot and we did not include her. We let her regroup.

Nagamatsu

So I guess probably your command is out of span of control in a more than – how many persons were reporting to you?

Adam

All the ESF function leaders. But actually they weren't out of our span of control because we had with the IMT teams. That's what they were there for. I mean, understand this. Each ESF function report to their section leader, okay, and then their section leader will report to the deputy commander and then the deputy commander will report to me. But during this catastrophe, we had so many different IMT team leaders. We had the span of control was actually helped because they could report to the group and we were, you know, what I am saying. I can't explain this and name the terms.

Phillips

[Unclear] the help was for us being survivors in the first place trying to run the command out of here because of the catastrophic event. You know, my house was ruined. He was very lucky that he didn't have that worry on his head but you know, my house was gone. So you know, you have all that emotion going on too where the outside folks originally when they came in were a blessing because they weren't exposed to that emotional distress to be able to perform the function and that's what got us up and running and ICS and all the command functions so fast because they came in fresh. You know, they are coming to work, you know, they leave their wife at home and their dog and everything is taken care of when they're coming over here to do a job, so that

was different. That's what was very interesting about the whole storm lesson learned that, you know, operating when you are in, you know, when it happens to your community, you know, how do you feel when your house is gone and then we are trying to make sure that others work. That took a little time to, I guess, just absorb you know. It's just like, that's why it was like this and when IMT, SMAC, or EMAC came in that's what got our structure so fast and helped Hooty be able to do that even though we had, you know, some folks like Dee that had personal, you know, other thing that really affect them when we had to work around. She did – that gave her that basically time to be able to do that and still do a little work and then eventually transfer on because the emotional toll is like devastating, you know.

Adam

But span of control – getting back to span of control, when you are using a system we were using there were reports – I was in a meeting, the span of control is not that bad. I know you are only supposed to have six or seven per person, but they are actually just reporting the information to us in a meeting and then if they had any problems they would go to basically their section chief and then – so I mean, if you understand what I am saying. And so basically we had a large span of control, but we did it. So it was kind of – it was one other thing that I told you all the other day, we had to adopt a lot of things and we had to maneuver around a lot of things. That's basically what we did. You know, each section's got a person to report to and they report to the deputy director. So it really basically is ruled out.

Nagamatsu

Yeah, I am puzzled because I think that the – it seemed to me that you are not a commander, but rather coordinator of overall ESF functions and...

Phillips

Choreograph?

Nagamatsu

Yeah. That's why you are not...

Adam

You name it I am it. I mean I'm not [Unclear] you can say that. I am the incident commander because all decisions go through

me. If I say, make a decision it goes down to my deputy director and then it goes out. So, a coordinator commander in my opinion is the same thing. I mean if you think about it, what does a coordinator do? He coordinates activities. What does the incident commander do? Same thing, he coordinates activities. So it's actually the same thing. My thing is I stand up here. I disseminate what I want to down, but then again it all flows up here too because without them I can't do a dead-gum [ph] thing.

Carey

He realized of the expertise and knowledge of his EFC functions.

Adam

You know, information not only flows down, but it flows up.

Nagamatsu

I got the same story from New Orleans.

Adam

Because I can tell you they made me look awful good, and look I have made some decisions and they will tell you. Throughout the storm, they may have not been popular with a lot of people, but it was decisions based on what was best for the Hancock County. My crew backed them, but you know, some other people may have not liked it. The thing is we all have to make decisions that we may not like doing, but the way I instilled [ph] in them and they can tell you, and I told you all this the other day, is my installation on to them was, let's first worry about the citizens of Hancock County. That's where we're going to base our decisions on. We got to put them in pieces so [Unclear].

Adam

But basically to say that coordinator and the commander in my opinion is the same thing because you coordinate and they command at the same time. You're commanding to your deputy director what to do and your deputy director is commanding to the Vision [ph] Chiefs and the Vision Chiefs are saying that to their people under them. So essentially we're all the above and you got to understand, although we knew about the incident command structure and all that, we were still fairly new of using it in an extreme circumstance that [Unclear] I can tell you prior to the storm I didn't have that. That was

made after the storm and it's probably going to change some when I have changed my SOD, but the thing is, I have tried – just like you all are doing, get my lessons learned, that's what I have tried to do. I have tried to basically take it and say, "Okay, what work, what didn't work." You know, you have your operations group, okay, but then you have the other groups like finance and all that. People would think transportation is an operations group, but it is. We use transportation before, during and after the storm. We use communications before, during and after the storm. So that's a very important key to the ESF functions. And what you got to remember is all ESF functions and I am going to try and make it simple, the emergency support functions are just that. They are emergency support functions. They support all the functions coming out of EOC. Not every person in the war room, as I call it, is an emergency support function. You may have a governmental entity that have a representative there. They are not an ESF function, but they operate in there. Some in ESF command or control over the ESF function basically as top, and just like I showed you that the people who are under me, in their basic most ESF functions they have somebody to report to and that's the way it worked. Basically, instead of flowing chart down, basically the chart flows up, in my opinion.

Phillips

For information collection?

Adam

That's right [Unclear] reporting. If I am the lone man [Unclear] I am going to report to my boss. My boss is going to report to his boss, his boss is going to report to his boss, and that's basically the way that is, you know. That may not be the ideal work chart in some people's eyes, but that's ideal for Hancock County. We lived it, we slept it, and we feel that that's what's best for us, you know, does it outstretch the span of control of some of the functions, absolutely. But, you know, what, I have been a fireman all my life and the span of control has always been out of my hands half the time so I mean, you know, we didn't have any communication problems as far as within our war room. I mean we did meetings and that's where – you know something about the planning and the PIO people, they did their reports and I will tell you something. They were up half the night making sure that things

were ready because there is a lot to them. They look simple, but there was a lot to them. And I wish [Unclear] would have been here and he could have explained a lot because he is another person, who took over like Carey and Brice and Wayne and myself to go and do roles after a lot of other people had left. But I mean that took a lot of time to do because one, you got to collect it from everybody, and then you got to, yeah.

Phillips

A lot of things we couldn't have took over those other roles if we had known that report wasn't made so we know what's going on in the past. You know, that's what gave us the education and know where they're going and what their functions are and be more familiar with the people operating [Unclear] because it's written in a form everyday. So if something happened to Carey tomorrow and she couldn't perform that function, is there somebody else that could take over that role immediately that's what that does. That compilation of that report everyday allowed anybody to walk in here and assume command for that function, or if somebody from underneath had more experience like Carey had the networking and all these skills and assets to provide that function fully.

Adam

[Unclear] Carey had how many ESF functions? She actually had three ESF functions. She was doing [Unclear]. Let me break this up still down...

Carey

Transportation, mass care, food and water, and then I was doing the reports, yeah.

Adam

And so she had three or four, but towards the end I mean it wasn't as busy, but still I mean it's very hard to do that. She wouldn't have been able to do that after we were fully blown.

Phillips

But that's how the span changes, you know, like that.

Carey

But on the other hand the only reason I was able to do that is from the meetings, everybody being in one room, everybody talking about what they do and what is going on because I couldn't have stepped into mass

care and known where the shelters were without talking with everyone, having the briefings everyday, you know, asking the questions that needed to be asked and finding a way. You know, we all coordinated together, everybody knew what everybody else was doing and on the same page, and that was really important. That's the only way with the knowledge that I was able to do what I did because we had a [Unclear].

Adam

So the ESF functions and for any type of functions at the emergency operations center there is some organizational meetings, that's the key because I don't have the time to have each ESF function doing that, and they will tell you this. Probably during the storm they didn't talk to me personally much because you all may think I am lying. I guarantee you up; I had more meetings than the President of the United States. I was having probably anywhere from 20 to 30 meetings a day and that's not, no lies. But these organizational meetings gave them a chance to meet with me, maybe not one on one, but meet with me. They were reporting to me. Albeit sometimes I was falling asleep up there, but you know, I mean we would – I mean probably most of us did. We had probably four weeks with maybe at the most 10 hours of sleep if not less. I know I had less, but I mean we had not a lot of sleep so I mean if we still stood still for a moment we would...the meeting.

Nagamatsu

May I ask what the financial section did? Do you have an authority to assign a budget to each ESF function?

Phillips

Yes, we report to him that – he has to make a decision for the overall best of the people for his job to dissimilate [ph] that goal. He is always in control for the orchestration of everything else that's happening. If something's going wrong or like in PIO going bad, bad publicity or something else, you know, he has to work and change and adapt the rules to dissimilate it for the next day's plan.

Adam

What did Brian Adams do? That's what you asked. Brian Adams took care of the financial institute. We had one lady, Jinnell Tompkins [ph]. Her job – she had the entire Hancock

Area Finance Department under her wing and they had a section of EOC that they work out of. They did normal payroll. You know, we still have to get paid even though it was lawful we get paid, but we still have to get paid. They had to keep track of all stuff that we were buying to help mitigate the storm. Vehicles were needed. We lost most of our vehicles so we needed vehicles to operate, so basically anything to do with purchasing, receiving, anything to do with...

Phillips

From documenting to finance and the cost of the storm and mitigation.

Adam

Yes, the PW, public worksheets, project worksheets are public. Project worksheets where we can give recoup by FEMA to get our money back and stuff, they did that. They are still doing that. She is still doing that. So...

Phillips

Inventory, lost items, you know, damage and all that. I mean all of that.

Adam

Yeah, lost items that we lost, you know. The only fortunate thing with this lady we had in over the finance department is, she has the experience during big storms and that certainly helped us, certainly.

Nagamatsu

So what about the budgeting? You decide which one to – how many dollars to...

Adam

No, no, that's all done by them. Budgeting is all done by the finance department. I don't have anything to do with the budget. No, I only make decisions on what we need. They provide me with the money. Let me explain this with...

Nagamatsu

So you don't have to worry about how to afford it you know?

Adam

No, I didn't worry about that, but let me explain this. And this is going to get a little complicated. We have request that we need or we have things we need, okay.

Carey

If I may go, get a sheet?

Adam

Yeah, what?

Carey

I can go and get one from [Unclear].

Adam

We have – yeah, that will help, but I'll kind of explain about what you are doing. Here at the local level, we've lost everything. So we need stuff to help mitigate the storm, correct. So we send up request through a computer system to MEMA, okay. MEMA then – if they can provide it they provide it. If they can't provide it they send it up to FEMA. That's how we got a lot of our equipment. It's through initial request.

Phillips

Yeah, they forward their requisition.

Adam

Through them. I'm not trying to make you all confused, but that's how a lot of what we did, but finance had to keep track of it.

Nagamatsu

Are there any cases that is rejected?

Adam

Yeah. Let me tell you all this. Remember me telling you guys that – and I didn't stay on it, but for a brief second that we had to – we put some request and there was a bunch of requests – and I am not just talking about for material items. I am talking about for search and rescue teams. I am talking about it. We were getting rejected for request of search and rescue teams and I finally had to call and have one of their MEMAs higher people. What is that?

Carey

The request forms, no, the forms that I was going to get, how we request stuff and how it...?

Adam

No, that was regular. Also we still had to build this outer hand [ph] to go through the right. We had to try to justify a search and rescue team. Now you are talking of devastated... We got debris, piled upon piles upon piles. When I called one of the head

guys of this MEMA department and said, you know, somebody needs to come down to see me because you are all going to explain to me what's going on. So when I finally got this guy down here, he's never been down here. MEMA told you all that we had a lot of people making decisions and it wasn't down here on the ground scene the devastation we were in. They were concentrating on housing candidate and give a dead gum about us. Well, when I got this guy to the EOC, everybody was a little bit worried me talking to him because I was a little bit upset. I was a lot upset because, one, they weren't down here. They were basically making decisions that we would need and they didn't know we needed them. He knew. We all knew because he did it. After talking to this guy and really showing him the first thing they said, you know, this is going back to your finance. First thing he said was, you know, we got to watch expenses. We got to watch money. So first off, nobody around here has money, so let's not worry about it. The local governments don't have it; the state government has a lot more than local government. I said, "If you all don't have it, FEMA's got it." I said, "So let's not worry about that," and I had to do a lot of convincing, but we would have to do 10-page justifications to get an item. So, yes, we have been turned down not much after that because after I got through dealing with him he saw I was very serious and I will ready to go to the Governor of Mississippi had I had to and because I was that serious, you know. We didn't ask for wants. We asked for needs, you know, and see the thing is, if anybody requested anything it had to go through us. If law enforcement needed something, they had to go through the EOC and we did. We had a bunch of them coming and, well, they needed a bunch of laptop computers. For what? Did you have it prior to the storm? Well, no. Well, you're not getting them now? We had a lot of that. We were in the business of getting – trying to replace now because there was no way we could essential equipment...

Phillips

Essential operating equipment at the time of the need, what we needed for tomorrow or the next week or whatever, you know, that's basically how it works, you progress.

Adam

That's what we did. We weren't in the process just because you need a – when you

did want a laptop you're going to get one. No, it doesn't work like that.

Tamiyo

How many people attend to the meeting each ESF leaders, and also how about various six people in planning section? Does each six people attend the meeting? So maybe, 30 or 40 people are attending the meeting.

Adam

Actually there was – at one time there was probably 40 to 60, and let me explain why because it wasn't just ESF functions coming to the first months of the meeting, it was the mayors. It was some of their supervisors. There was...

Tamiyo

Public works, the ledger company.

Adam

Public works, the ledger company too, so we had quite a few [Unclear] for a little while, but on a normal without all of them, 30 to 40 people.

Tamiyo

Yeah, how long does it take to finish that meeting?

Adam

An hour and a half. Now sometimes an hour because we were getting to where we were timing them. Our goal was one hour because these meetings weren't to tell us everything they were doing, it was basically an overview of what they were going to do, what they did, and what they were going to accomplish furthermore.

Tamiyo

What is the objective for that meeting, an hour meeting?

Adam

To get what they were doing and they were going to plan on doing tomorrow.

Tamiyo

Okay. So they understand the situation for each ESF function and also to plan for the future, the next operational thing [ph]...

Adam

Right, and let me tell you this thing, I did not quite at first believe that these meetings were

going to be good. I really didn't until we sat down. What she said earlier was that [Unclear] true. You learn so much about everybody's ESF functions just sitting in there that you wouldn't have known if you had not had that meeting. So the meetings are very important. What you have to watch with these meetings is somebody getting a little bit over-winded and we have had to cut off people and say, "Hey, we just need your overview, you know, because at the end of the day we have had one at 7:30 in the morning and 6:30 at night. Folks were tired," you know, and so we tried to get it to where, you know, they were just giving us the essential, you know, because everybody – that's another thing that planning and PIO did. Every one of us when we walked into that meeting had a copy of that right there. So they've worked their butts off going through a lot of paper, burning up a lot of copying machines, I mean we burned up some copying machines, I mean big time, so...

Carey

Yeah, literally burned them up, yeah. We have got through some ink.

Nagamatsu

But I think that such a big meeting is not capable for discussing – virtually discussing what the plan is, I think it's a little bit difficult because the number is so big.

Adam

No sir. Let me tell you why, the key is all in what you do. One, the commander – actually I didn't run the meetings there for prior to first month or so because the IMT teams did, to show me how they do it because I have never done it, okay. [Unclear] started ESF1, they had a list, and I wish I could find my book I'll put it in storage. The list of who they call and they started with ESF1, ESF2, 3, 4 and then okay, and once they go through all the ESFs they said, "Okay, MEMA, MEMA do their report. FEMA, FEMA do their report." Anybody from the City of Bay St. Louis did their report. Anybody from City of Waveland did their report. Anybody from Hancock County Government did their report. That was it.

Carey

Let's give them an example. I think they look at how do we get all that information in. It could be called ESF1, I stand up. Today, I

picked up 200 people out of Bayside Park, delivered 40 to north shelter, 40 to east shelter, and the rest went with the Red Cross. Tomorrow, I am going to do the same thing, search certain streets, bring them to shelters, get them out of the mud, that's it. I am done.

Adam

Yeah, but then they won't know is how did we manage that many people. They do know talking won't help.

Nagamatsu

Yeah, my question is that reporting is – we understand that reporting is needed for various persons, but discussing a strategy and forming a plan for tomorrow should be done other than the meeting.

Adam

No, no, they didn't do the plan in the meeting. They already had their plan prior to the meeting. They only reported to you what their plan is, so there's no planning in that meeting.

Joe

Each organization, ESF1, ESF2, ESF3, they each have their own commander that's in charge of that organizational structure and as it goes they have people under them. They will have an internal meeting between their group. They will get their plan and everything together. Well, on day one, what they will do is they will have a meeting in the morning, they will say, "Okay, today we are going to do this. This is our goals for today. We are going to go out and we are going to do this." When it comes time for the evening meeting they have compiled everything that they have done that day into a summarized format to say, "Hey, basically, this is what we have done today. Our plan for tomorrow, we are going to do this and additional, like if my thing was research and rescue, I searched this street, that street, that street, that street, and these neighborhoods. These are completed. Tomorrow, my focus is going to be on this area of neighborhoods to get that completed," and, you know, you don't want to over-plan, but you don't want to under-plan either. So the first few days since the disaster you kind of realize exactly how far you can get. So all of that planning is actually done in the individual groups and when they come to the meeting, they just say, "This is our plan. We are doing. This is what we are going to get done today and this is what we have done this

afternoon and our plan for tomorrow is this and that's it." That's all they tell, and then they move onto the next person. So the actual planning of what they are going to do, your finance section, okay, what do we have to buy today. You know, how are we going to get all these funds." These are [Unclear] in their annual meeting and then they bring the results of that to the big meeting, where all the ESF functions are going to be...

Tamiyo

So he always respects what ESF's goal is. Does he order something that you have to change your goal or objective?

Joe

If he says, well, like for search and rescue for instance, he says, "Look, you all are not getting enough area to search it faster." Then what I have to do I have to step off to the side and talk to FEMA because they are the ones that send the national search and rescue teams down and say, "Hey, FEMA look, we are not getting this job done fast enough. We need more teams," and then, you know, I can step off to the side or I can say, "Hey, I am not given up teams." He can request it through MEMA. MEMA sends it to FEMA, but there is – it goes up and down and it also goes to the sideways. It can go out too, so there is coordination all around.

Carey

So, yes, if Hooty says – if I had a certain plan and he says, "No, I need you to do this," yes, the plan's changed.

Joe

Yeah, then we cooperate that into our planning.

Adam

No, because one, you trust the people in, you let them handle their chief and I'll handle mine. My expertise is they can't command and control. I say it's expertise. I didn't have much expertise and this might spread command. I had been in command just about my whole career, but not this widespread. I consider a lot experts and a lot of things now, but I knew if Carey comes to me with something or Brice or Wayne comes to me with something – Wayne comes to me a few times, you know, have you read my report, you see. Are you okay with what I needed? Yeah, I am great with it Wayne. Do what you got to do and get my people found, and that's

the way it is. I mean, very seldom did I have to ever step in and say something. And I am not going to unless it is absolutely necessary because like I said, believe it or not, when we finally formed a – got a core group in here – we are a close knit group and most of us could tell you what each other was thinking half the time, and I am not lying on that because we are not a large group like New Orleans and all that didn't work and most EOCs are – we are a small group. It has to do several functions you know. Fortunately, we have to do several functions, you know, and...

Phillips

Its important to have the local people from the local area, you know, be in that key positions for that reason.

Adam

Although I have read because I had to stand off on all these sheets, either myself or Dee whoever was available, and if I had some questions, I would ask, but most of the time I never had any questions because how can you say, we set goals. Everybody knew what our goals – not my goals, what our goals were. Our goal was taking care of citizens of Hancock County by hook or crook. I didn't care how we did it as long as we got it done [Unclear], but we had to get them taking care of and they knew their boundaries and they stayed within their boundaries and they did their job.

Tamiyo

Our understanding was that the Hancock County EOC have to set the overall objective for the EOC, not for each ESF, but as you said that...

Phillips

No, including all the ESFs.

Adam

That's correct. We do set objectives.

Phillips

Yeah, it's like a big film production. He is setting there and core graphing everything that's going to happen for the next scene. That's basically how you can look at it in that respect, you know, to compare it to something. If somebody is directing a movie, that's the same thing. He's directing what happens for the next scene or...

Adam

Actually, I told you all. This is not – we did a lot of this on the flood. You know, how do I make you all understand this without – plain and simple. Up here is command. I let him know, the team leaders know what I need, okay. What our objectives are. You know, everybody knew what our objectives were and that's where they go, no there was not ridden, but they knew what my verbal things were. So...

Tamiyo

So the objective does not change so often, right?

Joe

The overall objective what it is and this is – we are talking about disasters and disaster management. The first objective of anything is life safety. You have to protect the people that survived the storm. You have to find the people that are injured. First step is life safety, it's number one.

Carey

Find, feed and shelter.

Joe

Everybody is working together for life safety. Okay, we have all the people that need rescue rescued. We have all the people that need food, water and shelter, food, water, and shelter, so that need is met, that's done. They are in shelter, they are eating. Okay, now we can move on to the recovery method. Now, all these things are going on simultaneously. But the first thing that you want to say, you want to protect and save all the people. That is your first goal that you have in any disaster.

Adam

That was the first thing I said, yeah.

Joe

Once that situation is stabilized then you could worry about, alright, we need computers, we need this. Then you can worry about...

Phillips

We need more search and rescue teams because he felt like it wasn't over for the search and rescue for life safety yet.

Joe

But that's the goal. Once you get all the lives saved, all the people that are saved, clothes,

food, water, shelter, then you can start moving on to okay, now we have these people all in these – the high school has people in it. Now, we are stabilized to a point. Now, we have to get these people back out to where the houses were, where they lived, so because the state and the federal government can't take care of them forever.

Adam

Although it's an objective, life safety, search and rescue by getting used to [Unclear] where our objectives were.

Tamiyo

Oh, this is the first day.

Joe

So all the ESF functions work together for each other. Now once the search and rescue is done you move on to recovery because... You know, if somebody is trapped in a house down the road, they are dead; there is nothing you can do about it. Move on, the priority is to save the lives first. Make sure everybody has food and water. Then worry about collecting the bodies. It's a terrible job, but you have to do it now because if you don't the people, who are in need of food and water, well, they could be the ones that die, so you have got to take care of the living and then worry about the dead.

That's the thing about disasters. Everything is dynamic. Two earthquakes will never be the same. It's a dynamic situation. You have to have a fixed plan and you have to work at it. If we have a major earthquake tomorrow, we know this. These resident structures are not earthquake proof and are going to collapse with millions of these...

People trapped in. So you have your initial plan of how you are going to go about rescuing those people and everything like that. And emergency workers are trying to do their jobs on that specific deal. So everybody's doing their own job. The incident management is at top overseeing, making sure that those people have what they need to do with their jobs, is really what it all evolves into. The people or the local are going to be doing it at the local time.

Phillips

Yeah, and also making sure they get the task that they may not realize the director is seeing the whole [Unclear].

Joe

The most important thing is when you have assets coming in to assist you in those situations it is the proper utilization of an asset. If you have somebody coming down with heavy machinery, well, okay, where will the heavy machinery act? Do we necessarily need them to start cleaning these roads or do I have a house where someone's trapped. Do I need to get heavy machinery...

Phillips

Or do we have a biological diagram because of the dead bodies we still have to pick them up, we only have certain time. He has to go find a living while we're still trying to clear the roads, but we have this biological hazard in the way that has to be cleaned out too and tasked. See this is what he is coordinating and seeing all of that at the same time to be able to, you know.

Joe

Okay. We didn't have a lot of local resources because a lot of the local volunteer fire departments have volunteered, means, they don't have to be there. They can just show up whenever they want. And a lot of local volunteer fire departments – their personnel just left. They evacuated which I am glad because they didn't die because they didn't have to swim, but we were left with very few rescue resources. Now, the State of Mississippi's National Guard – they had sent some military police to provide security for the EOC. Now they had around 20 people. It doesn't take 20 people to guard the EOC. It takes four people – cops to guard the EOC, just guard the main entrances and, you know, make sure that nothing's wrong. A four people task. So what I did since I did not have the resources we couldn't get places in a fire truck that you could in a military Humvee and I basically explained it. I went to their officer in charge...

I went to Hooty. I said, "Hooty, can I utilize this asset?" He says, "Ask the colonel." So I asked the colonel. I said, "Colonel Melton [ph], can I utilize your asset? It's not being used in a way that's beneficial to what we have do."

They're just sitting there. So I grabbed that asset, even though they were not tasked originally to do that, they came down, they had food and water with them that they brought for their own personal supplies. Well, I told them, I said, "Look, within a couple of

days there's going to be airplanes landing at [Unclear]. You all would be re-supplied. Let's take the food and water that you all have while we all do the search and rescue the people that we find. This chance is ours. It's been 24, 36, 48 hours. They may not have had anything to eat or drink.

So when we were doing search and rescue, when we were coming across survivors aid what do you all need. Instead of having to leaving and come back to them, we just give them what we had and by the time five days forward we had and they were re-supplied and the people were in the place to re-supply everybody else. So we didn't have to do that anymore. But in initial disaster we actually had to take on additional duties where they take on mass care, providing food and water, in addition to conducting search and rescue because there was not enough people scouting, going out. We had so many different paths that we were not getting the whole scope of what our job was. That's the whole part of being dynamic. You see a situation where there is a need and...

Phillips

When other assets come in that's when they are tasked to do what he has already found being the lead out there in the very beginning, you know. That's how it morphs and expands so fast. And as an assets come in they feel that role as he writes down what he saw, and it goes to the incident planning for the director to be able to say, "We need these assets, when they are going to come," you know to choreograph – bring all this together and everybody together, and when the assets come then somebody is sent out to do that task, that task and they already have a task list already growing before they ever get here.

Tamiyo

But doesn't National Guard respect your decision to not – you're not – you don't have to secure EOC, but you better go to search and rescue task?

Joe

Well, that goes to their officer in charge. Their officer in charge – I make the request, the officer in charge says either yes and he will give the order to them and supplement me or he will say, "No, we have to do this one." At that point, then I will find another way to do what I have to do.

Phillips

You see, that all goes to Hooty, right, and then it comes back.

Joe

If, for instance, that I couldn't get the National Guard to use our assets for my benefit, I would go to Hooty and Hooty would make a phone call to the boss' boss and I will still get the asset I need. Either way I would get what I need.

Adam

But fortunately our National Guard – the colonel we have, as I ever know, our lead officer is a wonderful man and we have had him in two storms already and he does what he does to help us.

Phillips

And working relations are already there?

Adam

Yeah, so we have a great working relationship. I hope it never changes because he is a great person.

Joe

But then that's one of the key things. Even though you have the set structure of these people doing these tasks, in the initial onset of disaster, everything is timed critical. Once you are six months, 12 months down the road, you are not in the crunch time where everything is going to be done like...

You can sit back and really, you know, think, brainstorm, how can we recover from this disaster faster? What are the key things that we need to do? But in the initial phase, which is the most important phase of responding to the disaster is getting everything done as quickly and as efficiently as possible without collisions or arguments or, you know, having two search and rescue teams on the same street. It doesn't make sense. You know, this is your grid square. You are going to search this grid square. When you complete it, report back for your next assignment. That's basically what going back to the ESF meetings, the morning meeting and the afternoon meeting.

That's what those meetings do. It let's everybody know the progress you are making. If you are not making enough progress, then we can give you additional resources. We can request those additional resources. Does it mean we are going to get them? But if there is a need, it's not a want, it's a need, it can be

addressed and it can be filled. And once you start getting into the part where you no longer need those resources say, "Hey, you know, this task is completed," you release those resources. Either they go back to their – what they were doing before the storm or they go to another situation to supplement one of the other areas that functions.

That's right, because everybody that's in incident management is multitasking. You know, if you drop me and said, "Okay, I want you to be in charge of all the fire departments and coordinate the fire departments," well, I have, you know, limited experience with fire departments, but I could jump in there and coordinate that. So everybody that's in incident management and incident command has the basic training and the basic principles and you really – you don't have to be a doctor to coordinate a medical team. You just have to know what the issues are to coordinate the medical team because you are not going to be the one on the field diagnosing their problems. You're just saying, "Hey, medical team, go here. This is what I need you to do. Get this area done. Set up a medical thing here. You set up a medical thing over here," so you don't have to know everything about the field that you are commanding. You just need to know the basics.

Tamiyo

Okay. So the MEMA staff and the National Guard will attend the meeting so that you can request their resources in that meeting?

Joe

The military themselves are – they are specific ESF function.

Adam

ESF13.

Joe

The militaries have their own ESF function. So they will have their commander or their liaison at that meeting and if, you know, if the time that you need to make request which you will do is – everybody will go through and say what their plans are, what they accomplished, and you will say, "Hey, military, can I meet with you all offline, after the meeting." Then you will get together if you all have to have the sideways communication, which is basically in a command structure. You don't have to go to him and say, "Hey, can I go and talk to the military."

Tamiyo

Yeah, that's very important.

Joe

So, you know, it's not overstepping anyone's boundaries, it's having like a cross talk where you can actually talk to the person that's on the same level as you without having to take it all the way up to the top and having a request, while all the way back down.

Phillips

Now that everybody is already aware and it's already common knowledge.

Nagamatsu

So everybody is aware of what's going on and it increases the productivity level of everyone there because information goes up, down, and across.

Joe

So do you think that the way of the decision making has been shifted from the initial phase of the management and the later phase of the management? You were talking about very, very initial stage of the disaster management and several months later the way of working of the EOC got different or not?

Joe

The actual operations, the decision making is still like – everything works [ph] the exact same way as the beginning of the storm, which was people were alert, it was more coordinated. People were more prepared and you got into the routine of getting everything done, but the decision making, the way that it was going about was exactly the same on day one – as it was on day one.

Because the plan is dynamic, it's changing. As you learn doing you incorporate that into what you're doing.

Phillips

Where we've been – as you learn where we've been you know where we are going.

Joe

And in the decision making as it gets later you can actually step down and take your time...

Phillips

Yeah, that stays in fact as long as you have declared emergency, as long there were emergency declarations it always goes through him until that is over with.

Joe

But as it gets later on into the phase six months down the road, you can actually take the time in the meeting, have a discussion. Now, this is not the main meeting. The main meeting where all the ESF functions get together. That's still a short, brief meeting summarized, but in each ESF function group the department heads can sit down and have a two to three hour long meeting if they have to, but in the initial phase they are not able to do that because of time constraints and you [Unclear] time, I mean, everybody is out to get the job done and then later you can take your time, you can actually sit down and think. You don't have to be so quick on making a decision. You can think about it for a day or so before you have to make a decision.

Phillips

That's what is so important about the planning section of being able to look at that and go back now. We can look now and see all the things that we had to do, to write and do planning, adapt it to a catastrophe that nobody has ever seen so are we going to be more able to be able to handle that situation that other people like yourself are coming to learn how to prepare the plan in advance underneath crunch times, you got to know. You know these things – there's little things that can hang you up and the more that information is shared across and documented is the better off you will be for the next response for anybody that you try in the future because we have had this experience. We know – you know, you can't prepare for every disaster. All you can do is try to plan for it, but all the information we have been through is the only real history telling it.

Joe

In the initial phase, decisions were made, they were made quick, so mistakes can be made and will be made.

Phillips

Yeah, the better the planning the better off you are.

Joe

The better the planning the better off you are, but mistakes will always be made. You are never going to eliminate the mistakes out of the equation, but once you realize that hey, you know, maybe we should have done this, this way, the next plan you have, you can redo

it and say, here is the – and it goes back to the lessons learned.

Joe

These are the lessons we learned. This is the way, you know, it didn't work too good this way. But it worked really good this way. So we are going to do it this way from now on because this is the way it worked. Then that's not saying that the next disaster what worked so good this time might not work so well for the next one, but this is the plan that worked for this one. We will apply it to the next one and if it doesn't work we can always change it. Nothing is ever written in stone within...

Phillips

See and that's what Hooty does and his job is the comprehensive emergency management plan. You know when he does it every year for what the plan is, that's why his book went from this to this. You know, and planning for what's going to happen if we have this. You know, these affects [ph] out here then this is what we do.

Tamiyo

Okay, I have another question on ESF. I found that the ESF function is evolving in Hancock County because I found ESF18 is GIS mapping.

Adam

I made that.

That may give you like 15 that's not in there so what I did was I added a number.

Tamiyo

So do you have to...

Phillips

See that's up to him. Yeah, you can add and remove.

Tamiyo

You didn't have to follow the national standard of ESF which was I think ESF1 to ESF... You don't have to? No, so you have to...

It's your decision to set what's this Hancock County needs.

Joe

Well, also – and depending on the type of emergency – if we have a small localized catastrophe we really don't need all of these planning sections and you don't need, you

know, finance sections. It's dynamic. You have certain ESF functions for certain things. Say, they have a bus. We don't have any mountains around here, but say a bus went off the side of a mountain, well, you are not going to need mass care, food, water and ESF functions are like that because it's localized emergency. You are going to have your first responders arriving on the scene and you are going to have the search and rescue people arriving on the scene to coordinate that. In that situation you may only have two or three ESF functions because transportation will be involved. Your medical – emergency medical services will be involved, your fire and rescue will be involved and your search and rescue will be involved and your law enforcement. That's basically, yes, you have five or six ESF functions that are only required for that localized emergency. But as an emergency or disaster is larger in size there may be ESF functions that you might have to split in half because ESF6 at one point in time mass care, and housing and all that – and the larger the disaster is you might actually have to split that up into different ESF functions if it's a major, major catastrophe because it gets to be to the point where all of those tasks are too much for one person to handle up on a daily basis so you can't split put that up, but basically what the ESF functions are, that's a set guideline. That's a reference saying, this is the system that works, but it's dynamic. It can be changed.

Tamiyo

It's something like a working scheme or...

Joe

So that flowchart can expand and contract throughout the disaster, the initial phase of disaster.

Phillips

And that's up to the incident commander to figure that out what he needs when he is looking at everything, the whole big picture. You know if he needs this type of function going on that he can add it on demand.

Tamiyo

Okay, I understand that.

Joe

But those are the basic most used functions that we have.

Those are the core functions. And they will expand or contract with different disasters.

Tamiyo

And also I found that the ESF2 is separated, divided into two, phone, IT and phone communication and radio communication. Why do you need to separate that too?

Phillips

Radio communications and phone communications are totally different.

Tamiyo

Can you say that she does not [Unclear] ICS? Did you find any difficulty that Carey didn't understand EOC or ICS?

Adam

At first because somewhat at first, but you got to understand most of us – most of my [Unclear] here didn't understand ICS, but ICS is not really that hard to understand once they see who's running things and how things go down and then come back up. So, yes, first it was somewhat difficult, but after that...

Phillips

As for posting this and the people you know, in their early days they had their posting list and then, you know, you report this person and they would basically guide you along, you know, be able to fill the slot.

Adam

But listen if you all ever get a chance to come back we would like to have you again...

Tamiyo

Thank you.

Adam

It has certainly been a joy and they can answer anything.

Nagamatsu

Thank you very much.

END

Interviewee:

Craig Harvey, CIO, Executive VP, NVision Solutions Inc.

Joel Lawhead, Program Manager, NVision Solutions Inc.

Brian Hooty Adam, Director, Emergency Management Agency, Hancock County, MI

Interviewers:

Shingo Nagamatsu, Ph.D. Research Scientist, DRI.

Tamiyo Kondo, Ph.D. Research Scientist, DRI.

Shinya Kondo, Ph.D. Research Scientist, DRI.

Date:

10:00 -11:30 AM, December 15, 2006.

Place:

Hancock County EOC

NVision Solutions Inc. – Assistance activities for Hancock County

Brian Adam

We wouldn't know how to handle or been able to handle everything that was coming in. And just like with our disaster with Katrina, I mean, we all can have the same thing. You know, you don't have the big earthquake, so I think it's a great idea. And it certainly, you know, – yeah, I know I am going get a lot of these guys because I had two – probably two entities that really stood up during this whole storm. One was that the NVision guys with GIS people and the radio guy that I am bringing in. That were the two probably – once you didn't expect they turn out to be the best thing that we ever got out of the storm. You know, because not only all the knowledgeable people, but as you will find out they are very, very friendly people and we have formed a close bond with not only Joe, but his boss Craig [ph], who you'll meet shortly and the rest of the guys that were here.

Craig Harvey

And I'll tell you just like I told you other day; we never actually use that up until the storm and the best thing we used. Because, you know, and it took a little while for the people to really get used to it because some would just turn in, I did this, and we [Unclear] now listen folks you have a job, you are doing something everyday, everybody is doing something all day along, so tell us what you are doing and tell us what you are going to

plan to accomplish, and they started to getting better. You know, we just [Unclear].

Joel Lawhead

So, what we are trying to do – the reason we want to form our research center is that we have defined – America has defined a very precise plan for incident action, for different groups, who are working together, but there are no best practices for GIS for what we do for emergency management. Its always there at every emergency and its been more developed and nobody – as a industry we haven't come together and come up with how, you know, for the best practices for GIS and disaster management, so that's we are trying to – that's why we found our paper, we are trying to write everything down and we did plus come up with lessons we learnt and then define, you know, make or write a manual on how you do GIS for disaster management.

Shingo Nagamatsu

So let us talk about our research background. We are very interested in establishing the Incident Command in Japan, but we do not have such an organized system in Japan, so it looks to us as very effective and efficient disaster management system to us, but – so we want to learn from the lessons of the Katrina, both in Louisiana and Mississippi. So the basic question to you – NVision is that we realized that when we establish this kind of the incident action plan we need to form the common operational picture and raising the situational awareness. I think that for that purposes the information system, like GIS or any other kind of the computer system is very useful. Otherwise, if we have not such a common operational picture, we cannot make a good incident action plan. So our question is that how do you support the making of incident action plan by using your system – what did you do for that purposes?

Lawhead

Well, the important thing to remember about any computer system disaster management is you have to have a paper backup plan, yeah, certainly at a – as a higher state federal government you can have computer systems, but at the local level where all the action and information is we had trouble with the generators keeping power on so the computers were blank and you lose it, so we had to be able to switch back and forth on a computer system which was great, but also be ready to

go to paper if you lost power or anything like that. Because you know anytime especially for an earthquake or something you maybe in a very unstable environment and you never know if you can, you know, save our lives and yet be prepared to switch. So the ICS system is designed to be [Unclear] with pencil and paper, so they really – they haven't defined any computer tools around that, so we try to come up with a computer system that made it more efficient when the computers were available, but you rely on it if it didn't stop the whole plan if it failed. So the core of the ICS and the incident action plan is each ESF, Emergency Service Function, fills out a report everyday with what they did that day and what they are going to do tomorrow. So we have put that form into a computer form and they could fill it out very quickly and then it would automatically compile that into a single report and then, you know, then hand that back out to everybody, to all the teams, we have for the coordination and that's really what we did as far as that – very simple, but very effective. Because it was taking up to four hours everyday to compile the incident action plan, which you know things were happening very fast or too slow. So we got the computer system working. Its very simple logging there, but it works very well. And then we are expanding that or we did expand that to handle volunteers coming in or other groups, it could be volunteers, and we would allow residents run the county to log on its website and tell – describe what they need, do they need, you know, tree cutters to come in and remove trees from the yard; do they need somebody to help them with electrical repair or roof repair. And then volunteers coming into the county can look on that website, register themselves, and say we are tree cutting specialists or we have electricians and they could match – automatically match up with residents, who need their assistance, and so that was the other aspect of it. And then we are also working [Unclear]– ICS, how we are trying to bring in, we have doing that for several years, just creating models, like we have a flood inundation model. But its all web based, so you know, its only software that runs on the single server that you can deploy and many people can hit it and we will give you a predictive flood inundation, but we also have [Unclear] string gauges over Louisiana for them. We're working on expanding that. And then so you can be proactive about flooding and [Unclear] tell you where it might flood,

but it tells you how many people are in there, property values, and information like that.

Nagamatsu

You mean the damage assessment?

Lawhead

Damage assessment, but before it happens...

Harvey

And it's more of damage prediction.

Nagamatsu

Yeah.

Harvey

It uses the area that the water will cover, it uses GIS to figure out how many people, and property values, or the people that can't travel on their own and it is all beforehand. It's also tied to a 911 reverse calling system. So we think it's going to flood, we can send out an automotive phone warning it says, "Hey, you have four hours to get out of here, you are expected to have water, and you need to take appropriate measures."

Lawhead

And then we are also working on an evacuation routing system, so a citizen can type in their address, where they want to evacuate to, Atlanta or Baton Rouge and then giving – given what roads are closed or what, you know, the state plan is for evacuation or ways to route them, you know, which may not always be the standard route, peace time route, it maybe look on counter flow or...

Nagamatsu

It means that you had been collaborating with Mississippi State before Katrina came?

Harvey

Not for emergency management, we had worked with Mississippi State for probably eight years in various projects.

Lawhead

Agriculture and other projects.

Harvey

So we had a long relationship with Mississippi State. As do most of the tech companies here in Hancock County, most of it – Mississippi State is one of the premier engineering schools in the area. So the tech companies naturally have partnerships with those universities.

Nagamatsu

So you have never worked with the Hancock County?

Craig

No. Never before the storm.

Lawhead

The Mississippi State was brought in to tell about – Mississippi State called us because they knew we were local. We worked with...

Nagamatsu

I see. So, Mississippi State sent you to the Hancock County?

Harvey

No. No. No, no. No, two days after the storm I realized that our company was intact – was in one piece, you know, we didn't get wiped off the map, we didn't get flooded, our equipment worked. I went to NASA's Kennedy Space Center and see if we could help there, I mean, we were going to be able to help there, it was a government issue. So we went to Jackson – we drove to Jackson, Mississippi, to the State Emergency Operation Center where I met with the state emergency management and David Shaw [ph] from Mississippi State who was assisting at that point and said, "Look, you know, we are on the coast, we are ready to help, just tell us where we are needed." In a couple of days they –said, "Hey, Hancock County needs you," and that's how we got to Hancock County. And it was through a coordinated effort through the state office. It wasn't like they just knew us and called us. We had already checked in immediately after the storm and made ourselves available.

Tamiyo Kondo

So, when you came to Hancock, two days after the storm?

Harvey

I didn't come – yeah we were in Hancock, I think, two or three days after the storm.

Tamiyo

Three days, okay.

Harvey

Yeah, we got a call – I got the call for David Shaw, who said Hancock County could use some GIS support. That day we moved our

entire office, computers, people, software, printers, moved everything into the EOC. We showed up and talked to Brian and said, "Hey, we are here to help and we do GIS," and he said, "GI what," I said, "We do GIS," and he had, I mean, you understand he had 50 people following him around every step he took. He was completely – everybody was – in those hours and days and weeks immediately after the storm he was a pretty popular person. So he said, "Okay, you can have that room."

Nagamatsu

So what – do you think what did MEMA expect to you to establish a GIS?

Harvey

MEMA never contracted us. Our contract – we volunteered for the first, almost three weeks. We were just – we volunteered the entire company on our dime so until we got to the point where we couldn't afford to stay, we never asked for a contract. And then we went to FEMA. By that time, we were producing close to a 1,000 maps a day, 1,000 products a day. We had already started automating, had become the de facto IT specialist and we were doing PC support. We went to the FEMA lead in Hancock County, so look as much as I want to be here, we have to go earn money or my company is going to go...

Nagamatsu

You said previously that Mississippi State asked you...

Harvey

Mississippi State told us they needed us. That's all they did. So – and I had already volunteered, yeah.

Nagamatsu

Yeah. So my question is that the Mississippi State – what did Mississippi State expect you to do – they wanted you to...

Harvey

Nobody knew what the role of GIS was going to be post Katrina. That's really what it came down to. GIS has nationwide not been predominantly used in emergency management. Mississippi State, like us knew that there was a role for GIS in remote sensing. What that role was going to be would be up to us. And, you know, to come in and say, "We are going to do this on our first day, this on the second, this on the third," would have made us

like every other emergency management that had a fixed view of how emergencies are supposed to work. Every emergency is different and Hurricane Katrina was certainly very different. So we kind of just changed what we were doing on a day-to-day basis until we had the right mix of what was required. We knew we were going to be making maps. I think that the initial expectation was that people are going to come in and do and they know the local work. They were going to do things like damage assessment, fire maps, dry maps, you know, do change detection, and that's what always the other group did when they initially came in.

Lawhead

The GIS core that volunteered GIS group.

Harvey

The GIS core, which is a volunteer group, they were professionals around the country who would volunteer to come in and for – you know that's what they thought they were going to be doing was this really high level of GIS. With Mississippi State, we are dealing with Katrina lessons learnt [Unclear] and that's one of the things at that time we did and we did correctly early on was for every GIS request that we had we made people to fill up paperwork, who are you, what do you want, and what do you need it for? So we have 20,000 pages of request for GIS service, so the reason that's now become really important is we know the types of products requested in the first week and in first two weeks, and then in first three weeks, we can watch a change overtime. Certainly, in the last year, you know, after the first six months, the type of GIS product changed, but early on initially – primarily it was navigation. How do you get people from point A to point B, the people that come in for an emergency – our county was like that? We had people coming here from across the nation, you know, 20, 30 different states, you know, police forces, fire departments, search and rescue teams. They didn't know where to go, they didn't know how to get there, moreover the road – the existing road infrastructure had changed, there were no landmarks, there were no street signs, so we wound up having to make very detailed roadmaps where they could count – okay I have got to go four intersections, one, two, three, four, and turn right. That's how you got around in the county because there were no

navigational signs, there was nothing to get you from point A to point B.

Lawhead

And they were just trying to deliver water and ice.

Harvey

Yeah, just delivering water and ice and getting people around. That was the most important products we put out for the first four months. Hands down and the maps that state put out, you know, that the – your regular road maps if you went to the bus depot and got a road map, they didn't have all of the roads, they didn't have minor roads, and streets and alleys so you couldn't count the turns and that's what we have to do. I mean we had to have fire roads, alleys, you know the very the minor, minor roads had to be in there for people to be able to be able to get around.

Nagamatsu

So we – Japan has a disaster management support IT system, for example, we came from Kobe and Kobe is governed by the Hyogo Prefectural Government, they have very good system for assistance of disaster management. But the problem is that we are very familiar with that system, but does it means the input and output are fixed basically. So we require a certain format of the information to input in that system. And the output is also fixed. So, but your story is quite interesting that you are making each maps by request. For different groups

Harvey

One other thing that we are dealing with these lessons learned, project is – we are building a new database infrastructure because of exactly what you said, essentially you have fixed reports that come out. Even now when you clear your database or you have to have a database specialist to sit here and make sophisticated sequel queries, that's no good. Because, you know, Brian Adam is going to have a database specialist walk around with him all the time nor as a governor or the director of MEMA or the director of FEMA or the director of DHS, so when a President says, "How many people," somebody needs to be able from DC to get on that database and say how many people are effected and because the system knows that this is a very high level individual, it knows that you don't want addresses or names what you really want is a

pie chart by state, by county with a number first, you know, 13,000 people in Hancock County, there is 11,000 in Harrison, there are 6,000. That's the level of information they want, we call that contextual request, okay.

Nagamatsu

Contextual.

Harvey

Contextual viewing – it's a kind of new idea. So if you are the director of MEMA you make that same request, because it's – it knows who you are when you log in, how many people are affected, it knows because of who you are that you want the number of people by county, by city within your state and it may also want, you know, how many critical infrastructures affected, you know more details, more granular. If you are Brian Adam and you get on to the system and say, "How many people are affected," it knows that he is concerned about Hancock County and he wants the list of names by city and then county outlying areas, maybe within the impacted area, so contextual viewing. It's also privilege based. A lot of the things that were created came from national security assets, NGA, CIA type stuff. So they took imagery that we are not allowed to see, created products and gave us the products. Well, if NGA queries and says, "Show me the imagery available for Hancock County," they want to see their assets and they want to see the commercial data that was filmed and they want to see the private data that was filmed with video and pictures. They want to see it all and they can because of their privilege. If I get on and say, "Show me the data, Frank. Show me the imagery for Hancock County," I am not going to see NGA assets, I am not going to know they are there. So it's privileged based and contextual. So based on who you are and what your level of privilege is, determines what type of output you get to see and what format it is going to be in and that happens automatically. Then the final thing is the queries will be exactly what I just said, "Show me imaginary." It will be like a Microsoft knowledge based common language query system so that any of us could query the system, you no longer have to have a database specialist to do it. Not that I don't like database specialists, but they are kind of hard to find in the middle of an emergency. So that's the solution to the problem that you – that's the way that we are dealing with it

anyway and we are under funding now to create that.

Nagamatsu

So you mean that the database is integrated and the people, who want from that database, the database allows them to get the contextual viewing.

Harvey

Contextual viewing, so based on who they are determines how the data is presented to them and at what level, you know the – essentially the higher up you are in government the more granular you are considered that you want the data.

Nagamatsu

So do you have some fixed contextual viewings, readymade context?

Harvey

It will be dynamic. The whole thing will be dynamic. So there won't be – I mean you'll have formats that are fixed, you know, there could be pie charts, line graphs charts, white paper type reports, abstracts, fully detailed, so there will be a whole list of methods to view the data, but depending on what – how your data gets formatted will be depending on who you are and there will be user forms to figure out how they, you know, those different levels want to see the data. You know, we are not going to say, "Because you are the governor this is how you see it," we're going to say, "How do you want," – now if you are going to ask this question, "How would want to see it," and so through user forums we will find out what data presentation will be associated with various levels within the government or in public.

Nagamatsu

So who are expected to use that data?

Harvey

Anybody. You know you think about the people that made the query request and there is a reason behind this. A fair man of our time was served producing data for newspapers; you know, The New York Times called us on a routine basis, "Hey, how many – hey here is the web link go find out yourself," you know, "Go ask the database yourself," so what we are trying to do is empower the public, the media, and the government to get their own data out and provided an easy-enough

interface that they are not going to cry foul, they won't say no we can't do that, you are blocking the data, no. If it's a common language interface, anybody can use it. If its contextual viewing, they are going to get the data in the format that they needed, and if its privileged base, they are not going to get data that they are not allowed to see. You know, certainly the newspaper is entitled for the same information that the governor or the director of FEMA is. So that's the – it's a fairly ambitious, you know, endeavor, but in the same way it's important for the same reason that we built the ICS, you know, Report Builder. Its – we are trying to save the time within the EOC infrastructure, you know, take away the things that are automatic, redundant, that happen over and over again and that leaves us with time to do the things that are more detail oriented, more time consuming, and more complicated, okay. So that's why we are building that interface.

Bring roller maps

Lawhead

This is map book, so you have the county in a grid with numbers and then a street index that tells you page numbers and this when we made for toxic release sites anywhere – the environmental protection agency came in, so we showed them where are the hospitals, industrial plants anywhere that might have been flooded and dispersed chemicals, so they can go out and check. And you can also look at it by, you know, street or whatever you are looking for. But we are also getting the law enforcement and other agencies. We would map traffic accidents by density and if I have one of those that will show you the dangerous intersections, because we have law enforcement from other states that would come and patrol temporarily so we give them these maps showing where crime areas were and accident areas...

Nagamatsu

So basically the APA has such a GIS data?

Lawhead

Yeah, they do.

Shinya KONDO

We cannot make one by one so quit data; quit each ESFs.

Lawhead

Yeah, for example, the toxic release sites, super fund sites, those are – that's EPA mapped data. We also combine hospitals, because there is biohazard data so combined it.

Shinya

At the Hancock County EOCs or – who wants this map?

Lawhead

EPA contractors and Mississippi Department of Health, those were the two people, who want this map.

Harvey

Also then there were people that were responsible for picking up the contaminated waste. Noah wanted to know if they are out picking up cans and bottles and contaminated stuff, they wanted to know if there was anyone near the superfund site.

Lawhead

Right. And so the map looks good because large maps can be taken on a truck or a car and it's, you know, very compact. We also made small street maps, just for navigation for only water. Because, you know, so there were no street signs left, so you had no turns. Aero-photography this is the port on the harbor so we could locate containers in the wood that you couldn't see from the ground. So it's an evacuation route map. Here is some of the survey that we started collecting high-water marks from the surge inundation and here is a map we made that shows where the Katrina surge went and where the FEMA flood zones are, so how the surge was and that's so they want to make – find a new EOC location so we said, "You know there – you add up all possible danger there."

Nagamatsu

So everybody brings their data to you and you combine.

Lawhead

Sometimes they bring us data; sometimes it may just be a spreadsheet with GPS locations. They bring us data or we will find it and we will go collect it sometimes whatever it takes.

Shinya

And how many people are making this – so this database?

Harvey

We had between six and 16 people on staff over a year. And one of the things we found out post Katrina was particularly something of this magnitude most of the data holdings in county were destroyed. You know, you noticed that if we had a population map as well we would go right where the water is. This northern part of the county is not very densely populated. This was the county seat, most of the city sea [ph] – all the people and all the information got wiped. So we found ourselves doing data recovery as well, so we recovered data from hard drives, CDs, maps. We froze maps and scanned maps. The only maps that were available for the [Unclear] were maps that we scanned at the end.

Nagamatsu

It's something like a company doing it. The Belfor – you know Belfor – the company name, who assist the business recovery?

Lawhead

Yeah. Yeah. Right, but for the government. Yeah.

Nagamatsu

Something – so you are doing that for the government.

Lawhead

Yeah, you are right.

Harvey

Yeah, we also mop floors and help cook and honestly, you know, everybody that was involved in this did whatever was necessary. If they had told me that we needed to go dig a ditch we would have went outside and dug ditches.

Adam

There was many a nights that I didn't get to go home probably for almost six months. I stayed here. So Craig stayed here 90% of time we would be up to two, three, five in the morning coming up with ideas on how to better our search and rescue efforts. You know talking about any type of operational thing, you know, we would come up with ideas and they would institute them or work on them and get them done. And that was beyond, way beyond what they were paid to do. I mean this we feel was way above and beyond their call of duty and probably it didn't pay for the first, two, three months to release to they won't even pay. They were doing it because as

[Unclear] this is his home and he wanted to help and we did not know [Unclear] at all. However, any storm that I have – they also have their own office, their own room in my EOC. It doesn't matter. They have their own room now and then when I get my new they'll have their own room. That's just how much did I feel the data is necessary during any type of catastrophic event. It doesn't matters if it's a Hurricane or tornado or whatever. There – it all starts to me from the top within and it institutes to helping, with all their employees under them, Joe and everybody, feel that "Hey, we are here to help," and that's why they did, you know, so we were very blessed with that.

Tamiyo

Okay.

Harvey

You need these numbers that we see here?

Nagamatsu

Yeah, it is very important.

Harvey

It is actually something that's been adapted – adopted many, many, many emergency procedures across the country, recorded maps to go.

Nagamatsu

Yeah, maps to go.

Harvey

And, you know, we were getting hundreds of map request a day and so when we started getting similar map requests they didn't make sense to go make one at a time, also they didn't make sense to make 10 of everything. So if we got four or five requests for the same map we put a number on it, we hung it on the wall outside, so there was a whole wall with one through about 30 numbers, so people could come in and say, "Hey, I need four number of 15s and two numbers of six's. The other thing is...

Nagamatsu

It's catalogued.

Lawhead

We compile everything, every element.

Harvey

The other important thing was as Brian said, you know largely GIS was an unknown thing

here, so even when people were coming in from Fairfax County, Virginia, or say from Oregon or you know Kansas City, Kansas, they look and they say, "You know can you make me one like this." It gives them a place to start because they don't understand GIS, they don't understand mapping, but when they see something they say, "Hey, you know, if I had one that they did this it made us more efficient and it gave us a point of reference to discuss the balance."

Nagamatsu

And probably which organization requests?

Lawhead

Yeah. We are compiling all the data right now to give vivid graphs of who requested what and how many...

Harvey

And we are getting thousands and thousands of requests – probably several thousand a week of map request.

Lawhead

We are just now going back and analyzing all the requests.

Harvey

Today is like a 130,000 hardcopy maps. It ranges from maps this big to, you know, the map books.

Adam

I've probably got 50,000 and that's...

Lawhead

We are still working with FEMA in [Unclear] and but they keep track of the map request now, so we are no longer tracking, so there is even more being made, this is one. After the storm, people just naturally went to the churches, people would meet there, the volunteers started bringing supplies to the churches. So we made a routing map to show the most efficient way to drive to all the churches. They started whining... supplies. So nobody would have done that, yeah, that's a new idea that, you know, [Unclear] another disaster. This is one of my favorites too. This is a fire susceptibility map, so before the storm this is based on satellite and weather data and it tells them the fire susceptibility, so dark red means higher susceptibility for fire, forest fires. And then after the storm, you can see there is a lot more danger and we had limited

fire resources, they hadn't decided where to put fire trucks in state resources.

Harvey

This is one of those things where actually the guide that authored this is on the same project that we are with lessons learned. After presenting this, one of the things that sticks in his mind is the FEMA guys says, "Can I get that in a pie chart." Because this is too complicated for senior level managers to really get their hands – I mean this is what he needs to see, so he can see exactly where he has to deploy people. But from a much higher perspective its like way too complicated – too much information.

Adam

You know [Unclear] and I have the – I am the one who has to make the determination of no burn, no burning. We allow burning in this area, however, that's exactly what I used to say, "No, we cannot burn," and used it up until [Unclear] take off. And, but the thing is, is that's what we utilize that data right there and that's what helped. And we were speaking about that one and about having something like that and that's when you got that.

Nagamatsu

So basically you are making this kind of maps by request and after making that map. Or by request, either his request or when we sat down and felt the need. And once you make the maps this must be – this will be some – the format, how can I say, the model and do you put number?

Lawhead

Yeah, we put a number if it requests and this one was requested very much, so it wouldn't get a number not – it's not as popular, only a few people will see it. But certain ones like street maps, everybody wants to put a number on it and then we put map producers at night [Unclear] we print them out [Unclear] for next day.

[Male]

In fact, we can show them that. We have a number of maps.

[Male]

Yeah, we save them on the wall over there.

[Male]

We can show you our GIS facility here.

[Female]

Okay.

[Male]

Yeah.

Harvey

You haven't seen it. We can show you the maps and so we are staged right now for – if something happens. We will show what we did in advance.

Nagamatsu

So those maps are most frequently asked.

Lawhead

Yes. Not more – we never did more than 13. Yeah, more than 13 gets confusing. They are not as popular so we stay between 10 and 13; try to keep a small number. And then sometimes just as people stop asking for one, you know, another one becomes more popular or rotated out and [Unclear]. This is a good example of contextual viewing. This is for the governor and the media. Every – they went to every house in the county and did a damage assessment. So that we turn that into sort of an overview map of to the level of damage, so red is 100% damage, this is heavy damage area, green means 0 to 25, so mostly would have some, but very minor damage, the few areas you can see that were really bad. And then how many people live there, how many were inside the FEMA designated flood zone and how many were outside, but still got flooded.

Harvey

We knew specific – we knew this whole area, we knew for each house the level of damage, but the governor was not concerned about individual homes, he was wanting big area statistical representation.

Shinya

Excuse me. So when did you make this map?

Harvey

In these couple of months maybe November 2000 – January 2000, okay.

Lawhead

Not exactly – there's a date on it, January 2006, January this year.

Shinya

Is it updated?

Harvey

Yeah, we would update it. It will be updated. I think we made the first one in November there.

Lawhead

This is why it was important to have GIS. The people that were doing the damage assessment came and said, "Hey, can you give us a map that has good property building [Unclear], right?" "Yeah, what you are going to do?" And they said, "Well, we are going to use this to do our damage assessment," they are going to go visit each home and they are going to do an assessment like then what. Why they were going to have this map and like everyday can you come back here and leave the map overnight and what we did was we took as they were drawing on a map saying 50% damage, 75%, we would take that and put that into a GIS database. So that's how we could produce this, but had we not been there what they would have had is a hardcopy map with colored in squares... and no way to produce this for the government.

Harvey

There were some people – some female contractors had computers and they had a form that they could fill it out and then we could just copy that. But all this was done on paper. This was done by the state. In some of the city areas they had computers, but then most of it was done on papers, so we had to type all that in, geo located on the map, the address. And sometimes there wouldn't be address so we'd say, "The house next to the big white house at the corner of," such things because we didn't have address for it, so we have to, yeah, figure it out.

Lawhead

Before Katrina, the worst storm was Hurricane Cameal [ph] and so we did a comparison between Cameal and Katrina as far as of, you know, the flooding, the states that were – the counties that were declared a disaster, the path of the storm, and then the rainfall. How many populations at the time?

Harvey

There were several versions of...

Lawhead

Yeah, there were different versions of population.

Nagamatsu

Let me ask about this map again and how did you correct this damage data?

Harvey

The government employees visited each site and did a damage assessment every house, every process. So it took a few weeks to get all the data.

Adam

They went out and collected it, come back, give it to Craig and then Craig would then put it in the database.

Lawhead

In the whole time we would make maps each day and then we would go to the technical meetings and talk about it.

Nagamatsu

It is quite interesting to us, because in Japan collecting the damage data, especially individual houses, is work assigned to local government, but you told me that the FEMA did it.

Harvey

FEMA came in with their little handheld computers doing their things, but the local, you know, remember the local governments all got wiped out. So all these people had was pencil, pens, and paper and that is what they did.

Lawhead

You know FEMA makes – FEMA doesn't make flood zones, okay? And so FEMA only cared about the houses in the flood zones because they are responsible [Unclear] the flood insurance program.

Harvey

But if you here at this – is this not a flood zone?

Lawhead

But that's – there's no [Unclear] there's no residence.

Harvey

But see this line here it is – this is the FEMA flood zone, so they didn't so much – they didn't care, I mean its not they didn't care,

they weren't responsible for these areas outside the flood zones.

Lawhead

–Yeah, the county had to do this with the head volunteers from other states who helped them deal out of tax assessors, yeah.

Nagamatsu

So FEMA does the damage assessments for their purposes?

Harvey

For their flood zones. This is the area – this is the zone that FEMA says you are susceptible to flooding every 100 years and because of that you have to have flood insurance. So people in here had some kind of flood insurance. It was mandatory. People out here – the government told them “Hey, you are not susceptible of flooding, you don't have to buy it,” and consequently all the damage you see here were uninsured, mostly.

Nagamatsu

So FEMA collected data from this area?

Lawhead

Yeah, it was around the coastline.

Nagamatsu

And so this area, which is inundated, is collected by local government, like here.

Adam

And that was done by the tax office people, the bureau officials any – basically anybody that had knowledge of looking at a house and seeing how much it was damaged.

Lawhead

Yeah and the state had a problem because people in this high elevation areas didn't buy flood insurance because they weren't required to, but they got flooded. And so their insurance company – the house insurance wouldn't cover it so that's a big debate.

Nagamatsu

So do you know how – do you have any unified criteria to assess this damage?

Lawhead

FEMA has RST, Residential Substantial Damage Estimate, and most states also have some sort of form, I think the [Unclear] form is very similar, so.

Adam

Now the emergency management does – have what they call it a DR2 form, DR1, DR2, DR3, DR4 and it's a damage assessment form, but its for our purposes, its not for the purposes of going out and its for basically a rough estimate. The forms that the county was using to get a correct estimate, I am not sure what they were using, but we had to basically give a window assessment within 12 and 24 hours of how much damage we have to our state, but this is not an exact estimate.

Lawhead

This was a highly requested map later on which was for wind speeds, wind gusts as people started fighting their insurance companies.

Tamiyo

There was a need.

Lawhead

I mean we were very careful about how we presented specific data because, you know, I will give anybody any data they want for free, but the minute they say, "Hey, we need you to become a witness, you know, for the legal proceedings," my time gets to be really expensive. Because you know you can just – you can easily tie up three or four people in you know litigation.

Nagamatsu

It is also very – quite interesting to me and the situation of Japan is, of course, the damage assessment is very critical for getting the support – individual support from the government. So it means that the assessment of such kind of the damage is very, very political, isn't it? So some local government is very overestimated to get a lot of the support?

Harvey

We used a lot of this for the initial investigations. The day after or the next day, aerial photos – this is before and after and this is what NGA used with initial assessments to get just a ballpark figure on how – just how devastating was this. We had a whole display like this set up. The President of United States has been [Unclear] how long did he stand and looked into maps and images?

Lawhead

15, 20 minutes, you know, studying in these for each area, and you know if you get the President of United States looking at anything for 15 minutes you have done something special. He has a hard time paying attention to anything now. We also have a picture of a pictometry fly-by and they get an oblique, an angle view so you can see, you know front of the house and also damage assessment that way for the whole county, or most of the damage area at least.

Nagamatsu

This picture was taken by your company?

Lawhead

No, this was taken by other companies that are...

Harvey

3,001 is a local company they produce some data, land, air, fluid imagery, but they flew at the request of the government, so.

Lawhead

Yeah, right. That's very important because normally in GIS, it's very hard to get data, people don't share data very much, but after the storm everybody was working together and sharing all the information here.

Nagamatsu

Which register...

Harvey

Standard navigation, yeah, we probably have got some more examples over here.

Lawhead

They are mostly based on county.

Harvey

Yeah or in the map therein.

Shinya

I want to – basically prepare for – what do you prepare for – prepare the hardware and software for the support?

Harvey

Yeah. That's in the future we won't talk about that because as we said for this case county didn't know us, nobody knew you needed GIS that's not the case now. Now, we have protocols in place where [Unclear] us by six licenses, pretty much anything we need software, the hardware through this effort we

purchased hardware with the county, so there are six fully state GIS workstations. And GIS Server that's got FPe [ph] database that we built, that brown book came from, there is a plotter already here. So all the things that we didn't have before the county now has, you really need outputs, you need the ability to put large support right now, 11 by 17 and 18.5 by 11. You need to be able to scan data, produce CDs and DVDs. I mean, you really need to become your own self-contained print shop. It's important to have those pieces of equipment.

Lawhead

Some counties that we worked – we worked with St. Tammany Parish, Louisiana, and now Jefferson Parish and that's why I was in the storm, I was coming to Louisiana in the emergency operation center doing GIS. And they have now bought trailers that are loaded with computer equipment that are like a GI lab and they can bring a truck and pull them wherever they need to get them out the harms away before a storm or a disaster and then move them back in wherever they want and run it off the generator, so that's what a lot of areas and a lot of counties are doing, so.

Shinya

And how much cost?

Harvey

I think to outfit a trailer it would probably cost you \$250,000 – for the trailer and equipment.

Tamiyo

How about your place in Hancock County?

Harvey

I think that we probably for the fixed units that we have and, yeah, we probably spend about a \$100,000 and \$110,000 each. I will have to go back and look at records, but really here we bought six workstations, a server, the plotter was \$12,000 and the little printers and stuff like that we already had.

Lawhead

We had those from our office.

Harvey

So we brought those in and just – they have been here for the duration.

Lawhead

But, you know, the ability to [Unclear] dedicated GIS rooms, so have it all outfitted. So hopefully we think we will be able to survive the storm and the run-off generators so we wouldn't have to build it next time.

Shinya

And can Hancock University use the systems?

Lawhead

They have one person that knows how to do it and that's what I said it takes a lot of expertise and so that's why we are trying to build newer systems that are automated, like a map key [Unclear] say, yeah, give me these layers and make a map. So we are trying to find ways to make it easier where you don't have to have experts on hand, because...

Harvey

In a county the size of this with a population base there is not a large enough population or tax base to support a GIS Charter. So they really have a GIS person for taxes really. Pretty much it. You know they have a couple of engineering departments that contracted the county that do, you know, some GIS related to engineering. But its important for the EOC to have a GIS department that they can tag when the time comes and that's the role that we intend to fill is, you know, we don't want to have to go try to teach GIS post hurricane, you know, you got to hit the ground running. And so based on that experience, and our relationship with Brian, you know that's what we are going to do, you know, if we get hit by anything else then, you know, I'll have a half dozen people here tomorrow. When we got the call to Hancock County that we were needed, and understand this is where we live, this is our home. I live five miles from here. So when they said you are needed, so come there – we were operational. We got that call at four or five in the afternoon and at six the next morning we were operational with 10 workstations, plotters, we were fully operational producing maps the next day, the next morning.

Lawhead

And you are going to understand from a person that don't know a lot about GIS, I didn't, I do now, but without it we couldn't have functioned. I will tell you plain and simple, because when all our things are gone and Wayne [ph] I can tell you that because Wayne was over search and rescue? Without

the maps that Craig and him did we were basically up a Creek, without a paddle, I mean it wasn't really good.

Adam

The thing is would GIS will help – in a catastrophic event you are going need maps because you are going to have outside help coming in. Even in Kobe, Japan, yeah, when you all had earthquake, I bet you all had so much outside help you all didn't know where they were coming from and that's going to happen. But to rectify this, that's why you have a GIS, and I am partial to this group because of the long-lasting friendship we made, but not just that is when I would come up with an off-the-wall idea that I thought was off-the-wall he would run with it and this is many nights at 2, 3 o'clock in the morning that we were sitting and coming up with ideas to make all of this better. And I would go up to him and say, "Craig, I got an idea, I think it's off-the-wall, but this is my idea," and he said, "No, it's not, hold on, I think we can enhance it by doing this." One of it was did you explain?

Harvey

No, I was just asking about and they said our mission is good.

Adam

We – they didn't – one night we were speaking about search and rescue, okay? Why we were having a hard problem with finding some of the bodies we knew were in certain areas, but we were having a hard time finding them. So we used to sit down and talk until what 2 o'clock in the morning?

Craig

Yeah, it was one in the early morning.

Adam

Yeah, and I said we got to have something to where we can show the water basically coming out – I said going in and you said, "No, we got to have it coming out." And that was one of my ideas to say, "Well, he started working on it," and he said, "I think if we do this, this, this to this that will help find and once we got it down it would help find quite a few bodies." Because you could take a certain area, do this chart in this area and it would show where the water was coming out and it would show – no it wouldn't pinpoint where the body was, don't get me wrong, but it would pinpoint the area that "Hey, the water

flows this way, this is where you need to look," and that's exactly what happened. One particular body we were looking for three weeks. And as soon as we got the [Unclear] working we said, "Alright guys, we are looking in this area." Craig, you explain the gentlemen who [Unclear]?

Harvey

Yeah, we – that was when we first really started working with search and rescue and we said, "Hey, well, if you bring us," they said, "We are finding items." We found a bowling ball, we found, but they were all heavy items, which we didn't really figure out until later. So they were – so we would get GPS points for where they found those heavy items and we made a plan on the maps that, you know, based on this – this should be here and then we started thinking about it. And Brian and I were talking and it is not so much as important about the where the water came in. You can take a garden hose and squirt the water straight up hill. But if you shut it off water adheres to hydrologic principle. Then so we did surface water sheet flow vectors [ph]. We said if you had a bunch of water and now you have a pressure where does it go and the lighter items – the heavy items fell out going up under pressure, but the lighter items and the floatable items they followed a different path entirely coming out, and that wasn't readily intuitive for us as we were doing this. And we have – I think we have that map. We have an example of that map we can show you. That map has gone into a lot of attention.

Adam

That map was – that's probably one of the – even though I think everyone had [Unclear], right, the map was great that was probably one of the best as far as search and rescue goes that we have. Because, you know when you are looking for bodies for a quite a long time and you know its there you just can't find it and then not even a day – the day they have it I think it's when they found the body.

Harvey

They found the person that day.

Lawhead

I will show you here what happened to the GIS [Unclear] and I will show the facility.

Move to other room

Harvey

So, this is an example of the local people when they were going out to talk about building footprints where they did the classifications.

Lawhead

So in this case, blue is totally destroyed. So then we took that and made the other map for the governor, the density map.

Nagamatsu

Does this data has any connection with damage assessment, data repair [ph] service?

Lawhead

Yes. So, the other one is a summary map of this detailed information.

Harvey

That's the contextual. You know this is the detailed version and that's the contextual. The governor doesn't want to see this. He wants to see big areas.

Nagamatsu

Excellent.

Harvey

So one of the things that we are doing, we are actually, a couple of my GIS people are doing a study for ASPRS?

Lawhead

Yes.

Harvey

They've got a paper accepted [ph] at ASPRS. This is a railroad, here right, Don.

Lawhead

That's the central.

Harvey

Railroad, it was close to 30 feet of water here. That railroad berm is 6 feet high, but look at the change in damage.

Lawhead

So it's right there, totally destroyed.

Harvey

It went from being totally destroyed to less damage, not destroyed because of 4 foot. There was 30 feet of water. So they are trying to figure out why it's such a small berm. You know can we mitigate damage by putting a

smaller berm farther upfront. You know if we had a railroad berm closer would we have preserved more homes this way?

Lawhead

Or if we put a breakwater out here...

Harvey

Or a breakwater out here, it's a combination of GIS and hydrologic study because its fluid dynamics, it's what happened to that wave of water as it came in there. You know, my personal thought is that it's carrying debris. The debris is the damaging part, it's not the water, you know. The homes still stand. They flood, they still stand, but it's carrying debris. I think when that wave comes in and hits that berm that it tripped and drove that debris down, and then its simply floating debris as opposed to debris under pressure, under stress.

Nagamatsu

Yes, I saw so many debris along the railroad.

Harvey

And it's not a tall river. I mean it's, you know, it's small. It's not like it's a levee. The water was just as deep up here as it was here but something, some major difference from here and this is the most logical candidate.

Nagamatsu

That railroad is intended to be a levee?

Harvey

No. That railroad has been a major pain in the rear end for the whole coast. They want to move it farther north, and our thought is wait a minute, you know, maybe we'll move the railroad north but we keep that berm and that's the deal. We don't like the trains because of the railroad crossing but this berm – this railroad grade obviously has some benefit we didn't know about.

Lawhead

The railroad has been there for 100 years, and it used to be important for Roe [ph] to come to the town, but now it's, nobody wants it there anymore but the berm seemed to have stopped the flood, it's amazing.

Nagamatsu

I have very, very basic questions. Who funded you for this activity?

Lawhead

FEMA.

Harvey

We volunteered. The company volunteered. Everybody that worked for the company got paid. So we paid our staff. The company volunteered.

Nagamatsu

I mean, you mean the company.

Harvey

Yeah, the company. So after three weeks or so MEMA gave us a contract through FEMA, because FEMA is the one that said they need a contract. From the contract that we got here we got an additional contract to support FEMA, down at their Advanced Field [ph] Office and Joint Field Office which we still do. We are still under contract with FEMA. If Brian had his say, so we'd still be under contract here but the county just doesn't have enough money. But we come here, even though it's empty, every day somebody spends between one and four hours a day here. We verify that the equipment works and the databases are all up, so that if there is a tornado tomorrow we know we can walk in here and start working.

Lawhead

He used to work for the US Geological Survey, USGS, so they donate, you can call them and they donate the map cabinets, and then the map scanner over there. So we pick a lot of the web paper maps, and we run through a scanner and then recreate them digitally. We saw some of the maps to go on the wall up there [Unclear].

Harvey

I thought we can see if there is a map to go in here or not.

Nagamatsu

Does the product is expected to cover these kind of activities?

Lawhead

No, no, that's what we are trying to push for is trying to define the role of our GIS activities.

Nagamatsu

This is the first case that FEMA covered these activities, this is not the first case?

Lawhead

They have their own staff just, pretty small number. As far as I know it's the first time that I have seen, contracts whom I work with, they may have before, although, I am not aware of, this was so large scale with so many states involved that FEMA couldn't handle it all. So it started getting – contracting more people.

Nagamatsu

So this is the part of the FEMA's activities.

Lawhead

But we are not, we don't, here we did not answer to FEMA directly. We answered to the county.

Harvey

This is part of state work...

Nagamatsu

State work?

Lawhead

Yeah.

Harvey

That was funded by FEMA for emergency response.

Nagamatsu

I see.

Harvey

So even though its FEMA money its state work.

Harvey

This is the current map that we did.

Lawhead

The traffic accidents.

Harvey

For traffic map, traffic accidents, and we broke it down temporarily by eight hours, and then again by four, I think, so these are the intersections where accidents were occurring. So if you were going to focus in your police resources, I think, I would put them there and there, what do you think? That's where the accidents are occurring, at least between 8:00 a.m. and 4:00 p.m.

Lawhead

That's the best time, yes.

Harvey

Then this is from midnight to 4:00 a.m. and that pretty much indicates that there is just one accident or two accidents...

Lawhead

We get this data from the 911 people, just, the county 901 that gets – have the databases, not the map, then we map it for them and we give that to visiting law enforcement people who are patrolling, don't know the area, so that they can sit...

Nagamatsu

From 911 people, accumulating the data for the GIS friendly [ph].

Harvey

No, we just downloaded the database and they told us what the different codes meant, and then we went through and added a color to assess a key item so we knew what that code was.

Lawhead

We have a tool that can take an address or an instruction [Unclear] field location for the map.

Harvey

This is the initial flow vector map, and this shows where they were finding stuff, finding debris, we planted debris, Wayne do you remember where this lady was found, someone?

Lawhead

I don't remember exactly.

Harvey

Yeah, it was up on this side of the hill. I think it was over here.

Adam

It was somewhere as the water started coming down, and I think it was right here if I am not mistaken.

Harvey

So we were looking, you know, where we found it, green, her trailer was right here where she lived but everything was this way that's why they were focusing their effort, they just felt that she had to be in the debris pile somewhere and it turned out that, you know, water went up far enough then you could simply draw a line with the arrows and

this was one of their early-off maps, they got better as we went.

Nagamatsu

Who funded this activity?

Harvey

FEMA.

Nagamatsu

This is the under the Stafford Act, no?

Adam

I am not sure, I am sure it is but it basically we showed a need in an emergency situation we can ask for and they will provide us with immediate needs, and that's what – he said that wasn't provided under the Stafford Act. He said...

Adam

It was just emergency preparedness or emergency mitigation is basically, we needed GIS. We proved we needed that and they paid for it and they paid for it for almost a year.

Nagamatsu

So, my understanding is that this is a duty of the local government and MEMA and FEMA. It is the duty of the government but in case of the lack of your ability to manage that the FEMA has outsourced this activity to this private company so that is why they pay for that.

Adam

Not only did they see the great things that they did with us, they picked them up...

Harvey

To support FEMA directly.

Adam

Yes, to support FEMA directly.

Lawhead

But it's very common for FEMA to outsource work to private companies.

Nagamatsu

It's common?

Lawhead

Yeah, very common.

Harvey

FEMA put us under a FEMA contract.

Lawhead

FEMA actually has a very small staff, I mean, core staff, and they, basically they manage contractors and all.

Harvey

Yeah, FEMA has really a two-pronged role. Everybody thinks FEMA is there just to manage a disaster but that's not their sole purpose. Their other purpose is to through the influx of funding reinvigorate, you know, a community or an area that has been hit by a disaster and they do that by employing people that were affected by the disaster. It's one of their core requirements. It's how they get money back into, you know, an area that has been devastated.

Nagamatsu

Quite interesting, that at this stage the water and sewage company as a utility company will visit there, and they said that they had a very big trouble to do damage assessment because FEMA does not cover the cost of the damage assessment of the water and, so its not written in the Stafford Act. So that's what is their problem.

Adam

I don't know the intricacies of the waste water and all that because that's one that I didn't get involved with, but I do know we had external help within the state that come down, people from other counties to come down and help us with our waste water treatment service [ph], you remember them Craig.

Harvey

Yes.

Adam

All in groups, so was it Hillsborough [ph] basin, what was, it was several what they called basins up there from...

Explain system

Lawhead

Volunteers, EMAC is emergency workers from others states and SMAC is emergency workers within Mississippi and ESF is 17, so we're an ESF, and we're ESF 18, Emergency service function, that's GIS is ESF 18...

Yes, I logged in, and everyday we would come in, we thought this form, so this is the ICS resident support form. Normally we are

doing on paper, writing everything, so this is faster. So I fill it out.

Shinya

Can you show the other date objective forms?

Lawhead

Yes, so I view objective forms, I can say query and get them all, so there they all are for the whole November 22, 2005, who filled it out and then a manager has to approve it. So one of the GIS people here can fill up and somebody an official has to approve it. They can look at it, any one of them. And so if it is, so to say, what we did today, so that's for the 911 data, set the meeting, radio planning meeting because they had radio towers they're trying to solve where to place them, and [Unclear] and then if we have any problems we can write it there, so then and that automatically gets compiled to a master IIP and then that gets sent to FEMA, the regional FEMA director can read that. So it's going on here in Hancock County, and it also gets to everybody, all the other teams, the fire team, the volunteer team, so we can all see what everybody is doing, sort of, a common operating picture. There are no maps officially part of the IIP, it's still something we are looking at as making maps on the common operating picture, so you can see visually

And for volunteers, we had 20,000 volunteers unofficially, you know, there were just churches and other groups, so as a – so a resident can come in, and they had kiosks around the county for residents that could get internet access and I come in, this is me, so you can register who you are, how many children you have, and then where your family is, the status of what's functioning, sort of, power, garbage and then you can note as I've got trees in my yard, okay and that goes into the database, and I can request volunteer services, so I could say here is the type of help I need, you know, counseling, you know, child care, everything...

Tamiyo

So the volunteer can see this there?

Lawhead

Exactly, and then the volunteers can come in and the volunteer registers, so then the county people in charge of volunteers can see that are working to kind of know who they are, and

they can stock or what equipment they have, what specialties they have and then they can find people and so they can say I am a – I do debris removal around your house, I don't care where and then it will show me all the residents who did it. It also shows me if another group [Unclear] has completed it, I can see if its pending, then its unassigned, so that's the volunteer group number. So I can see who did it. So then that helps coordinate that and they can find a local person go to the address. Once again for the future we want to add maps to all this, so you can see where the address is and so its automatic but after this storm the volunteer groups have come to us and asked us for the addresses that are going to help, we'd make them the map by hand.

Businesses and this is also important as the economic recovery, I don't know if I have a log in for this but if a business opened up they could register here and then there are lots of groups providing economic development assistance, and they can see which businesses were back open or trying to open. For example, the health department, if you are a restaurant and you want to open, the health department has to come and inspect, and so is this why the health department will come and see if the restaurant is almost ready and then go do the inspection.

Contractors, there are lots of contractors – I don't know if I can log in or not, no, I don't have a log in for that one, but there are contractors coming in from all over the US and some of them were criminals. So as a resident if I was going to hire a carpenter who I wasn't familiar with, who wasn't a local carpenter, I can come here and see if they are registered with the county, and then I could know that they are okay. The county is monitoring them otherwise if I didn't see the name there, I might be a little concerned and may not be able to hire them.

Nagamatsu

All volunteers are happy to use this one? Because some of the volunteers, NPO do not want to be analyst rated by some one you know.

Lawhead

Right. For the most part, that's what they are worried – a lot of groups were worried about that, so the county put billboards up on the road so as the volunteers came in their buses

they could see, please rush or the county won't help you, and the volunteers that did do it liked it because the county wasn't trying to manage them. They just want to make sure that, you know, that it's trying to help them find people and you know take care of all their paperwork. And it is also very important because for every volunteer hour that we recorded in a given name and hours, the federal government would match 75% of the cost of that labor, so the county could turn that in and get money for those volunteers coming in because that was saving the government money of having to do that work, if they are helping fix people's houses. So we're going to create like a time card system where the volunteers can also register the time because that's all done by hand, it's very messy, so we can create an automated system where it will tag away all of that for them and they can hand it over to the federal government, very, very important recovery method too.

Nagamatsu

So I have another question according to the small businesses. The businesses who entered this information about I am open now. So everybody in this town can see which kind of the restaurant and shops are open?

Lawhead

Who's open, yeah that's very boring, because it's very hard there are no grocery stores.

Nagamatsu

Yeah, it's a good advertisement.

Lawhead

Good advertisement, right, because that was very important in getting tax revenue going, and so it's just another way, and there were some other people that are collecting information and putting on state websites as well so.

Nagamatsu

Yeah, we had a very big problem during the earthquake. Because, everybody is getting the donations and when the restaurant opened nobody comes because they are – they can eat anything free.

Lawhead

Yes, that's a big problem here. That's a big problem, a lot of restaurants that we can't afford to open until like the FEMA food tents close down so. Some amount of bother [ph]

went there, but the people are very good because everybody wanted things to get back to normal, so people would go to the restaurants and support them, if they knew they were there.

Nagamatsu

But there is another problem which restaurant is opening now and nobody knows.

Lawhead

Right.

Nagamatsu

That's another problem.

Lawhead

So that helps....

Nagamatsu

So this helps that.

Lawhead

It helps exactly, and we have, they had a radio station which they still do broadcasting out of EOC, and they would announce you can go to this website so we had a whole like public information campaign to try to centralize everything, here, so they had a office doing press releases, probably what you do – getting information out to the news and so...

Tamiyo

So it seems to me that this EOC, this system is very supportive for the EOC and how did you find these needs from the [Unclear], would you – did you talk with?

Lawhead

Yeah, we just, we did notice for a few months and we were just working and we just observed and in addition we are part of the system, we are just watching and talking to other groups, and because we are making maps we got to interact with just about everybody. Everybody needed maps, and so we talked to people and hear their problems and see what they were doing and see where the bottlenecks were, what was taking a long time each day. The IIP [Unclear] one, so it made the computerized forms but then sometimes the generator would go down and then you can't get the website, and so then we go back to paper and then when the power came back on we get caught up in another paperwork, and so it is very, probably the best way you could do it so far and then so now we

are going back and things are quiet now, and we are looking at what we did, how we can improve it, talking to other organizations around the country, that's why we're doing paper [ph] to conferences which generated a lot of interest and, you know, we hear other ideas, and so just tracking up the best practices, at least for what our job is because, you know, in urban search and rescue the dog search teams they do disaster work all the time, and nationwide they have a, you know, very set best practices and training centers for working out but GIS doesn't have that.

There isn't anything like that for mapping and yet you know every disaster is inherently a geographic problem involving geography, people and resources and GIS solved those problems. There is no official plan in ICS or the national incident management system to apply that, so we are trying to come up with a coherent set of standards.

Tamiyo

So everybody can use this system because its interface is very simple.

Lawhead

Very simple, and but there is also – it's secure and that people want to see the information they need to see like I can't even see all the stuff that Brian Adam can see because he has access to everything, every ESF desk, and so that's pretty good.

END

Interviewee:

Mr. Jason Higginbotham, Emergency Manager, Sewerage and Water Board of New Orleans.

Mr. Jack Huerkamp, Sewerage and Water Board of New Orleans.

Mr. Bob Moenian, Sewerage and Water Board of New Orleans.

Mr. Gabe Signorelli, Sewerage and Water Board of New Orleans.

Interviewers:

Nagahisa Hirayama, Dr. Eng., Research Scientist, DRI.

Shingo Nagamatsu, Ph. D., Research Scientist, DRI.

Tamiyo Kondo, Ph.D., Research Scientist, DRI.

Shinya Kondo, Ph.D., Research Scientist, DRI

Date:

13:00 -15:00, December 14, 2006.

Place: Sewerage and Water Board of New Orleans

Hirayama

Today, we deeply appreciate for accepting our visit and before starting this interview we would like to introduce ourselves in brief.

Mr. Jason Higginbotham

Okay.

Hirayama

We are coming from Kobe, Japan and you know, 11 years ago the great Hanshin-Awaji earthquake attacked the Kobe. And Kobe City Waterworks Bureau had numerous damages and was not able to supply the drinking water for long period. And it is important to share our experience and lessons from Hanshin earthquake, and Disaster Reduction and Human Renovation Institution, this is our centre abbreviated to DRI, was established to transfer the experience and the lessons to the next generation and to the world. And DRI was established by the Hyogo Prefecture, is the Japanese local government and subsidized by the national government, in 2002.

Now, our intention is to learn lessons from the Hurricane Katrina of the Sewerage and Water Board of New Orleans as a section of water works, sewage and drainage. And so, our today's interview, we have five points. First, what damaged the water supply and se-

wage draining system, from the Hurricane Katrina?

Second point is how to work cooperative operations with other public authorities such like AWWA, AMWA, the other waterworks bureau such like Portland Waterworks Bureau and other sections of the city of New Orleans. The third point is the ESF number three, public works and ICS, so how did you operate your duties on the ICS and ESF#3?

Fourth point is how to achieve risk/crisis communication in Hurricane Katrina. And last point is your recovery and reconstruction plans.

Mr. Jason Higginbotham

Okay. Number one, okay, the damage to the water supply and sewers and drainage.

Mr. Jack Huerkamp

Well, it depends on which side of the river you are on. The Mississippi River divides Orleans Parish into two segments. I don't know if you can point it out, Jason.

Mr. Jason Higginbotham

Sure.

Mr. Jack Huerkamp

About 10% of the system exists in Algiers. And that area of New Orleans did not suffer a levee failure and as such they did not sustain tidal flooding, they did have some localized flooding from rainfall but the water purification facility on that side of the river never stopped production, and for the most part the sewage system. You had a few stations above that sustained some damage from flooding, from rain, but not from inundation from tidal surge, and the drainage system never was affected. That is not the case for the other 90% of the city, the other 90% of the city sustained flooding from either overtopping of the levees or from outright failure of the levees.

Sewage, the treatment plant for all of the East bank of the city is located out in a marshy area surrounded by a 13 foot high levee, the trouble is that the tidal surge was 17 feet high. So the entire plant was inundated with water. Once the tidal surge left, you had 13 feet of water trapped inside the plant. The only parts of the plant that were not, were visible were the top of the incineration building, the top of the [Unclear] generating facilities, everything else was still under water. It took flying in pumps by helicopter, placing them on top of the bioreactors and reach [ph] to pump the

water out of the plant, and then the reconstruction process began; that was for the treatment facility.

Sewer pumping stations, almost all of the sewer pumping and lift stations were damaged from flooding. At the current time, we still have 30 of the 65 stations that are nonfunctional and are being run by a portable pump. The other stations are either running one unit out of two; they are in limited capacity, so we are a long way from getting the sewer pumping station back in operation.

Water purification, this plant did not stop production until two days after the storm, what - very unique system in that we have on site here a 25 hertz power generation facility. We provide power for about 65% of the drainage system, the other 35% is purchased power from the local utility at 60 hertz. We also produce steam in the boiler room to drive two of our high lift pumps, they are steam driven pumps, and then we produce 25 hertz power for low lift roll [ph] water pumping into the plant and 25 hertz high lift pumping to the distribution system.

On the Wednesday after Katrina, the water elevation in the plant causes to have to shut down the plant to save it, the lake, Lake Pontchartrain which is on the north of New Orleans literally was in the plant. The - we don't have the pictures. If you can see the darker brown areas along the river, that was the only part of the city that was not flooded. By day three, 80% of the city was under water.

Mr. Jason Higginbotham

The city's elevations is, the higher you get towards the river, the higher the land is. Our system drains on the gravity flow system also, the more you get towards the lake will be the lower parts of the city.

Mr. Jack Huerkamp

The city's high ground naturally developed by the river over time, as the Mississippi river overflowed its banks every spring, the alluvial deposits stayed near the river, the lighter materials flowed away towards the lake, so the heavier clay soils exist close to the river. It is also the naturally high ground in the city. High being above 14 feet above sea level. The majority of the city is below sea level, so when the levees breached, the lake and the levee and the city became same elevation, and then it took the Corp of Engineers weeks to get the holes in the levees patched to the point where we could re-establish pumping. We did

get the water system back up and running the Monday after the storm. Within a week, we had the ability to generate power internally and produced water internally. It wasn't potable, we didn't have chlorine disinfection going, but we were able to provide limited fire protection within a week, but then it took until November to get, was it November or October, November?

Mr. Bob Moenian

I think it is November.

Mr. Jack Huerkamp

November 18th, by November 18th we had all the city to the west of the Industrial Canal deemed potable. The part above the Intercoastal Waterway was deemed potable by the end of the year, except for a small portion which was isolated, and then we deemed this part potable, May?

Mr. Bob Moenian

Yeah, not sure.

Mr. Jack Huerkamp

And now the entire city is potable but it took an extended period of time to get the entire city's water system certified by the State Health Department.

Drainage system, we, I mean Bob - all the stations, few of the stations in New Orleans East are elevated stations, we have a picture of - don't have a picture of [Unclear], St. Charles.

Bob Moenian

There is no [Unclear].

Mr. Jack Huerkamp

Right there, there is one, the operating floor of the station was as high as the levee, so that once the storm passed we were able to get those stations operating because they have onsite generators. But most of the stations weren't that high and sustained flooding damage.

Mr. Bob Moenian

The pumping stations are, for the most part, we had the hurricane under control and then when the levee breached then the water started coming up. We were still pumping, even with the breach just because some areas downtown they were doing rescue operations and we were just trying to accommodate them, but we

weren't doing anything beyond [Unclear] because the water...

Mr. Jack Huerkamp
Circulation.

Mr. Bob Moenian

Was just coming right back. But once the system got inundated, we preferred to shut everything down because we still had power coming from this plant, so we shut everything down just to salvage our equipment and then from there on everything became rescue operations.

Mr. Jack Huerkamp

I mean, you shut down station 6 on Monday afternoon.

You shut down station 1 which is an internal station on Tuesday morning.

Mr. Bob Moenian

Right, early morning.

Mr. Jack Huerkamp

And then we shut down the power plant Wednesday morning.

Mr. Bob Moenian

Right. So again we just waited till last possible minute to shut the things down just because, I mean, we just didn't want to stop pumping. So then of course the levee breach was understood by all of us, so then we focused on the area that we could pump and that was New Orleans East mainly because we were just going to the lake. Even though the water kept coming at us but we were just pumping it up.

Not having potable water was an issue for us because our equipment used potable water for cooling and lubrication, so we kind of used the canal water for cooling, so we did that and we were able to get fuel, we had fuel for three days at each of our stations. Then we were able to secure fuel, it wasn't easy but we managed that. So with that New Orleans East was operational, and we survived, then of course it took the Corp of Engineers to shore up the levees and then we started pumping, and we got the city dry by 20 days?

Mr. Jack Huerkamp
By 20 days.

Mr. Bob Moenian

Once we got the – once the levee was fixed. Now...

Mr. Jack Huerkamp

Patched. The levee never was fixed [ph].

Mr. Bob Moenian

Right, we suffered significant damage all around, I mean, what happened was that once the water was, we took the water out of the station, we went and cleaned our equipment, I'm talking about mainly electrical stuff, we cleaned them, we dried them out, and we baked [ph] them, put the power on place to go to the work. Well, some of them did work, and basically that's how they got the – the water drained. However, as I am sure you know Corp of Engineers is funding a lot of replacement and repair to the point that I am comfortable to tell you that almost 90% of our equipment, I mean the electrical side, is brand new.

Mr. Jack Huerkamp

Drainage.

Mr. Bob Moenian

Drainage side only. Okay, that is all because of the Corp of Engineers.

Mr. Jack Huerkamp

They are also going to be doing bearing replacements because...

Mr. Bob Moenian

That's coming. That's coming.

Mr. Jack Huerkamp

If it had been fresh water it would not have been a problem, but because it was gulf, salt water that sat in the coils and sat in the bearings for an extended period of time, we are now seeing bearing failures, we are seeing some of the motors that were not rewound initially were failing even though we cleaned them, dried them, and baked them. When you started putting power on for an extended [ph] period of time, they would short out and catch fire. So they rewound all of the large motors at the stations.

Mr. Bob Moenian

So, and the repair continues on today. Like Mr. Huerkamp just said there are two contracts right now in the market to replace bearings in the pumps, so that is ongoing. The beauty of it is that this is the time of the year

for us that the rain is not an issue because of the climate, but once you get to March - April you are hoping that by then all your pumps are back in service, that's the timing of that. Okay?

Now on the sewer side, totally different story, sewer side, again on the West Bank everything is up and running and not a problem, but on the East Bank we still have about 30...

Mr. Jack Huerkamp

I told them 30 stations on portable pumps.

Mr. Bob Moenian

Portable pumps, and rest are running with the local utility companies, but they are not 100%.

Hirayama

Where they were?

Mr. Bob Moenian

They are all over the city.

Mr. Jack Huerkamp

What map is that Jason folded up earlier, oh, wait the one that's behind.

That's water system, what's the one behind it? It's [Unclear] district.

Mr. Bob Moenian

There's more. I think the sewage, you have already taken it.

Mr. Jack Huerkamp

What's that one there?

Mr. Jason Higginbotham

That's sewage, this is water.

Mr. Jack Huerkamp

We had them all on the wall, and they all disappeared. This are the sewage stations.

Mr. Bob Moenian

[Unclear] This is a triangle. See these are sewage pump stations, and we have.

Mr. Jack Huerkamp

65.

Mr. Bob Moenian

65 of them, and we have them all...

Mr. Jack Huerkamp

On this side of the river, 17 on the west side.

Mr. Bob Moenian

17 on the west side. These all are operation-
al on that side.

Mr. Jack Huerkamp

The ones that got some damage on this side, it was fresh water, it was rain water. So, we didn't - we dried them and got them back in service. This side was all salt water.

Mr. Bob Moenian

And the stations that we've on the sewer side, they are not as complicated as the drainage and being in the remote part of town, some of them being underground, they just got inundated with water. So, though the stations received tremendous amount of damage and...

Mr. Jack Huerkamp

The average water depth out here was 4 to 5 feet and most of these stations are below ground.

So with 4 feet of water they entered the hatches and just flooded the entire station.

Mr. Bob Moenian

So, right after the storm, once we realized how massive the damage is, we concentrated on the area of downtown, which is...

Mr. Jack Huerkamp

The area along the river.

The Central Business District and the French Quarter did not sustain flooding.

Mr. Bob Moenian

Incidentally this is the same part of town that was established back in 1800. So because it is high ground, so the damage wasn't as bad. So we concentrated there, we got these stations up and running, I mean we had army coming, military coming, they were all stayed in downtown.

Mr. Jack Huerkamp

That's where you had people living at that time, the rest of the city was uninhabited.

Mr. Bob Moenian

Exactly. So we took care of those stations and now...

Mr. Jack Huerkamp

That station is, where A?

Mr. Bob Moenian

A?

Mr. Jack Huerkamp

Pumping station A? The one major station here handled all of the uptown flow, flows to one station, and luckily we had two 25 hertz motor driven pumps there, one of which is operational, the other 60 cycle [ph] was flooded but the 125 was operational, and we were able to get that one on line and handle the sewer flow and divert it to the river, otherwise there would have been no way to occupy the city and there would have been no way to get rid of sewage.

Mr. Bob Moenian

So on the sewer side we are still going through repair, replacement process.

Mr. Jack Huerkamp

Contracts are being bid.

Mr. Bob Moenian

Right, I mean there are some funding issues because the money for the repair of all of the sewer systems comes from FEMA as opposed to the Corp of Engineers, so we are dealing with that as we speak. There are two contracts in the vault [ph] that should be here in the market soon to replace pump stations and do some major repair but...

Mr. Jason Higginbotham

Another significant challenge is not only with the stations but its [Unclear] distribution system itself, the actual piping underground that would distribute these from station to station, significant challenges with FEMA to have assessments done, to have - in order to get to the repair of the piping you need to know where the breakage, where the leakage, where the breaks are, so you know to go through the Stafford Act and to have FEMA recognize this.

It is very challenging - it is very challenging that our water utilities are designed to be the exclusion to the rule. For so much of our system is the unknown, it is single to the water distribution system. We can't tell you that underneath the street the leak is here, we have to identify that that's where the problem is, and our assessments are normally not covered under the Stafford Act to look for damages, and that generally would apply to a building where we would hire a contractor to go into a building and start scoping out an area and you know go throughout our systems looking, but when you get to the underground parts of it there is no other way of doing it. So we are

ongoing, working with FEMA to have them accept this, so that we can go out because when Mr. Moenian's stations get back into service, and unless we have this piping system inspected and we know where the leaks are, we can't tell the Environmental Protection Agency we have identified where the repairs need to be made and now we are going to go into those areas and make these repairs, and we can say to them, our system is whole again. And it is a very significant challenge for us and I reiterate that.

Another portion of this is that after the system, prior to Hurricane Katrina we had an assessment done on the whole entire sewer system, so we have met those EPA requirements, so we can show to FEMA that we had an intact system, here is the reports of our system. The water systems we use are a program called CAS Works [ph] to identify leaks in the system as they are called in by residential areas and also reported by our working crews, and we go out there and we respond to them.

And water utility is moving to the question of corporate people coming in here like Portland, Oregon. Mainly after the storm, FEMA has its categories called, you mitigate, you prepare, you respond to the disaster, then you recover from the disaster. The problem is that [Unclear] for your first responders, you can move real quickly from a response phase to a recovery phase, but for water utility it takes longer to respond to disaster.

I don't view recovery until you have an action plan of how you are going to go about doing the recovery, and so I would say to you the Sewage and Water Board for a long time stayed in the response stage while others were moving to the recovery stage. And by having corporate people coming in here from other - The American Water Works Association, Portland, Oregon, it is good to have someone that understands that concept helping you, because they bring in that the same knowledge, the same understanding, the same principle focuses so, that is one of the lessons learned from Hurricane Katrina. Have these, what we call in America mutual aid agreements, which means I will help you, you will help me in times of disaster.

We spell out what that help defines, how many people we will send, and how we will respond. We are going to incorporate that to having these plans preexist by these agencies, so we will know who is coming. The big question is who is coming, for years and years, when we met with the Planning Commission,

that I sit on the Local Emergency Planning Commission, it was always said that this would be a regional approach and after 9/11 we went to regionalization.

We found out that after Hurricane Katrina no matter how much you say that word, it becomes local. You are not going to be regional because you have your citizens on top of roofs. You have your people inside stations. You need to take care of your boundaries. And we felt that when supplies would come in, we will wait on desperately, it was hard to get them here. One of the things is we have a drainage station on the I-10 pumping station. In order to get these additional resources in from outer state with the Portland coming to help us, with the National Guard coming, the interstate was inundated with water you know, so we are working real hard with the state to identify that the first measure of planning attack is to clear the roadways and to do this you need to assist the Sewage and Water Board for this pumping station, the pumping abilities. You know, I am having a significant challenge there making them understand, fixing I-10 [Unclear] pumping station won't do the job. You have to fix station 6, you have to fix other stations that support that resource in order to do this. So it comes back to the point where when you plan, we learned with Hurricane Katrina, let others know how your system operates, so that when you are calling for resources from the state EOC, in America we go to the Local Emergency Management and we follow the ICS protocols, you must coordinate through the local EOC which then coordinates to the state EOC, practically this is how it works.

We had the Sewage and Water Board have internal communication with our managers and with our support staffs, and we moved into that support staff communicating with the representatives we have at the EOC, getting helicopters, you know, helping move materials or whatever the asset is, but if the state EOC that I am requesting the asset too doesn't understand the complexity of how our station, how our system operates, they don't understand why I need to get a man from this plant out in New Orleans East.

How does that affect the area? Well, now they understand that the generator we were trying to repair not only supported that one station but all the stations – the two other stations working together, pull it together, and that would have started draining New Orleans East and what we are trying to say to them, we

are trying too help you clear your interstate. You can't get in through one direction. Let us clear some part so you can get moving the equipment out there and still rescuing people, but in order to do that you have to get the drainage system supported. And even though – then we speak on the terms of the levee system, you know we could move the water but the water is just going to flow back in, so now we are going to the table saying, okay, we have to sit here, we know what's happened, it is clear. How do we protect our personnel? How do we rescue our personnel? Because no matter how much reconstruction you do on the system unless you take care of your people that work here for you, you are not going to have anybody to operate those pumps. So we are developing a rescue plan internally here at the Sewage and Water Board. We have learnt again what I said about regionalization [ph], where in your own community they may have a response planned and incorporates you. I say no, Water Utilities have your own rescue, have your own bills, have your own plans to get your own people somewhere that you are going to house, and that you are going to feed them, rely on no one.

First 72 hours you must be self sustained, be able to support yourself because help is not coming, help is not going to get here quick. You know, help moves at a very, very slow pace. So you can have your ICS functions and those are great. You can have your incident command. Unless the command itself, the command function, because you know incident command is broken down into command, were broken down to planning, operations, logistics and finance, your five sections of ICS. Unless that first section of command understands your needs, your directions, then a unified command that you have established will not work.

You have to be the voice that is heard, and we are trying to work the plan, you know, part of hazardous mitigation, hazardous risk is first you define what can happen to you, well, this has been defined. This is defined. What is the results? This defines how we must learn from this is to go back to that original stage when you plan for risk and say to yourself, what can I do to mitigate this from happening, fix the levees, but the levees may fail again. How do I plan better to rescue my personnel? What did we do wrong? How can the city be drained quicker? Public works, public utilities, water utilities and drainage, especially drainage, central focus. And I will say this to you

that we would have never lost the Carrollton water plant had they understood protecting that boiler room plant back there, and what I mean by understand, we requested help in the system, we were trying to get sand bags, we were trying to barricade it from flooding, water inundated the system.

We put no blame on anyone but what we are saying is that we have to sit down, and now that we know that that's the need, that's a big asset. And by taking that system out, made the water, the water that is potable for many, many days. We are working here with - I am not going to mention vendors but with a company, local, to buy some water barriers to put around, internally we are doing this, so that we can protect the assets.

Mr. Bob Moenian

Well, he is too nice, I am going to blame the state and the FEMA [ph], Federal government, for letting us down. I am just going to give you the fact of life, I mean the public work, the drainage, the sewage, the water, should be considered essential operations, they do not.

Mr. Jason Higginbotham

Exactly.

Mr. Bob Moenian

They don't. We are not considered first respondent. If we were considered first respondent things would have been different. Throughout this whole ordeal, as everybody in this room can tell you, all we heard was how great was the fireman, how great was the policeman, to hell with the rest of us, I am tired of that. And I do know when you talk about AWWA and all, you know those are the people that got to make the pitch in the government to consider our people essential personnel and first respondent, and if that was admitted and understood then when this man says I need help for so and so place, it would have been there.

Mr. Jason Higginbotham

Exactly.

Mr. Bob Moenian

See, that is what everything is for. Now, I have been in this business for 25 years, utility companies are out of sight, out of mind. The only time we come into play, when there is no water running system, case sample [ph] [Unclear] 33.40 and not before. In Algiers, we had the water main break, and everybody is up

and off. Well, people understand what we got to go through to fix the 24-inch pipeline. You cant go off out to the store and buy a piece and plug it in, it takes time and money and resources, but people don't understand that because the government, the state, is not pushing for that. All you hear is police, fireman, and now teachers. No, no, I am just - for you folks because I think your side of the world - you are different, you know, you all have other things going on, but here it all depends who you want to push and what the issues are, but for us utility company, I mean utility company needs tons of money to fix what is underground, this didn't happen overnight.

Mr. Jason Higginbotham

Yes, that is exactly right.

Mr. Bob Moenian

You know, underground facilities you don't know.

Mr. Jason Higginbotham

No.

Mr. Bob Moenian

They break. We got pipes in the system underground over 100 year old.

Mr. Jason Higginbotham

The Federal Government does not understand, FEMA does not understand.

Mr. Bob Moenian

And today, when we sit on this table and we talk with FEMA about the pipeline that we know it wasn't broken before, but it broke now, they are telling us, well, it is 100 year old, we are not going to pay for it. No, no this is the truth.

Mr. Jason Higginbotham

And if you cant get these services back to your citizens, how are they going to come back and rebuild. It is, you know, it's parts [ph] like that that makes you look at the government and say do you know what you are saying, you know the point at hand is Bob [Unclear] home, when your toilet doesn't flush you got serious situations. I was in city hall and nobody was listening to me when I was yelling for help for this and that. After the water system broke down...

[Male]

Yeah, thank you for that help [Unclear].

Mr. Jason Higginbotham

You are welcome baby, anytime.

After the water system went down, two days later, everyone was turning to me, how can we get the water system back so we can use the bathroom, and you know what I said, too late, people. You should have heard the cry.

Mr. Jack Huerkamp

The Mayor was wondering, is it safe to take a shower?

Mr. Jason Higginbotham

You know, it is part [ph] like this, you know, you should have heard the cry back. I will say this for Colonel Ebert and for Joe Matthews the OEP director, we worked hand in hand through this stage trying to make them understand, we need water barriers to secure the boiler room before the water that broke...

[Female]

Yeah.

Mr. Jason Higginbotham

...from the levees that fail, that was designed by the Corps of Engineers, gets to our plant and floods the boiler room and takes out the city's water supply. We need these brought in. They are in Plaquemines Parish, the company's name is blank. Get us the supply Colonel. And you know I was sitting there with Colonel and we thought it was coming by heli [ph], they were waiting for it, it never got here.

This foreman, his name is Gabe Signorelli. He is the Superintendent of Facility Maintenance. This is the guy that keeps it all running, his department. It breaks, they fix it. The superintendent of our facility maintenance was doing repairs, and I stress that, he has people working under him. He had to do the repairs himself. He took a helicopter ride with parts to go out to a station to repair transformers. They left our Chief of Facility Maintenance there for two nights before I could get another helicopter to go pick him back up. And in the mean time anything we are coordinating for the ICS function for maintenance...

Mr. Jack Huerkamp

He is not available. Of course, there was the army.

Mr. Jason Higginbotham

You know why they took him away, and look it doesn't [Unclear] like people needed

rescuing, but understand you wouldn't need to rescue them by air if we could get the water out for you.

Mr. Jack Huerkamp

Then you can drive up to the house.

Mr. Jason Higginbotham

You can drive up to the house, as people can walk out, help us get to that point. You are wasting efforts, both ours [ph] and all these people in the interstate. Look he was fixing a problem and Gabe wasn't able to complete his mission because he needed to go fly back and get other tools to finish the job, because how many people go out there to a job – when you first show up and you don't know what [Unclear], you know what the problem is, you bring what you think you need.

Mr. Jack Huerkamp

But you never bring everything.

Mr. Jason Higginbotham

But you don't ever bring everything. The helicopter was supposed to keep making trips. I got it on the news, and I said look, [Unclear] I got on the city radio and I said, look, I don't care who, and I want [ph] an order from the EOC [Unclear] went to the heliport, got with the guy that's in charge of canceling his mission, two days later and said, look, at this point we say keep your helicopter, but could you just give us a ride back, we are going to figure another way out to do this rescue effort, and I tell you what, thank God for corporate America.

A company, and I am going to mention their name, Air Products, Air Products sent us a helicopter free of charge to help us get our system back up and running. Air Products coordinated with us to get a fuel barge out to a station that we couldn't deliver diesel to. Gabe met the call, General Electric stopped all production of your refrigerators, of your stoves, whatever, stopped full production, started building, and Jack I will let you speak on this, transformers for our...

Mr. Jack Huerkamp

Switch gears.

Mr. Jason Higginbotham

Flooded switch gears, for our flooded stations and boiler room, how long does it normally take to get something like that done?

Mr. Jack Huerkamp

6 to 9 months.

Mr. Jason Higginbotham

And how long did they have it here for?

Mr. Jack Huerkamp

Two weeks.

Mr. Jason Higginbotham

Two weeks, you know how much mass production they had to do, how many people were called off their jobs, how many orders they may not have been able to meet, but they came in here and they helped us, and their prices were not outrageously charged either.

Mr. Jack Huerkamp

Because it depends on...

Mr. Jason Higginbotham

But you know what FEMA stopped finishing [ph] of it, they were. You are asking me to stop our production of our private company, I am losing millions of dollars by doing this because I have somebody's orders not going to get filled that I promised, and they don't want to hear about New Orleans, but I am going to help New Orleans because I am answering the call.

Who helped us? Corporate America, brothers and sisters of the Water Association came together and they helped us rebuild this, it has got to change. And you know unless we can learn, you know, when I was taking a class for what is called the Homelands Security in emergency management, one of the things they kept saying you know, test the plan, do the plan. Well, we can tell you, the plan is old, the plan has to be thrown out, there is a new plan written, but you can put it all on paper, you can even practice at this table top, you can even have a real disaster, because we had mock hurricane exercises. And things – and when I participated at the EOC, things were coming, they were answering my request online, everything was going right, coordinating with the state and Federal government, but you know, when the stuff hits the fan, it doesn't happen. When I have drainage operators that are being rescued out of a drainage station brought to a Super Dome and I deliberately gave the instructions that when you take these people out don't bring them to the mass of population, bring them to this part and we will get them.

Thomas Deal, [ph] which is the EOC representative with me in the EOC, we walked to Super Dome floors not the ICS function. We figured at that point it was pretty much shut down, so we developed our own system internally at the board. We are good utility, we come together, and if we see we are not getting support from somewhere, by God we are going to find some other way of doing it, but you know what when it comes to money ladies and gentlemen, the thing that moves people, we can't do it now, 70% of our population. And when I was walking that floor with Thomas Deal at the Super Dome, I saw all these people and I said, my God, once when they get out of here, after the way they had to sit in here, they are never coming back, but you know how you educate the public? You keep showing it over and over, and what you say to them, if it happened to us it is going to happen to you. One of the greatest failures of FEMA was Hurricane Andrew. And after Hurricane Andrew, President Clinton appointed a man by the name James Le Witt to revamp [ph] FEMA, to redo it over, to learn from mistakes of Hurricane Andrew. You know what, they didn't learn.

In my opinion, it got worse. So, I think they need to abolish the Stafford Act, rewrite it, and look at how do you help the United States of America citizens, what is in the best interest of your country, not in the best interest of the treasury? And when you do that, you need to incorporate infrastructure. If you are developing the city in Japan, you are going to need to do infrastructure first and you are going to have to evaluate how you are going to do that, and you are going to need to support it, because you tell me one person or one community that is going to buy land in the middle of the desert with no water – electricity or water, and you know what, send them to me because we have got some smart land we would love to sell, because it is not going to be developed.

So, there is a lot of frustration amongst our team members. We have been put through a washing machine over and over and we are in a spin cycle and someone has forgotten to come and unload us. And now, that's it.

Mr. Jack Huerkamp

Can you help [Unclear].

Mr. Jason Higginbotham

Wait till you see this report. I have really been told, but you know, what is said is what

is said. It is the truth, and what I am saying is exactly the truth.

Hirayama

Yeah, the communication between you and EOC or FEMA is our concern, and one of our compared...

Mr. Jason Higginbotham

The local EOC worked, but you can live in a cardboard box and everybody working together, if no one is going to help come and get you out of it, then you are communicating to thin air.

Hirayama

At that time the JFO was – worked – had been worked?

Mr. Jason Higginbotham

The JFO was staffed with a lot of people that didn't understand.

Mr. Bob Moenian

What is JFO?

Mr. Jack Huerkamp

That's an abbreviation.

Mr. Jason Higginbotham

Joint Field Office. They didn't understand. You are in a community that you can drive to your local Wet Lobster [ph], have some food you know, flush your toilet, take a shower, you are not down in the trenches [ph], you are not listening to the people in the trenches.

Now, some of our people were busy trying to co-ordinate efforts, but you don't understand what is going on. You know and I will say this for General Andre [ph], the National Guard, my hats off to them. The Louisiana National Guard, met the call, the United States Coast Guard, deserves a Presidential Declaration for doing an outstanding and superb job, because these people rescued and they did a great job at it.

[Male]

I think the Coast Guard were here first.

Mr. Jason Higginbotham

Yes, the Coast Guard were here first, and that's the people, they are military people, they understood a mission, command control, what is my mission, I have to get it done, except for some incidents where you know [Unclear] because some things do break down.

But I am telling you right now, you know I just wrote a term paper for Tulane, and it was basically about Recovery versus Response.

Ladies and gentlemen, Hurricane Katrina was not our disaster, absolutely not, it was the cause of the disaster, the disaster is the recovery process. Plain and simple. You can meet with one person one day, they can tell you Mr. Bob we want to fix you up. While he is telling you about fixing you up somebody else is over there unfixing you, and before you know it, you have an invoice, you have vendors. And these vendors aren't from far, where are they Bob [ph]?

These people are who? People, they are only in New Orleans, small mom and pop's places, some big companies, only big to New Orleans, they are supporting the residents [ph], willing to stay here. And if we can't get the money from the Federal Government to pay them, they are going to shut down and those residents are going to say, "Now, you nail the boards up on my house, I am going somewhere else, preferably not by a coastline, inland."

Disaster strikes everywhere, you don't have to be by a coastline. You got earthquakes. I would like to say to California, look at this, because when an earthquake strikes you, this is the response you are going to expect. Unless we come together as a nation, all the governors, and you sit and you say, no you are not, not going to do it to us, it's got to be changed, and it can only change from the top down, not the middle man.

Hirayama

I think the situation, of course we have experienced a big earthquake.

Jason Higginbotham

Oh yes, exactly.

Hirayama

12 years ago, yeah, and we thought that the, this is our hypothesis to coming here that the water and sewage system can be independent from the EOC because you are very technically independent and you have your own national network like AWWA, and so we didn't think that you need the collaboration between – you don't need the coordination with an EOC because you can do independently.

Mr. Jason Higginbotham

Well, but unfortunately because it was set up...

[Male]

I explain with the example of the Hanshin earthquake, Kobe City. The water works bureau have mammoth damage, about 1500 pipes were broken, and it takes to repair about 3 months. And the citizens complained to water works bureau and came the shortage of the water, and want to wash their face and get a shower and many, many complaints. And in Japan, JWVA – Japan Water Works Association is the coordinator on the repair process of the damaged water works city in Japan.

Mr. Bob Moenian

Is that under the government? Does the government run them?

[Male]

National government.

Mr. Jason Higginbotham

No, it's private, but...

[Male]

It is non-governmental.

Mr. Jason Higginbotham

Here in America.

[Male]

Okay.

Mr. Jason Higginbotham

Unfortunately – that would be great, I understand your concept. You know, American Water Works Association, because they understand us, speak the same language, can help us in restoration and rebuilding. Here in the United States of America, they are not going to be the ones paying the bill. It comes from the Federal Emergency Management Agency; they are the ones with the checkbook. And you are going to have to play your game by their rules and you can have the AWWA telling you and the EPA telling them, you can't do it like this, you got to do it like that. That is one of the challenges. Our American Water Works Association doesn't have billions of dollars to hand out to us. That comes from the Federal Emergency Management Association and that's the only way you are going to get any money. Period.

Mr. Bob Moenian

The team of Portland, Oregon, after they did their first, initial help with us, the plan was

they are going to go and they are going to solicit other utilities around the country and come back with electricians, machinists, laborers, engineers, whatever to help us. We sat down in the big room upstairs; we explained to them our needs, clearly identified what we need. They said fine, they gave us a list of cities that they committed to from Sacramento, San Francisco, Oklahoma.

Mr. Jack Huerkamp

Seattle.

Mr. Bob Moenian

Just like what you were talking about, okay. Do you know that stopped, was because the state didn't give them the money.

Mr. Jason Higginbotham

The FEMA would – the FEMA and the state would not commit because, because ladies and gentlemen, they were in recovery.

Mr. Bob Moenian

Exactly.

Mr. Jason Higginbotham

We are no longer doing EMACs, which is called as Emergency Mutual Aid Compact.

Mr. Jack Huerkamp

[Unclear] emergency.

Mr. Jason Higginbotham

We are recovering, [Unclear] like, no, we are responding.

Mr. Bob Moenian

To all the equipment that we purchased through GE, we didn't have the manpower to go back and install them, we were banking, we were hoping that we can get those folks do it, because it stopped [ph]. And then locally you don't have enough people available to do the installation for you because everybody is gone. I mean right now you see the city got full of people from Texas over here because they know the jobs are – and that's what there was, but the fact is you didn't have enough trade or any technical people left here to do the work, so you wanted outsiders to come for dumping the stuff, the bottom line is the money. But I am going to say and I have said it before, we, us people and all the staff in the pumping stations, we didn't do our jobs because of the money, we did it because we are residents of this city, number one, and number

two, we have pride in our job. You know, my operator's job is to pump the water out, doesn't matter where it comes from, keep it down, pump as much as you can, as long as you can, but if he doesn't know the levees breached he is going to keep on pumping because that is what he is taught. And maintenance guy, his job is fix it, doesn't care what it is, he is going to fix it, whatever resources he has he is going to fix it. But the problem is, you know, what you are talking about looks good on paper but in this country of ours – does not work here.

Mr. Jason Higginbotham

And I'm not going to tell you that this is – the sad part about this is, it is not going to change.

Hirayama

I have one question, I had read the reports of the journal of the AWWA, and assistance for you, and assistance progress of the Portland Waterworks for you, and I don't understand what difference in AWWA and AMWA

Mr. Bob Moenian

What the difference is?

Hirayama

Yes.

Mr. Jack Huerkamp

They are like a lobbyist, they work with water utilities in helping get legislation approved through the EPA that benefits the agencies, and they don't have any...

Mr. Bob Moenian

There is rules . Right, they don't have no – but they set the rules, right.

Mr. Jack Huerkamp

...legal status. They help work with the EPA to get the rules established for water quality and the ways that the water system is maintained, but they don't have money to lend for repairs and they don't have any legal way to do that, they are basically our lobbyist.

[Male]

It's like a board that sits, as board of directors it sits over something. They make recommendations, they do the research, they figure out what needs to be done and why, but they can't fund...

Nagamatsu

You are talking about AMWA?

[Male]

AMWA, Association Metropolitan Water Agencies.

Mr. Jason Higginbotham

Metropolitan.

[Multiple Speakers]

[Male]

They are lobbyist, yeah.

Mr. Jack Huerkamp

Basically, I mean look at what the proposed legislation is from the EPA and how it is going to effect the water industry, and if there is something that they feel is adverse to the water industry, well, they will get together with all the agencies and lobby for changing the laws, but they are not in the business of operating and maintaining the water system.

Mr. Bob Moenian

I mean, none of us had – I mean we had a conversation with a gentlemen that came after the effect [ph], but that was just to collect information and wasn't here to help us what we need and what we don't need.

Mr. Jason Higginbotham

You know, you are pretty much sitting down by yourself, that's why...

Mr. Bob Moenian

But the bottom line is your people have to be educated.

Mr. Jason Higginbotham

You know I think...

Mr. Bob Moenian

Once the people are educated then they can make the way, they can be your lobbyist for you, but you see for yourself, City of New Orleans has, what, 40-50% of poor people and that's what you saw at the Super Dome.

Mr. Jason Higginbotham

Yes.

Mr. Bob Moenian

But they didn't have the means to get out of town. Everybody else left when we had means to leave, those folks didn't have no means to leave, and that's what the city has.

Mr. Jason Higginbotham

And now they are living on trailers in their homes.

Mr. Bob Moenian

And the trailer is the best thing ever happened to them.

Mr. Jason Higginbotham

And waiting for money to come in, so that as they look out their window and they look at their homes, they can one day celebrate Christmas, this will be their second Christmas that they will celebrate in their trailer. For some people the first because the trailers took so long to get here.

Mr. Jack Huerkamp

Took so long to get there.

Mr. Jason Higginbotham

What do you tell a person? What do you tell a person when they are in that predicament? You know, when you leave here today you will notice some dedicated Sewerage and Water Board employees that are living in those trailer homes, that didn't flee to another better part of the United States, that are committed to rebuilding their lives, bringing their children here. And they are committed because like Bob said, not because of the money the agency pays them, but because they have pride in their job and what they have accomplished. Most of these people have 15 plus years at the Sewerage and Water Board. And let me tell you as a person in that category, I can say that the reason I have pride in my job is because it wasn't given to me, I came in through the ranks, through Gabe Signorelli's department when I worked there in the machine shop. And I learned what it takes – of how this system operates, what makes it tick, and that's why I understand it, and that's why I have to keep pushing and lobbying my agency for – to the State Emergency Management Association. And when I go to the National Emergency Management Association Conference I am pushing them to understand why we need to have that pipe fixed and how do they get that station back. And how do you plan for disaster like this, you know, that's a question that keeps coming up.

You plan for it by learning from the lessons, one. Two, you try to improve on those plans, if all you do is writing out the action report, you should have done this and this and this,

filed [ph] the way in. You don't ever go back and see how you can do this. I decided like we just [Unclear] we were saying, we are here on our own, we are finding our helicopters, we are finding our fuel boats, we bought boats already, we have food supplies, we have storage containers of food, so I've gotten – we worked together as a team and we put all these in place in the stations. And what we are telling our people, listen, we had this by June 1st of last year, none of the other agencies around here had supplies, they are still waiting on their supplies.

Hurricane season came last year, we had stuff ready to go for our people, the reason why we say that because we are sending the message to our people, you are going to be – we are going to be prepared. The food, we all know will be there, the water we know will be there, because there was supposed to be a national stockpile, and to the defense of the government, there was. St. Bernard Parish, right by the Jackson Barracks, that's where the MREs were, that's where the water was, and let me show you the areas where the...

Mr. Jack Huerkamp

Areas where the [Unclear] was.

Mr. Jason Higginbotham

Jack said that this area here was flooded, over top the Jackson Barracks around – right here. They are wet.

Mr. Jason Higginbotham

The 72-hour supply of food, water, docks, boats, rescue equipment, all wiped out. And you know what they said, oh, oh, we got a messy [situation on our hands. So, it is not going to happen again, and I don't care if it is put back in the plants or not, it is not going to happen again. But it costs, you know, it cost us money. We, and I'll say that, 70% of your revenue going are emergency supplies with the bills and the food and all, cost us \$178,000. There are emergency backpacks, and we are still not where I want us to be.

It's hard, it's hard to get there, but again, you know, you are tied to an act that doesn't cover major disasters.

Mr. Bob Moenian

The only good thing is we didn't lose a single employee.

Mr. Jason Higginbotham

Amen.

[Male]

Nobody [Unclear].

Mr. Jason Higginbotham

No loss of lives.

Mr. Jack Huerkamp

None.

Mr. Jason Higginbotham

Not directly.

Mr. Bob Moenian

Some retirees, yes, but...

Mr. Jack Huerkamp

An after effect.

[Male]

During the storm rain [ph] there was...

Mr. Jack Huerkamp

[Unclear] people knowing, the storm was not over yet.

Mr. Jason Higginbotham

People are looking at the recovery efforts and saying, adios. I thought about it too. I really and still continue to think about it, you know, it is hard to just feel like, well, you know it is not our fault, you can't do without money, you know you can't.

Mr. Bob Moenian

Let me ask you all a question, when the earthquake hit Japan, who took over the recovery of Japan? Was it the government who did that or?

Hirayama

Local government, national government.

Bob Moenian

How did...

Nagamatsu

Basically - principally the local government have to take care of the every kind of the disaster management, of course and the response and recovery, but our problem is that the money, most of the money came from national government and, yes, the regional authority also helped national government.

Mr. Jason Higginbotham

Okay.

Mr. Jack Huerkamp

How fast did the money show up?

Nagamatsu

It takes - it depends. Okay, in United States, the FEMA has a lot of funding authority, they can distribute the money for the, according to the priority, but in Japan quite different, the each - budgets are sanctioned by each ministry, national ministry. So, for example the water and - [Japanese] ministry of health care has the money and the authority to provide money for the local government for the recovery of the water and sewage, so it is quite different, so it is quite interesting to me that the FEMA has responsibility to coordinate the water and sewage recovery, isn't it?

Mr. Jason Higginbotham

Yes.

Mr. Jack Huerkamp

Yes.

Nagamatsu

That's the source of the problem?

Mr. Jason Higginbotham

That is the problem. No, I'm serious, it is, you know.

Mr. Bob Moenian

But that and coupled with - I am going to say, I know I am going to get in trouble because this is a - but that coupled with a lack of leadership at the local and state level gets you where we are today. You know the fact that after the emergency we come back and we are forced to provide sewer service in distance, as far as over here, it just doesn't make sense to me, you know...

Mr. Jack Huerkamp

Because there are a few people who have their elevated houses, they want to come back.

Mr. Bob Moenian

You know, but that is not the right thing to do because I have to get the sewer from here all the way [Unclear] planted over there. This is not going to happen, you know. So, that is why like I said we concentrated there, but then once the politicians came back, now we got to provide services everywhere.

Mr. Jack Huerkamp

Everybody.

Mr. Bob Moenian

Now I lost my home in Lake View, I used to live right here. I lost my house, but I don't think I should receive any services because of the serious damage I received up there. You know, concentrate here, fix this good [ph], and gradually just expand up, that's what would have made sense to me. But no, we went at it because they say it is the public's right to demand services. Well, no, no, I am serious, that's what the thing is.

So, my point is, public can't understand, you know, you can't ask things that doesn't make sense. Now, maybe military should have stepped in and said, no, you are not going to get it, and maybe that would have been [Unclear] but that doesn't happen. General Andre, he was talking about, was a great guy, I wish he would have stayed here. But he didn't, so I don't know maybe the politics had something to do with it, but FEMA coupled up with local government and state level, then that's a problem right now.

[Male]

You know it's...

[Multiple Speakers]

Mr. Jack Huerkamp

You got a dinner with our Governor for a dollar [ph].

Mr. Bob Moenian

I saw that, did you see that, did you hear that?

Mr. Jason Higginbotham

No.

Mr. Bob Moenian

You didn't hear that?

Mr. Jason Higginbotham

No.

Mr. Bob Moenian

They are the chamber of commerce, here, and they were holding the fund raising program, auction for the holiday. They were auctioning a lunch with the governor, okay? They started the bidding, no this is true, go look in the news, this is on the news.

Mr. Jason Higginbotham

Governor Blanco.

Mr. Bob Moenian

Governor Blanco.

Mr. Jason Higginbotham

Yes.

Mr. Bob Moenian

They started the auction at \$1000, nobody bid. They even went to \$100, nobody bid. So, finally a bank executive director bought it for \$1, however, he gave the \$1000 because it was a charity event. But nobody cares, this is we are talking about Chamber of Commerce, the business people, they just don't care because she did not offer leadership and all she did was just talk. And that's not what you need, you need action. You didn't hear that?

[Male]

I missed that, no.

Mr. Jason Higginbotham

One of the things, and we talked about all the problems, as a local Utilities Emergency Manager, let me give you some of my solutions to the problem, I think it is only fair, if you are going to talk and say something is wrong, you should have a solution back in your mind. [Unclear] emergency management used to start off by working at, first of all, having a bond which is money, bond issued to the utilities. You are a legitimate applicant, non-profit organization, you have a legitimate disaster, yeah. You then simply put in – some people could just give you the money, grant managers here at the utility, grant writers here at the utility, but you fund it, and you draw down and give the money in increments. And you work locally, instead of everybody going to that one big bowl and trying to get the money out of it, you work locally together, you are still being monitored, you still have to have properly procured contracts. If you have an emergency contract, you are [Unclear], but you have the people working with you to say, okay, we got to stop this contract now, we now must go off a bid. No, I think that maybe we can do this a little bit differently, let's come together.

You work together. You don't go back off to somewhere in Baton Rouge and have me bring invoices up there, and you don't de-obligate the money because you feel different than the other person that was before you. You know somebody comes in here to do my job after I am either retired or fired, but after that hap-

pens, they are going to say I can do a better job than Jason because Jason messed up here, here, and here, because they are going to build themselves up.

Well, let me tell you about FEMA. One thing about a new FEMA pack [ph] officer, they love to build themselves up and shoot the other guy down. You know how they do that? They go by decisions that he made, money you are already spending, coming back and taking it away because they feel, well, he really didn't look at the rules right, I interpreted it differently, and I want to do this. In the meantime, you spend yourself chasing your tails while your vendor says – I quit, I am not working for you no more, don't ever ask me to come back again, if it's FEMA money.

Give the utilities the money. Give the fire department, give the city the money, have grant managers to oversee it, we are not saying we just want you to write us a blank check, but we are saying there is a better way of distributing the money for the people, that's my solution to it.

Mr. Jack Huerkamp

That was – part of the problem with FEMA is that they wouldn't leave people here more than so many weeks or months.

Mr. Jason Higginbotham

No, they won't, and they are still that way, Jack.

Mr. Jack Huerkamp

They didn't want the employees of FEMA to become too familiar with the City employees, so every two or three weeks they would ship them out and ship somebody new in. So they never learned what the problems were.

[Male]

We had to start over.

Mr. Jack Huerkamp

We had to start over and retrain them, and as far as – most of the FEMA employees were not government employees, they were contractors...

Mr. Jason Higginbotham

They all were contractors.

Mr. Jack Huerkamp

...hired by FEMA, who the first time they saw water was when they went to the faucet

and turned it on. They knew nothing about a sewer water drainage system.

Mr. Jason Higginbotham

And they are all contractors that work...

Mr. Jack Huerkamp

But they were all engineers...

Mr. Jason Higginbotham

So called.

Mr. Jack Huerkamp

...that supposedly knew everything.

Mr. Jason Higginbotham

We had an industrial engineer telling us how to run a Waste Water Institution, that was real fun. You know they are all consultants that work for a consultant company, that has problems with the consulting company that we are consulting out with, personal issues.

I've one person, a FEMA person telling me, "Oh, you are giving too much business to company X, why would you sign somebody else?" And I said to him, "We did a competitive bid and the company which you work for didn't even submit a bid," because it was FEMA funding, hello. You know, we can't award today a sewer assessment project, today, to go out and assess the other 70% of our system, so we can tell our contractor that repair problem is here, because they view that as an assessment. We have an EPA order to do it, so we told the EPA, they will talk to FEMA because FEMA doesn't understand, and if FEMA doesn't want to give us the money, you find the money, because we can't do it because we don't have no money to pay the doggone water bill.

Now, you want us – and it again gets back to Bob. We are certifying [Unclear] ghost town [ph]. You know, if they are going to film - the ghost town because it's not going to come back to yet. Their money from the [Unclear] home is in there.

Mr. Jack Huerkamp

They have still water and drainage available.

Mr. Jason Higginbotham

And when the money from the [Unclear] home comes back, ladies and gentlemen, we are going to have to tell them, hold your horses, we got to assess it. And it is not the utilities fault, if you don't have money we have a contract awarded, it is ready to go. We

can't give the letter to proceed because under Louisiana law we got to have money.

Just last night, at 8 o'clock at night, FEMA in their infinite wisdom after sitting down with the head of FEMA down here and his commitment to working with us, his pack team submitted without my knowledge or my state packs, a de-obligation, \$9 million. We have already been paid 10. We are now going to have to figure a way to get \$5 million back, asking for intervention to stop it, that's on the sewer assessment. And you know what happened? I asked them to obligate more money so we could do phase two. FEMA decided, why obligate more money, we will just take the money we gave you away because they feel that the other person that was there before him, they want to show that they didn't read the letter of the law right. But you know what, they sat at the same table you people are sitting at here today. And I am not talking local FEMA guys, I am talking FEMA-FEMA people. And when we say FEMA-FEMA, they are actually employed by the Federal Government. And we told them, anything wrong with the plan and how we are going to go fix our sewer system. Oh, no, we got to do, we got to do it, so one hadn't done it.

We built, a year and half later, some genius comes by and decides that that wasn't the way it should have been done, it should have been done this way, this is ineligible, this isn't eligible, this isn't eligible, this isn't okay, we are only going to give you \$5 million and you have to give us back \$5 million.

And you know how we give the money back? On every project that we have – we have 483 projects like this one, the money is taken back on – your waste water treatment plant has \$3 million invoices at my desk, when I submit those \$3 million invoices, state is not going to pay me.

[Male]

Just take that off for what you owe.

Mr. Jason Higginbotham

Take it back off until I meet the \$5 million, then I get paid back. You know what I have to tell that poor vendor, "Are you real good friends with the consultant company, because if so, they might give you that \$5 million that we weren't supposed to give them," but by law we have to pay that consultant company. We entered into a contractual agreement. Gee, FEMA, are you here to help, because if this is what you call co-operation I sure hate to see

when you don't co-operate with somebody what goes on? And yeah I use sarcasm because I am fed up to here with it. I am fed up with the lies [ph], I am fed up with meetings, I am fed up with procurement, I am fed up with money being taken back, and I am fed up because you know what, you know who they blame it all on [ph], the little guy.

He - it is going to come down to me, that is why I begin it unless I get fired or retired or die, I think die may come before either one of the three, because a counterpart of mine had a massive heart attack and he was involved with the FEMA process, and it has taken its toll on my health, on all of us. I failed the stress test for my heart, I developed hypertension and have high blood pressure, none of these problems existed until I met these 4 letter people.

And sorry, but that's the way we feel, you know. And I am going to tell you as I was sitting in the EOC in the aftermath of Hurricane Katrina, me and my friend that do the FEMA Claims looked at each other and goes, [Unclear] our lives again ready to get torn up. I said, oh, so it is going to be the FEMA Claim from hell, and it is the FEMA claim from hell. The devil himself has arrived and started writing project worksheets, and he is now coming and taking the money back. And that is not fair to general public. Because who is the United States of America, the people, and you know what the people are going to say, what your watching pal?

Mr. Bob Moenian

I don't care what you say, it is still a great country.

Mr. Jason Higginbotham

It is, the people, the people make it the country, and when the people go to those election polls, they are going to pull these triggers, [Unclear] we see that you got to say the same things to the other states. Because earthquake happened to you, the same earthquake can happen anywhere.

The tsunami, we are in Mother Nature. Mother Nature is going to do what Mother Nature wants. Of course, you know the concept of building levees is that, the Federal Government's idea that they could stop the results of Mother Nature, that's that you know, yeah, okay. Maybe a barrier around the [Unclear] is next.

[Male]

It's not a project [ph].

Hirayama

Let me check a small matter, a small fact. You mentioned about the mutual aid agreement.

Mr. Jason Higginbotham

Mutual aid agreement, yes.

Hirayama

You know, the water and sewage system also had a mutual aid agreement with other cities and..

Mr. Jason Higginbotham

We have with the American Water Works Association, but we are establishing them with other water utilities. We are being proactive on this one. We thought by having this one agreement with America Waterworks' Association, FEMA would recognize it and relate it to all the other public utilities. But we find out that is not the case, you need to hand it with every individual assistance. So based on that we will have the mutual aid agreement and we will do the emergency compact too. Between the two of them, I sure hope Portland, Oregon gets paid sometimes before the next millennium. These poor people in Portland, Oregon, still have been out of pocket \$2 million and haven't been paid one red dime yet because of the bureaucracy. It makes me feel so sorry for my poor emergency manager, Perry Hopkins. It makes me embarrassed to the point that when he calls it used to be a happy occasion, now it is like I am so ashamed that this is happening to you and so is the Sewerage and Water Board, and we are doing everything we can to get you paid but you know what, we have a pen, we don't have a checkbook.

Nagamatsu

Okay so, AWWA is collective agreement.

Mr. Jason Higginbotham

Collective agreement.

Nagamatsu

You also have an individual agreement?

Mr. Jason Higginbotham

We will now. After...

Nagamatsu

You will now, but before the Katrina you didn't have it?

Mr. Jason Higginbotham

No, we did not, we just had it with the...

[Male]

So that is the lesson.

Mr. Jason Higginbotham

Lesson learnt, habit...

Hirayama

Lesson learnt.

Mr. Jason Higginbotham

Yes, no matter what they tell you.

Nagamatsu

Oh, I see. It is very interesting.

Mr. Jason Higginbotham

Well, because it was in the plan of protocol that you didn't have to have it.

Nagamatsu

All lessons, after the Kobe Earthquake, it is not only the water and sewage and public utility, but everything. The Kobe city government tried to individually make a contact – compact, mutual aid compact, and not only Kobe but also the other cities tried to...

Mr. Jason Higginbotham

Yeah, but the...

[Male]

Within their – individually.

Mr. Jason Higginbotham

The compact here, we do have compacts, we have – called EMAC.

[Male]

Yeah I know, I know.

Mr. Jason Higginbotham

But EMAC, she don't work. EMAC didn't get Portland paid. FEMA wants a mutual aid agreement. I'm trying to tell them [Unclear] your own policy, you are the one who came up with the EMAC, that is an agreement between governor to governor, then pay it. We requested help through the right channels that came from the local EOC to the state EOC, to the EMAC, EMAC told Portland, Oregon, come down here, they followed it, because we don't have a mutual aid [ph], are you people getting me? Well, okay fine, fine. So, Perry, look, let's just go ahead and do a mutual aid

agreement and have my work. But you know, meanwhile you know what they saying - we are never coming down again, that's what America is saying, the people here - we haven't been paid, and we are not even coming under New Orleans. But if the disaster strikes, next thing, we are staying put because we owe \$2 million. Now I think they will get paid when the next disaster strikes Bob, and they don't get the money because they don't want them to play [Unclear] again. It is sad.

[Male]

Alright.

Mr. Jason Higginbotham

Okay.

Mr. Bob Moenian

I got to go, if you all have any questions for me just give it to Jason, I would be more than glad to get back with you, okay.

Mr. [Male]

Yeah, we will be, okay.

[Male]

Thank you very much.

Mr. Bob Moenian

So, nice meeting you all.

Mr. Jason Higginbotham

And let me end by saying this, it is not that we have lost faith in America, we have lost faith in the policies that govern the disaster. I believe that FEMA, and when you write your article please put this in there, I believe that FEMA still needs to be around, but just like Hurricane Andrew it needs to come back and interview me and other emergency managers and listen to us because we are not doing this because we don't like - we have been put through the process. You are not getting anything from me that is not factual and true and cannot be sustained, and it is sad.

I wish I could say to you today, it was a beautiful experience that everybody is working together, the money is flowing, things are great, the ICS function worked just the way the text of the 6 courses that they have said it would, everything was perfect. They came, but you know what, that's why we define the word disaster as being something that over, over, and I use the word over, accommodates and takes all your resources away from you and causes devastation. The disaster is not at

the time the hurricane hit you, it is recovery, because I believe that the FEMA people in their minds they are working off a government legislation and they are right to say assessment is not eligible, because it says it. But in the school of common sense, how would you like me to begin this thing? Do you want to go [Unclear] the sewer pipes and tell me where the leaks are [Unclear] the street, go for it. There is no other way for me to know.

The water system, he has a beautiful machine shop, great equipment, we have found people that can operate his equipment. Gabe, after the storm how many machines you had?

Mr. Gabe Signorelli

How many now?

Mr. Jason Higginbotham

No, no I mean right after the storm when Portland was coming in to help?

Mr. Gabe Signorelli

2 more than I have now.

Mr. Jason Higginbotham

2 more than you have now.

Mr. Gabe Signorelli

That's 6.

Mr. Jason Higginbotham

They are not coming, his employees haven't returned.

Mr. Gabe Signorelli

I need 30.

Mr. Jason Higginbotham

He needs 30, to operate, he has got the equipments. The equipment still runs?

[Male]

He is still with [Unclear]

Mr. Jason Higginbotham

That's what the problem with recovery is.

If you look at your disaster and when you compare it to the notes of our disaster, we would be much obliged to see how your government responded to you, so that maybe we can share that report with our government and say, "Here is something you may want to do," because it can happen again. This is too massive, and the best part about the whole situation, factual, is had the levees not breached, we wouldn't have had this problem. So in my

mind, the hurricane did cause the levees to breach, but the design of the levees caused the levees to breach. Right, right Gabe? Okay.

Mr. Gabe Signorelli

We didn't say a word until the day after, midday.

Mr. Jason Higginbotham

Who built the levees? Thank you, federal government, now come over here and help us rebuild our system. I hate to say but, you know, it is not the blame game but if you are telling us that you won't replace a 100-year-old pipe, well, the 100-year-old pipe was minding its own business in the ground, the levees broke, that you designed, they caused the 100-year-old pipe to break.

Mr. Gabe Signorelli

It would have lasted 22-1/2 years longer.

Mr. Jason Higginbotham

There you go. So don't come here with this nonsense. You know our Mayor got a man on the radio, you know, and I told the Mayor, that's it, I am going to take the offer. I want to get on the radio now, because I would rather go on unemployment than keep dealing with all this bureaucracy, this is tangled [ph] mess. And you know, I used to have a lot of good friends.

[Male]

Where?

Mr. Jason Higginbotham

But I am losing many. Chief Matthews [ph] gave you a [Unclear] to come see.

Hirayama

Please change to topic number 4.

Mr. Jason Higginbotham

Sure, number four. Now we have got four. Risk and crisis communication

Hirayama

Yes, this is the assessment rollup of New Orleans City, and how did you manage your system of recovery information and reported to the EOC?

Mr. Jason Higginbotham

We did this through my office of emergency management. [Unclear]. We have staff members in the EOC that gave daily briefs and up-

dates and continue to do so with this, and we coordinate with our team managers here. And our EOC is no longer operating here, we are recovering but we still have our senior sections chiefs are still operating, and we would get those information from – Jack has people working, he would send them to us and then we would [Unclear] for the EOC and tell them to change something from amber to red. So we coordinate – the office of emergency management coordinates with the EOC.

Mr. Jack Huerkamp

And we needed to update your contact to us, we get the information...

Mr. Jason Higginbotham

Yes, exactly.

Mr. Jack Huerkamp

...and pass it down to you.

Mr. Jason Higginbotham

And that's how it is done, it's - we follow the ICS protocol. You know, that's why the OEP listens to the office of emergency management from here. We can't call up over there and get information, they are not going through us because the ICS protocol is that you must know that the information is authoritative and trustworthy. And if you are not following your own protocols on who gives you the information, then you may get misinformation turned in, and that's what we are following.

T. Kondo

So somebody in Sewage and Water Board have to attend to that?

Mr. Jason Higginbotham

That is me, that is me.

T. Kondo

[Unclear] you attend to them each day?

Mr. Jason Higginbotham

I am the Emergency Manger of my system [Unclear]. Every Wednesday now. but during the hurricane it was every three hours.

T. Kondo

Okay. Three hours?

Mr. Jason Higginbotham

Yeah, we were given updates on the podium in trying to coordinate, and that's what we are - all of our managers are being put through the

ICS 100 and 200 class which starts tomorrow, and so that they can understand what the new structures – because we are going to build an EOC here. And they are going to be coordinating with us. This is something we are going to start, they are going to be coordinating a central location, getting the resources there to our EOC, which will then – only one person will be communicating to me at the EOC.

They will communicate their needs to our EOC, which in turn will give me a situation, we will probably be interlinked, and then also we have redundant backup communications. In the event communications fail, there would be a representative from my office at the state EOC with the satellite phone from this EOC who has the authority to request assets. So we are going to have that backup. But this phone [ph] because it will be for Jack to call me, Gabe will call me, Bob will call me. It was so much – and then people on the radio would call, but we are going to get this to where they have got one situation up here where they can call and get their help and they get their answers.

Now I asked Jason to come rescue me for help while I am still sitting two days, but I heard you, I heard you. You know, so we are changing the way we communicate, but there in the storm it is all going through the local EOC, our list of contact with the people that work under me, and we gave – and I gave the brief updates, every three hours, and as the times changed then we went ahead.

T. Kondo

But you were one of the – just one of the members supporting agency in ESF 3.

Mr. Jason Higginbotham

ESF3 yeah, we had energy.

T. Kondo

That your cards showed ESF 3, and...

Mr. Jason Higginbotham

Yeah. We had energy, BellSouth, Cox Communications, we had Atmos energy also for the gas, and some of the same from our parish area. So, yes, we had all the utilities together which is great because we really got along great together, you know, we knew what we faced together, whether it is water or pipe or electrical wires, you got the same common problem, common goal. So yeah, ESF 3 we all stayed together.

T. Kondo

Stayed together to coordinate or?

Mr. Jason Higginbotham

We had our own little private floor space, and that's where we sat.

Hirayama

Was that Hyatt [ph]or?

Mr. Jason Higginbotham

No, no, this - then we moved over to the Hyatt and expanded to become more comfortable, but we were at the 94 [ph] City Hall communicating this together.

T. Kondo

So for example in the operational briefing and meeting do you report independently for the...

Mr. Jason Higginbotham

For the Sewage and Water Board, yes.

T. Kondo

Yes, not by ESF 3.

Mr. Jason Higginbotham

No, but you know it is a protocol that is done that way. We didn't – they didn't follow that, they wanted to talk directly.

T. Kondo

Okay.

Mr. Jason Higginbotham

Now, once when we got to the Hyatt, we still didn't operate that way. We still didn't [ph] operate that way today. The reason being when it comes to utility I can't train energy to talk for me, and if I get up there to talk for energy, energy is never going to get the information. All the other functions work well, ESF 3 can't work that way. I don't know anything about energy; he doesn't know anything about waste water.

Mr. Jack Huerkamp

The phone call [Unclear].

Mr. Jason Higginbotham

So ESF 3 winds up, energy speaks, water speaks.

T. Kondo

Okay.

Mr. Jason Higginbotham

And therefore – because they ask questions and you ask me about a feeder [ph] out somewhere, I am going to tell you...

Hirayama

So, you mean that nobody coordinated within ESF 3.

Mr. Jason Higginbotham

No, but we worked together to come – to write the action plans, to write the operation.

Mr. Jason Higginbotham

The only thing separate will be the operational briefing we report.

Hirayama

So do you feel the necessity to work together within the ESF 3?

Mr. Jason Higginbotham

I think that we need to give all briefings. I don't think that – we need to coordinate together, but when you speak for your agency it needs to be separate because there is not cross strain [ph].

Hirayama

What you did?

Mr. Jason Higginbotham

Well, I was behind energy, energy spoke on his system, then I spoke, and if we need to coordinate where energy - I need energy to come help in the system, which they did, we would coordinate together, and our Cox Communication gave us some communications that they had satellites and what have you. But when we gave our briefings, I stood behind energy, energy spoke on energy system answered the questions from the incident commander, then I went up there and spoke on Water and Sewage Board and answered the questions. It is the only part of ICS that they have to understand. You see again it is developing someone that does understand utilities.

Fire department, yeah, because fire and EMS [ph] they are kind of – police department. They have the EMS representative speak on behalf of all three. It is rescue and response. They speak in the same language. What you are calling sewage, you know, are you going to hire a plumber to do your electrical work? No. Okay.

Nagamatsu

Is there any order or command from the incident commander, probably Matthew?

Mr. Jason Higginbotham

Chief Matthews coordinates with his section chiefs.

Nagamatsu

Section chiefs.

Mr. Jason Higginbotham

And we were under, according to ESF protocol we were under the operations section.

Nagamatsu

Oh I see, yeah.

Mr. Jason Higginbotham

So we listened to our operations sections chief who happened to be Captain Brown [ph] of the fire department. And working on that, we answered to Captain Brown. Captain Brown would act if a situation reports, then he would say, okay, ESF 3 is now reporting, here is this and if there was a specific question for Water and Sewage Board, then I would go up there, but we reported to Captain Brown and Captain Brown reported because you can only span [ph] and control no more than 7 people.

T. Kondo

Yeah. So unity of command works at the EOC.

Mr. Jason Higginbotham

Unity of command works, but it worked locally.

T. Kondo

Locally yes, yes right.

Mr. Jason Higginbotham

You worked [ph] other places, and it is hard to get command and control accomplished and we are sometimes - we follow, we ran out of procedures where we went, Captain Brown, move out of the way, I am going to see Chief Matthews, because something is not being answered. It wasn't Chief Matthews' fault, it wasn't Captain Brown's fault, they couldn't get the answer from where they needed to, at the state EOC. And you know with the water utility, I got people waiting, I got things to do, I got water rising here at the Carrollton plant, I don't have time to play hot potato. I got to find out the answers, yes or no, and I said in

an hour it is going to be no. I said in a couple of hours, there is going to be no water and then my answer is going to be no. I'm not going to turn back home and quit [ph] because it filled up. But now you get to see what the frustration I went through.

You know, he told me – well, I don't care who you have to talk to, get a boat, come and get me. I don't know how you had to but I know the helicopter brought me here and there is no way I am going to get out from here without a helicopter. I think he needed a break though, you know I've seen a break for you.

Mr. Gabe Signorelli

That was no break.

Nagamatsu

Now what are you – utility company – utility authorities have the, always replacement and the maintenance operation, but I understand that hurricane Katrina using EOC protocol, this is assessment role of your recovery information, the management, and what does the - confused in the usual method and differences in using the EOC protocol?

Mr. Jason Higginbotham

Internally?

Nagamatsu

Yes.

Mr. Jason Higginbotham

Yes, we are going to use the EOCs' protocols here internally at the Sewage and Water Board in our EOC, but in a more of an operational function. The reason I say this is because we have to understand what our managers are doing. You don't change the ICS function but you can take [ph] it to match your agency.

We are going to have briefings; we are going to have section chiefs. We are going to have people that from the field report in. The section chief may not be, for instance, on operations section. It may not be the chief of operations, he may be scheduled to be out there with his people, but he can send someone who has his knowledge and some support and you are going to learn that in there to be the person, which he appoints to be his operations sections chief, and that's the person he will coordinate with. And we find this important because he has to have the briefings because you get too much – your phone can only ring so many times, and the executive director that is

making decisions for the agency needs to know that the best resources were requested for the better [ph] of the agency.

He needed something to – an equipment – it is very hard for the EOC to understand, this is one of the things that is going to help out when you needed to get the piping that you wanted to get the canal water and get the filters into your [Unclear] at the I-10. It was hard to coordinate that with me at the EOC because that was the only diesel fuel [Unclear] all, but it is important. Whereas he will have somebody from his maintenance division, someone that knows exactly what he is talking about and they are going to fax over or describe briefly in detail in a reporting format of what Gabe needs. So when Gabe's request comes to Jason at the EOC and the already filled out protocol needs to be send to the state then, the resource he will get. Because you can ask for a generator, I need a cord to plug it up, you got a generator.

So, that's why ICS and protocols like this are important to follow those procedures, so you want to put the right resources that you can use and not just something that has been delivered to you that's un-useful. So I hope that answered that question for that.

I think – recovery and reconstruction plans, we had them but we didn't have them to something of this magnitude. You know we had them for your minor street flooding, we had protocols to deal with street flooding, responding there is no...

Mr. Jack Huerkamp

Yeah, hurricane, chemical spills, spill in the river, we had...

Mr. Jason Higginbotham

Yes. Everything but not for levee breaches.

Mr. Jack Huerkamp

Even the critical past, worst case hurricane didn't encompass levee failures, they encompassed levee overtopping.

Mr. Jason Higginbotham

And I will say to you right now, if it happens again, it is going to be the same results. Even though we are considering purchasing those temporary pumps at our sewer stations, we are going to move our vehicles further out, we are going to have the temporary pumps installed further out, but still after the aftermath of the storm, you are going to have the same problem because I had [ph] to put the temporary

pumps by the pumping station, I'll be the laughing stock of emergency management. Come on, you know, it has to be stored somewhere out, but you got to get your equipment back again, and you got to feed those people and keep those people, and you know, then you got to pay those people and that becomes the next problem. You talk about reconstruction plans, FEMA doesn't pay for someone sitting down, so because they are with their vehicle, waiting to come back they are not eligible for reimbursement because they are not performing storm related duties. FEMA doesn't pay for the ESF functions either, I was ineligible for receiving [ph] a reimbursement because they claimed I wasn't working on storm related issues.

Storm related issues with FEMA is actually out there doing something to fix something, to prevent something. Now I consider my function just as important as any one else's function, but for an emergency manager, not to be eligible, that's sad. And it's based off their own principle that they created. I mean, come on, how crazy is that, you created ICS, you told us what needs to be in there, they went after the storm, you don't want to fund the people that work for the ICS. You know, I hate to say but were you sober when you did the planning and thinking? Because it doesn't make sense to come out with a mandate and then not back it up, and I say this because ladies and gentlemen I worked 24 hours a day for three weeks, impossible? I slept with the radio earphones on my head, on the floor, I'm not thinking why or what – and I was in the Hilton, [Unclear] I was in comfort compared to the poor people at the drainage stations who slept on roofs.

Mr. Jack Huerkamp

Or boiler room floor.

Mr. Jason Higginbotham

Or the boiler room floors, with generators banging at your ear. So I am not complaining about my conditions, but what I am saying to you is, it is an important function, I had to be there, and for our company to take on the financial risk of – you know, how many people we got to send with those vehicles? We evacuated 200 pieces of equipment; everybody had to have a driver. That's 200 people that we are going to have to pay for at time and a half because of our policy to sit with a vehicle because they are on the clock, they have left their families, what are you going to tell them?

Take the vehicles for we are not going to pay you or you are not going to get money take your vehicles. They don't understand that, and it is not because it is their fault, the person who developed the Stafford Act did not do a risk assessment, did not follow their own procedures and do a hazardous risk assessment and define what are the consequences of that risk. It's an old plan.

There needs to be a Stafford Act for hurricanes, one for earthquakes, one for large events, one for small events, and then you take out that rule book, then you set it down to the people that work the disaster and say read these rules and tell me if this would've helped, and we can say yes or no and make amendments to that plan. But you can't have one book for all. That's in the emergency response protocol book, our own federal guidelines to respond to disaster, national response plan, says all hazards, and then there is a different section for each hazard. Why isn't the FEMA Stafford Act that is going to fund this the same way? Because I'm telling you the funding you are going to need for an earthquake is not the same funding you are going to need for a hurricane.

And we are not saying don't be accountable for taxpayers dollars, but what I am saying, I want the Federal government to be accountable for my taxpaying dollars. You are paying people to develop plans that aren't working. And don't you think it is time you hired somebody that can develop something? I will do it for free. Send them all down here, let us review, not to take everything we say, you don't have to pay for everything, but pay for the things that the storm caused. You can go into my office – they can audit me. Everything we claimed reimbursement for, I swear on my soul was a result of Hurricane Katrina, because you know why, there wasn't a public voucher before Hurricane Katrina for the restoration of our drainage and sewer pumping station pump, waterline repairs, sewer repairs throughout the whole [Unclear] system. Now come on, you know, this frustrates me, unless you go work for the IRF, these people.

Mr. Jack Huerkamp

I will call you to [Unclear], you are frustrated.

Mr. Jason Higginbotham

Tell you what, I think FEMA people previously worked for the IRS, you don't want to go into a whole different system.

Hirayama

And I have one question. In the emergency restoration period, do you have the maintenance decision and which, priority to quality or quantity, to supply the potable water?

Mr. Jason Higginbotham

I think it would be – the quality of potable water is what we mandated by.

Mr. Jack Huerkamp

Okay Yeah, we have to deliver water that meets or exceeds the EPA regulations for it to be deemed potable.

For a long time we were delivering water just for fire protection, but yeah we have to certify the water is safe to drink. So it had to meet the regs [ph] and at whatever quantity the system demands, and it's the problem we are having right now because of the leaks that exists in the system, we are taxing the treatment process to provide enough water to keep the pressure up and that's the problem.

Mr. Jason Higginbotham

Are we one of the first people that you have interviewed? I mean with Hurricane Katrina? Like on the list have you interviewed someone else about their responses from Hurricane Katrina yet or are we the first?

T. Kondo

No, no - we've – this morning.

Mr. Jason Higginbotham

Has anyone else complained about FEMA?

T. Kondo

Yes.

Mr. Jack Huerkamp

You are not the only one Jay [ph].

Mr. Jason Higginbotham

I just want to say for the record that the Sewage and Water Board isn't picking on FEMA, FEMA is picking on us. Okay? That's right. You will find that throughout the whole system.

When you enter the City of New Orleans, you will see a sign, Welcome to the City of New Orleans, FEMA go home, because they are killing us.

[Male]

Which just stands for fix everything.

Mr. Jason Higginbotham

Fix everything?

Nagamatsu

I think that President Bush was criticized because of the very slow responding of the federal government after Katrina.

Mr. Jason Higginbotham

He is still being criticized.

Nagamatsu

Still.

Mr. Jason Higginbotham

I think that the President issues orders down with responsibility and demands for them to happen. Someone forgets the listening to what the orders the President has sent. We have a representative down here by the name of Don Paulo [ph], appointed by the President of the United States of America to work with us on the FEMA issues and recovery efforts.

We have met with Don Paulo. After meeting with Don Paulo, our relationship with FEMA got worse. Somebody is not listening to the President, and I don't think it is the Presidents fault, I think if the President did an internal investigation he will find out the reports that he is getting and what actually happened down here are two different things. And I will say this about the President, he has the whole United States of America to worry about, he has a war in Iraq that he is dealing with. He has people he put down here to do the job, and just like anybody else said, cover themselves; they are going to report back to their boss that things are alright. Well, today the Sewage and Water Board is going to be informing the President about some of the problems hopefully, through the right channels, and letting the President know, not doing the job for you down here.

That's what happened to Jim Brown [ph], he didn't answer the call correctly, but I think it is time for some other people to be fired, including every single person that is working down here for FEMA. And I think you need to bring in someone with no ties, any other consultant company to work this thing.

Nagamatsu

What I wanted to say is that, yes, [Unclear] President Bush will criticize and he was very anxious about the voters, public, and he immediately come to New Orleans and he exhibit his concern about rescuing the people and

something, and I think that his political activity, his political mind changed the priority over the disaster response, you said the FEMA didn't support to the public utilities instead their concern is search and rescue.

Mr. Jason Higginbotham

The President changes, sir, they could care less, that doesn't change their minds. They continue with the same path they always continued on.

Nagamatsu

No, I think that FEMA has a very sophisticated, educated staff, and they know that the recovery of the infrastructure is critical, I believe. So, I think that they do not pay, the reason they didn't pay for the infrastructural recovery, its response, is because of the political reason from the...

Mr. Jason Higginbotham

I see what you are saying, no, I - we feel it I guess because we have been through it. We feel it, they didn't pay for it because they get paid on billable hours.

If you complete your mission too early, in my mind, this is my own opinion from working the process, if you complete your job too early then you go home, you don't have job, no more. If you keep creating havoc and problems, you have a job for a lot longer. So they didn't pay for the recovery effort right now, one, because they are using Stafford Act for their defense, two, because I believe they want to just continue to receive money and be paid on the job, because if you fix me whole, you have to go home.

If you continue to fight with me and target me and only to the point where I am bleeding, do you help me? Then you are going to stay here for a lot longer, you know. And I think by him coming down here, committing to America that he was here to help was good for New York City, it was good for San Francisco, California, it's good for Boise, Idaho; it is good for all the other major cities throughout the United States, they hear that because that made them feel like that when it happens his commitment is there. But it wasn't good for the Mayor in New Orleans and it wasn't good for the City of New Orleans because we are still bound with the same problem that [Unclear] the first time he came down here. And I am not blaming him, I am just saying the people that is down here doing the job are not listening to what his directive is. They want

to continue to have their job, and they are dead set on being here for another 10 years.

Nagamatsu

So I am asking what do you think, why they didn't listen to your voice?

Mr. Jason Higginbotham

They didn't listen to the voice because they want to keep their jobs, because they are not going to mend [ph] and because the Stafford Act hasn't been amended by the Congress of the United States. The policy must change.

If you tell me and I am a police officer, that looting is no longer a crime, but in the law book looting is a crime, I am going to have to continue to arrest you for looting.

Mr. Jack Huerkamp

Okay, I have to go, I have a...

Mr. Jason Higginbotham

I am sorry.

Mr. Jack Huerkamp

I have a ride, see you later. Nice meeting you all.

T. Kondo

Thank you.

Mr. Jason Higginbotham

The talk is sheep [ph] but the policy is where the rubber hits the road. I think if the President would have come down here and made a commitment to change in policy, the FEMA people would have responded because they have it in writing.

Every time I meet with them, son of a guns, they quote the policy. I know the policy, I am asking for a little bit of common sense, that's all. Policy hasn't changed, sir. Sir, the policy has not changed one word, the Stafford Act has not been amended. No, no, stayed the same, so you know what they say? President Bush is president right now, when I get audited it might be President Cinderella and President Cinderella's feelings aren't the same political motivations of the other president.

[Male]

You are going to jail.

Mr. Jason Higginbotham

See what I mean, because that pack [ph] officer that made that decision all from a word of mouth didn't follow the letters of law.

Somebody over him must change the letters of law.

Nagamatsu

After Kobe Earthquake, Japanese government has passed 14 or 17 new legislation immediately after the earthquake, such kind of treatment.

Mr. Jason Higginbotham

I will be honest with you, working in disasters you will see a change in our policy probably as a result of Hurricane Katrina in 2008. They will start making some amendments to Stafford Act. It takes them that long to understand – 2008, it won't be immediately after and you know they could do it.

They don't have to change – ladies and gentlemen you don't have to change the whole policy. You can make an emergency amendment to a policy. See in this...

[Male]

I will piggyback somewhat to what Jason says, we are still going to be in recovery in 2008 and 2009, 2010. Maybe by 2008 they are tired and maybe they want to go home and maybe they want to see some progress, we are not seeing progress now. So maybe by then they will be ready to what hasn't worked in three years after this hurricane, let's do something different to make it work. That's what we are at.

Mr. Jason Higginbotham

My hats off to the Japanese government for mending your policies. Let me ask you a question.

If they had not changed your policies, would it have been difficult for you to be made whole again?

Nagamatsu

Yeah. I think so the new legislation after Kobe earthquake included financial, special financial treatment, raising the National fund to the local government. It is very helpful for the local government to fund – to finance the disaster response activities, and that's great. And big difference between the United States and Japan is that in Japan the bureaucrat has a lot of discretionary authorities, so they can change the policy by themselves without legislation.

[Male]

Yeah, it's called running on common sense.

[Male]

Something that I'm working for, let's do it, but Like Jason says, the common sense is there, we know what needs to be done, you all know what needs to be done.

Nagamatsu

But there is a problem, the problem is that we the people cannot control that, you know, you can control it by legislation, you can, if the people want to change the policy we can vote politician and they will change the legislation, but in Japan we cannot do that, everything is on the bureaucrats, that is another problem.

Mr. Jason Higginbotham

Under control, right.

Nagamatsu

So we are discussing which type of the disaster response is good or not, bad, and it is very – so for us the United States System is very ideal before coming here.

Mr. Jason Higginbotham

Yeah, exactly. When you go next door, when you look over the fence the grass is greener, when you get over there it changes color.

Nagamatsu

It was quite an interesting discussion then.

Mr. Jason Higginbotham

I'm going to write down my contact, I still haven't had business cards reprinted. Just kind of gave them all, I am going to write down my contact information.

Nagamatsu

Okay.

Mr. Jason Higginbotham

I ran low on business cards. If you are ever having a workshop and you need anything, please give me a holler.

Nagamatsu

Yeah.

Mr. Jason Higginbotham

I think that you can go back home and you can take some of these experiences and tell your government thank you for having those policies in place where they could be amended.

Here you go. If it wouldn't be for my pride in my job and my dedication to our Executive Director and the staff, because I've seen what she went through, I would have took the job at Portland, Oregon, and moved my whole family up there.

Immediately after the storm, while working with Portland, they began to like my concept, [Unclear] responded to one main crew for this disaster and they offered me a job. I didn't leave it because of people like my former boss Gabe, people like my director, friends that I call force [ph] because we are in this together as a team, we may not always agree with each other but we stood by each others' side during this, and we are the men and women of the Sewage and Water Board that stood the watch during Hurricane Katrina, and we are proud of the fact that we stood that watch, because we did it because of our job and our duty, just as a fireman did it for his job and his duty, policeman did it for his job and duty.

One of the things, I would like to come out of this, out of anything, not the FEMA policy changing, that is one [Unclear], for us to be viewed as those first responders, because that's what we are. We are water utility responders that responded to the call of duty, and Hurricane Katrina she didn't note the difference between a police, a fireman, or our emergency management for the Sewage and Water Board. That is all we are asking for. Thank you so much.

Hirayama

Thank you very much.

Multiple Speakers

Thank you very much.

END

Interviewee:

Dr. Mike D. McDaniel, Secretary, Dept. of Environmental Quality, State of Louisiana
Dr. Bijan Sharafkhani, Administrator, Office of Environmental Services, Dept. of Environmental Quality, State of Louisiana.
Mr. Lenny M. Young, Administrator, Office of Environmental Services, Dept. of Environmental Quality, State of Louisiana.

Interviewers:

Nagahisa Hirayama, Dr. Eng., Research Scientist, DRI.

Date:

13:00 -14:00, December 15, 2006.

Place: Department of Environmental Quality, State of Louisiana

Hirayama

So, I greatly appreciate accepting this meeting and I'm glad to see you. And today is the – my research – my background, science background is environmental engineering, especially the water supply engineering. And – but recently Japan has many floods and disaster in 2004. And 10 typhoons attacked Japan and I have the research activities of the emergency debris operations after the flooding disaster.

Dr. Mike McDaniel

Okay.

Hirayama

And today I would like to learn the lessons from the Hurricane Katrina in the operation of the emergency debris.

Dr. Mike McDaniel

Sure.

Hirayama

My questions are – sorry – I prepared only three papers. In this interview I have four points. First topic is the amount of the debris in the Hurricane Katrina

Dr. Mike McDaniel

Do you want just the Hurricane Katrina; we also have Rita just a month later, you want both of them or just Katrina? You want Hurricane Rita and Katrina, the total or just Hurricane Katrina?

Hirayama

Only Hurricane Katrina.

Dr. Mike McDaniel

Katrina has New Orleans.

Hirayama

New Orleans.

Dr. Bijan Sharafkhani

Rita went to Western part of Louisiana.

Dr. Mike McDaniel

So you are just really interested in Katrina, the New Orleans area, okay.

Hirayama

Yes. And second topic is the strategies of the emergency debris operations. It is important to remove the debris from the town quickly – as quickly as possible. And you know, this week I went to the New Orleans City and see around the town, but many places have not removed the debris. And what kind of the strategy or the plan Department of Environmental Quality, State of the Louisiana has to do emergency debris operations for the Hurricane Katrina? And the third point is the planning emergency debris operation is the required estimation of the amount of the debris and do you – how do you estimate the debris after the Hurricane Katrina and the emergency response phase and do you use the ways [ph] to do the estimation. I know – I – yeah. And the last topic is the – it is important to do – reuse and recycling system is important to do sustainable environment or to make the sustainable world from the view point of the environment. And before disaster in Japan and United States usually has the recycling and reuse system, but after the disaster or on the restoration period after the disaster and 2005 Hurricane Katrina and I think the reuse and recycling system did not work well, but what do you think the emergency debris into the reuse and recycling systems?

Dr. Mike McDaniel

I'm going to give you – because I just finished it. This is something that I have put together that summarized kind of where we are. It's just a very high level summary. But it does have a lot of the recycling, reuse information in it. We recycled over 1 million white goods; 250,000 small engines, 600 or something electronic goods; 20 million pounds of hazardous

waste. All of that is in here and I'll just leave that with you as to take with you as a reference. So, and about 100% of the green waste was recycled and reused [Unclear] used in – as fuel in some – I think a couple of entries pick on that along the west side of state.

Hirayama

Yeah.

Dr. Mike McDaniel

So that's a good summary for you. Now, another thing I think that would probably be helpful for you is to give him a copy of that. This is the debris plan that has been updated now, but that's what we started out with and as essentially the strategy and the methods and the results are where we ended up as far as what we – how we wanted to manage the debris from the storm and you are welcome to take that with you, look over with your convenience as well.

Hirayama

But the first – my question is the amount of the debris...

Dr. Mike McDaniel

Katrina area?

Hirayama

Yes, Katrina area.

Dr. Mike McDaniel

You have it, don't you [ph]?

Dr. Bijan Sharafkhani

Yeah, what I'll do is just put a little book sheet off a PowerPoint, which lays out how much debris?

Dr. Mike McDaniel

Because it separates the two from....

Dr. Bijan Sharafkhani

It separates Katrina and Rita and tells what the total amount is. It lays out how much was processed, you know, and for us what remains and it goes through a lot of information that's in our document...

Hirayama

Well, the management in the volume or weight?

Dr. Bijan Sharafkhani

Cubic yards.

Dr. Mike McDaniel

It's in cubic yards, it's been – it's used both interchangeably. Some people talk about tons of waste and it's – I think it's migrated more at least what I'm saying to cubic yards.

Dr. Bijan Sharafkhani

Cubic yards, right.

Hirayama

Only cubic?

Well, there is some – early on the estimates were so many million tons. About 22...

Dr. Mike McDaniel

Right, 22 million tons.

Dr. Bijan Sharafkhani

Tons, but then it went to 55 million cubic yards.

Dr. Mike McDaniel

Now, the conversion between cubic yard and tonnes, in this particular case was C&D it's about 5 to 1.

Hirayama

5 to 1?

Dr. Mike McDaniel

5 cubic yard:1 ton.

[Multiple Speakers]

Dr. Mike McDaniel

Okay. For C&D.

Hirayama

Construction and Demolition.

Dr. Mike McDaniel

For vegetative debris, for wood waste, that's about 12:1. 10 to 12:1.

Dr. Bijan Sharafkhani

Another thing, amount that they interchanged between tons and cubic yards will be based on with when we submit reports to the department, most of the facilities were dealing with it in tons and that's why we gave both conversions.

Hirayama

In Japan, the opposite ways...

Dr. Mike McDaniel

Its metric tons?

Hirayama

Yes.

Dr. Mike McDaniel

I think the cubic yards is more consistent with how we measure volume or capacity of landfills because we don't treat that in tons, especially in cubic yards.

Hirayama

Right. 22 million tons.

Dr. Mike McDaniel

Right.

Hirayama

That's the same volume of the 1995 in Kobe, the Hanshin Earthquake is the – at – 20 million tons is occurred in the Kobe City.

Dr. Mike McDaniel

Yeah.

Dr. Bijan Sharafkhani

But New Orleans we think is a lot of more...

Dr. Mike McDaniel

Yeah.

Hirayama

Lot more.

Dr. Mike McDaniel

Somewhat even when telling about some other...

Hirayama

Yeah.

Dr. Bijan Sharafkhani

Flooding...

Dr. Mike McDaniel

Oh, yeah. We still have 30,000 storm-damaged homes that have to be demolished and disposed off. There is somewhere around 80,000 additional homes that are damaged that we really don't – somebody has got to make a decision whether they are going to rebuild or not? So there is additional, I think, 12 million cubic yards.

Above the 55 so we are really ultimately going to get somewhere around 67 million cubic yards. And that does not include the

reconstruction debris that we are going to get as people rebuild homes in all of that. So, that's going to be a huge amount of debris overall.

Dr. Bijan Sharafkhani

And if you look at the handout, it's broken down in different information materials. How many Parishes we have completed debris removal or how many have that are still are converting [ph] debris removal? And it gives you information about what's being hauled and what's the remaining in Orleans Parish and St. Bernard obviously the two major impacted Parishes in there.

Dr. Mike McDaniel

And the parish is like a county.

Hirayama

Yeah. I know.

Dr. Mike McDaniel

Okay.

Hirayama

Just like – and well in the local governments, under the state.

Dr. Mike McDaniel

Parish.

Hirayama

...county.

Dr. Mike McDaniel

Yeah.

Dr. Bijan Sharafkhani

Parish.

Mr. Lenny Young

Parishes.

Dr. Bijan Sharafkhani

The Louisiana's parish is right. Mississippi is county; it's the same thing.

Dr. Mike McDaniel

Yeah, same thing.

Hirayama

I know.

Dr. Mike McDaniel

But it also talks about what the demolition mission as far as the houses, what's been es-

estimated in Katrina, what's been estimated for Rita. In Mainland Rita, most of the demolitions are completed there. And what's remaining as far as St. Bernard in New Orleans.

You could take up any [ph] kind of question just e-mail us back you know we will respond to your e-mail...

It will give you chance to spend some time with your colleagues, if you have got any questions or additional information just e-mail on the correct e-mail, Lee John [ph] or Lenny.

Mr. Lenny Young
Yeah.

Hirayama
Thanks. Well, the [Unclear] see the New Orleans City and the difference at the district and some district completely removed of the debris, but some district not completely, why?

Dr. Mike McDaniel
Well, some of is just amount of resources are available for and go on the priorities first. But one of the things particularly when you get down into the Lower Ninth Ward and the areas where you see there has been – there's a lot of homes that have been destroyed by – and they are still standing and falling and everything else. We have had, and this is a problem I think, I don't know if it's unique to the US, but we have property access rights that we have to have. And we can't find the owners to get that in some cases.

So, we are going through a very thorough, trying to be fair, but we are trying and the city makes the decisions and that's where the 30,000 homes basically they say, we are going to condemn that home and demolish it and remove it. But before you do that, you got to try to find an owner, notify him and give him a chance to decide whether they want to do that or not. That takes time. It's taken a long time to even come up with a process to get access to the property. So that's certainly been an issue that has slowed things down.

Right of access in order to get to the property to take the debris out. But we still have vehicles that are sitting in yards, no-fences, no-houses and we have got boats still down there. We can't go get them until we have basically an approval that says you can go on that property and take that debris.

Hirayama
Well, do you think– how long do you completely finished operation of the emergency debris, how long?

Dr. Mike McDaniel
We – and Lenny you know better than me.

Mr. Lenny Young
Well, that's going to be depending upon right now on New Orleans of the amount of debris has to be removed as far as the houses, but that's all dependent upon the ability to process the debris, the quicker they can process it, of course that shortens the timeframe, but if it takes longer to get the debris process, with the recycling or disposal at landfills, that's going to determine whether it takes you know months versus years to do it.

Dr. Bijan Sharafkhani
Right now, I guess on the demolitions I think I remember Church numbers they are demolishing are only 12 to 13 houses of faith [ph] and the Corp of Engineers, who is responsible for, is saying they should be handling about a 100 a day and if you take a 100 a day and divided into 30,000 that's going to be at least a year...

Dr. Mike McDaniel
Yeah.

Dr. Bijan Sharafkhani
I think...

Mr. Lenny Young
So you are talking about a year or better.

Dr. Mike McDaniel
Yeah.

Dr. Mike McDaniel
An ultimate process.

Mr. Lenny Young
I think most reasonable people understand nothing works without optimal efficiency.

Dr. Mike McDaniel
Right.

Mr. Lenny Young
It will be a couple of years yet before all the debris is taken care of disposition.

Hirayama

Well, I have the phrases [ph] and well the question is the Great Hanshin earthquake and after the Great Hanshin earthquake it is three years takes the completely the debris operations...

Mr. Lenny Young

Without any earthquakes, yeah. Yeah, yeah. Well, that's – things just don't happen for us and there are a lot of bureaucratic rights, political decisions, disposal decisions, resources, all those issues have to be dealt with and it's – I think the public or the perception is that you should be able to go out and clean this up pretty fast, and the reality is recovering from something this massive takes an extraordinary – it just takes a while.

Dr. Mike McDaniel

Now do you all recycle everything in Japan?

Hirayama

Well, in the case of the Great Hanshin earthquake is very, very small volume of the recycling of the debris and most of the debris is the landfills in the North Kobe, but....

Dr. Mike McDaniel

Particularly when you have destruction like that where you got the debris so intermingled, destroyed, and actually dangerous to deal with, it gets – its not like having a home set in New Orleans, you know, and deconstruct the whole thing out and so it's little different situation.

Hirayama

Yeah, but in Japan, at the 1995, and we have no role of the reuse of the recycling of the electronic device.

Dr. Mike McDaniel

Okay. We did about 600.

Hirayama

And we have the role of the reuse and recycling and the recycling system of the motors, and cans – just like milk cans or beer cans and we have the reuse and recycling system, but for the electronic device, the reuse and recycling system in 1995 we have no systems.

Dr. Mike McDaniel

Okay, I thought – maybe I'm really thinking of another place that Japan was – maybe they are not far as for along the [Unclear] the municipal waste. They had some systems they were researching for segregation and recycling

out of municipal waste and that's something different that we are talking about, but we actually did as you will see in the little note that I gave you in the secretary's message is a summary.

We've recycled quite a bit. We got about 50,000 pounds of refrigerants back out of the refrigerator. We recycled around them; it will be ultimately be well over 1 million refrigerators.

We had 4 million orphan containers.

We had 250,000, I think, small engines that we recycled. We are going to have around a 100,000 vehicles that are going to be recycled; about 50,000 boats that are going to be recycled.

So, there is quite a bit of recycling, but as far as segregation of the piles of debris that are demolished homes and all that there hasn't been a lot of segregation other than before we demolish a home, we will go in and take out white goods and household hazardous waste and then demolish the home.

Hirayama

I'm surprised you know where the – we learned recycled and the reuse system and emergency operations from the Hurricane Katrina, we should learned more.

I want to show you some pictures, – these slides show the pictures in Japan as the 2004, 10 typhoons attacked Japan and the Niigata Prefecture and the Hyogo Prefecture and North of the Hyogo Prefecture, the Toyooka City had more damaged and this is the debris. But...

Dr. Mike McDaniel

That would be a staging area right there, a temporary site where you...

Hirayama

Temporary site, yes.

Dr. Mike McDaniel

All together [ph] on stage, okay.

Hirayama

Yes. But this debris is not reuse and recycling.

Dr. Bijan Sharafkhani

It's pretty difficult, yeah.

Hirayama

What – this is the...

Dr. Mike McDaniel

That's recycled stuff or what?

Hirayama

No. The suppression of the debris.

Dr. Mike McDaniel

Okay.

Dr. Mike McDaniel

Was it furniture?

Hirayama

Yes, this is furniture and this slide shows the Tatami in the Japanese style, the floor just like the...

Dr. Mike McDaniel

Oh, okay.

Hirayama

Just like carpet in the U.S.

Dr. Mike McDaniel

So all the furniture and the bedding and the carpet all went in landfill as well. Okay.

Hirayama

Yeah. All these to do landfill.

Dr. Bijan Sharafkhani

What kind of landfill?

Hirayama

What kind?

Dr. Bijan Sharafkhani

What kind, what type? Do you have a liner system in your landfill?

Hirayama

Type of landfill?

Dr. Bijan Sharafkhani

No, was it – did it have a liner?

Hirayama

Liner system?

Dr. Bijan Sharafkhani

Or was it just a hole that you filled in?

Hirayama

Almost hole to filled in.

Dr. Bijan Sharafkhani

Do you have a membrane, geo-membrane?

Hirayama

Yes.

Dr. Bijan Sharafkhani

Had a geo-membrane and clay?

Hirayama

Well...

Dr. Mike McDaniel

We have – I will try to help you out of it. We have different types of landfills. We have a Type I and II, if I'm correct, that have to be lined and they have to have synthetic liners to make sure there is no migration of contaminants outside to ground water and other sources. And that's where municipal and Type II – some household garbage, some industrial waste. Then we have a Type III, which is a C&D type disposal facility, which has clay, but it doesn't have to have a synthetic liner or it's not to the same standards as the ones that take household and municipal waste. And I guess they – the question is that – was this one.

Hirayama

I know about the many local governments in the damaged area, but they have different ways to landfill and I don't know this....

Dr. Mike McDaniel

So you don't have national regulations?

Hirayama

Sorry, I don't know in details.

Dr. Mike McDaniel

Okay.

Hirayama

But in case of the Hanshin Earthquake in Japan located around the sea, and many, many bays or many lakes and to do construct of the land in the sea or the lake.

Dr. Mike McDaniel

So they actually build or fill in water areas.

Hirayama

Yes.

Dr. Bijan Sharafkhani

For their – to get rid of the debris.

Hirayama

They tried to do.

Dr. Bijan Sharafkhani

Okay.

Dr. Mike McDaniel

So did they chose certain locations based upon where the damage was, so you know wherever it was close to the damage that's where [Unclear] is or those lakes and you just put the debris there and dispose over there.

Hirayama

Well...

Dr. Mike McDaniel

In other words, they don't – one of the considerations that we have to deal with is do you take it to the landfill that's already operating, it's 30 miles away or do you try to find some that are local, so you got shorter haul times, so you are not spending all the time driving to take it to a spot. So is there – do you in Japan try to minimize the distance and therefore try to get things done more rapidly?

Hirayama

Well, and temporary site – and for the temporary site is nearby the airport or port and just like to easily access to the site– and trucks and ships and the – I don't know in 1995 they used the airplanes

Dr. Mike McDaniel

Yeah.

Hirayama

And I think the airplanes were not used, but the ships and the trucks were used. In Japan, most of the cases they use the trucks.

Dr. Bijan Sharafkhani

Do you reduce the volume before you dispose off or do you grind or compress before it goes into the disposal?

Hirayama

Yes tried to.

Dr. Bijan Sharafkhani

This one looks like it has been grinded or whatever, it does like, doesn't it?

Dr. Bijan Sharafkhani

Do you use grinders to try to reduce the volume that you're...

Hirayama

Maybe yes.

Dr. Bijan Sharafkhani

Okay, okay.

Dr. Mike McDaniel

Yeah, that looks like that's, you know.

Dr. Bijan Sharafkhani

Yeah, it looks like it has been...

Mr. Lenny Young

It has been grinded, yeah.

Hirayama

This is before the grinding.

Dr. Mike McDaniel

Yeah.

Hirayama

And besides...

Dr. Bijan Sharafkhani

And then they would take this and take it to the landfill.

Mr. Lenny Young

Take it to the landfill.

Hirayama

Yes.

Mr. Lenny Young

Yeah.

Dr. Bijan Sharafkhani

Okay. To ocean fill or lake fill.

Dr. Mike McDaniel

Reclaimed land, right?

Hirayama

Yeah.

Dr. Mike McDaniel

Okay.

Dr. Bijan Sharafkhani

[Unclear] have Corp of Engineers...

Mr. Lenny Young

Yeah.

Dr. Bijan Sharafkhani

Or our good friends in the Oman's East [ph].

Mr. Lenny Young

Yeah.

Hirayama

And my interesting thing is the estimation of the amount of the debris and what way do you – how did you estimate?

Dr. Mike McDaniel

Oh, how do we do it?

Hirayama

Yes.

Dr. Mike McDaniel

Corp – actually the FEMA has a program. Federal Emergency Management Agency.

Hirayama

So and the ESF Number 3, not?

Dr. Mike McDaniel

They have a program – computer model.

Dr. Bijan Sharafkhani

Yeah.

Mr. Lenny Young

They have a computer model...

Dr. Bijan Sharafkhani

And we can get the information based on – because the Corp used there to determine how much debris is going to be managed in each parish and then they basically use those numbers to determine overall what we have to manage.

Mr. Lenny Young

But typically each home will generate about 300 cubic yards.

Hirayama

300 cubic yards?

Mr. Lenny Young

Yeah.

Hirayama

Each house?

Dr. Bijan Sharafkhani

Each house, yeah. 300 cubic yards of C&D, construction and demolition.

Hirayama

In case of the Hurricane Katrina?

Dr. Bijan Sharafkhani

That's actually that's general...

Mr. Lenny Young

Yeah.

Hirayama

General.

Dr. Bijan Sharafkhani

General, yeah.

[Multiple Speakers]

Dr. Mike McDaniel

It could be a tornado or a storm.

Hirayama

Tornado or the earthquake.

Dr. Mike McDaniel

Yeah.

Hirayama

Earthquake, I think that just a house has become to much cubic yards of debris when it's destroyed.

Well, the flooding disaster is just like the – disaster is the flooding disaster and earthquake disaster, but I think after the earthquake disaster and houses is became to the debris, but flooding disaster the housing – destroyed houses changed to – became to the debris, but house has no structural damage when the house is not damaged, only the furniture or equipments and electronic devices changed to debris, but the volume or the weight is the – many, many difference between the disaster of the Hurricane and the earthquake, do you think?

Dr. Mike McDaniel

Okay, that's true. That is true because I mean flooding, I mean you got furniture and so you got to throw it away, you know, whereas earthquake, you know...

Dr. Bijan Sharafkhani

Earthquake might rattle it up or break a few bench, but if it's underwater for six weeks...

Dr. Mike McDaniel

Yeah, yeah.

[Multiple Speakers]

[Unclear]

Dr. Bijan Sharafkhani

Yeah, yeah. But that's the contractors, you know, that's what they were working you know – this is...

Dr. Mike McDaniel

But it is American model established on experience.

Dr. Bijan Sharafkhani

Yeah.

Hirayama

[Unclear] mentioned the unique generation of the debris and on the flooding disaster in Japan and – not volume only the weight and the 4.6 tons debris per houses is occurred after the inundation of the houses and after the flooding disasters, 4.6 tons per houses.

Dr. Mike McDaniel

Okay, so that's 300 cubic yards. You say flood [ph], yeah that's about it...

[Multiple Speakers]

Dr. Bijan Sharafkhani

No, that's more than 60.

Hirayama

60.

Dr. Bijan Sharafkhani

Yeah.

Hirayama

Well, in the – after the earthquake in the same case is the Hanshin's earthquake is the – and 44 tons per houses.

Dr. Mike McDaniel

Okay. That one makes sense.

[Multiple Speakers]

Dr. Mike McDaniel

Yeah, that's pretty much to.

Dr. Bijan Sharafkhani

Yeah.

Hirayama

But the difference between Japan and United States is that the – well these pictures show that – this is the no damaged houses and the not comes to the house – building or the houses...

Dr. Mike McDaniel

You don't have to destroy those or demolish them, yeah.

Dr. Bijan Sharafkhani

Yeah.

Hirayama

Only the furniture or the devices, equipments, that's the smallest earthquake – after the earthquake the volumes debris. But the Hanshin earthquake destroyed building and the houses damaged and...

Dr. Mike McDaniel

And how many homes did you think were destroyed in that particular earthquake disaster?

Hirayama

Well, completely collapsed houses – the number of the completely collapsed houses is, you know, more than 100,000 houses.

Dr. Mike McDaniel

Okay. In New Orleans, it was about 160,000 homes that were flooded and that's just in New Orleans. And that didn't include South of New Orleans or on the North Shore of Lake Pontchartrain and, of course, which you saw in Hancock and so...

Hirayama

And, the damaged area of the Kobe City is very smaller than New Orleans City on Hurricane Katrina.

Dr. Mike McDaniel

They probably, yeah, [Unclear], yeah.

Dr. Bijan Sharafkhani

Well...

Hirayama

When did the FEMA systems have the estimation of the debris after Katrina?

Dr. Mike McDaniel

I'm sorry what happened?

Hirayama

When...

Dr. Mike McDaniel

Oh, no, no. They do it. After they – I guess they look at the satellite, I mean, like McDaniel said you know it was – New Orleans was flooded for how long for two, three weeks.

Dr. Bijan Sharafkhani

Yeah.

Dr. Mike McDaniel

They looked at the satellite and they, I guess, superimpose the data they get from satellite onto their model. And that's what they come up with the...

Mr. Lenny Young

They can do house count, they can...

Dr. Bijan Sharafkhani

Vegetative...

Hirayama

Vegetative...

Mr. Lenny Young

Vegetative debris and all that.

Dr. Mike McDaniel

Yeah.

[Multiple Speakers]

Mr. Lenny Young

Based on that square [ph] footage.

Dr. Bijan Sharafkhani

Yeah.

Hirayama

Japan has no system to do estimation of the debris.

Dr. Mike McDaniel

You might – our guys – when you get back, shoot an e-mail, we'll send you an e-mail. We'll word it who to ask about that model, to get you more information on it.

Hirayama

Thanks.

Dr. Mike McDaniel

Because if they use that to determine how much debris had to be managed in each parish and that's how we used to determine who had to do what as far as financing FEMA funds and those type of things.

Hirayama

Well, the FEMA has the Instant Command System and the debris operation includes Emergency Support Function number 3, I understand is right?

Dr. Mike McDaniel

Well, as a national response system FEMA's really just part of that and that includes all of your first responders, federal government, agencies, and then the various state agencies, and it brings them all together in Instant Command. So, you would have state government, local government, and you would have the federal government agencies and then, of course, FEMA sitting in the middle of it as well, they are not making the decisions so much except when it gets who is going to pay on the reimbursement of expenses. And that's where they are get involved in. They make estimate of the damage. For example, if a sewage treatment is damaged, they estimate the damage. If it's over 50%, they will replace it; if it's less then they would fix the damages. So FEMA has a lot to do with the reimbursement, disbursement of the money, the funds to help in the recovery.

Hirayama

Yes.

Dr. Mike McDaniel

And we do have people calling – they're public assistance officers that they have in each of the Parishes that help the municipalities determine how much fund is going to be needed and how they need to submit documentation to them to request the systems for those funds.

Hirayama

Well, in Japan the funding or the budget of the emergency debris operations have the Ministry of the Environment, not just like the FEMA in Japan, the Emergency Operating Centre...

Dr. Mike McDaniel

You do have Emergency Operating Centre there as well.

Hirayama

They have no authority to do budget or to operating the emergency debris, but Japan has the Ministry of Environment and national government they will.

Dr. Mike McDaniel

Do they have a similar system of coordinating with local governments and – I'm not sure how that would be arranged over there, but if you're on an island state, and I'm not exactly sure how you are doing this over there, but you have local input plus you have the national government involved with it working at an emergency operating centre in the vicinity of the disaster.

Hirayama

Yeah.

Dr. Mike McDaniel

Okay, okay.

Okay, but the Ministry of Environment is responsible for clean up and recovery?

Hirayama

Legally. Local Governments should have

Dr. Mike McDaniel

Do they do the disbursement of funds?

Hirayama

Yes, half of funds to damaged local governments.

Dr. Mike McDaniel

Okay, interesting.

Hirayama

There are different systems in the United States and Japan. In the U.S. the budget of the debris operation rely on the estimation system, result of the estimation?

Dr. Mike McDaniel

Well, of course, Congress has to approve it, yes.

Dr. Bijan Sharafkhani

Yeah, congress has to approve the amount of money that ultimately goes – flows to it, but ultimately it's these estimates to drive the estimates of what kind of funds would be required.

Now this is just talking about debris, but you've also got funds for supporting individu-

al's food, housing, social services, transportation, all of those things are also part of the overall cost to recovery. And those are factored in as well. I forget I think its 110 billion....

Dr. Mike McDaniel

That's right, yeah.

Mr. Lenny Young

110 billion at last count. That's all they...

Dr. Mike McDaniel

I think Louisiana shared with us 60 billion maybe – 50 billion, 60 billion.

Dr. Bijan Sharafkhani

Something like that.

Hirayama

Only Louisiana – Add to Mississippi?

Mr. Lenny Young

Louisiana.

Dr. Mike McDaniel

So a part of that is also to rebuild the levee system.

[Multiple Speakers]

Dr. Mike McDaniel

Yeah. That's also another part.

Hirayama

Well, I know. The next issue is the reuse and recycling, how did you do citizen's level and recycle and reuse plan and so I think – I talked about that in Japan after the disaster the debris is – citizens do not need to separate the debris and at least the burnable garbage and garbage do not burn to – but the usually we have the separation of the garbage is five or six materials; the burnable garbage, the garbage does not – do not burnable, steel, plastic, glasses and the tires and so on. And have more than five types of separate of the garbage. But after disaster the citizens do not need to separate whereas in Hurricane Katrina after that?

Dr. Mike McDaniel

No, in fact I don't think you would want to probably try and assort through debris ever after a hurricane or an explosion or anything like that because its safety considerations, you just don't want to do it.

Now, we have professionals in EPA and DEQ and the Corp that recycle certain items; the refrigerators, small engines, free-on out of the refrigerators, electronics goods, tires, so there was a good bit of recycling, but it was done by the professionals and a lot of it was stuff that was sorted out of the landfills, in other words we sorted as they brought material in, there are spotters and they pull out anything that shouldn't be going in the landfill, propane containers or something like that.

So there is – there was household hazardous waste. They picked up 20 million pounds of household hazardous waste by going in and pulling it out and then disposing it properly. So there was that segregation, but now the people that wandered – there were few people down there anyway. Because everyone obviously had to leave when we had that much flooding and damage, there was no infrastructure to support anybody. So as far as recycling of the actual, say a demolished home didn't know we will as we demolish homes now go in and take out white goods, household hazardous waste, and asbestos, visible known asbestos materials, but other than that it will be demolished, it will be wrapped in plastic and taken to a landfill.

Dr. Bijan Sharafkhani

We did have what we called our debris management sites, which were based in staging areas for the different things you had. Certain areas for burning the vegetative debris, the grinding of the vegetative debris, we had staging areas where we would actually go in and those areas separated white goods out – separated out tires, so it wouldn't be [Unclear] when we went to the landfills. They tried to segregate as much as possible, but before it went to any landfill for disposal. We have about 400 old sites between Katrina and Rita Parishes.

Hirayama

So I understood the government has the function of the separation – separate of the debris after the Hurricane Katrina, is it right?

Dr. Mike McDaniel

I'm not sure.

Hirayama

Citizens get out the refrigerators to the temporary site for the...

Dr. Mike McDaniel

No, actually the contractors picking up the debris would separate them. In some cases, where a home was flooded they would move them out to the Corp [ph] to be picked up.

Hirayama

And citizens move them to the front of their houses?

Dr. Mike McDaniel

Yes, yes, yes. In fact you could drive around, and you would see a lot of refrigerators sitting outside and that just meant take it as obviously there was no power, so everything inside was rotten anyway. So all of them basically were recycled. But the citizens per se were involved in that part of it, but not in the larger clean up or the demolitions, you really don't want untrained, unequipped people going into the homes that are falling over or are in danger of collapsing so it's mostly done with professionals.

Hirayama

Operated to the – there is only government or the public works and the company – public companies?

Dr. Mike McDaniel

No, this is FEMA – under the National Response Plan the Corp of Engineers is responsible for the debris mission. So the US Army Corp of Engineers was responsible for management of the debris from the disaster.

Hirayama

US Army Corp of Engineers.

Dr. Mike McDaniel

Corps of Engineers, right. They have contracts with companies – large companies that go out and actually do the work, they oversee it. So it's federal government contractors that do the majority of it. Now, EPA had contracts with us, to do a lot of the hazardous materials and recycling work.

Hirayama

Electronics...

Dr. Mike McDaniel

Electronics, for example.

In some of the municipalities we may have through FEMA could have had contracts on their own, but they hired contractors similar to

what the Corp here to do that work for them. So in every case we had professionals actually handling that work.

[Male]

Yeah. But FEMA would basically compensate whether its municipality or the Corp they pay for the debris pick up. You got to be there too [Unclear] keeps you going...

Dr. Mike McDaniel

Okay, good. So you have got strategy questions in here and if you look at that particular report, Debris Plan, it will give you a lot of good information on the strategies that were employed.

Hirayama

Thank you very much. When I am going back to Japan, if I have some questions, can I send you e-mails?

Dr. Mike McDaniel

You bet. Yeah.

[Multiple Speakers]

Dr. Mike McDaniel

Yeah, all e-mails are [Unclear] there. Feel free – any of these guys, if you got a question just shoot us an e-mail. That's pretty effective way to communicate long distance.

Hirayama

Okay, thank you very much. I am glad to see you.

END

Interviewee:

Concordia Architecture and Planning, Mr. Steven Bingler and Ms. Bobbie Hill

Interviewers:

Tamiyo Kondo, Ph.D. Research Scientist, DRI.

Date:

17:00 -18:30, December 14, 2006.

Place:

Concordia Architecture and Planning, City of New Orleans

Kondo

Let me introduce myself. I'm a research scientist working at the Disaster Reduction Institute which was established after Kobe earthquake funded by the national and local government. There is a research function in this institute and also museum function for the children to learn about the earthquake

Bobbie Hill

I heard about that.

Kondo

Oh, You do?

Bobbie Hill

The delegation that recently traveled to Kobe from here went to the museum.

Kondo

Yeah, we met each other at Kobe. My background is city planning and I took PhD degree three years ago and I have studied about recovery process after Kobe earthquake and also World Trade Center recovery process. So this is my third case study in New Orleans to figure out how the New Orleans is going to prepare recovery planning framework .I have visited Lower Ninth Ward and also Lakeview twice, and it seems to be that the recovery is a long-term process in New Orleans and when I visited Lower Ninth Ward there's no people there, and the statistics said that just 2% of the population is back in the area. So, and then I have studied after Katrina that Bring New Orleans Back Commission rebuilding plan in January 2006 and after that there is Lambert

Plan and also the UNOP plan became in September 2006. So my question is a simple. Would you explain that how the Lambert Plan and also this commission BNOB plan were going to unify in one single citywide plan and , the UNOP process is going to prepare by district level and citywide level. I have also talked with Ms. Leslie Alley in City Planning Commission and also Dr. Marla Nelson in New Orleans University a few days ago. So I have learned such things about this issue, but would you start with this question?

Bobbie Hill

Well, it's interesting to hear you say that, you did Kobe which is earthquake and then you did World Trade Center which is terrorist and now you are doing New Orleans which is flooding, so they are all different.

Steven Bingler

Hi, how are you?

Kondo

It doesn't matter what kind of disaster it is, because I am focusing on the planning process and the planning framework for the recovery.

Bobbie Hill

Right, I understand. So what this means is after Katrina the mayor obviously wanted to act promptly and do something and that's when he created the Bring New Orleans Back Commission and it was a broad commission. It was looking at all aspects of city, everything from, flood protection to education to culture to economic development, all of those pieces, right everything. So I think that in early October and November when this began that this city was so devastated, it was so wounded physically, emotionally, spiritually in every way that it really didn't matter what was going to take place. It was the people were not ready for that. They were ready to be engaged but they weren't ready for somebody to come in and tell them what was going to happen. I think they were in shock and there were not as many people here at that point in time and so while I think it was a very important effort on behalf of the mayor and that there were some very important things that came out of that plan that no matter what it was or who did it, it

KEY

[ph]: Short for "phonetic"; used to indicate transcribed text that we are unsure about.

[Unclear]: Indicates audio parts where we were unable to hear or understand what is spoken.

[Multiple Speakers]: Used when more than one speaker is speaking at a given time and it is difficult to transcribe what is spoken.

[Technical Difficulty]: Used to indicate bad audio and abrupt breaks.

would have been difficult for the community to accept and that indeed is what happened.

Kondo

Is it just a guideline or footprint to show a vision for the citizens? What was the intention of the rebuilding plan in January 2006?

Steven Bingle

Framework.

Kondo

Just a framework.

Bobbie Hill

It was a framework. It was not a real drilldown, it was just a framework.

Kondo

Yeah, just a framework.

Bobbie Hill

More based on principles and those kinds of things but it was, it probably had a little more meat on the bones, you know, we say but it was...

Steven Bingle

You know, it was a framework but it was a framework that was done by planners who took the next step of drawing pictures.

Kondo

Drawing pictures

Bobbie Hill

And that's where it gotten into trouble you know.

Steven Bingle

They drew too many pictures.

Kondo

Yes, I know, I understand that.

Steven Bingle

And you understand about the green dots?

Kondo

Yes.

Bobbie Hill

There were two words, the green dots and the footprint. Those became words you just don't speak any more.

Steven Bingle

Those words sent fear and so rather than hope the hope turned to fear over in one day at this big presentation with a thousand people. When the plan was presented, people came up to the microphone and I don't know if you know the details but one of the people said, Mr. Canizaro who was leading the task force, urban planning task force, he is a real estate developer. He is also formerly the President of the Urban Land Institute which is a very highly respected organization that also came in and came to the same conclusion, and he's also a Republican and a friend of George Bush, and so people felt very – I think he was a little bit not the right messenger for poor people, and so the first man who stood up at the microphone said, Mr. Canizaro I don't know you but I hate you, and it went downhill from there.

Bobbie Hill

And so when that happened, the mayor immediately retreated if you will and he said, I will take these plans and I am not going to endorse anything right now. I will review it then I will come back. So when he came back in January, it was when he came back and he said I accept this and this and this and this, I don't accept this and in one of those words you know, anybody and everybody has the right to come back so that's where we sort of undid the footprint.

Kondo

The moratorium.

Bobbie Hill

Exactly, and the moratorium for building premise, exactly. So even though those were smart physical planning ideas it just was not what people wanted to hear. They weren't ready to hear anything like that and they didn't understand it.

Steven Bingle

And they still don't, I mean, even in the community congress output that we got, people said, they were divided between, they don't want to have the city just built back haphazardly, right. But they also don't want to have government control.

Bobbie Hill

They want incentives, and they want principles and they want direction but they don't want the government to mandate what's

going to happen. Okay, so you had BNOB and that hit the wall. Now you also had an election coming up and you had city council election and mayoral election and politics are proper tricks right, and so with that plan kind of being dead in the water then city council felt like they had to do something because those devastated neighborhoods, many of those African-American, many of them, the poor neighborhoods, they wanted to be proactive and be doing something for because they should and also because they wanted to be reelected. And so that's when – and they were looking for a very quick way to do that, to expedite, the planning process so they found some CDBG money that they had left over, if you will, and they actually had hired an economic development planner previously that was Paul Lambert and he had a much smaller contract and then when this happened they took his existing contract and they added additional services and then that was a \$2.9 million contract for neighborhood-based planning. So what they did was they gave him – they said, we want you to plan for \$2.9 million which was a lot but not enough to plan for the whole city. So you plan in for the 49 neighborhoods that had two feet of water or more, right. So then they started their planning process. Well, right when BNOB came and then the Lambert thing was kind of bubbling up, Steven and others really felt like that was not going to give us a complete plan because you can't plan for a devastated city and leave out some parts of the city no matter what you have to do, and so that's when we started trying to work on figuring out how do we fill in the gaps to create something that's whole. And there was no money either. No, actually if you go back to the BNOB plan, that was really a principle-based plan. They had intent, the intention of planning at the neighborhood level and they thought that FEMA was going to fund it but FEMA didn't fund it.

Steven Bingler

Part of the reason why FEMA didn't fund it was because it became very controversial, so FEMA has enough controversy. They don't need to get more controversies. So I think they backed out when they saw that the community wasn't in favor of it.

Bobbie Hill

So then, we started talking to people to foundations and others and then that's when

the Rockefeller Foundation actually got very interested, and they said, we would be willing to fund the gap, if you will, but we are not prepared to give it to the city council or the mayor because they were so much distressed at that point in time. So that's when they decided to go through the Greater New Orleans Foundation, a not-for-profit and then they created actually a separate not-for-profit under that umbrella and that was the New Orleans Community Support Foundation. And so that's the foundation that was really the fiduciary to receive the money from Rockefeller and the Greater New Orleans Foundation put in some money and then subsequently the Bush-Clinton Katrina Fund has funded it, and I think there might even be some funding from the Louisiana Recovery authorities.

Kondo

Who took initiative to ask for the Rockefeller Foundation and also New Orleans Community Support Foundation to fund to the planning effort and the outreach for the community?

Bobbie Hill

Well, I really think that Steven and some other, business people and people, with a philanthropic mind really came together and said, we have to figure out a way to fill the gap and have a plan and it really just sort of organically evolved and that's when Rockefeller said, I mean there were some people in New Orleans and at the LRA that had connections with the Rockefeller Foundation and they said, we need some more money to finish this plan.

Steven Bingler

It was the Louisiana Recovery authority that made the arrangements to get the Rockefeller grant because the city of New Orleans had reached a standstill. They could not get the money to do planning and there was not enough. There was no plan and there was no hope of having a plan that would be citywide. And so that's when the Louisiana Recovery authority agreed to help out, they wanted to make sure that it would be based on best practices, that it would be transparent, community based...

Bobbie Hill

That the community would be very much a part of the process.

Steven Bingler

And that it would be data driven.

Bobbie Hill

And that really – those were not necessarily principles outlined prior to BNOB or prior to the Lambert plan, I mean, and so when Rockefeller agreed that they were interested that's when they formed this new foundation, the New Orleans Community Support Foundation and the board members of that foundation are made up of current and former board members of the Greater New Orleans Foundation and that is the community foundation locally.

Steven Bingler

So the community foundation has maybe 30 board members. Well, they knew that they couldn't manage a project like this with that many board members so they have selected only six, half, and they also understood that there would be issues of race and equity, so they – three of those board trustees are African-American and three are Caucasian or others, but they happened to be Caucasian. And then the other organization that we put together since those trustees also clearly had not – don't represent any of the institutions that are stakeholders in the planning process, we put together a separate organization called the Community Support Organization that is an advisory group of nine people to provide advice to the community, New Orleans Community Support Foundation.

That community support organization is made up of one representative from the city council, one representative from the mayor's office, one representative from the city planning commission and one representative from the foundations and five representatives from the five voting districts in the city.

Bobbie Hill

And there is on the website, I mean, there is so much stuff on the website now but that it actually gives you information about the CSO, tells you about the people and everything.

Steven Bingler

And there are those five community people who are selected through a nomination process that neighborhood groups nominated people from those five different areas of the city and they were interviewed by the foundation trustees and then selected by the foundation trustees. So it was not political.

Bobbie Hill

But we did, once they were selected we did share that list with city council and with the mayor and then but ultimately the decision was made by the foundation.

Steven Bingler

And there were some city council people who didn't agree with me in these selections and they wanted to substitute a different person but that did not – the foundation did not agree to do that. So it was genuinely not political which is very unusual in New Orleans. And the other part of this process I think it's important to know about is that it's just the way, it's all you may know already, but the way it's divided up in terms of planning teams.

Bobbie Hill

You know, before we say that do you want to talk about the fact that well, BNOB people were appointed by the mayor.

Lambert was given a contract on top of another contract so there was some, you know, political fallout from the fact that that was not a competitive bid, he just got another big contract so...

Steven Bingler

And he didn't have a lot of experience in doing this kind of planning.

Kondo

Really? Why did they hire him?

Bobbie Hill

No disaster planning. Well, I think it was because city council was in a hurry and they were going to have an election and they just – this was easy and they could just do it you know.

Steven Bingler

And, it was before the election and it was a different city council and they were more inclined to operate based on what I think was kind of the old politics where it's about friendship and it's about not necessarily qualification.

Bobbie Hill

Patronage.

Steven Bingler

Patronage, yeah.

Bobbie Hill

And, something else that I think is really true and I have learned this more and more as we go along is number one, how little most people know about planning at all. What does that mean, much less disaster planning? If they don't know about planning how do they know about disaster planning? So they don't really know, what this means. So we were committed to doing, to having a competitive process where you know we attracted the best and the brightest, so we actually wrote an RFQ. You know we had 85 applicants and we interviewed 25 different firms, and so we chose firms that could plan at the citywide level and district level, and then we also had some firms that we felt were really talented and capable, but they might not be able to take a district but they could plan at the neighborhood level.

Kondo

Would you explain the criteria for selecting a planning consultant, and how did you develop it?

Steven Bingle

Okay, the criteria was to do a recovery plan and so we put a request for qualifications, national request for qualifications for people who could – I could give you a copy of the request for qualification if you would like. Anyway, 65 firms responded. We assembled a review committee and selection committee. Now this was also unusual in New Orleans, right.

Kondo

It's a very interesting process that I heard about from Mr. Ken Topping

Bobbie Hill

Yes, yes, yes, because he was on the selection committee.

Steven Bingle

That's right because in the past in New Orleans all consultants were hired by politicians. Because they are not necessarily qualified. They just contributed money to campaigns or they are friends of somebody or if somebody owes somebody a favor, so that's how they pay back the thing, and so that's kind of how they did the Lambert one but then because this was privately funded, we didn't

have to go through that process, very important. There are actually a couple of really important principles here. One is that this whole thing is privately funded and therefore to some degree not political except to the degree that the politicians tried to stop it many times and almost succeeded to stop this whole process. Even when the process was halfway finished they were still trying to stop it and make it go away because they called it a shadow government.

Bobbie Hill

So there are really two things. They felt like this was taking power away from them, number one, and number two that this is an important thing that's very specific to this particular process that the Greater New Orleans Foundation by many people is considered to be white, rich, uptown, and they are equal. I mean, they are...

Steven Bingle

There are certain communities.

Bobbie Hill

There is a big race thing going on here, so...

Steven Bingle

So the foundation is not so trusted by poor African-American people and vice versa, so the foundation doesn't – I was fair to say that the sort of white wealthy community doesn't necessarily trust the politics of sort of African-American. They have evolved over the last – not that it's any different than it ever was frankly, but...

Bobbie Hill

White or black.

Steven Bingle

Back in the old days it was white people, giving white people jobs and now it's black people giving black people jobs and whoever gets left out is not happy about it, right. So, but anyway, but it's very important that there is a very clear racial division in the community and that this process kind of put a big light on that.

Bobbie Hill

It was there before big time you know but...

Steven Bingle

But it did – because it was the Rockefeller Foundation and then all these big – all these

people coming in with all this money that there wasn't, it wasn't government money that, it did smack us like as outside control, especially after the Bring New Orleans Back report caused everybody to have so much fear, now it comes in these wealthy white people mainly who are and notwithstanding that they try to have three African-American people and three white people, it was still three wealthy African-American people, you understand. So in some ways even the wealthy African-American people are not seen as trustworthy to the poor black community because they are successful. So there's a lot of sensitivity there.

Bobbie Hill

But we have worked very, very hard to be transparent and be inclusive and there was so much skepticism in the beginning, it was a very, very rocky start you know. People didn't trust us. They thought, it was part of a conspiracy theory and while we were saying we were doing this but then something else was really happening behind the scenes and it was criticized for you know...

We are about halfway through and we had this big meeting a couple of weeks ago and we had...

Kondo

Community congress.

Bobbie Hill

Yes, so you heard about that?

Kondo

Yeah, then people said that we want levee, Category 5 levee not the Category 3 that is going on.

Bobbie Hill

Right. And I think that people what they are really saying there, if they understand, I mean it's – when you talk about flood protection in New Orleans and in the Gulf Coast I mean, there is a lot of modeling. I mean I was just at an LRA meeting and they were talking about this, and so you had to talk about wetlands protection and what can that do when you combine wetlands protection with levee protection but then you have to factor in how long does it take any of these things to happen. So how long does it take to rebuild your wetlands? What do you in the meantime? How long does it take to bring the levees back to Category 3 and then what about Category 5 and what about the gates, out at the mouth of

the Wrickleys, like the Dutch I mean there are so many complex options to the flood protection puzzle, and I think that's why going back to what you said earlier about nothing's happening in the Ninth Ward, well nobody really knows what to do because we don't know what that's going to look like.

I mean when you are protecting yourself from an earthquake I mean, it's all about how you build the structures right and it's all about how you can get out of the building and be safe but it's not like, wetlands and levees and gates and all that kind of stuff, so people there are – I think there are more complex issues that factor into personal decisions about whether or not you are going to rebuild your house and where are you going to rebuild your house and all that kind of stuff. So this is just complicated, more complicated I think. And the other thing is that, New Orleans infrastructure before the hurricane was in terrible shape and then when you have that much water sitting on top of everything for two weeks that it might not look as bad as it really is but it's really bad I mean, everything is broken.

Steven Binger

One of the things that I think I have learned, I don't remember how I learned this but you know, maybe it was Ken Topping or Rob Olshansky or Laurie Johnson. He said, disasters don't or recovery plans don't really – disasters and recovery plans don't really change anything. They just magnify whatever the problems were there to begin with. So if poverty was a problem it gets worse. If racism was a problem it's more complicated right. If the city council and the mayor weren't getting along with each other they are probably going to get along with each other worse, after the storm, and I think all of those things were true. It sort of made things more difficult instead. Instead of people coming together nationally to serve, come together and work as a team, it seems like it causes people to be more skeptical and more afraid and then I think that's a really important thing to think about that how you structure. What you do first, how do you – in hindsight I am sort of feeling like this whole notion of sort of health and mental health and I have learned that in the Tsunami in Indonesia that one of the first things that happened was the women came together and formed these kind of healing groups. And in Cuba, the people always know what to do when there is a hurricane as they have been through it before.

So they work together as a team like ants. You know, I always think about an ant pile, an anthill, if somebody kicks an anthill all the ants are immediately out working to fix it back and I think in some ways what happened with Katrina is like everybody scrambled and kind of ran for cover.

Bobbie Hill

But they were also forced to do that.

Steven Bingler

That's true.

It was very difficult for people to come together although I mean there were moments, the BNOB things was a moment when people really did come together.

Bobbie Hill

There were moments, but it was also I mean, when 80% are happening, the whole entire city is dispersed I mean, not only were there all those emotional reasons but there are actually physical implications for why people couldn't come together. I mean and I know I remember talking to you when you were in Houston and a whole bunch of people were in the same place and I mean there was that sort of immediate sense of somehow coming together because you kind of can't do that on the kind of scale that happened. In New York City for instance, right after World Trade Center to some degree politics went out of the window, to some degree people came together but they could. Here you couldn't. You just couldn't. And the longer people were apart and emotionally overwrought that just complicated it.

Now I hope that, I mean I think everybody or to some level, not everybody but a lot of people hope that this rebuilding process, this planning process and this rebuilding process is an opportunity for us to come back together and really fix some of those problems but only time will tell. But it seems like just when you get at least half of those way, when you get just to the edge and you feel like everything is going to fall apart somehow you know, we get over another hope and then we make a couple of steps forward and maybe take two steps back and then something happens and we move forward again, so I am still hopeful but it's also very scary.

Kondo

The recovery plan a mitigation plan for the next disaster so that it is very important to

include a safety element in recovery plan. But in New Orleans the levee system is how to – the decision maker for the levee protection is the federal government, not local and the money comes from the federal government so that levee and flood protection plan.

Bobbie Hill

Well, it is accepted I mean again you have the – what's it called, the Close Door Restoration, CR, close door restoration, something, something. I will have to go back and find out what the acronym is but and that's local and so that is a state agency that is developing a plan for closed door restoration. Then you have the Army Corps of Engineers and so each one of those has a plan but I heard today that the closed door restoration plan is far ahead of the Army Corp plan but that they are absolutely talking to each other so that those two things are in sync. At the same time, we have the regional planning process that's going on, that's the Louisiana Speaks, and we talk to them on a regular basis because they are looking at you know, 30-50 years down the road and they are looking at protection, but they are also looking at economic development and transportation and all of those things and what we decide to do in our plan has to be integrated into their plan too. So there's all kinds of things like you asked well, how do you get from 13 to 1. We have different planners in each one of those districts but they all have the same goals and objectives. They all have the same scope of work and they talk every week with each other and with the citywide team.

Kondo

Okay, I understand.

Bobbie Hill

So this right here, this right here is – so we started out with district level meetings and everything that happened here got fed to the citywide team and then they took all that and then fed down – back down information here. Then we had the scenario meetings and then this was taken to build the agenda for community congress too. So now we have all the data from this and that went back down to district people so here's where we are right now. And then so you see, that's how it's...

Kondo

So at the district level each other is sharing a vision and goals for the recovery.

Steven Bingler

It's like a heartbeat you know. It goes in, goes out, goes in, goes out. It goes down to the grassroots and then it goes up to the whole community and then back down to the grassroots. When it goes down, it goes to 13 meetings all over the city and then when it comes back up it comes up to one whole citywide meeting and then that information then goes back down to the districts for processing at the neighborhood level. So it's neighborhood level, citywide level – no it's actually district level, citywide level, district level because there are 13 districts as you are familiar with.

Bobbie Hill

Right. So that's how we are going to end up with them now in this overall plan that will be citywide recommendations but there will be 13 chapters if you will. So that there will be specific and any of the projects that come out with district plans that are recovery related that need to be knitted into one piece, in other words I mean if you are talking water and sewer they all have to be connected obviously, you know, so...

Kondo

When I talked with Ms. Leslie Alley on Tuesday she said that UNOP is not a traditional recovery plan but I understand that UNOP is an action-oriented project list for the federal government to select which project should be funded.

Bobbie Hill

It's that but I think it's more than that actually. It is project related because one of the main things is to get the federal money because of course you know that this really was not a hurricane, this was levee's failure. So it was the federal government's mistake right. So there is – certainly the state and the community feels like there's an obligation for the federal government to make right, so it is...

Steven Bingler

So that it can't – it's a very different thing about this, I didn't mean to interrupt you, but this is a very different disaster than other disasters. In other disasters there is no one to blame. You can't blame Katrina. Katrina has

no money, Katrina has no existence. Katrina was just a storm.

Kondo

Not just a hazard related.

Steven Bingler

Right, but there was – and that's an unfortunate situation that comes when there is, in every single disaster there is a kind of a natural calamity, if you will, but in this case when the natural calamity was over, the real calamity started and the real calamity does have fault. It does have fiduciary obligation. Do you know what I mean? Fiduciary is financial obligation, right, and there are many people who feel like the Corps of Engineers is legally responsible to bring people back to at least where they were before the storm. So if somebody owned a home before the storm they should own a home of the same size maybe in a different location after the storm. They should not be given – they should not be paid for what their home was worth before the storm because after the storm it costs 1.3 times more to build another one, and that because the Corps of Engineers may or may not be able to be trusted, if somebody wants to move to higher ground maybe they should be given the opportunity, to be given the incentive to be able to move to higher ground for no extra price, no extra money. So money in this case you see it's not just humanitarian. You know, what I am saying. It's also, there's legal liability. Now whether that legal liability can actually be quantified or acted on is a big question, because the government, typically you cannot sue the government.

Bobbie Hill

And surely, Louisiana does not have a particularly good reputation when it comes to money and politics and those kinds of things. So that's all the more reason why one plan that puts all the pieces together that is transparent, that is community based, that is based on best practice, that had a competitive process. I mean the only way we are going to have the credibility to get money from the federal government is to have all of that done right when indeed it is their fault, but you see they would still, they can say well, we can't give money to Louisiana because they will just squander the money, and that's what they have done in the past and blah, blah, blah.

Steven Bingler

And that is what they have done in the past.

Bobbie Hill

Right.

Steven Bingler

They have wasted a lot of money. So why would the federal government trust all this money that it could – easily just gets given away to friendships and wasted. So they are very skeptical about that. Yet they were responsible, so it's complicated right now. I think all that's going to work itself out. It's going to take 10 or 15 years to work that out in the same way that you are probably still working things out in Kobe.

But I understand in Kobe it's different than here is that here I think that there is more movement started off with the same framework. Like in Kobe there was a framework for recovery and rebuilding, not recovery in the way it was but rebuilding on a different model, correct and tearing down a lot of small homes and buildings, large buildings with wider streets and that kind of thing. So that wasn't just recovery in the way it was. It was rebuilding in a better way or at least a more safer way.

But it's only – it was after the government said, this is the way it's going to be that the neighborhood said, we don't want it that way or we want to have more of a voice and the government said, this is the way it's going to be, and the neighborhood voice is now stronger in opposition. Is that right? The neighborhoods were not happy with necessarily – the neighborhood people were not happy with the solution.

Kondo

Some of them are not happy because there is a problem, in early stage the trust between government and community became bad. Kobe government unveiled the rebuilding plan two months after Kobe earthquake hit. But this

plan does not have a vision, does not have an objective but it says, this is a redevelopment and this is a land adjustment area which means to construct wider roads for fire protection. There's no vision and just like "Your area the development is going on", so that so many people in that area get angry for the government in early stage in Kobe. So the conflict between the local government and community resident continue for long time so that early stage mistake continues for so long,

even still exists between community residents and government. I think it is necessary that the local government has to show community for the rebuilding vision and also objective just principle like vision. It's necessary but it's not good to act like a Kobe local government to just set area and it should be an area that will be redevelopment. So my concern is how the local government should unveil, show the vision and objective in what way, and how concrete does local government can tell the community?

Bobbie Hill

Well, I think that the vision has to be developed by the people.

Steven Bingler

But it takes longer to do.

Kondo

And in New Orleans, the residents evacuated from the state, so nobody could participate.

Steven Bingler

But they came back in a hurry actually because it wasn't this whole city was gone, so there were still places to live. So it wasn't long before 100,000 people were back and those 100,000 people were beginning the planning process.

Bobbie Hill

Right, but the problem around that is, in going back to whole race issue is that many of the poorest people were the ones that could not come back. Number one, they didn't have the resources and number two, they didn't have a place to live. So I think that while the BNOB was an open process, they had open meetings at the Sheraton Hotel every week or once – I don't remember exactly what it was but if people could come, but, people were not back, and so as soon as there is any distrust then they could always turn it into race issues. So you are planning and you say you have people at the table but the poor people don't have a voice. You really don't want them to come back.

Kondo

But when I see building, New Orleans commission's rebuilding plan I feel very strange because it explains about light-rail thing, but what they need was housing and safety.

Bobbie Hill

Exactly.

Steven Bingle

That's right. And here's what happened is that the planners were not doing the recovery plan. The Bring New Orleans Back plans were doing a visionary plan and that's where they stumbled up. The other thing is that they were doing physical plan. They forgot that there were real people here, so they didn't look at culture, they didn't look at history, they didn't look at social issues. They just had a physical solution and they tried to force it on people and the people – what happened in this country and I don't know if it could have happened in Japan is that Bring New Orleans Back commission report created not because it meant to but inadvertently created massive neighborhood planning process.

Bobbie Hill

Because people reacted to it, and New Orleans is more – one of the best things about this is New Orleans is more organized at the neighborhood level than it has ever, ever, ever been and self organizing happened.

Steven Bingle

And the leadership, the mayor let it happen. He didn't make it happen.

He let it happen. He allowed it to happen, okay. For whatever reason whether he did it because he believed that it was the right way to do it or whether he did it because he was afraid of losing his political position or, I mean books could be written about why he did that, okay, but because he let it happen now we have massive democratic process which brings with it also a frustration because people are weak. On the one hand they wished they had a leader and the other hand maybe it's okay not to have such a strong leader. In Kobe they had a strong leader and so for a while they felt cared for and taken care of and then all of a sudden they realized they don't agree with everything the strong leader says. Now it's not so rosy anymore, right. So it's almost like no matter, it's like the yin and yang, you know. It's almost like no matter which way you go it's got problems. And what I am interested in is, as Bobbie was pointing out, is that what I believe is it going this way that's slower and more deliberate and more community based and more transparent, actually in the end may be less painful.

Bobbie Hill

You know, one of the things that happened at the community congress and that I think was pretty amazing because you do hear people say, I am so tired of planning, I don't want to go to any more meetings. I have had enough, you know....

Kondo

Same in Kobe.

Bobbie Hill

When is something going to happen, but at the convention center here there were 1500 people there, and there were hundreds of tables of 10 people and it started at 9 o'clock and it wasn't over until 4, and people got there at 8-8:30. People stayed the whole time and they sat at a table with 10 people all day long and at the end of the day people were walking out and some people actually, had tears in their eyes and they said, I made new friends for life, and they really had a chance to – and intentionally when the – people were assigned to tables so they made sure that it was very mixed. So you had racial mix and geographic mix and age mix and everything, so people were sitting at tables with people they didn't know before and sharing stories and talking and debating and all of that and that was huge. I mean that was very much of a heaving-I think for people.

Steven Bingle

It was a turning point. The community congress number two was a turning point in this process and there have been a number of turning points. When the Community Support Organization was finally formed even against the will of many city council members, it was a turning point because they tried to stop it and they were not successful, so the fact that it existed. If you go all the way back there was a point where the mayor and the city council had to sign a memorandum of understanding.

Bobbie Hill

They didn't want to.

Steven Bingle

They didn't want to do that but when they did that it was a turning point. So if you look at the number of turning points, there was a turning point when Rockefeller put \$3.5 million on the table. All of a sudden then there was a project. I mean, it was – they didn't put \$300,000 on the table. They put \$3.5 million on the table and nobody could,

even the mayor couldn't say, we don't want that. Right? So it was a – always I have been saying since the beginning of this project that never has there been \$3.5 million that leveraged so much change. \$3.5 million is this much in the scheme of things but it changed everything in this process because it was private philanthropy that made the shift and took the politics away from it.

Bobbie Hill

And that is really unusual.

Steven Bingler

No, they are not. They didn't take the politics away from it, that's a stupid thing to say. They allowed a process to be developed that could in many ways compete with the political process. They call it a shadow government that, I mean the adversaries call it a shadow government. I would call it a sunshine government. But the one that's here now is the shadow government. This government has a lot of light. The other government has a lot of darkness, in my view, and so this lighter government is more I think noble kind of government, is allowed to exist to begin with but not to grow and it was allowed to grow to the point – but it could never get complete traction. It could never be completely safe from being ignored, it still can be ignored because that's the other part of this, there is no authority. So even though this is a bright sunlight government it has no real authority.

But the point where it got the most authority was in community congress two when there were 2500 people and the demographics would match the demographics of the city pre-Katrina, it gave it validity. So all the conspiracy theories that were related to race and whether the voices of poor African-American people were going to be heard, those voices had less to say you know. Of course then they started nitpicking, well you said this question this way and this word that way and nobody really knew except – people didn't know exactly what this word meant, then they started picking at it. For the most part, it has a certain – the whole process now has a certain legitimacy that it didn't have in the beginning when it was the Greater New Orleans Foundation of rich white people. Now it's the Greater New Orleans Foundation of rich white and black people, that have embraced openly and clearly embraced and listened to a large, large number of the broad

cross-section of the community, rich and poor and black and white. So I think that that's why I think that that was a turning point that we need to keep building on and then in some ways we almost have the politics. At least at this point, I will never say always, but at this point we have the politics neutralized. Whether the mayor supports this process openly now, the city council supports this process openly now, and I have to tell you at the beginning of the community congress even the mayor didn't support it. You see, that's really interesting. The mayor gave two speeches, one at the beginning of the community congress to welcome everybody and one at the end, two completely different speeches.

Kondo

So he didn't see the process.

Steven Bingler

The first speech was very antagonistic.

Bobbie Hill

It said we can't wait for this planning to be over, this is enough, aren't you ever [ph] tired of planning. That was the first thing he said, and we were all...

Steven Bingler

And at the end, he said this is a great plan because it confirms everything I always already said.

[Multiple Speakers]

Bobbie Hill

He said, I was skeptical in the beginning of – I admit I was skeptical, but now I see this is what needs to happen. Yeah, we have actually probably the best on tapes.

Steven Bingler

I know. That's, I am telling you that is a very important piece of tape.

Bobbie Hill

All in a matter of about four hours.

Steven Bingler

Yeah. Complete 180.

Bobbie Hill

So we are halfway there, and we have another round of district meetings this weekend and...

Steven Binger

We are still dealing with some difficult issues. We are still dealing with issues of relocation, and we have issues now about – I mean people have already relocated to dangerous areas, which could have been solved by a moratorium but the moratorium would have created other problems. I believe that if moratorium had happened, and I think the mayor was probably right about this that he probably knew this that if the moratorium had happened and the mayor had taken the Bring New Orleans Back recommendations there may have been riots.

Bobbie Hill

I bet there would have been.

Steven Binger

It would have been very different set of issues and problems. It would have divided the city down the middle racially and I think that...

Bobbie Hill

But I wonder too, I mean I think that's...

Steven Binger

That's my view.

Bobbie Hill

But I also wondered because you know, people always think of the Lower Ninth Ward and they think of New Orleans East, but Lakeview is primarily middle class, right, and the Lakeview community people feel just as strongly about their right to come back as anybody in New Orleans.

Steven Binger

Well I know. Actually, you are right about it. There was a guy who said that in the meeting. He said, you know what – it was an African-American guy who said that in the Bring New Orleans Back meeting to Mr. Canizaro, he said, you know what, he said, this time you are not going to get us because we're black, because all of your white people have the same problem.

Bobbie Hill

That's right.

So I don't – I mean I think there might have been riots but I don't think it would have been a black or white I think it would have been, you know, both people against the....

Steven Binger

Yeah, you are right. The white people would have been just as...

Bobbie Hill

They would have been just as adamant, no question about it.

Steven Binger

Yeah, it would have been the sort of low liers versus the high liers, the lower ground, the basin people versus the rich people you know.

Kondo

The recovery process is a very interesting thing, because there is no textbook that shows this is what you have to do in recovery process. This is recovery process so you have to follow with it. There is no – so I studied Kobe case and also World Trade Center case and New Orleans case.

I concentrated on focusing on the planning process by the non-profit organization level in Lower Manhattan because there is a regional planning association and also municipal art society. They have a long history in New York City and also that APA and AIA are engaged in the process and the interesting is that they make the planning process, they lead to develop the planning process, not government. That is a very interesting point.

Bobbie Hill

And actually if you think about it, that's what happened here too.

Kondo

Yes, yes.

Bobbie Hill

I mean actually it's interesting that you say that because there is a colleague of ours who wrote a paper for the Aspen Institute and his paper is about the role of non-profits not just in recovery but in disaster mode and I think that's a really important point, because if we're looking at as researchers or whatever trying to write the textbook if you will or at least, make some recommendations about what to do, recognizing the role of not-for-profits and how they need to be supported because they are the ones on the ground. They are the first ones on the ground. They are the ones that take care of people. First it, wasn't I mean, you know, FEMA was terrible here. The Red Cross was not that great but it was this local not-for-profits, the churches, you know, that the social service not-for-profits

that really came to the rescue. So that's interesting. I hadn't quite thought about it that way since you said that.

Okay, I understand the process and what situation you are in, in New Orleans.

Bobbie Hill

Good.

Kondo

Okay, thank you.

Steven Bingler

And are you going to write a paper or a book or what are you going to do?

Kondo

Well, first I am going to write a research paper and not only in Japanese but also in English.

Steven Bingler

So can you go back and explain to me what you just said before because I didn't quite understand it completely. That the government you said there was a development project over here.

Kondo

They selected the most devastated area to select area for redevelopment and also land adjustment area.

中略。神戸での区画整理と再開発の仕組みの解説が続く。

Kondo

There is large amount of positive thing in Kobe recovery, and I have said the redevelopment area and land adjustment area – this is physical redevelopment and physical planning so that national government funded, so

They had a large amount of money for that project, but other 90% area is not in this area, so that private consultant and also university, college and a student as I was, supported the community-based planning efforts by volunteer base.

Bobbie Hill

That would be interesting to understand too and maybe that's kind of different here because you had something that started that was volunteer, because the mayor's thing was all volunteer, right? Okay, so then you had volunteer, then you had something that was

local government funded but not complete, and not competitive and not necessarily best practice. Then you finally had something that comes in that is, it treats every neighborhood the same, every district the same and that you have the community participating, paid for by this process. So you've kind of three different things, so it would be interesting to understand exactly how that happened, why did, so the government said, okay, here's where we are going to put our money. You know, the country did, and, but we are, just understanding to what level they engaged the community, doesn't sound like they did that much, and then you have people, universities and people who said, no, we want people at the table, so pre-engagement.

Steven Bingler

So was the university. So the community engagement process in Kobe was volunteered.

Kondo

Yeah, almost volunteered. Very small grant for consultant.

Steven Bingler

Wow. Whereas here even the Lambert process was paid for and it was community engagement.

Bobbie Hill

Right. To some degree, yeah it was, yeah.

Steven Bingler

To a large degree it was. Alright. So just add up the numbers, \$3.5 million from Rockefeller, okay. Write these down because I think...

Alright. \$1 million from the Bush-Clinton Katrina fund and I'm going backwards here. It's going to be – it's actually ultimately it's going to be, it's 3.5 from Rockefeller, 1 million from the Greater New Orleans Foundation, 1 million from Bush-Clinton and then 2 million from the LRA.

And – from the Louisiana Recovery Authority, and then 2.4 million from America Speaks, 2.9 million from Lambert.

And peanuts from BNOB, but wait a minute, there's another piece, 5 million from FEMA. the ESF-14 but that was the...\$5 million of planners doing community engagements.

Bobbie Hill

They didn't do community engagements?

Steven Bingler

Bobbie, they did it. They didn't do it the way you and I would do it. But that's what they were paid to do. Read the RFP. We have applied for it. Remember when we first thought we might want to do that?

Bobbie Hill

Wait, but was that just for New Orleans?

Steven Binger

No, it was for the whole state.

Bobbie Hill

Okay, well that's different. You are mixing the money then because we are adding up...

Steven Binger

Alright, well then let's put it this way. New Orleans had 60% of the devastation, anywhere or somewhere between 50 and 60% of the devastation, so there 3 million of that would have been New Orleans.

You could actually figure it out.

Bobbie Hill

That would be the only number to maybe question.

Steven Binger

Maybe let's take half of it.

Bobbie Hill

Yeah, so 2.5, so there you have it.

Steven Binger

So how much does all that add up to?

Kondo

It's about \$18 million.

Bobbie Hill

So that's for planning and community engagement.

Kondo

Yeah, that was surprising. I was very surprised to understand that Rockefeller Foundation funded \$3.5 million for the planning process, and local Japanese government doesn't pay so much for the planning process effort.

Bobbie Hill

Yeah, and most government institutions really don't like community engagement.

Steven Binger

They don't trust it. They want to just say the top down.

Kondo

But Kobe government has been funded for the community-based organization in neighborhood planning process before Kobe earthquake hits in some areas, so that kind of area, very good planning after the disaster.

Bobbie Hill

They already had it.

Kondo

They were already organized.

They have experience of planning efforts, so that is a great lesson for us.

Bobbie Hill

That's very interesting.

Now one thing that I heard too from the people that went to Japan was that the places in Kobe that came back first or where the first people came back and the places that came back last were where the last people came in. So if that theory is true then, I mean, it will be interesting to see what happens. For instance in New Orleans East that is a vulnerable place, however the middle and upper middle class African-American population, there is a strong – and Vietnamese population are out there, and they were back from the beginning. Now the upper middle class African-American population I mean they have slab on grade, which is not, which one has but they are back in their little island, so it's going to be interesting because they were in a moratorium and they went back and they built their houses but they are in this really vulnerable area. What will happen? I mean...

Steven Binger

You know what I think is going to happen is that it's not going to be possible to relocate all the people who have made those choices. So that part of the city, those spots there will be hamlets.

Bobbie Hill

There will be clusters, yeah, like hamlets.

Steven Binger

Those parts will be like little communities. And some of those communities will be on low ground and they will be susceptible to future storms and those were – am going to call those the early communities, the early

resettlement when there were no rules although there are no rules anyway, [Unclear] there were no incentives, right. When there were no incentives, people will come back, they had to come back soon, and even if they didn't have enough information they come back based on their hearts, right. Later people start to – some other people don't want to come back based on their hearts, because they might not make a good decision, so they wait and then their brain tells them, you know, that it's time to come back when more information is available and then they realize that it's better to be on high ground. So we don't know, we will probably end up with two different kinds of clusters or little communities but it's like most cities grow from these little clusters or, you know, hamlet. You know what that is, a village.

Like little villages often times you have, there's the city and then there are these whole villages and then the villages get bigger and bigger and the city gets bigger and bigger and finally they all come together. Well, what happened here is that the city shrunk back and now it will come back to the little village, village over village over village and some of those villages will be safe and some of them will not be safe.

Bobbie Hill

And then it will be a matter of you know, will people stick it out, will the levees be built. I mean it's going to be a real sort of chicken and egg thing. Maybe if those levees are not built and it isn't safe and you know, if another storm happens they will probably leave.

Steven Bingler

The fact is if the levees are built properly, they will be safe.

Kondo

Yes.

Bobbie Hill

Yeah, that's the whole thing.

Steven Bingler

So they will be the group that are dependent on the government only.

Kondo

Not individual decision.

Bobbie Hill

Right.

Steven Bingler

Right, but the second group will say, we are not going to depend on the government. We are to say, we have belt and also suspenders, , to hold their pants up, but – the belts and also suspenders.

Just in case you know, just in case. Okay is that – you've got enough?

Kondo

Thank you. I got very good information.

Steven Bingler

Okay.

END

Interviewee:

Dr. Marla Nelson, University of New Orleans

Interviewers:

Tamiyo Kondo, Ph.D. Research Scientist, DRI.

Date:

14:00 -15:30, December 12, 2006.

Place: University of New Orleans

Dr. Marla Nelson

Well, it sounds as if you have got a good mix of people that you are speaking with, you know, Mr. Bingler is in-charge of the UNOP process. Have you spoken at all with Laurie Johnson? She could talk about it from a more of a comparative perspective.

Kondo

Yeah.

Dr. Marla Nelson

You know whereas everyone else I think that you will be seeing here were so immersed in what's going on in New Orleans. Sometimes it's hard to think about you know the disaster in other places.

Kondo

I have studied Kobe Disaster Recovery and also I'm doing recently on the World Trade Centre recovery process after September 11th. This is my third case study after catastrophic disaster on Disaster Recovery Process.

Dr. Marla Nelson

You know my name is Marla Nelson; I have been teaching here. This is now my fifth year. I have a PhD in Planning from Rutgers University.

And my main areas of interest focus on Local and Regional Economic Development, Urban Redevelopment, and Community Development. Prior to Katrina, I didn't focus at all on Recovery Planning or anything related to disasters. And now, because I'm here in New Orleans, you know, I think all academics down here by default are doing post-disaster research. A few other things that I'm working on here, I'm a very minor member of the UNOP team. The faculty here at the department is involved in the UNOP Planning Process. We have helped out some with the Community Congresses, the Community Events that have gone on.

Kondo

On December 2nd.

Dr. Marla Nelson

Yes. We worked not so much on the logistics that was done with, you know, primarily by AmericaSpeaks, I've worked with Laurie on some of the content creation. And the faculty here has been focused primarily on the Public Facilities Assessment as part of the UNOP plan there – the different neighborhood plans.

Kondo

In 13 district area?

Dr. Marla Nelson

Yeah, and then there is a City-Wide Infrastructure Plan and we have been working on the City-Wide Infrastructure Plan and it's a fairly large team of people, but the faculty here have been focusing on specific components of that infrastructure plan related to public facilities, schools, I have been working on healthcare, the healthcare infrastructure, the parks, libraries, doing an assessment of that and now we are in the process of identifying key projects in those areas, you know that we believe that the city should focus on.

Kondo

Oh, okay. So you mentioned that the City-Wide Infrastructure Plan, is it what you call UNOP?

Dr. Marla Nelson

UNOP, the Unified Plan of New Orleans consists of the different district plans and then to serve as a sort of overarching framework – an infrastructure plan for the city. Because of the level of devastation I mean as in Kobe you know there is rebuilding that needs to take place on the very local neighborhood level and neighborhood or district-wide priorities that have to be set, , but there are a lot of commonalities amongst each of the planning districts so that's sort of what we are working on; identifying, assessing the key components of the City-Wide Infrastructure and identifying projects that are important, not to a particular neighborhood or district, but important to the city-

So sort of – more of a macro-level approach and this is sort of another layer of the UNOP process.

Kondo

I am confused about several plans for recovery. At first, Bring New Orleans Back Commission Plan in early stage, and there came Lambert Plan and now, there is Unified New Orleans Plan which you mentioned City-Wide Infrastructure Plan. Would you explain about this process ?

Dr. Marla Nelson

What happened is that soon after the storm, the Mayor put together this Commission, The Bring New Orleans Back Commission, building on work by the Urban Land Institute and came up with, a comprehensive set of reports covering all aspects of the city's recovery, not just the land use component, but one plan that's focused on economic development or healthcare, a variety of different aspects of the city .

Kondo

I have read that Plan and I have read a newspaper that communities get angry about this report because it says that you cannot come back and rebuild your housing before the city made a recovery plan or city [ph] wants to set up moratorium, not to rebuild their housing.

Dr. Marla Nelson

Yeah and that's – and really it was with the Urban Land Institute's work and then the Bring Back New Orleans Commission that, this talk of the footprint of New Orleans really came to the fore and, has ever since been a very hot-button issue and gotten a lot of people upset. Because people, as I'm sure you know in the United States, we have got a very unique system of property rights where, the individual is king and to tell someone that they can't come back and rebuild is, not what people want to hear, particularly in light of I don't know if people have mentioned to you a recent Supreme Court decision, *Kelo v. the City of New London*, which really looks to restrict the powers of government to use eminent domain. Very different than what I understand the Japanese system to be like. With BNOB, the Bring New Orleans Back Commission, although, I believe that there was some good work done, it was very controversial and not just the footprint issue, but people were concerned because that there weren't a lot of mechanisms for citizen participation.

Kondo

Yes, that is the problem, citizen participation in recovery process.

Dr. Marla Nelson

For many, BNOB was seen as elite driven, who were these people, who were making these decisions? As part of the BNOB process there was to be a neighborhood planning component to be led by the Dean of Tulane architecture, Reed Kroloff, and a local architect, Ray Manning. They were hoping that FEMA would fund the neighborhood planning effort and for whatever reason FEMA did not. So the neighborhood planning process never got off the ground. As part of the Bring New Orleans Back Commission, so it never materialized.

Kondo

Yeah, so I cannot find neighborhood plan in 49 districts on the website.

Dr. Marla Nelson

Yeah, funding could never be secured for it. So what happened is some time went by and then the City Council said, "Oh, you know, we need to jumpstart this neighborhood planning process," and used some remaining Community Development Block Grant Monies to fund what's referred to here as you can see is the Lambert Plan within planning process of – to come up with district and in some cases smaller scale neighborhood level plans in the flooded areas. Now, Dr. Kondo, I think it's important to consider that there is – the mayor and the City Council haven't always gotten along, right? The council process rose [ph] in part in a response to bring New Orleans Back Commission and there are City Council members, who represent those areas of the city that were badly destroyed. So, of course, they don't like the idea of a shrinking footprint either.

Because of – right if you are part of the city, you can't come back that means you are out of a job. But, the City Council initiated a process with Paul Lambert and Sheila Danzey, the plans were recently completed and they are all available on a website, nolaplans.com. As with the Bring New Orleans Back Commission work, I think that there are certainly limitations and shortcomings of some of these plans, but I think that there is, some very good useful work within the Lambert plans. And this would be a good question to ask Steven Bingler when you meet

with him, but at some point when the Lambert process was going on, , was controversial because some people didn't like the way it was financed with the Community Development Block Grants and there was a no-bid process so that created a lot of tension.

I'm ambivalent about that. But it became a another hot-button issue here in the city. So at some point during the Lambert process, it became known that Rockefeller and some other foundations wanted to fund a neighborhood planning in the city. And this is when the UNOP process was born. And Steven Bingler would have some good insight as to why Rockefeller decided to fund a third planning process instead of just saying, "Okay, let's pay for to continue the Lambert process in the unflooded districts or unflooded neighborhoods," but instead started a third process. But this third process, which is UNOP builds on, looks to the Bring New Orleans Back Commission and looks to the Lambert plans to say, "Okay, what work has been done either in these particular areas or in these subject areas and what can we draw on." So instead of trying to reinvent the wheel ideally in this UNOP process we are building on this earlier work. It also draws upon the work of neighborhood groups that have been doing their own planning, we've had some neighborhood groups who haven't been involved in the formalized processes – not a lot but a handful. UNOP will try to incorporate their plans into UNOP as well as the work that FEMA has done and, you know, some of the state-wide efforts that have gone on.

And we are hoping by next month to have, you know, we will have drafts of each of the district plans as well as the draft of the City-Wide Infrastructure Plan.

Kondo

My next question is that it seems difficult to ensure consistency between district plan and city-wide plan. Two different level planning started 平行して、
How does the UNOP process ensure consistency between district level and all city-wide level?

Dr. Marla Nelson

And when you say consistency what do you mean by consistency?

Kondo

Well, I think it is hard to develop unified plan just adding district one, two, three, then unify just to the one city-wide plan. In planning theory, the unified plan should have broad vision and objective in city-wide area, then, neighborhood-based planning would follow. It seems to me difficult to involve and implement safety element in recovery planning in neighborhood level. In New Orleans recovery plan, safety element would be one of the most important planning element should have, because recovery plan would be mitigation plan for next disaster.

Dr. Marla Nelson

So your concern is that some of the district plans may be at odds with one another or may be at odds with the city-wide plan? That's a real challenge, I think, that we are facing and I think it still remains how some of these issues are going to play out in the final plan. You know maybe a little bit about how this plan will be used and that might be helpful, I think, in getting at your question or your concern. You know there is Federal money that has been – come down to the Louisiana Recovery Authority which is to be dispersed to impacted areas for particular projects or recovery efforts. Now, I have heard tons of numbers, you know, I don't know what's accurate, but apparently you know I have heard numbers as high as for the city of New Orleans we would need \$8 billion to repair our infrastructure. But essentially the amount of money that's left is, I hear figures around 200 million. So the fact of the matter is that there is not going to be, enough money, and initially the way the UNOP plan was talked about was we needed to have this Unified City Plan to go to the LRA with. We can't ask for money if we don't have a single plan for the city. What subsequently happened is because we have already gone to the LRA with some of the recommendations from the BNOB and the Lambert Plans. So now there is discussion about how UNOP, both the City-Wide Plan and the district plan, the identification of important projects be they city-wide or district or neighborhood wide will be used not just focusing on that 200 million, but hey, here is a list of projects with needs.

So that we can go to other places. Go back to the Federal Government and say, "Hey, we need more," go to foundations, go to other sources of money, but the idea is that we have

to have a list of projects that we're interested in funding.

Kondo

Yes, so I was very confused because when I look at that concept of Unified – UNOP Plan, it is not a traditional disaster recovery plan but just like project list.

Dr. Marla Nelson

Sure.

Kondo

For the federal or local government, they need project list to decide where to fund and prioritize.

Dr. Marla Nelson

And in fact, I think that's been one of the big criticisms of planning in New Orleans since Katrina and this is something that, we heard before – well before UNOP, as a planner sitting around and saying, "This isn't planning; we're coming up with, sort of identifying, assessing our needs and then developing projects to fund." So, that definitely is one of the critiques.

Kondo

Who made the decision to adopt this planning framework to proceed? In the United States, the American Planning Association has a power and an impact on the city planning department in the U.S. when compared to the Japanese society. We have professional association to advice or provide technical assistance for the city government, but it does not have an impact to the city policy, but when compared to the APA, APA involved in early-stage phase in October also to have a conference after Katrina and talk about how the New Orleans city recovered from Katrina. Would you elaborate how the APA have an impact for the New Orleans City Government?

Dr. Marla Nelson

Well, I think when we talk about the APA, we have to think about – we have a national association and there is also a state association. Our state association is fairly active and tends to be always prior to the storm; I think probably the largest concentration of statewide APA members is in the New Orleans area. In fact someone you might try to contact for an interview is Steven Villavaso, who is President of the Louisiana APA. He is also one of the leads on the UNOP process. You know

I would be more than happy to give you his e-mail. I do know that he is incredibly busy, but he would be a good person to talk a little about that.

Kondo

Okay.

Dr. Marla Nelson

You know the APA is national, as you said they were very involved with the State Conference in October of 2005, Paul Farmer, Executive Director of APA came down. Also early on and around October or November, APA put together a team of experts from across the country to come to New Orleans. The recovery team spent about a week here and put together a report with some recommendations, things that city planning could or should think about doing in the wake of Katrina. Leslie would be a good person to ask about how useful some of that information was. APA does a lot of work national, it does a lot of work you know lobbying and spending time in DC, you know, so I think that that's probably sort of their biggest impact. I know Paul Farmer has testified before Congress on Katrina-related issues in the Gulf Coast.

So APA, has historically had that type of role. Now I'm sure Leslie mentioned this to you, but where we have had a real difficult time in the aftermath of Katrina's effect that our planning – our planning department was decimated, right, went from what 27 employees to down to seven or eight, and I know recently they have been able to hire more, but arguably we had – our planning department was too small before the storm. So in terms of the capacity to do effective planning, I think the people, who work at city planning are a lot of very bright, incredibly-talented people, but like all city departments after the storm, everyone has been struggling. And this is where and why instead of being able to fund city planning to do what they normally do that we've relied on, outside consultants.

Kondo

Another question is how the planning consultant and also university assist in the neighborhood based planning level to work with citizen's organization, community organization, to prepare districts plan in the 13 area, it is very difficult work, and my question is how the professionals work for and – not

work for – work with community organization to prepare district plan.

Dr. Marla Nelson

That's a good question. Immediately when the issue of the footprint was raised last fall or in January, there was this talk about there would be a moratorium, which never came to fruition, but that the city would have to provide – approve their viability and what you saw happening was really an unprecedented amount of neighborhood activism in the City of New Orleans and groups getting together to sort of say, "Hey, our neighborhood is coming back." And then there was a hiatus before the neighborhood planning actually began. As I said the BNOB Neighborhood Planning Process was never funded, it took a little while for the Lambert process to get off the ground. So, a lot of neighborhood groups have really started planning and you had university planners, I mean here, but also from planning schools from across the country.

Kondo

Across the Country?

Dr. Marla Nelson

Universities from across the country stepped in to provide some technical assistance. Some of the schools and Ralph would have a very good handle on this because he was working with FEMA at the time and a lot of university groups would contact him. Cornell has been very active, Pratt, MIT. Cornell and Pratt have been working with ACORN. Also, the Broadmoor neighborhood they teamed up with some faculty from the Kennedy School of Government at Harvard, –there has been a lot going on. Then the Lambert process came along and each districts, was designated consultant teams and those consultants worked with you know those neighborhoods. I mean as you know sort of what the literature says, I mean so far it's hard to say what's been successful and what hasn't, right.

Because it's such an ongoing process. But from my casual observations, it sort of confirms the literature, a few of the outsiders coming in, be it this university faculty or university faculty from other places those sort of partnerships that have seemed to be the strongest or bearing the most fruit are those that work with established community organizations and have a long-term relationship, we've seen a lot of people coming, "Oh, we are here for a week. We are

going to come and help you plan and," you know, it's sort of a...

Kondo

I understand.

Dr. Marla Nelson

...disconnect. So to the extent that the Lambert Consultants and now the UNOP District Consultants and I think there is probably some variation between districts or among districts, but it takes a lot of work to really work with the community and make sure people come out to a meeting and really involve folks. But, I believe in some of the areas, I mean those that I participated in it seems as if the consultants are doing a good job. I don't know if that's the case across the board, but it's difficult.

Kondo

It's very different from – when compared to the Kobe, that the consultant team is funded by the private foundation. In Kobe, city government funded to the consultant so the consultants tend to just listen to the city government's voice because city government pay the consultant fee. So it was hard to facilitate and empower the community residents in a real sense. Kobe City Government prepared a plan in two months in the early stage, the community have little impact for this recovery plan to change what they want in their neighborhood. So, I think in New Orleans the private money, independent from government, is funded for the consultant team, so it works better when I think compared to the Kobe.

Dr. Marla Nelson

My concern is effective citizen participation is difficult. You know you used the word empowered, for people that feel truly empowered, this doesn't happen by going to two or three meetings.

Kondo

I agree.

Dr. Marla Nelson

And participation is a really difficult business. And I believe that there have been efforts to really get people involved and to listen to people's concerns, but the degree to which, that participation is really going to change things, I don't know, it remains to be seen.

You know we had a very successful Community Congress a couple of weeks ago. A lot of people came out, but do you feel empowered by voting? I don't know. I was a little frustrated myself. I think the outrage was great, the participation was phenomenal, but a couple of the key things that we found out from that meeting, so people wanted Category-Five Levees and good schools. We knew that 15 months ago.

Kondo

Yeah, yeah!! They wanted it from the beginning.

Dr. Marla Nelson

Effective participation is very difficult and, it's hard and people are very stressed out, I'm sure as the citizens in Kobe were feeling after the earthquake. People have got a lot on their plates. In New Orleans about planning fatigue. I don't know if anyone has used that phrase before. Planning fatigue –people are tired of planning. How many more plans? What is this one? There is some confusion because first it was, you know, BNOB.

Kondo

Oh, I understand that, it also happened in Kobe.

Dr. Marla Nelson

And then Lambert and now UNOP and everyone's just like, some confusion as to you know what does this all mean...

Kondo

Let's go back to the topic on the rebuilding plan announced in January 2006. Was it just a guideline for or just a guideline or a plan, which indicated –what kind of planning element does Neighborhood Rebuilding Plan should include? How do you evaluate the intention of the rebuilding plan issued in January 2006? I have read that rebuilding plan, but I could not understand what was this plan's intention, it is a first step to start recovery planning or – and is there a connection between Unified New Orleans Plan or not?

Dr. Marla Nelson

Well, it will be interesting to see this plan when it's actually released, but the idea is to say, "Hey there is a lot of work and research that went on in the BNOB and the Lambert Processes." So, we are going to draw on that

and that's sort of, why you have the alliance and the connections instead of it being, right, that's you know totally unrelated to say, "Hey, we are going to build on it." The degree to which it really provides the framework, I think will be limited, but essentially that plan in January was to provide, recommendations. Ideally, this is sort of how we would like to proceed.

And it laid out a particular roadmap to begin to think about how to rebuild, but there was public outrage and at first, it came out to say there was going to be a moratorium. What happened is the Mayor quickly realized how politically unpopular that was and retreated. And said, "Okay, no moratorium," so then everyone went and got building permits, and really changed his tune from saying, "We are going to shrink the footprint of the city," to saying, "Hey, we are going to let the market lead." He adopted this market approach to let rebuilding happen anywhere.

So now I think that's really the key tension that we have here. How much regulation will there be? And tensions between – we just hired a new head for our office of recovery, Ed Blakely.

He was Dean at USC and also Dean at the Milano School and at the New School in New York City, in fact, during the Trade Centre attacks. You know he would be an interesting person for you to talk to, I also have his e-mail if you want to try to contact him. But when he, I was just reading a recent article when, he – you can see there, it would be interesting to talk to him about this, so this is the really the key tension I think we are facing, are we going to really try to concentrate, rebuilding efforts in certain parts of the city or are we going to really let it happen everywhere, tension between shrinking the footprint and a market approach.

Kondo

Yes, that would be a focus in recovery planning. You mentioned before that in Community Congress the people say "We want category-five levee!". I walked around yesterday in Lower Ninth Ward and go to Lakeview where the Canal Breach and the levee Protection – its just emergency restoration, not just for the category-three levee, right, and it's not for the Category-Five Hurricane.

Dr. Marla Nelson

No, no.

Kondo

When the city government tried to involve community in the recovery process, they have to ensure the people can come back to a safe city. They have to provide temporary housing, infrastructure and also the levee protection. I was very confused at how the levee restoration and protection plan is connected to the recovery plan (UNOP), it is just different component.

Dr. Marla Nelson

Well, and I think this gets back to you know the tension between shrinking the footprint and allowing people to rebuild anywhere.

The Mayor has said build at your own risk. So people are going back into areas that won't have protection back to pre-Katrina levels for quite some time and we know that pre-Katrina levels weren't good enough.

Tomorrow actually I'm to go to a meeting as part of the UNOP team where we are going to have folks from FEMA and the Corp of Engineers talk about where they are with the Levee Building Project with all the levee repairs.

It's very complicated and by this date this will be complete, by that date that will be complete, but nothing about Category Five that hasn't been, approved by the Federal Government and many people don't think it will be.

Kondo

So the problem would be that decision maker for the Levee Protection is Federal and national level not the local level, right?

Dr. Marla Nelson

Yeah, because it's such an expensive endeavor that you can never have a local government, who would pay it. You know it's sort of similar – in fact it is similar with transitional housing, because the housing, the transitional housing that's been provided has been provided by FEMA.

Via either trailers... Vouchers for people to stay in hotels or apartments and other parts of the country and, I think hopefully perhaps one of the things that may change as a result of Hurricane Katrina is a rethinking of FEMA's housing policies because FEMA – and again Ralph there would be able to speak to this better than I could.

But FEMA is restricted from providing – from building housing, right. They can provide travel trailers, but they can't come in and actually build housing, and my guess is housing developers – they don't want the federal government building housing, right. You know so that's why there have been plenty – there has been a lot of discussion about "Hey, why are we spending so much for trailers?"

When we could put in decent, safe, more hurricane resistant modular housing at the same cost or less than what it cost for a trailer? So, hopefully this may be a policy change that we see come out of Katrina. I don't know if that's the case, but hopefully so. Again, I mean the city doesn't have the resources to build transitional housing.

In the United States, local government might provide incentives to developers, some tax incentives particularly for the development of affordable housing, but local government doesn't build housing. And in fact nowadays, the federal government doesn't even build affordable housing, right, they come up with public/private partnerships with developers to help build affordable units, but that's a sort of another problem that we are having here in this city as what to do about public housing.

Kondo

Kobe government provided public housing for the citizens who lost their housing by earthquake.

Dr. Marla Nelson

But here again a lot of housing scholars have pointed out over the years that American Public Housing has been plagued with problems where poverty, crime, violence, difficult up keeping the units. The fact of the matter is many people point out that it's because we never provided the sort of resources for it to be successful or, we only allowed the lowest-income people to live in it and because there has been pressure all along that by housing developers and home builders associations that they don't want the federal government, in their markets, right. You know so it's always been a very difficult relationship.

Kondo

In Kobe, the government provided 40,000 public housing units, and when compared to the US, the public housing project in Japan is not similar to US, there is little stigma.

Dr. Marla Nelson

See some have argued that in the United States, I mean we are obviously not as enlightened as the Japanese and that stigma was put there purposefully so that people wouldn't want to opt out of a private housing market to get public housing. You know and again because of pressure by private housing developers and organizations.

Kondo

But just 1% or 2% share in United States is the public housing share, but in Japan its 7-8%, so public housing would be not a tool for the housing recovery after the disaster in the U.S.

Dr. Marla Nelson

You know so in terms of transitional housing after that, there were certainly people displaced, but not on the level of the Kobe or a Hurricane Katrina so it's very, very different, because the impact was very concentrated.

So any sort of housing assistance I would guess, in looking at, Hurricane Andrew, I mean, my guess is to look at the work of disaster scholars, but FEMA's assistance is either via trailers or, vouchers to stay in a hotel or rent an apartment.

Kondo

Okay. Would you explain the urban problem in New Orleans before Katrina? I think I have to understand the urban problem in here – this city, what was the problem before Katrina.

Dr. Marla Nelson

Okay. You know a good source to look to for this for some data is The Brookings Institution and, I'm sure you have seen their Katrina Index, but they also did right after Katrina hit a couple of pieces that really, I thought, nicely sort of summarized really the negative side of New Orleans before the storm, really documented, provided data on poverty...

You know and looked at issues of race and class. So I think that should still be on their website so that's something that you should take a look at for numbers. The problems were numerous, high levels of poverty and really seeing inequities in terms of race. I mean for the most part, African-Americans were disproportionately represented amongst

the poor. My husband is a public school teacher and he was before the storm, we had a terrible public school system. We had a handful of magnet schools where middle class people, who were committed to public education, would get their kids into, but for the most part the public school system was a mess. And The Brookings would have the exact number, but it was something like the public school enrolment in the City of New Orleans was like 97% or 99% African-American. So you could really see the inequities there that if you had the resources and a few moderate-income person, I mean you would do what you could to send your child to, a private school unless you were so committed to public education. I mean the stories are terrible about that system and as a result, we had a very undereducated population. We had really high rates of functional illiteracy; our economy was not very strong and really where our economy lacked – where it lagged in other regions is that it wasn't very diverse. So we had a tremendous amount of jobs in tourism and healthcare or other areas of specialization that provide decent wage jobs, poor-related jobs or jobs related to petrochemicals. These aren't very labor-intensive industries. I mean if you look at ports now, years ago you would employ thousands of people at the port and now things are so mechanized that even though the jobs are well paying they don't employ a tremendous amount of people. So we had a vast under-skilled population and not a tremendous amount of job opportunities with career ladders for people to move up. So a lot of poverty and, as a result a lot of crime, I want to say that these problems, although very serious and intense in New Orleans, were in no way unique to New Orleans, but really you could see similar trends in cities throughout the United States.

And the scale of the problem may have been different, but I personally was pretty frustrated in the aftermath of Hurricane Katrina and all the media coverage, like "Oh, poor black people in New Orleans," as if there isn't poverty in other places and growing up in the New York area, I know very well that, there is tremendous poverty or inequalities based on race and class. But, people keep their blinders on so you don't see them. The problems in New Orleans were very real, but I think that it's, you know, a problem we see in urban America more broadly. But Brookings, I think, has provided a lot of information on

some of the inequities before Katrina by race and class.

Kondo

Okay. When I compare to the World Trade Centre recovery and I have visited this summer to New York and talked with planner in Regional Planning Association and also there is Municipal Arts Society of New York. There were very mature citizens and professional-based organization in New York and they have their impact in the recovery planning process just one year after the disaster. But when compared to the New York – to the New Orleans it's – the civic organization is – civic society is not mature when compared to the New York. So it seems to me hard for New Orleans to recover from the disaster just by the local human resources in New Orleans. That's why so many private architects planner consultant all over the states come to New Orleans and helping the district recovery planning process, but how do you think about the difference between the Lower Manhattan Recovery and also Katrina?

Dr. Marla Nelson

Well, there are two key differences. One is the scale, you know, as I said and this is not in anyway to minimize the tragedy of 9/11.

But geographically, I mean it was a very small part of New York, the next day in much of the rest of the city, things were fine. You know in New Orleans, the city was empty for over a month, right. You know 200,000 damaged housing units.

So the scale is entirely different. Second, there was never any question that Lower Manhattan would recover. I mean here you have one of the key financial centers, of the entire world. It was just a matter of how it would recover and whether or not, what role if any an average citizen's voice would have. And I think what's difficult now in New Orleans is to think about New Orleans a little bit what it was before the storm. And New Orleans, although a wonderful city and I think one of my favorite places in the United States before Katrina and a truly fabulous place despite its problems, was a lagging or declining city. We were losing population over the past 10 or 20 years and our economy was strong in certain sectors, but if you look at New York again there was no question that New York would recover to matter how it

would recover, real estate in Lower Manhattan. I know in the first few weeks after the attacks, people were saying, "Oh, the death of city as no one is going to want to live there." I mean we know that that it took a while and that all changed and you know it's such expensive real estate that it would be developed. Here, I wonder I mean what will future demand be, not, in various parts of the city, but the city as a whole. I think that's a real key factor particularly in the United States where private development, private developers are really the key force, we have government that steps in at the local state or federal level to sort of regulate or shape the way that development takes place. But it doesn't control or dictate development. And I think that that's fundamentally different than what you may have you know in Japan, right, we can kind of regulate and I think that that's sort of what you can see happening in New York, maybe sort of shaping what all happened. B

It comes down to individual property owners, in longer term business and new people, and will people come back or will new people come? I don't know was that – did that answer your question?

Kondo

Yeah, yeah. My another concern is citizen participation, it's very difficult in the world anywhere. But in New Orleans, you have mentioned that the under-skilled population and the educated people – the people have a bachelor degree is very low rate in New Orleans when compared to the other states.

Dr. Marla Nelson

Actually, we were at the two ends of the spectrum. The City of New Orleans had a higher – a disproportionate share of people with graduate degrees.

Yeah, okay. And then a lot of people who were, so at the two ends were over represented, but in the middle a little bit weaker. But I believe even low-income people are people, who may not have formal education, can still be very active participants in a planning process because when it comes down people understand if that means you can rebuild, you can come back, these are such personal decisions, but I think people – I mean people have been so emotional here, which is I think another difference between the World Trade Centre because it's like what's going to happen to this big public building? Certainly some residents were displaced, but it's more

of what's going to happen to Lower Manhattan and not what's going to happen to your house, what's going to happen to your block? So it's much more personal here and I believe that if people are given the right information they can make decisions, right, because this is something that even if people aren't well educated they, if they were homeowners they know what it means to own a home or what it's going to take to rebuild and they need that information and should be broadened to the process. I think where the problem is that it's been very difficult to someone, who has been watching the process since the storm and has been very active in various aspects of it, to fully understand it and to fully understand what it means. What does this plan mean? what does that plan mean? What's UNOP going to do? That – I think that's where there is a real disconnect with effective participation. We are asking people to come out and participate, but we don't know what their participation is really going to affect? So, there is a focus and planning on process and outcome. And right now there has been so much process, process, process, we need your input. But we've seen very little outcome and I think that that's frustrating for people and I know it's frustrating for myself too. And I know that part of this is common after a disaster because it takes such a long time. In English we have a saying, "The grass is always greener," if you look in someone else's backyard, their grass is always greener. And in some ways the little bit I know about Kobe, it sort of seems preferable because, okay, maybe the government came in and said, "Okay, moratorium, this is the plan," and you know at least within a relatively short amount of time people knew – maybe they weren't happy with the decision, but you knew what to expect and you had an idea of what was coming. I think here in New Orleans individuals are making decisions, but they don't have all of the information because all of the information doesn't exist. We don't really know about levee protection. We don't know what insurance companies are going to do. So people are making decisions, but there is a tremendous amount of uncertainty.

Kondo

Also, outreach would be very difficult after Hurricane Katrina because so many citizens evacuated, nobody knows where they are, right? So – but I have read that Community Congress Report, second report, and it was

held in Houston and also New Orleans and the other – Atlanta. And there are the states that many people evacuated living in. What kind of outreach city government is trying to do to provide information like what the city government are trying to do or what's or how to involve into the district-based planning?

Dr. Marla Nelson

Well, and it's – I don't think it's been nearly as strong as it could be in one, because it's an incredibly difficult task at hand. We don't know exactly where people went. I mean another saying in English is "Hindsight is 20/20", right? It's easy to look back and say what we should have done. But I think one of our key limitations in post-Katrina planning is that people – there is always uncertainty in that the city, I think, could have done a better job granted, I realize the constraints that the city has faced in providing basic information to people and I think this has been one of the impediments to some of the planning that's gone on, is that there has been a disconnect sometimes with what people need and the actual planning activities that were undertaken, and if you think back to the Bring New Orleans Back Committee and the Commission Plan; in January these plans were unveiled. And a lot of it, was akin to a sort of visioning, right. Let's revision how we should rebuild New Orleans. And some real big topics were talked about, the footprint issue, the idea of like light rail, a transit, but at the same time people were outside of the city looking in and saying, "I haven't gotten back to my house yet, what's going to happen to my house? When is my water going to be turned on?" And I think that really angered people because the idea of talking about light rail was just like where am I going to live? And so a real sort of disconnect between what people needed and the planning that was going on and, I think my advice to other cities, who might face something like this in the future would be to, hey, to have some central place to really provide as much information as possible and maybe I'm being naive, but I think it would have been better to tell someone, I don't know, we don't know yet, than to not have any information at all, so even though some of the work that was done in the BNOB was good work. For many people they were just coming back to the city and it was like, "Wow, wait a second, what are we talking about?" So, real disconnect. But the outreach is hard, you now.

How about in Kobe? I mean were people just housed within the city pretty immediately?

Kondo

In Japan, they cannot evacuate their community because it would be hard from them to get information from local government, such as victims assistant grant. This does not happen in the U.S, because it has a system that people can register their name anywhere in the U.S at recovery office, and based on this list, they can get information from government.

If you evacuated the city, they can't – hard to get information about the funding so the Japanese never tends not to evacuate out of the city, they can't, but when compared to the US the system is different.

Dr. Marla Nelson

Excuse my ignorance about Japan, but in the United States, New Orleans aside, but in the United States, I mean we're a highly mobile population I grew up in the New York area, lived all over, came down here. And New Orleans had the highest share of people, who were from the area, but so this idea that people would move and be spread, I have lived in other places, I lived for a while in Poland and you don't move unless you've got a job somewhere, or in the United States. I feel like living in Florida or I feel like moving to California and you can just get up and move. But it makes outreach much, much more difficult. I think AmericaSpeaks did a very good job with the outreach on Congress Number Two, so I don't know how they do it, I don't know how they – I saw some of the techniques used in the city, the different print, the print media, and the television and radio to really get people involved, but I don't know you know how they really identified people in Houston or Atlanta or Baton Rouge, but you know Steven Bingler may know something about that.

Kondo

Okay. So I have a last question. And this is a very big question and difficult to answer, but how – as a professional point of view how can New Orleans plan and plan for more resilient place after Katrina? How to ensure the resiliency that can stand for the disaster, not only for the disaster, but the disaster would be a window of opportunity to restore a city to not just the safety element, but a comprehensive element plan would be needed

after disaster. So, how do you think the most important element to make New Orleans a resilient community?

Dr. Marla Nelson

Well, that's a very good question and, you know, it's outside of my area of expertise. I work with a sociologist here on our campus who has worked on hazards mitigation for the past 20 years. You know really looking, working with FEMA and the Corps and with Flood loss and certainly there are things that we could do to rebuild smarter. To make sure that people don't move back to vulnerable places and try to increase densities and safer places realizing that when we talk about New Orleans safety is – its relative, right, because the city is – all of the city is vulnerable, right, there are places that are less vulnerable, but to not encourage development in the most vulnerable places and when people do rebuild, to rebuild smarter to make sure that people rebuild higher, but this is a tricky thing because in the United States, as I said, I mean the individual property owner enjoys a lot of rights and doesn't like a lot of restrictions and regulations and, I think, that there has been a lot of punting, first we were going to come out and have a moratorium and not allow rebuilding in certain areas where there was so much of a political outcry that the Mayor quickly retreated and really since the time people haven't talked openly and honestly about the footprint issue. I want to say that the level of mistrust in the United States and in a lot of cities is incredibly high. In minority communities, the level of distrust minority communities have of City Hall is enormous. And so if you tell someone maybe in the Lower Ninth Ward or maybe in New Orleans East, you shouldn't built, even if you are using good sort of planning sense people feel that there is social engineering going on and that people don't want certain populations to come back and it's a conversation that we haven't been able to have openly and constructively. And, so there is mistrust. "Oh, you don't really care about our safety, you just don't want, you want fewer African-Americans or fewer of this type of person coming back." On the same side, is that you have had people, who have lived, so called advocates of good government that have said, "Oh, we shouldn't have rebuilt in these places." But they're not saying, "Okay, everyone, who lived in the New Orleans East, come to my neighborhood," right. So it's – you can see

why that mistrust is there. I don't know if you are familiar at all with the History of Urban Renewal in the United States.

And, what a lot of community suffered is very palpable. And the issue is highly racialized. So, it makes good planning difficult and I think that you can't really understand the situation in New Orleans without having a very basic understanding of that, because if you say, Green Space or shrinking the footprint to some communities that means you don't want black people back.

Kondo

Yeah. Leslie, associate director of City Planning Commission in New Orleans, mentioned that the Urban Land Institute report was technically good from the perspective of planning. City has to rebuild a safer city, but the people does not want just technically right plan, but their problem is how they cannot rebuild their housing and rebuild their life. So, there is a conflicting interest and value between the public government level and the resident and community level in the disaster recovery process. I think it's very difficult to fill the gap between the city government plan and also what the community wants. It's also about the issue in Kobe and it was very hard. There is also the tradeoff between the slow, deliberate process and the speed, quirkiness to recover.

Dr. Marla Nelson

Well, and I think that raises its real temporal dimension that we're dealing with. I know that there is a disconnect between what people need and the sort of the planning activities undertaken, but I think that there is – this is something I'm particularly interested in watching overtime here in New Orleans, as how people's attitudes have changed. The sociologist, I mentioned I have been working on a survey of two planning districts with her to gauge how many people are coming back and where and, I think there is a temporal dimension in that people after the storm say, "Yeah, I'm coming back and rebuilding," and maybe people got a trailer, and maybe people started working on their house, and if they don't see a lot of progress or progress is too slow people are reconsidering and maybe starting to think, "Well, maybe I don't want to stay here, maybe," you know so what someone is feeling now could very well be

very different than what they were feeling in October of 2005 or January of 2006, right. If you start rebuilding and no one is – you are in a trailer and there isn't anyone for three blocks, well, you might say, "Hey, maybe this isn't what I should do."

Kondo

So the city government outreach would be very important for the citizens, who evacuated from New Orleans to reconsider how they can come back or not.

Dr. Marla Nelson

Well, and this is part of the problem is that I think a lot of people, who have – a lot of people haven't come back that want to come back because there is no housing and public housing for the most part has not reopened, they have reopened a few units, but only a small percentage. And, because of the mistrust that I spoke about I think that there is a perception by some people, who haven't been able to come back, that says, "I'm not wanted back," and that makes people very angry. And it gets back to the crucial housing issue, , and we are very – why don't we have transitional housing?

Will you be writing anything up in English?

Kondo

Yes, I think it will take two or three years to finish, I will submit a paper in English in academic institutions, so I will let you know after I completed this project.

Dr. Marla Nelson

I'll look forward to it. You know you should really try to get to speak with someone from AmericaSpeaks because they worked at the Trade Centre too.

Kondo

But I don't think this technique just one big workshop is just called citizen participation.

Dr. Marla Nelson

I agree.

Kondo

But it was very interesting workshop style using IT technology, but in a real sense the empowerment and the civic involvement could not be implemented. Just one workshop so, I'm not just focusing on this workshop. So you are engaging in District 5 Neighborhood?

Dr. Marla Nelson

District 5 and District 6 with surveys. And we're still getting the results back from those surveys and in terms of the – I have been pretty involved going to a lot of the District 6 meetings for the Lambert plan, all during the Lambert plan, so I went to those meetings and now I have been going to my own district, I live in District 2. You know so that's the hard thing, and it's sort of part researcher and part resident.

And now, involved you know as I said, with this UNOP City-Wide Plan just doing some assessment of the healthcare infrastructure and just documenting where we are, with hospitals and clinics and, identifying some projects that we should really be thinking about in our recovery.

Kondo

Okay. So the next time I visit New Orleans, I would like to visit District Level interview for the community resident and how the district plan developed, and I will come back to figure out how the district plan was prepared.

Dr. Marla Nelson

Okay. And when are you going to come back?

Dr. Kondo

I'm not sure, but I think fall or September or October.

Dr. Marla Nelson

Okay. Well, certainly definitely come back because we'll be able to provide you some feedback and hopefully the organizations within these districts that have been very involved with the planning, so it's a long-term process.

And hopefully they are still going to be going strong and, so there would be the potential to identify some contacts in District 6 to possibly talk with.

And the reason the sociologist, Shirley Laska and I focused on Districts 5 and 6 is because our chancellor of the university really called upon faculty to focus on the districts next to the university because knowing that if Districts 5 and 6 don't come back the university is going to be in big trouble. And the University of New Orleans has really been struggling since the storm. The planning department has been fine, but numerous tenured faculty members have been laid off.

I guess they realized that it wouldn't look good to have fire planning professors even though most of the planning professors are untenured, you know, because we're relatively young so we were lucky.

No, but there is a concern that parents send their kids to school if they have to drive through Gentilly and Lakeview and it looks bombed out and there is no services, no coffee shops or restaurants.

Kondo

Okay. Thank you. I was very lucky that I can meet with Dr. Ralph Thayer [ph] in Kobe. He visited Kobe for the – our institution this October.

We shared the experience between Kobe and Katrina.

Dr. Marla Nelson

Dr. Vera Triplett is the CSO so she knows a lot about the UNOP process.

And she is also a resident of District 6 and a very active resident.

So she would be a very good person when you come back to talk with about, well, what did the district plan accomplish, right?

She is a wonderful woman.

END
