

HUT-206
***Disaster Recovery Management and Urban Development:
Rebuilding New Orleans***

Class Meetings:

Fall Semester: Tuesdays & Thursdays 10:10am-11:30am, Littauer 382
January 2010: January 4-21 in New Orleans

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Office Hours: Tuesdays 1:00pm to 5:00pm and Thursdays 1:00pm to 5:00pm
 (except October 29th and November 10th)

Course Description: This course presents disaster recovery theory and practices and examines (in detail) the recovery from Hurricanes Katrina and Rita in New Orleans. Disaster recovery management will be examined at the federal, state, city, and neighborhood/community levels to present a full understanding of disaster recovery in general, and the recovery in New Orleans in particular. Coupled with a January practicum in New Orleans, this course applies community disaster recovery skills in field-based team projects working in the flood-damaged Broadmoor neighborhood of New Orleans. Concepts covered in this course include: principles of disaster recovery management, the economics of disaster, risk management, hazard mitigation and land use planning, disaster recovery planning, community development, community-based recovery, repopulation dynamics, federal and state recovery programs, and housing and capital projects reconstruction and finance. This course can best be thought of as the anatomy of a disaster and its recovery – a mega case study (or suite of cases) that dissect the recovery of a city from the largest natural disaster in U.S. history. This course will meet twice weekly during the fall semester and include a mandatory 2.5 week practicum in New Orleans during the January term to work on, and complete, field-based team projects begun during the fall semester. The field-based team projects are real recovery management projects that assist the residents of Broadmoor (the Client) with their recovery efforts. All students must participate in the 2.5 week non-credit January practicum in New Orleans, and grades for the fall course will not be submitted until completion of the practicum. Student travel, modest accommodations, and meals will be provided for the January field-based practicum in New Orleans. The goal of this course is to apply classroom learned skills in a real-world, high-stakes situation.

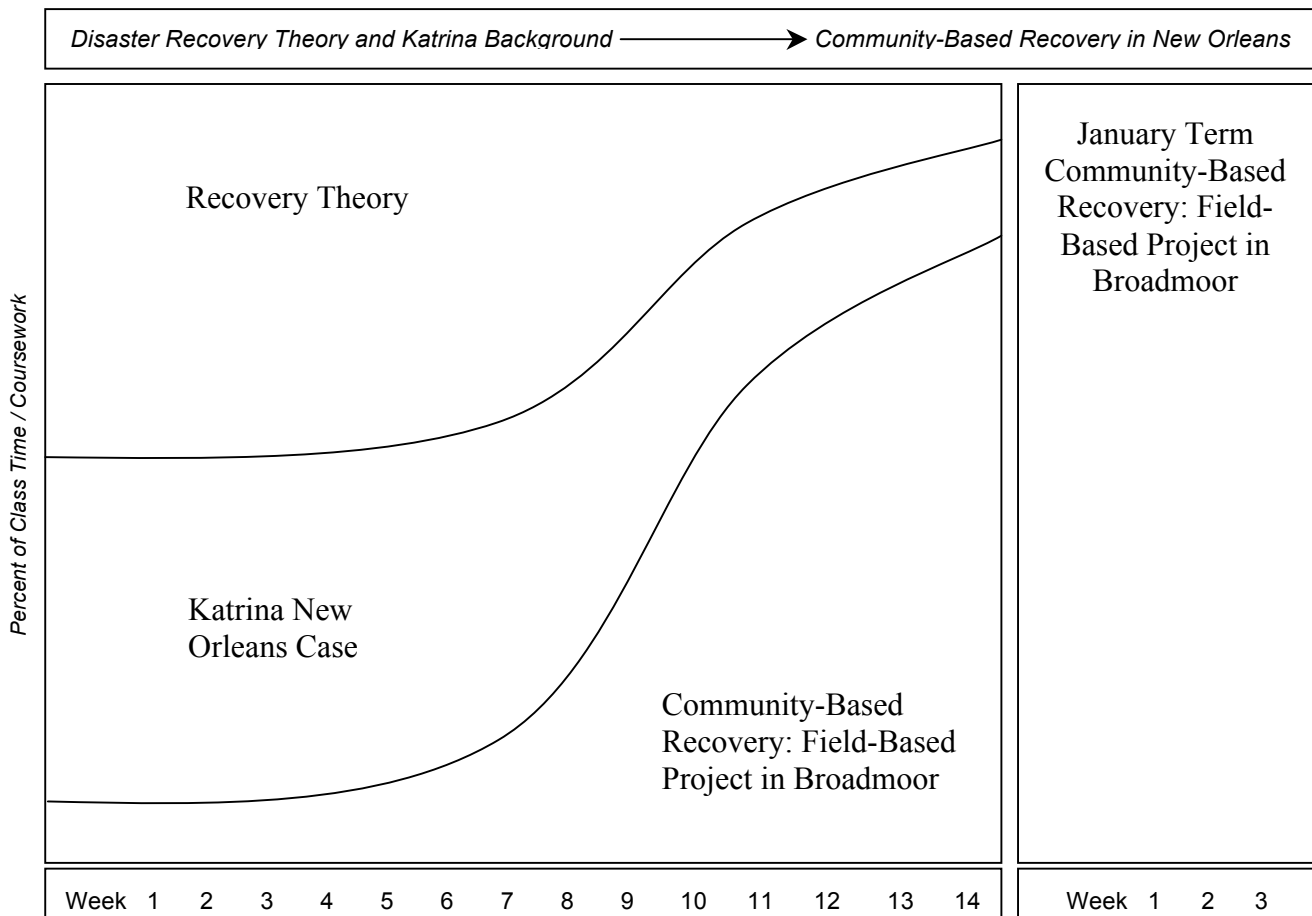
Enrollment Limitations: This course is limited to students in 2-year programs who are in their second year. Students who do not meet these criteria can be admitted by special permission of the instructor.

Course Schedule/Grades: The course will meet twice per week in the fall semester to facilitate case teaching (Tuesday and Thursdays 10:10-11:30). The class will spend January 3rd through January 19st in the Broadmoor neighborhood of New Orleans working on their group projects. While fall semester grades are normally submitted to the Registrar on January 15, grades for this course will not be submitted until January 22 after the student teams have submitted final deliverables to the clients in New Orleans.

Format: This course is based on the “case study method” and therefore relies on analysis of the case before class and participation in discussion of the case during class. Many classes will require the reading of prepared case studies, others may require reviewing a “fact set,” and others may require reading and analyzing legislation, testimony, and/or government reports. In each of these instances, the reading and preparation will be for participant-centered learning (active discussion) in the classroom.

Over the duration of the semester, the format of the course will shift to a greater emphasis on field-based projects (practicum) working with the Broadmoor neighborhood of New Orleans as “the client.” Students will be assigned to teams of 4-5, and each team will be assigned to a project selected by the instructor and the client. As the semester progresses, the student teams will spend more time working on their field-based (practicum) projects. In January, the teams will travel to the Broadmoor section of New Orleans where they will spend 2.5 weeks working on their projects and presenting to the client.

The Disaster Recovery Management Course begins with general disaster recovery theory and an examination of Katrina and New Orleans (anatomy of the largest disaster in U.S. history) and shifts to a focus on Community-Based Recovery in the neighborhoods of New Orleans and in Broadmoor. The theory and Katrina cases provide the knowledge, tools and context for the community-based recovery fieldwork (practicum) in Broadmoor.



Course at-a-glance

Fall Semester 2009

	Topic(s)	Cases	Field-Base Project
Th 9/3	Simple Analytics of Disaster Recovery	Cold Discussion of Recovery Issues	Overview of Field-Base Projects/Logistics
Tu 9/8	Katrina – Preparing & Responding to Katrina	Hurricane Katrina Case (A) & Case (B)	Review Field-Based Project Opportunities
Th 9/10	Field Project Overview (meet the clients)	Guests – LaToya Cantrell & Hal Roark	Projects Assigned; Meet Client
Tu 9/15	History & Geography of New Orleans	Guest Speaker – Richard Campanella	Meet with Instructor for a Briefing
Th 9/17	Hydrology & Risk in New Orleans	Guest Speaker – Ivor van Heerden	Prepare Project Plans
Tu 9/22	Recovery Management in a Federal System	Discussion of the Stafford Act	Contact Client & Prepare Workplans
Th 9/24	Federal Disaster Assistance Programs	Presentations on Assistance Programs	Contact Client & Prepare Workplans
Tu 9/29	Federal Disaster Assistance Programs II	Presentations on Assistance Programs	Contact Client & Prepare Workplans
Th 10/1	New Orleans Situation Analysis	Immediate Aftermath Case (Fact Set)	Contact Client & Finish Workplans
Tu 10/6	Presentations of Field Project Plans	----	Presentation of Project Plans in Class
Th 10/8	Recovery Planning	Planning vs. Politics Case (BNOB Case)	Working on Projects
Tu 10/13	Recovery Planning	Broadmoor Lives Case (A & B)	Working on Projects
Th 10/15	Risk & Moral Hazard; Land Use & Mitigation	Discussion of Op-Ed “Why Rebuild?”	Working on Projects; J-Term Logistics
Tu 10/20	Risk & Moral Hazard Continued	Discussion of Risk Continued	Working on Projects
Th 10/22	Recovery Management & Implementation	Guest Speaker: Ed Blakeley (ORDA Case)	Working on Projects
Tu 10/27	Recovery Planning	UNOP Case	Working on Projects
Th 10/29	Recovery Management & Implementation	Guest Speaker: Andy Kopplin (LRA Case)	Working on Projects
Tu 11/3	Housing Strategy	Road Home Case	Working on Projects
Th 11/5	Role of Non-Profit, Faith & Community Orgs	Neighborhoods in NOLA Case	Working on Projects
Tu 11/10	Emergence Theory and Recovery	Banda Aceh Case	Working on Projects
Th 11/12	Disaster Impact Modeling (HAZUS)	Guest Speaker: Hope Seligson	Working on Projects
Tu 11/17	Repopulation Dynamics	GIS Repopulation Mapping Exercise	J-Term Logistics; Working on Projects
Th 11/19	Role of Investment; Investment Uncertainties	Discussion of the Readings	Working on Projects
Tu 11/24	Course Summary (Sequel); Follow the \$\$\$	Katrina at Year 4 – Where to From Here?	Meet w/Instructor Outside Class
Th 11/26	Thanksgiving Holiday	---	---
Tu 12/1	Project Presentations	---	Presentations of Projects to Date
Th 12/3	Project Presentations	---	Presentations of Projects to Date

January Term 2010 – in Broadmoor, New Orleans

Week 1	Arrive; Meet & Greet; Tour; Meet w/Client & Present; Refine, Represent & Gain Approval; Develop Workplan/Schedule; Work on Project
Week 2	Meet w/Client (Check-in); Work on Project; End of Week Presentations to Other Teams
Week 3	Meet w/Client (Check-in); Work on Project; Present to Client & Residents of the Community; Prepare Final Drafts & Deliverables; Depart

Readings and Class Preparation: Each class has a set of required readings and a set of optional readings. The required readings are what you are expected to have read before coming to class – they will be central to the discussion based format of each class. Even for classes where a guest speaker is present, a large portion of the class time will be devoted to questions and answers, and the readings are designed to prepare you for engaging in a meaningful discussion of the subject with the speaker. Optional readings are not required to be read, but would be in an ideal world – they represent key information on the topic. You are encouraged to peruse the optional readings.

Note that several documents assigned as required or optional are quite lengthy (especially government documents, legislation, and reports). The nature of disasters and recoveries from disasters is often complex and messy. Understanding them is rarely a matter of reading a simple digested summary. This course is designed to explore the complexities of post-disaster situations, so lengthy documents and reports are a part of this exploration. For example, one New Orleans recovery plan can run hundreds of pages, and there have been at least five such plans since Katrina. But it makes no sense to talk about disaster recovery without looking at these plans. So, you will find that many original source documents are provided as either required or optional readings. You cannot be expected to read every page of these lengthy documents, so, one of the purposes of this course is to habituate you to the method of reading large documents, reports, or legislation efficiently (identifying and extracting the salient points). This is not a general skimming of the materials, but rather the pulling out of the central points and focusing your detailed analysis on those. Shorter readings and cases should be read and analyzed in their entirety. Cases may need to be read 2-3 times for complete preparation for class discussion.

Course day-by-day detail

Thursday September 3rd
<p><u>Course Overview</u></p> <ul style="list-style-type: none"> • Brief overview of the nature and purpose of the course <p><u>DRM Theory</u></p> <ul style="list-style-type: none"> • Risk Management Framework • Simple Analytics of Acting in Time • Phases of Recovery
<p><u>Field-Based Project</u></p> <ul style="list-style-type: none"> • Overview of the field-based projects and the January Term • Review of the logistics of the project and the immersive experience in Broadmoor
<p><u>Required Reading</u></p> <ul style="list-style-type: none"> • No required reading <p><u>Optional Reading</u></p> <ul style="list-style-type: none"> • Herman B. “Dutch” Leonard and Arnold M. Howitt, Chapter 2 - The Simple Analytics of Acting in Time Against Disaster: A Comprehensive Risk Management Framework, forthcoming in <i>Mitigating and Recovering from Natural and Unnatural Disasters</i>, Wharton School Publishing, 2010.

Tuesday September 8th

Case Study

- Case: Hurricane Katrina (A): Preparing for “The Big One” in New Orleans

Assignment Questions:

1. Were the various agencies prepared for this disaster? How and how not, and why?
2. What was the role of FEMA in preparing for this event? Did they do their job well?
3. What were the roles of the mayor and the governor? How did they do? Why?
4. What are the lessons from this case for emergency managers elsewhere?

- Case: Hurricane Katrina (B): Responding to an “Ultra-Catastrophe” in New Orleans

Assignment Questions:

1. Who knew what and when?
2. What was the role of FEMA in responding to this event? Did they do their job well?
3. What were the roles of the mayor and the governor? How did they do?
4. Did any one perform well? And if so, why? What made them different than others who performed less well?
5. What was the source of the problems with responding to this event?

Field-Based Project

- Review of Field-Based Project Opportunities
- Open polling survey to sign up for 1st, 2nd and 3rd preferences for project assignment

Required Reading

- Case C15-06-1843.0: Hurricane Katrina (A): Preparing for “The Big One” in New Orleans
- Case C15-06-1844.0: Hurricane Katrina (B): Responding to an “Ultra-Catastrophe” in New Orleans

Optional Videos & Readings

- NOVA documentary (video available online), “Hurricane Katrina: The Storm That Drowned a City,” WGBH Boston Video, Pioneer Productions, 2005.
<http://www.pbs.org/wgbh/nova/orleans/program.html>
- Frontline documentary (video available online), “The Storm,” WGBH Boston Video, 2005.
<http://www.pbs.org/wgbh/pages/frontline/storm/view/>
- U.S. House of Representatives, “A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparations and Response to Hurricane Katrina,” U.S. Government Printing Office, 2006. <http://www.gpoaccess.gov/katrinareport/mainreport.pdf>
- The White House, “The Federal Response to Hurricane Katrina: Lessons Learned,” February 2006.
<http://georgewbush-whitehouse.archives.gov/reports/katrina-lessons-learned.pdf>
- U.S. Senate, “Hurricane Katrina: A Nation Still Unprepared,” Special Report, Committee on Homeland Security and Government Affairs, Government Printing Office, S. Rept. 109-322. 2006. <http://www.gpoaccess.gov/serialset/creports/katrinanation.html>

Thursday September 10th

Discussion of the Readings

- Discussion of Introduction and Conclusion chapters in “The Resilient City.”

Field-Based Project – Introduction to Broadmoor and Field-Based Project Details

- Guest Speaker: LaToya Cantrell -- Broadmoor resident, president of the Broadmoor Improvement Association (BIA), and president of the Broadmoor Community Development Corporation (BDC).
- Guest Speaker: Hal Roark – Broadmoor resident, executive director of the Broadmoor Community Development Corporation (BDC), co-chair of the BIA’s Broadmoor Revitalization Planning Committee).

Field-Based Project

- Students assigned to their teams for New Orleans field-based projects (Team assignments to field-based projects for the rest of the semester and for completion in the January Term in Broadmoor, New Orleans). Teams should introduce & organize themselves outside of class.
- Meet the Client (Broadmoor)
- Discuss the Field-Based Team Projects

Required Reading

- Lawrence Vale and Thomas Campanella, Introduction: Cities Rise Again, in *The Resilient City: How Modern Cities Recover From Disaster*, Lawrence Vale and Thomas Campanella (eds.), New York: Oxford University Press, 2005. pp. 3-14.
- Lawrence Vale and Thomas Campanella, Conclusion: Axioms of Resilience, in *The Resilient City: How Modern Cities Recover From Disaster*, Lawrence Vale and Thomas Campanella (eds.), New York: Oxford University Press, 2005. pp. 335-355.

Tuesday September 15th

New Orleans Background: History & Geography of a Delta City

- Guest Speaker: Richard Campanella, Center for Bioenvironmental Research at Tulane University

Field-Based Project

- Teams meet with instructor outside of class for a briefing (each teams meets for one hour)

Required Reading

- Richard Campanella, *Geographies of New Orleans: Urban Fabrics Before the Storm*, Center for Louisiana Studies, University of Louisiana at Lafayette, pp. 5-65, pp. 91-97, and pp. 297-314.
- Rob Shields, Chapter 4: Delta City, in *What is a City: Rethinking the Urban After Hurricane Katrina*, Phil Steinberg and Rob Shields (eds.), University of Georgia Press, 2008.

Optional Reading

- U.S. Army Corps of Engineers, "Chapter 3: History of New Orleans Drainage, 1718-1893," http://www.mvn.usace.army.mil/pdf/History/abt_nodrainchap3.pdf
- U.S. Army Corps of Engineers, "Chapter 4: History of the New Orleans Drainage System, 1893-1996," http://www.mvn.usace.army.mil/pdf/History/abt_nodrainchap4a.pdf
- Richard Campanella, *Time and Place in New Orleans: Past Geographies in the Present Day*, Gretna, Louisiana, Pelican Publishing Company, 2002. Pp. 15-41, 73-84, and 125-146.

Thursday September 17th

Katrina/New Orleans Background: Levees and New Orleans Flood Risk

- Risk in New Orleans
 - Hydrology, levees and flood risk pre-Katrina
 - The flood event (What happened?)
 - The levees and the flood-control system today
 - Future Risk
- Guest Speaker: Ivor van Heerden, former deputy director of the LSU Hurricane Center

Field-Based Project

- Teams Prepare New Orleans Field-Project Workplans

Required Reading

- John Day, et al, Restoration of the Mississippi Delta: Lessons from Hurricanes Katrina and Rita, in *Science*, Vol 315, March 23, 2007.
- Detlof von Winterfeldt, Using Risk and Decision Analysis to Protect New Orleans Against Future Hurricanes, in *On Risk and Disaster: Lessons From Hurricane Katrina*, Ronald Daniels, Donald Kettl, and Howard Kunreuther (eds.), Philadelphia: University of Pennsylvania Press, 2006, pp.27-39.
- Carolyn Kousky and Richard Zeckhauser, JARing Actions that Fuel the Floods, in *On Risk and Disaster: Lessons From Hurricane Katrina*, Ronald Daniels, Donald Kettl, and Howard Kunreuther (eds.), Philadelphia: University of Pennsylvania Press, 2006, pp.59-73.
- Geoff Manaugh & Nicola Twilley, On Flexible Urbanism, in *What is a City: Rethinking the Urban After Hurricane Katrina*, Phil Steinberg and Rob Shields (eds.), University of Georgia Press, 2008.

Optional Reading

- National Geographic Documentary (DVD), "Inside Hurricane Katrina," 2006.
- Joel K. Bourne, Jr., A Perilous Future, in *National Geographic*, August 2007.
<http://ngm.nationalgeographic.com/2007/08/new-orleans/new-orleans-text>
- Team Louisiana Report <http://www.dotd.louisiana.gov/administration/teamlouisiana/>
- American Society of Civil Engineers, Hurricane Katrina External Review Panel, "What Went Wrong and Why?" 2007. <http://www.asce.org/files/pdf/ERPReport.pdf>
- U.S. Army Corps of Engineers Interagency Performance Evaluation Taskforce (IPET) Report, 2007. (type <https://ipet.wes.army.mil/> in the browser or "Google" IPET).

Tuesday September 22nd

Discussion Based on Readings

▪ Recovery Management in a Federal System:

You will be asked to read the Stafford Act, the NRF and ESF#14, and then discuss them in class. The documents to be reviewed are lengthy (all available online). The goal is not to read every line, but rather to read the legislation and agency reports quickly and efficiently in order to identify and concentrate on the salient points that govern disaster recovery policy.

Assignment Questions:

1. What are the laws and regulations governing recovery? Are they adequate?
2. What are the disaster recovery roles and responsibilities (political & financial) of Local, State & Federal Governments? What are those of individuals, neighborhoods, NGO's, CSO's and faith-based groups (if any)?
3. Who is in charge of recovery? Who should be in charge?
4. What is the FEMA ESF-14 (LTCR) process? Is it an adequate framework for recovery?
5. What, if anything, would you change about the current system?

Field-Based Project

- Teams contact the client to finalize project scope and refine project workplan

Required Reading

- Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities, FEMA 592, June 2007. http://www.fema.gov/pdf/about/stafford_act.pdf
- National Response Framework (NRF), Department of Homeland Security, January 2008. <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>
- Emergency Support Function #14 – Long-Term Community Recovery Annex, Department of Homeland Security, January 2008. <http://www.fema.gov/pdf/emergency/nrf/nrf-esf-14.pdf>

Optional Reading

- National Strategy for Homeland Security, Homeland Security Council, October 2007. http://www.dhs.gov/xlibrary/assets/nat_strat_homelandsecurity_2007.pdf
- NRF Resource Center: <http://www.fema.gov/emergency/nrf/> [ESF's 1-14 and Incident Annexes].
- DHS Organizational Charts, Department of Homeland Security, August 3, 2007. http://www.dhs.gov/xlibrary/assets/DHS_OrgChart.pdf
- FEMA Strategic Plan: Fiscal Years 2008-2013, FEMA P-422, FEMA, January 2008. http://www.fema.gov/pdf/about/fy08_fema_sp_bookmarked.pdf
- FEMA Organization Chart, FEMA, June 25, 2009. http://www.fema.gov/pdf/about/org_chart.pdf
- Post Katrina Emergency Management Reform Act (PKEMRA), 10th Congress, 109-295, 2006. http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ295.109.pdf

Thursday September 24th

Assistance Programs Presentations

▪ Federal Disaster Grant and Assistance Programs:

Each student will be assigned a different disaster assistance program or agency that offers disaster assistance. Each student will then research the assistance program(s) or agency and make a short (informal) presentation to the rest of the class. The presentation (5-7 minutes) plus Q&A will explain the goals and objectives of the assistance program, the details of how the program works, the benefits provided or paid-out, the situations under which it applies, program restrictions, eligibility requirements, forms/processes for applying/granting, any problems, gaps or weaknesses that you see with the assistance program, and any recommendations you have for improvement.

Assignment Questions:

1. What are the grant, assistance and incentive programs often used in recovery?
2. Are these programs effective? Why or why not, and under what conditions?
3. Who is in charge of directing and managing recovery funds?
4. What administrative and implementation challenges might you foresee (for the grantor or administrating agency, and for the grantee)?
5. Are these programs adequate? What aspects of recovery might fall through the cracks?
6. What other designs of programs might be used? Why?

Field-Based Project

- Teams begin background research on their projects

Required Reading

- Federal Disaster Recovery Programs: Brief Summaries, CRS Report for Congress, Congressional Research Service, The Library of Congress, RL31734, January 30, 2009.
http://assets.opencrs.com/rpts/RL31734_20090130.pdf
- Disaster Assistance: A Guide to Recovery Programs, FEMA, FEMA-229, September 2005.
<http://www.fema.gov/pdf/rebuild/ltrc/recoveryprograms229.pdf>
- Public Assistance Guide, FEMA 322. http://www.fema.gov/government/grant/pa/pag07_t.shtml
- The Gulf Opportunity Zone Act of 2005 [Summary], Committee on Ways and Means, Dec 2005.
<http://www.disasterhousing.gov/offices/cpd/economicdevelopment/library/taxincentivesgulf.pdf>
- Community Development Block Grant Funds in Disaster Relief and Recovery, CRS Report for Congress, Congressional Research Service, The Library of Congress, RL33330, May 6, 2008.
http://assets.opencrs.com/rpts/RL33330_20080506.pdf
- Disaster Recovery Community Development Block Grant Programs in Louisiana [Summary], Louisiana Recovery Authority (LRA), State of Louisiana, February 26, 2009.
<http://lra.louisiana.gov/assets/docs/searchable/meetings/2009/Board%20Meeting%202-26-09/CDBGProgramDescriptionsParishes.pdf>
- Fact Sheet About U.S. Small Business Administration (SBA) Disaster Loans, U.S. SBA.
http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_da_disastr_lo an_factsht.pdf

Optional Reading

Optional Readings for this class are listed on the next page. Many optional readings and resource websites are listed. Some of these resources will be helpful in research for your presentation on your assigned disaster assistance program or agency. Most of the pertinent documents, reports and websites that you might need have been collected here as a convenient research reference.

Collected Resources for Thursday, September 24th

- DisasterAssistance.gov – Federal assistance programs for Individuals and Businesses, [Website].
http://www.disasterassistance.gov:80/daip_en.portal?nfpb=true&pageLabel=gbcc_page_locate_federal&nfls=false
- FEMA Grants and Assistance Programs for Governments, FEMA, [Website].
<http://www.fema.gov/government/grant/government.shtm#1>
- H.R. 4440 [109th], Gulf Opportunity Zone Act of 2005. http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:h4440enr.txt.pdf
- Hazard Mitigation Assistance Unified Guidance: Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Program (PDM), Flood Mitigation Assistance (FMA), Repetitive Flood Claims Program, Severe Repetitive Loss Program (SRL), FEMA, June 1, 2009.
<http://www.fema.gov/library/viewRecord.do?id=3649>
- Public Assistance Handbook, FEMA 323 <http://www.fema.gov/government/grant/pa/apphandbk.shtm>
- FEMA Application for Disaster Assistance Forms (Grantee = State or Tribal Government)
<http://www.grants.gov/techlib/SF424-V2.0.pdf>
- FEMA PA Grant Program Project Worksheet (PW) Forms (Sub-Grantee = Municipality or PNP)
<http://www.fema.gov/government/grant/pa/forms.shtm>
- FEMA Policy [FEMA Agency policy rulings that govern recovery]
<http://www.fema.gov/government/grant/pa/9500toc.shtm>
- HUD Disaster Resources Website. http://www.hud.gov/info/disasterresources_dev.cfm
- HUD/Louisiana Action Plan for the Use of Disaster Recovery Funds, Louisiana Recovery Authority and the Louisiana Office of Community Development, Division of Administration, State of Louisiana, April 4, 2006. http://www.doa.la.gov/cdbg/dr/plans/ActionPlan-Approved_06_04_11.pdf
- HUD/Louisiana Proposed Action Plan Amendment 14 (First Allocation) – Road Home Homeowner Compensation Plan, Louisiana Recovery Authority and the Louisiana Office of Community Development, Division of Administration, State of Louisiana, May 14, 2007.
http://www.doa.la.gov/cdbg/dr/plans/amend14-homeowner-compensation_HUD-version_07-05-14.pdf
- Gulf Coast Disaster Recovery: Community Development Block Grant Program Guidance to States Needs to Be Improved, United States Government Accountability Office (GAO), GAO-09-541, June 2009. <http://www.gao.gov/new.items/d09541.pdf>
- SBA Website. <http://www.sba.gov/services/disasterassistance/basics/index.html>
- Disaster Recovery: Guide to SBA's Disaster Assistance, SBA. <http://training.sba.gov:8000/Response>
- United States Small Business Administration Disaster Recovery Plan, SBA, June 1, 2007.
http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_da_disastr_revcovery_plan.pdf
- SBA Disaster Loan Programs for Homeowners and for Businesses, 13CFR – Part 123, U.S. SBA.
http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_da_13fcr.pdf
- USDA Natural Disaster Assistance Programs, [Website], U.S. Department of Agriculture.
http://www.usda.gov/wps/portal/!ut/p/ s.7 0 A/7 0 1OB?navid=DISASTER_ASSISTANCE
- FSA Disaster Assistance Programs, [Website], Farm Service Agency, U.S. Dept. of Agriculture.
<http://www.fsa.usda.gov/FSA/webapp?area=home&subject=diap&topic=landing>
- Disaster Unemployment Assistance, [Website], U.S. Department of Labor.
<http://www.workforcesecurity.doleta.gov/unemploy/disaster.asp>
- Information for Taxpayers Affected by Hurricanes Katrina, Rita, and Wilma, IRS Publication 4492, January 2006. <http://www.irs.gov/pub/irs-pdf/p4492.pdf>

Tuesday September 29th

Assistance Programs Presentations – Part II

- Federal Disaster Grant and Assistance Programs:
Continuation of student presentations on disaster assistance programs.

Field-Based Project

- Teams contact client and work on their project workplans

Required Reading

- Review optional readings from Thursday September 24th for continued class discussion of disaster assistance programs (focus on the Public Assistance grant program)

Thursday October 1st

Case Study

- Hurricane Katrina: The Immediate Aftermath (Situational Analysis Fact Set)
You will be given a case package of facts (fact set) and asked to do a situation analysis and be prepared to discuss in class the problems confronting New Orleans in the aftermath of Katrina and offer recommendations for actions to move forward.

Assignment Questions:

1. What are the key disaster recovery issues?
2. What is the impact on the economy, businesses, real estate markets, capital markets, investment, wages, and the job market?
3. What is the effect on city revenues, finances and credit?
4. What is the impact on population and housing?
5. What is the state of health care, education, faith and civic groups?
6. What is the impact on infrastructure, transportation, utilities, and city services?
7. How do these (and other) problems interrelate? Which do you restart first and why?

Field-Based Project

- Teams prepare their project workplans

Required Reading

- Case: Hurricane Katrina: The Immediate Aftermath (Situational Analysis Fact Set)
[Available on the “On-Line Materials” section of the Classpages]
- R.W. Kates, C.E. Colton, S. Laska, S.P. Leatherman. 2006. Reconstruction of New Orleans After Hurricane Katrina: A Research Perspective. *PNAS, Proceedings of the National Academy of Sciences*, September 26, 2006. <http://www.pnas.org/content/103/40/14653.full.pdf>
- Daniel Alesch, Lucy Arendt, and James Holly. *Managing for Long-Term Community Recovery in the Aftermath of Disaster*. Fairfax, Virginia: Public Entity Risk Institute (PERI). 2008. Chapter 3 (pp.21-31) and chapter 5 (pp. 41-50).

Tuesday October 6th

Field-Based Project

- Teams present their project workplans (feedback from the rest of the class)

You will each be presenting your project workplans for your New Orleans field-based project. You will share with the class:

1. Your project topic
2. Your goals and objectives for the project
3. A description of the final deliverable(s)
4. Your workplan or process for doing the project
(what you are going to do and how you are going to go about doing it)
5. Your project timeline

Please use Powerpoint for your presentation. We will be circulating a template so all presentations will be uniform. Presentations should be 7-10 minutes (but should not exceed 7 minutes). We will have a few minutes (not many) for Q&A after each presentation

Required Reading

- None (assumes time will be used by the teams in preparing to present their project workplans)

Thursday October 8th

Case Study

- Community Leader Commission Approach to Recovery Planning: The Bring New Orleans Back Commission (BNOB) Urban Planning Process Case

Assignment Questions:

1. What are the main points of the recovery plan?
2. What went wrong with the planning process? Why?
3. How could the process have turned out differently?
4. What are the good ideas in the plan? What are the problems with the plan?

Field-Based Project

- Working on the projects

Required Reading

- Case C14-07-1862.0: Plans versus Politics: New Orleans After Katrina
- Case C14-07-1862.1: New Orleans After Katrina: Sequel

Recommended Reading

- The Repopulation of New Orleans After Hurricane Katrina, Technical Report, RAND Gulf State Policy Institute, RAND Corporation, 2006, [Report prepared by RAND for the BNOB Commission]. http://www.rand.org/pubs/technical_reports/2006/RAND_TR369.pdf
- A Strategy for Rebuilding New Orleans, Louisiana November 12-18, 2005, ULI – The Urban Land Institute, December 10, 2005, [Report prepared by ULI for the BNOB Commission]. http://ira.louisiana.gov/assets/docs/searchable/reports/ULI_Draft_New_Orleans_Report.pdf
- Action Plan for New Orleans: The New American City, Bring New Orleans Back Commission (BNOB) Urban Planning Committee (prepared by Wallace, Roberts & Todd), January 11, 2006. <http://www.nolaplans.com/plans/BNOB/Urban%20Planning%20Action%20Plan%20Final%20Report.pdf>

Optional Reading

- Long-Term Community Recovery Planning Process: A Self-Help Guide, FEMA, December 2005. <http://www.fema.gov/library/viewRecord.do?id=2151>
- Jim Schwab with Kenneth Topping, Charles Eadie, Robert Deyle, and Richard Smith. 1998. Chapter 4: The Planning Process. In *Planning for Post-Disaster Recovery and Reconstruction*, Report Number 483/484. Planning Advisory Service, American Planning Association. http://www.fema.gov/pdf/rebuild/ltrc/fema_apa_ch4.pdf
- Jim Schwab with Kenneth Topping, Charles Eadie, Robert Deyle, and Richard Smith. 1998. Chapter 5: A Planner's Toolkit. In *Planning for Post-Disaster Recovery and Reconstruction*, Report Number 483/484. Planning Advisory Service, American Planning Association. http://www.fema.gov/pdf/rebuild/ltrc/fema_apa_ch5.pdf

Tuesday October 13th

Case Study -- Guest Instructor: Archon Fung

- Community-Based Planning Approach: Broadmoor Lives Case (A & B)
 - Centralized vs. Decentralized Recovery Management
 - Devolution of Power vs. Command and Control
 - Residents as participants in their own recovery

Assignment Questions:

- How did leadership emerge and what did each protagonist bring to the table?
- How are public values determined?
- How was the community engaged and how did it remain unified?
- What were the key turning points?
- Where did Broadmoor find capacity?

Field-Based Project

- Team meetings – working on the projects, also project status reviews with the instructor

Required Reading

- Case C14-08-1893.0: “Broadmoor Lives”: A New Orleans Neighborhood’s Battle to Recover From Hurricane Katrina (A)
- Case C14-08-1894.0: “Broadmoor Lives” (B)
- Michelle Goldberg, “Saving The Neighborhood,” Salon.com, February 24, 2006.
<http://www.salon.com/news/feature/2006/02/24/broadmoor/>
- Sanford Ikeda and Peter Gordon, Power to the Neighborhoods: The Devolution of Authority in Post-Katrina New Orleans, Policy Comment No. 12, Mercatus Policy Series, Mercatus Center, George Mason University, August 2007.
http://www.mercatus.org/uploadedFiles/Mercatus/Publications/200708281_power_to_the_neighborhoods.pdf

Thursday October 15th

Discussion of Readings

- Risk and Moral Hazard
 - The Politics and Economics of Geography; Defining “Recovery” (Who Decides?)
 - The Different Models of Recovery (Competing Values)
 - Eminent Domain, Land Use Planning and Mitigation

Assignment Questions:

- What are the arguments for and against rebuilding in high-risk areas?
- Does Moral Hazard apply? Why? If not, why not?
- Is insurance an effective method of pricing risk?
- What are the trade-offs and who should decide?

Field-Based Project

- Team meetings – working on the projects

Required Reading

- Edward Glaeser, Should the Government Rebuild New Orleans, Or Just Give Residents Checks? *The Economist's Voice*, 2.4, 2005. Article 4. <http://are.berkeley.edu/~ligon/Teaching/EEP100/glaeser05.pdf>
- Managing Large-Scale Risks in a New Era of Catastrophes: Insuring, Mitigating and Financing Recovery From Natural Disasters in the United States, Wharton Risk Management and Decision Processes Center with Georgia State University and the Insurance Information Institute, March 2008. [http://opim.wharton.upenn.edu/risk/library/WHARTON-Managing_Large-Scale_Risks_\(Exec_Summary\).pdf](http://opim.wharton.upenn.edu/risk/library/WHARTON-Managing_Large-Scale_Risks_(Exec_Summary).pdf)
- Hurricane Katrina: Insurance Losses and National Capacities for Financing Disaster Risks, CRS Report to Congress, Congressional Research Service, The Library of Congress, RL33086, January 31, 2008. Pp. 1-7. http://assets.opencrs.com/rpts/RL33086_20080131.pdf
- Mark Pauly, The Economics of Moral Hazard: Comment, *The American Economic Review*, Vol 58, No. 3, Part 1 (Jun 1968), pp. 531-537. <http://www.jstor.org/stable/1813785>
- Alan Berger, Carolyn Kousky and Richard Zeckhauser, Obstacles to Clear Thinking About Natural Disasters: Five Lessons for Policy, in *House and Home: Disasters, Cities Public Policy*, J.M. Quigley and L.A. Rosenthal (eds.), Berkeley, CA: Berkeley Public Policy, 2008. http://ksghome.harvard.edu/~rzeckhauser/natural_disasters.pdf
- Howard Kunreuther and Mark Pauly, Insuring Against Catastrophes, Working Paper #2009-04-13, forthcoming in *The Known, the Unknown, and the Unknowable in Financial Risk Management*, F.X. Diebold, N.J. Doherty and R.J. Herring (eds.), Princeton: Princeton University Press. http://opim.wharton.upenn.edu/risk/library/WP20090413_HK,MP_KuU.pdf

Optional Reading

- Documentary (DVD), “The Water’s Edge: Profits and Policy Behind the Rising Catastrophe of Floods,” Marshall Frech writer & producer, The Public Entity Risk Institute (PERI).
- Anthony Yezer, The Economics of Natural Disasters, in *Methods of Disaster Research*, Robert Stallings (ed.), Xlibris, 2002.
- Michael Trebilcock and Ronald Daniels, Rationales and Instruments for Government Intervention in Natural Disasters, in *On Risk and Disaster: Lessons From Hurricane Katrina*, Ronald Daniels, Donald Kettl & Howard Kunreuther (eds.), Philadelphia: University of Pennsylvania Press, 2006.
- Scott Harrington, Rethinking Disaster Policy After Hurricane Katrina, in *On Risk and Disaster: Lessons From Hurricane Katrina*, Ronald Daniels, Donald Kettl & Howard Kunreuther (eds.), Philadelphia: University of Pennsylvania Press, 2006..

Tuesday October 20th

Discussion of Readings

- Risk and Moral Hazard – Continued Discussion from Previous Class
 - The Politics and Economics of Geography; Defining “Recovery” (Who Decides?)
 - The Different Models of Recovery (Competing Values)
 - Eminent Domain, Land Use Planning and Mitigation

Assignment Questions:

- What are the arguments for and against rebuilding in high-risk areas?
- Does Moral Hazard apply? Why? If not, why not?
- Is insurance an effective method of pricing risk?
- What are the trade-offs and who should decide?

Field-Based Project

- Team meetings – working on the projects

Required Reading

- There are no required readings for this class – this is a continuation of the discussion of the readings from Thursday October 15th.

Thursday October 22nd

Case Study

- City Administrator Approach to Recovery Planning & Implementation: ORDA (Blakely) Case

Assignment Questions:

- What are the issues that Ed Blakeley faced when he took over at ORDA?
- What role did the mayor play?
- What are the merits of the 17-zone recovery strategy? What are the weaknesses?
- What role did the governance structure play in recovery? How would you recommend other cities organize themselves to govern over recovery planning & management?
- What are the issues surrounding the management of hundreds of recovery projects?
- What would you have done if you were Ed Blakely? If you were mayor?

City Recovery Management & Implementation

- Guest Speaker: Dr. Edward Blakely, former director of the Mayor's Office of Recovery Development and Administration (ORDA) for the City of New Orleans

Field-Based Project

- Team meetings – working on the projects

Required Reading

- ORDA Online Project Tracking <http://neworleans.iprojweb.com/projectlookup2.aspx>
- ORDA Target Area Development Plan (posted online on the Classpages)
- Target Area Strategy Presentation, March 3, 2007 (posted online on the Classpages)
- Dr. Edward Blakely HKS Interview Transcript (posted online on the Classpages)

Tuesday October 27th

Case Study

- Citizen Participatory Approach to Recovery Planning: Unified New Orleans Plan (UNOP) Case

Field-Based Project

- Team meetings – working on the projects

Required Cases

- Case Study: The Unified New Orleans Plan (UNOP) Cases A & B (Posted on the Classpages)

Required Reading

- UNOP, The Unified New Orleans Plan, Citywide Strategic Recovery and Rebuilding Plan, 2007. <http://www.unifiedneworleansplan.com/uploads/UNOP-FINAL-PLAN-April-2007-15744.pdf>
- Lambert Advisory and SHEDO, City of New Orleans Neighborhoods Rebuilding Plan: Summary & Appendix [“The Lambert Plan”], City Council, City of New Orleans, October 2006. [http://www.nolaplans.com/plans/Lambert%20Documents/TOC+Summary+Appendix\(FINAL_FINAL\).pdf](http://www.nolaplans.com/plans/Lambert%20Documents/TOC+Summary+Appendix(FINAL_FINAL).pdf)

Optional Reading

- Memorandum of Understanding Between the City of New Orleans, New Orleans City Council, City Planning Commission, Greater New Orleans Foundation, and New Orleans Community Support Foundation, August 28, 2006. <http://www.nolaplans.com/plans/UNOP/MOU-66608.pdf>
- Bureau of Governmental Research (BGR). Not Ready for Prime Time: An Analysis of the UNOP Citywide Plan, March 2007. <http://www.bgr.org/pdf/reports/NotReadyforPrimeTime.pdf>
- Marla Nelson, Renia Ehrenfeucht, Shirley Laska. Planning, Plans, and People: Professional Expertise, Local Knowledge, and Governmental Action in Post-Hurricane Katrina New Orleans. *Cityscape* 9.3, HUD. 2007. <http://www.huduser.org/periodicals/cityscape/vol9num3/ch2.pdf>

Thursday October 29th

Case Study

- State Recovery Authority Approach to Recovery Management: The LRA Case

Guest Speaker: Andy Kopplin (Former Chief of Staff to Governor Kathleen Blanco and Former Executive Director of the LRA)

Field-Based Project

- Team meetings – working on the projects

Required Reading

- Any Kopplin has a few suggested readings that will serve as background for his talk. He will supply these in advance of the class session and they will be posted online on the Classpages during the week of this class.

Tuesday November 3rd

Case Study

- State Recovery Authority Approach to Planning: The LRA Road Home Case
- Recovery Housing Strategy

Field-Based Project

- Team meetings – working on the projects

Required Case

- Case Study: The Road Home Housing Program (Will be posted online by instructor)

Required Reading

- National Housing Plan
<http://www.fema.gov/pdf/emergency/disasterhousing/FEMA2009HousingPlan.pdf>
- FEMA National Disaster Housing Strategy, FEMA, June 2009.
<http://www.fema.gov/pdf/emergency/disasterhousing/NDHS-core.pdf>

Optional Reading

- Louisiana Recovery Authority Quarterly Reports [Familiarize yourself as opposed to a close read].
<http://www.lra.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&nid=50&pnid=15&pid=69&fmid=0&catid=0&elid=0&ssid=0>
- HUD/Louisiana Proposed Action Plan Amendment 14 (First Allocation) – Road Home Homeowner Compensation Plan, Louisiana Recovery Authority and the Louisiana Office of Community Development, Division of Administration, State of Louisiana, May 14, 2007.
http://www.doa.la.gov/cdbg/dr/plans/amend14-homeowner-compensation_HUD-version_07-05-14.pdf
- Current Housing Unit Damage Estimates: Hurricanes Katrina, Rita and Wilma, Office of Policy Development and Research, U.S. Department of Housing and Urban Development, April 2006.
http://gnocdc.s3.amazonaws.com/reports/Katrina_Rita_Wilma_Damage_2_12_06_revised.pdf
- FEMA Overview of Disaster Housing Programs
<http://www.fema.gov/pdf/emergency/disasterhousing/NDHSAnnex1.pdf>

Thursday November 5th

Case Study

- Non-Profits, CDC's, Faith Groups, Neighborhood Associations, and Community Organizations

Assignment Questions:

- What role are the neighborhoods, faith-based groups, and other community organizations playing in New Orleans recovery?
- What are they doing well? Where are they less successful?
- What role should these groups play in recovery?
- Does this approach lead to a fractured and inefficient recovery?
- How could it be more efficient (if at all)?
- What happens to neighborhoods that are less able to mobilize and access resources?

Field-Based Project

- Team meetings – working on the projects

Required Reading

- Tom Wooten, Better Than Before: How Neighborhood Organizations are Rebuilding New Orleans, forthcoming, 2009. [Will be posted on the class-page by the instructor].

Tuesday November 10th

Case Study

- Emergent Systems Theory Approach to Recovery: Banda Aceh Case

Assignment Questions:

1. What are the dynamics of emergent systems? How do they apply to cities?
2. How did the villagers act after the Tsunami?
3. How did the International teams act?
4. What was the disconnect between the two?

Field-Based Project

- Team meetings – working on the projects

Required Reading

- Case Study: Recovery in Aceh: Towards a Strategy of Emergence, Daniel Curran and Herman “Dutch” Leonard, Working Paper # 05-082, May 2005.
http://www.hks.harvard.edu/taubmancenter/emergencyprep/downloads/recovery_aceh.pdf
- Steven Johnson. *Emergence*. New York: Scribner, 2001. Introduction and Chapters 1 & 2.

Optional Reading

- Daniel Alesch, Lucy Arendt, and James Holly. *Managing for Long-Term Community Recovery in the Aftermath of Disaster*. Fairfax, Virginia: Public Entity Risk Institute (PERI). 2008. Chapter 2 (pp.15-20) and chapter 4 (pp. 33-39).

Thursday November 12th

Disaster Impact Modeling – Using HAZUS

- Discussion and demonstration of HAZUS disaster impact modeling and loss estimation, and the use of HAZUS modeling in disaster preparedness, mitigation planning, and disaster recovery.

Guest Speaker

- Ms. Hope Seligson -- Hope A. Seligson is an Associate with MMI Engineering in Huntington Beach, California. Ms. Seligson has over 20 years of experience in the areas of natural hazard risk assessment, earthquake engineering, and regional loss and casualty estimation. She has performed numerous research and applications projects funded by the National Science Foundation, the Pacific Earthquake Engineering Research Center, the Consortium of Universities for Research in Earthquake Engineering, the Southern California Earthquake Center, the United States Geological Survey, the California Office of Emergency Services and the Federal Emergency Management Agency (FEMA). Ms. Seligson has been part of the interdisciplinary team that developed the flood loss estimation methodology for HAZUS® and FEMA's National Multi-Hazard Risk Assessment Methodology and Software. Ms. Seligson is working with researchers at the Center for Public Health and Disasters at the University of California, Los Angeles (UCLA) to enhance the state-of-the-art in earthquake-related injury modeling techniques, as well as to examine the public health impacts of recent floods and hurricanes. Ms. Seligson holds a Master's Degree in Structural Engineering from Stanford University, with an emphasis in Earthquake Engineering.

Field-Based Project

- Team meetings – working on the projects

Required Reading

- FEMA HAZUS Resources Website: http://www.fema.gov/plan/prevent/hazus/hz_resources.shtm
- Using HAZUS-MH for Risk Assessment (FEMA Publication): <http://www.fema.gov/pdf/plan/prevent/hazus/fema433.pdf>

Tuesday November 17th

GIS Repopulation Mapping Exercise and Game Theory Exercise

- Repopulation Dynamics
 - The Prisoner's Dilemma and Repopulation Calculus
 - The Tipping Point
 - The Jack-O-Lantern Effect and Community Viability
- A Systems Approach to Repopulation Strategy

Field-Based Project

- Team meetings – working on the projects

Required Reading

- TBD

Resources

- Block-by-Block Repopulation Indicators for New Orleans, Greater New Orleans Community Data Center (GNOCDC), [Interactive Map] <http://www.gnocdc.org/repopulation/>
- HUD User Data Sets [For in class GIS exercise]. <http://www.huduser.org/datasets/pdrdatas.html>

Thursday November 19th

Discussion Based on Readings

- Capital Investment: The Driver of Recovery
 - The investment dynamics that drive recoveries
 - Recovery as a Confidence Game
 - Choice Under Uncertainty
 - The role of managing uncertainty in order to accelerate recovery

Assignment Questions:

- What are the drivers of investment after a disaster?
- What are the largest sources of capital?
- What dampens Investment in a post-disaster economy? How can it be accelerated?
- What roles do planning, policy, and politics play?
- What techniques can be used to inspire investor confidence?

Field-Based Project

- Team meetings – working on the projects

Required Reading

- Emily Chamlee-Wright, The Long Road Back: Signal Noise in the Post-Katrina Context, *The Independent Review*, v12-2, 2007. http://www.independent.org/pdf/tir/tir_12_02_05_chamlee.pdf
- Kevin Rozario, Making Progress: Disaster Narratives and the Art of Optimism in Modern America, in *The Resilient City: How Modern Cities Recover From Disaster*, Lawrence Vale and Thomas Campanella (eds.), New York: Oxford University Press, 2005. Pp. 27-54.
- Carolyn Kousky, Ezro Luttmer and Richard Zeckhauser, Private Investment and Government Protection, *Journal of Risk Uncertainty*, 33:73-100, 2006. http://ksghome.harvard.edu/~RZeckhauser/private_investment_and_government_protection.pdf
- Macroeconomic Effects of Hurricane Katrina, CRS Report for Congress, Congressional Research Service, The Library of Congress, RS22260, September 13, 2005. <http://fpc.state.gov/documents/organization/53572.pdf>

Optional Reading

- Emily Chamlee-Wright and Daniel Rothschild, Disastrous Uncertainty: How Government Disaster Policy Undermines Community Rebound, Mercatus Policy Series: Policy Comment no. 9, Mercatus Center, George Mason University, January 2007. http://www.mercatus.org/uploadedFiles/Mercatus/Publications/PDF_Disastrous_Uncertainty_20070111.pdf

Tuesday November 24th

Case Study

- New Orleans at 4+ Years (Follow the Money) and Where to From Here?

Field-Based Project

- Teams meet with the instructor outside of class (review project status)

Required Reading

- New Orleans Index, Metropolitan Policy Program at the Brookings Institution and the Greater New Orleans Community Data Center (GNOCDC), August 2009. 2009.
<https://gnocdc.s3.amazonaws.com/NOLAIndex/ESNOLAIndex.pdf>
- Financing Recovery From Catastrophic Events, Final Report, Homeland Security Institute, U.S. Department of Homeland Security., March 30, 2007.
http://www.homelandsecurity.org/HSIREPORTS/Financing_Recovery_HSI_Final_Report.pdf
- Gulf Coast Reports: Spending Federal Disaster Aid: Comparing the Process and Priorities in Louisiana and Mississippi in the Wake of Hurricanes Katrina and Rita, The Nelson A. Rockefeller Institute of Government and the Public Affairs Research Council of Louisiana, September 17, 2007.
http://www.rockinst.org/pdf/disaster_recovery/gulfgov/gulfgov_reports/2007-09-17-gulfgov_reports_spending_federal_disaster_aid_comparing_the_process_and_priorities_in_louisiana_and_mississippi_in_the_wake_of_hurricanes_katrina_and_rita.pdf
- Financing Recovery from Large-Scale Natural Disasters, CRS Report to Congress, Congressional Research Service, The Library of Congress, RL34749, February 9, 2009.
http://assets.opencrs.com/rpts/RL34749_20090209.pdf

Thursday November 26th

No Class – Thanksgiving Holiday

Tuesday December 1st

Field-Based Project

- Team presentations of projects to date (feedback from the rest of the class)

Required Reading

- None (assumes time will be put into preparing for team presentations)

Thursday December 3rd

Field-Based Project

- Team presentations of projects to date (feedback from the rest of the class)

Required Reading

- None (assumes time will be put into preparing for team presentations)

January Term Week 1

Field-Based Project

- Sunday January 3rd -- Arrive in New Orleans
- Meet & Greet
- Tour Broadmoor and New Orleans
- Meet with Client
 - Present Project to Client
 - Obtain Client Feedback
- Revise/Refine Project Plan Based on Client Feedback
 - Present Revisions of Project to Client
 - Obtain Client Feedback and Approval
- Develop Field Workplan / Schedule
- Work on Project
- Daily Check-in Status Meeting with Team (and Client if Needed)

January Term Week 2

Field-Based Project

- Meet with Client at Beginning of Week 2
 - Present Current Project Status to Client and Obtain Client Feedback
- Refine Project Based on Client Feedback
- Work on Project
- Continue Daily Check-in Status Meetings with Team (and Client if Needed)
- End of Week 2 Each Teams Presents to the Other Teams and Receives Feedback
- Meet with Client at the end of Week 2 to Present Project Status to the Client
 - Obtain Client Feedback

January Term Week 3

Field-Based Project

- Final Refinements to the Project Based on Client Feedback
- Work on Project
- Continue Daily Check-in Status Meetings with Team (and Client if Needed)
- Final Presentation of Projects to the Client and the Residents of the Community
- Final Drafts / Deliverables Complete and Turned-Over to the Client
- Client Training
- Final Party in Broadmoor
- Tuesday January 19th -- Depart for Cambridge

Field-Based Projects:

The projects will focus on topics drawn from the following areas, which are critical priorities for Broadmoor: During the second class, the projects will be reviewed and a polling survey will be “opened” to allow you to state your 1st, 2nd, 3rd, and 4th preferences for working on a particular project. Students will be assigned to teams and projects at the sole discretion of the instructor. The stated preferences will be taken into consideration, but the instructor will make the final project and team assignments based on a range of factors. In fairness to the rest of the team, all team and project assignments are final (no switching will be allowed).

Teams are expected to self-organize and develop project workplans and establish the division of labor among team members.

- **Post Disaster Blight Elimination Strategy:** Research and review disaster housing recovery programs and blight elimination programs and strategies around the country/world, and then develop a blight elimination strategy for Broadmoor (including an affordable housing strategy, funding mechanisms, mitigation, code enforcement, etc.), and create a Broadmoor housing strategy document suitable for presentation to government and foundation funders and real-estate developers. Develop a long-term policy strategy for the lot-next-door parcels, NORA/Road Home buyout properties, and abandoned properties. Develop a case-by-case strategy for dealing with each of the 391 blighted properties in Broadmoor that have yet to be repaired since the storm. Tackle code-enforcement issues that perpetuate blight. While this is a Broadmoor focused project, blight is a problem facing the entire city. It is envisioned that this project will serve as a model for other neighborhoods and the city in general.
- **Recovery Management Systems Design (Recovery Measurement, Metrics, Tracking and Reporting):** Extend and build-out a recovery management information system. Broadmoor has a Salesforce-based database of households, properties, residents, case-management cases, and quality of life issues. The system is the basis for a comprehensive recovery management software system (RMS). The Broadmoor RMS needs to be extended, refined, and fully integrated with PerformanceStat recovery management reports and GIS mapping for recovery management planning and tracking. Develop a set of appropriate short-, medium-, and long-term community impact metrics that can be used to monitor effectiveness of recovery and facilitate communications with stakeholders including residents, government, and donors (would draw on a rich literature from the community revitalization field, existing frameworks from intermediaries, and/or PerformanceStat models). Look at ways to apply CityStat to neighborhoods. Key goal from this project is to give the BDC and BIA “dashboard” type view of recovery information and to produce reports for funders on recovery activity and outcomes.
- **Community Development:** Rebuilding community is not just about physical structures, but also about rebuilding community. Research best practice in community organizing strategies/tactics to sustain the community-engagement over time as the community recovers.
 - Develop strategies for engaging residents in all phases of the recovery process. Help Broadmoor implement these strategies.
 - Review best practice in youth engagement programming (types of activities, funding sources, staffing and governance models, etc.) and help Broadmoor implement these programs.
 - Help Broadmoor develop a neighborhood crime reduction strategy and plan.
 - Develop and implement a plan for returning services and facilities to the Broadmoor Young at Heart (seniors).
 - Develop a strategy for moving forward to implement the Broadmoor Community Center plan (primarily fundraising or lobbying government)
 - Design and develop programming for the Education Corridor (Wilson School, Library and Community Center, Blessed Trinity, etc.)

- **Economic Recovery/Economic Development:** Develop an economic development plan for the Broadmoor neighborhood. The plan should address commercial redevelopment and business and workforce recovery. Both private and public sector incentive programs and mechanisms should be identified. Specifically examining the Claiborne commercial area and the Broad Street & Washington Street commercial corridor.
- **Marketing of Broadmoor:** Develop a PR & marketing plan for Broadmoor. Work with Digitas (a Boston-based marketing services firm) to develop websites and marketing materials. Document Broadmoor's recovery projects and Broadmoor's successes. Develop marketing and PR strategies for the following audiences: the funding community, the residents themselves (increased intra-neighborhood communication and engagement), government (city, state and federal), and other New Orleans residents (market Broadmoor as a good place to live).

Note that Broadmoor is now four years into their recovery. Using a medical analogy, Broadmoor has been through its triage phase and its ICU phase. Currently Broadmoor is just leaving the phase where it spent a long time recovering in the hospital and is now beginning the lengthy process of physical therapy.

Most of the needs of Broadmoor (as reflected by the list of projects above) are of the nature of how to rebuild "better than before," as fewer immediately critical recovery issues remain. So it can be easy to forget the disaster when working in Broadmoor (the debris has long since been cleared away and the visible scars of devastation are repaired, bulldozed, or painted over). But neighborhood recovery in New Orleans is still tentative at best. Pride, hope, optimism, and dogged determination often obscure the unhealed wound of the disaster, and how fragile the recovery really is. Each of the projects are important to Broadmoor – they either fill a hard need, or often, a symbolic or psychological need.

As you work on these projects, you will realize that many of them are not too different than working on urban issues in any other city (regardless of disaster). Blight elimination strategies could be applied in Cleveland, Philadelphia or Detroit. The same is true with the Broadmoor projects that focus on economic development, community development & engagement and NeighborhoodStats (neighborhood performance metrics programs) – all of these could easily be applied in urban neighborhoods of cities that are not recovering from disaster. What is different is the context. In a pre-disaster environment, urban problems are major issues, but in a post-disaster environment they can be the things that derail recovery or cause backsliding that offsets gains from recovery efforts. For example, pre-Katrina crime rates in neighborhoods of New Orleans such as Broadmoor were some of the highest in the nation – a large issue that impacted quality of life. But post-Katrina, these same crime rates can be the straw that breaks the camel's back and hampers repopulation and reinvestment in the urban neighborhoods of New Orleans. Effective recovery strategies require the elimination of impediments to repopulation whether they are direct effects of the disaster or pre-existing conditions.

January Term Logistics, Lodging, and Travel:

- The student teams arrive in New Orleans on Sunday, January 3rd and depart on Tuesday, January 19th (16 nights).
- The January practicum will be staffed by one faculty member and one staff member (both engaged in logistical and educational support). However, the nature of working in a strange city that is recovering from disaster requires that you be self-reliant and independent. The work environment lacks structure and supervision, so you will need to create your own. It is important to understand that the nature of the January practicum in New Orleans is that the teams are largely self-directed and need to be self-organizing. Part of the Immersive learning experience is being “dropped” into a strange city with an enormous task and a short timeframe to complete the project.
- Airfare to and from New Orleans will be paid by the BIA (the Client). Airfare rates are based on currently available economy tickets for the January 3rd – 19th time period (from Boston to New Orleans and return). The current range is from \$375 to \$750 with the median around \$500. Due to varying travel plans (students may be traveling from home after the holiday break), the BIA (Client) will cover airfare travel expenses up to a cap of \$750 which is the top-end of the Boston-New Orleans round trip economy class rate. Other travel arrangements that are more expensive will be reimbursed only up to a maximum cap of \$750. If the airfare is less than \$750, then the BIA (Client) will reimburse for the actual amount of the ticket. Please remember that the BIA is a struggling non-profit and any money you can save them by booking the least expensive airfare goes directly toward helping Broadmoor recover.
- \$75 per student is also budgeted for taxis and miscellaneous travel expenses.
- Lodging will be provided for students at Annunciation Mission. This fee includes gender-segregated dorm rooms that sleep 3-6 per room. Annunciation Mission is located in Broadmoor and is part of the BIA/BDC campus. Sheets, blankets, pillows, and towels are provided.
- If students prefer to book their own accommodations elsewhere, they are free to do so at their own expense. Annunciation Mission is not luxurious (it is like a Hostel), but it does reflect the realities of working within disaster recovery zones (hundreds of volunteer groups from around the country have stayed at Annunciation Mission). It also affords you with housing within Broadmoor – a crucial part of the immersion experience.
- Three meals a day at Annunciation Mission are included.
- Staff will have a rental car and a mini-van for group transportation (tours of New Orleans, etc.). Broadmoor can be a bit isolated, so it is encouraged that students band together to split the costs of a rental car if they want to see and experience the rest of the city or want to have some mobility. As rental cars are not needed for project work, the cost of rental cars is at your own expense.
- Snacks & drinks, working pizza dinners, and a final party with the BIA will be provided.
- More than 100 Harvard volunteers have worked in Broadmoor over the past four years. We believe the environment to be reasonably safe. But bodily accident or injury, or loss or theft of property, is always a possibility, so you will be required to sign a standard waiver of liability that holds the Harvard Kennedy School harmless for any accidents, injuries or losses. We urge you to consider safety first and act and move in ways that protect your safety and the safety of your teammates and classmates. The Harvard Kennedy School, the BIA, and Annunciation Mission each reserve the right to send a student home from the January Term practicum in New Orleans if we deem that a student is endangering themselves or others. Similarly, it is expected that no laws will be broken, and if students engage in illegal behavior, we reserve the right to send them home.
- You will be staying and working as guests in the Broadmoor community and in Annunciation Mission. We ask that you respect the residents of the neighborhood and understand their culture, their right to self-determination, their dignity, their psychological trauma and pain, and their set of values. Whether you agree with them or not, we ask that you be respectful.

Requirements and Evaluation:

The course will require that students:

1. Complete the assigned readings and participate in class discussions
2. Complete the assigned team project, including two preliminary presentations in class and a final presentation to the leadership of the BIA and BDC (the client) and the residents of Broadmoor.

Grading will be based on:

- Class participation (35%)
- Team project – project plan and interim presentation (10%)
- Team project – final presentation and deliverables (40%)
- Peer and client evaluations (15%)

Peer and client evaluation frameworks will be posted on the course website.

Participation in the January Term trip to New Orleans is mandatory as a part of this course, as the project and the client evaluations will be a large component of the final grade. Students who sign-up for this course need to be sure that their schedule allows travel to New Orleans from January 3rd to January 19th. While fall semester grades are normally submitted to the Registrar on January 15, grades for this course will not be submitted until January 22 after the student teams have submitted final deliverables to the clients in New Orleans.

Written Assignments: There are no papers, essays or other written assignments required for this class other than the project workplans, presentations and project work-output (client deliverables) which may take the form of a written document or report of professional quality. It is understood that the work that might normally go into written assignments, essays or papers is to be focused into the field-based projects and the project client deliverables.

Credit:

This course carries 1 (one) credit for the fall semester. The January Term field-based trip to New Orleans is mandatory, and is considered to be an extension of the work done in the fall semester. Therefore, the January Term field-based practicum does not carry any additional credit. The fall course-load is designed to reflect this fact. Nonetheless, this course is specifically designed for students who want to pursue a field-based immersion learning experience, and who view the practicum in New Orleans as a unique opportunity to apply classroom learning in a field setting.

Miscellaneous:

- Due to the case-based discussion format of the course, name cards will be used in class.
- In order to properly assign students to teams, backgrounds, past experience, interests, and skills (e.g., proficiency with GIS, Hazus, Excel, Power-Point, or databases) need to be known by the instructor. A resume should be given to the instructor at the start of the second class.
- Previous knowledge of GIS is not necessary, but will be a helpful skill for at least one member of teams working on projects that need geospatial analysis and mapping. In class GIS exercises will familiarize students who are new to GIS. Free GIS tutorials can also be taken at Harvard's Center for Geographic Analysis. Many datasets and shapefiles already exist for Broadmoor and will be posted online to make Broadmoor GIS mapping easier. GIS support and tutorials will be available to teams and to individuals as needed.

Additional Disaster Recovery Resources and Readings

Visual Images of Katrina

- Robert Polidori. 2006. *After the Flood*. Gottingen, Germany: Steidl Publishing.

Videos

- Frontline documentary (video available online), "The Old Man and the Storm," WGBH Boston Video. 2007.
<http://video.pbs.org/video/1082086361/search/Hurricane%20Katrina#>

Recovery Planning Processes

- Louisiana Speaks [Website], Louisiana Recovery Authority (LRA) LTRC Planning Process and Plans, 2006-2007.
<http://www.louisianaspeaks-parishplans.org/Default.cfm>
- Long-Term Recovery Assessment Tool, FEMA, June 2005.
<http://coscda.org/databases/COSFDA%20Disaster%20Recovery%20Toolkit-References-010209/Disaster%20Resources/DHS%20&%20FEMA/documents/FEMA-LTRC%20Needs%20Assessment%20Tool.pdf>

New Orleans Recovery Plans

- New Orleans Long-Term Community Recovery Plan (ESF-14), partnership of the Louisiana Recovery Authority (LRA) and FEMA, 2006.vn <http://www.louisianaspeaks-parishplans.org/Reports/Rpt11144299139.pdf>
- UNOP, Unified New Orleans Plan, 2007. <http://www.unifiedneworleansplan.com/home3/>

Disaster Recovery Research

- Haas, J. E., Kates, R.W., & Bowden, M.J. (1977). *Reconstruction Following Disaster*. Cambridge, MA: MIT Press. Seeks to help local leaders manage the disaster recovery efforts by addressing issues related to: post-disaster decision making process, land use changes, building codes, special financial assistance for individuals and businesses, and post-disaster financing.
- Kates, R., Colten, C., Laska, S. & Leatherman, S. (2006). Reconstruction of New Orleans after Hurricane Katrina: A Research Perspective. *PNAS, Proceedings of the National Academy of Sciences of the United States*, Sep. 26, 2006.
- Petterson, J. (1999). *A Review of the Literature and Programs on Local Recovery from Disaster*. Report No. 102. Fairfax, VA: Public Entity Risk Institute. Literature review of best practices and current programs for post-disaster technical assistance.
- Quarantelli, E. L. (1998). *Disaster Recovery: Research Based Observations on What It Means, Success And Failure, Those Assisted and Those Assisting*. Report No. 263. Newark, Delaware: Disaster Research Center, University of Delaware. Examines what makes a city's disaster recovery process a success or failure. Summarizes research literature, discusses policy impact of recovery and provides observations about financial resources for disaster assistance.

Katrina Congressional Testimony and After-Action Reports

- New York Times, transcript of Michael Brown's Senate testimony, February 10, 2006.
http://www.nytimes.com/2006/02/10/national/nationalspecial/10katrina-transcript.html?_r=1&pagewanted=print
- PBS News Hour coverage of Michael Brown's Senate Testimony, February 10, 2006,
http://www.pbs.org/newshour/bb/congress/jan-june06/fema_2-10.html#
- Statement of Michael D. Brown to the "House Select Bipartisan Committee to Investigate the Preparations and Response to Hurricane Katrina," September 27, 2005.

- Deposition – FEMA Director Michael Brown to the “House Select Bipartisan Committee to Investigate the Preparations and Response to Hurricane Katrina,” February 11, 2006.
- Hurricane PAM Draft Plan, IEM Inc. for FEMA, August 6, 2004.
[http://msnbcmedia.msn.com/i/msnbc/Components/Interactives/News/US/Katrina/docs/Southeast Louisiana Catastrophic Hurricane Functional Plan.pdf](http://msnbcmedia.msn.com/i/msnbc/Components/Interactives/News/US/Katrina/docs/Southeast_Louisiana_Catastrophic_Hurricane_Functional_Plan.pdf)
- GAO. (2009). *Past Experiences Offer Recovery Lessons for Hurricanes Ike and Gustav and Future Disasters. Testimony Before the Subcommittee on Emergency Communications, Preparedness, and Response, Committee on Homeland Security, House of Representatives.* Report No. GAO-09-437T. Washington, DC: GAO.
- GAO. (2008). *Disaster Recovery: Past Experiences Offer Insights for Recovering from Hurricanes Ike and Gustav and Other Recent Natural Disasters.* Report No. GAO-08-1120. Washington, DC: GAO.
- Louisiana Recovery Authority (LRA). Testimony of Paul Rainwater, Executive Director of the Louisiana Recovery Authority and Governor Jindal’s Authorized Representative to FEMA Before the U.S. House Subcommittee on Economic Development, Public Buildings, and Emergency Management. February 25, 2009. Available online at: http://lra.louisiana.gov/assets/docs/PaulRainwaterTestimony_final2-25-09.pdf
- An update to Congress on the progress made to-date (as of February 2009) in recovery from Hurricanes Katrina and Rita, and an outline of the challenges still facing Louisiana.
- U.S. Senate Ad Hoc Subcommittee on Disaster Recovery of the Committee on Homeland Security and Governmental Affairs. (February 2009). *Far From Home: Deficiencies in Federal Disaster Housing Assistance After Hurricanes Katrina and Rita and Recommendations for Improvement.* 111th Congress, 1st Session S. Prt. 111-7. Available online at: <http://hsgac.senate.gov/public/files/DisasterHousingInves.pdf>

Recovery Information from Other Disasters

- Galveston Long-Term Community Recovery Plan, Galveston Community Recovery Committee, April 9, 2009.
http://recoverygalveston.org/documents/Galveston_Long-Term_Community_plan.pdf
- The Overall Planning for Post-Wenchuan Earthquake Restoration and Reconstruction, National Development and Reform Committee, State Council, People’s Republic of China, NDRC 2008 No. 31.
<http://en.ndrc.gov.cn/policyrelease/P020081010622006749250.pdf>
- China Earthquake Geospatial Research Portal, Center for Geographic Analysis (CGA), Harvard University, CGA Map Service (GIS Map Data of Wenchuan Earthquake)
http://cga2.cga.harvard.edu:8399/China_Earthquake/mapviewer.jsf?width=1391&height=943
- Wilson, R. C. (1991). *The Loma Prieta Quake: What One City Learned.* Washington, DC: International City Management Association.
Discusses lessons learned from Loma Prieta Quake that other earthquake prone areas should heed. Provides recommendations on improving seismic safety and community awareness.
- City of Los Angeles Emergency Operations Organization. (1994). *Recovery and Reconstruction Plan.* Los Angeles, CA: City of Los Angeles Emergency Operations Board.
- Florida Department of Community Affairs, Division of Community Planning. (2009). *Hazard Mitigation Planning.* Tallahassee, FL: Florida Department of Community Affairs.
Reference guide created to help Palm Beach County, Florida make decisions on disaster recovery. Example of a post-disaster recovery plan created in advance of a disaster.
- Petak, W., & Elahi, S. (2000). *The Northridge Earthquake USA and its Economic and Social Impacts.* EuroConference on Global Change and Catastrophe Risk Management Earthquake Risks in Europe, IIASA, Laxenburg, Austria, July 6-9, 2000.
Provides a detailed breakdown of economic costs associated with the Northridge earthquake and the how response/ recovery costs are distributed across local, state and national governments. Petak and Elahi also identify pre-disaster activities that can be done to reduce total economic costs.
- Thompson, W. C. (2002). *One Year Later: The Fiscal Impact of 9/11 on New York City.* New York, NY: City of New York.
Outlines the economic costs (e.g., tax revenue lost, employment lost) of 9/11 on New York City and discusses how the controller’s office handled the increase in fiscal demands during a period of inconsistent tax revenues.
- Cedar Rapids Recovery and Reinvestment Coordinating Team (RRCT). (2008). *Progress Report - Flood Recovery.* Cedar Rapids, Iowa.
Provides assessment of the initial damage/ cost of the 2008 floods and actions taken to respond to the community’s needs. Lays out the process for neighborhood recovery planning.

Mitigation, Land Use Planning, Urban Planning and Resilience

- Berke, P. R., Kartez, J., & Wenger, D. (1993). Recovery after Disaster: Achieving Sustainable Development, Mitigation and Equity. *Disasters*, 17(2), 93-109.
Explores redevelopment planning as it relates to questions of equity, mitigation, sustainable development, and local participation.
- Colten, C. E., Kates, R. W., & Laska, S. B. (2008). Three Years After Katrina: Lessons for Community Resilience. *Environment*, 50(5), 36.
Focuses on the lessons learned from Hurricane Katrina. Examines New Orleans resilience in terms of four key elements - - anticipation, response, recovery, and reduced vulnerability.
- Johnson, L., Samant, L., & Frew, S. (2005). *Planning for the Unexpected: Land Use Development and Risk* No. 531). Chicago: American Planning Association.
Guidance on how to better incorporate risk management principles into general local city planning activities.
- Mileti, D., ed. (1999). *Disasters by Design*. Washington, DC: John Henry Press.
Provides a general overview about natural hazards, potential disasters, recovery activities, and mitigation efforts. Examines how multiple factors, including demography, climate, and social norms impact how natural hazards are experienced.
- Natural Hazards Center, University of Colorado. (2006). *Holistic Disaster Recovery: Ideas for Building After a Natural Disaster*. Fairfax, VA: Public Entity Risk Institute.
Provides practical advice on actions to take during the recovery phase to improve longer term community sustainability
- Olshansky, R. B. (2006). Planning After Hurricane Katrina. *Journal of the American Planning Association*, 72(2), 147-153.
Provides lessons learned from Hurricane Katrina about helping individuals and communities recover from disasters.
- Olshansky, R. B., Johnson, L. A., Horne, J., & Nee, B. (2008). Longer View: Planning for the Rebuilding of New Orleans. *Journal of the American Planning Association*, 74(3), 273-287.
Discusses authors' findings from New Orleans about improving recovery opportunities. Finds pre-planning, citizen involvement, and external resources are critical for success.
- Poland, C., Bonowitz, D., Maffei, J., & Barkley, J. (2009). The Resilient City, Part I: Before the Disaster. *Urbanist*, (479), 4-21.
Provides guidance about what San Francisco should be doing now to increase the city's ability to recover after an earthquake. Paper examines issues such as steps to improve resilience among existing building, upgrades to infrastructure, and establishing mitigation policy.
- Schwab, J., Topping, K. C., Eadie, C. C., Deyle, R. E., & Smith, R. A. (1998). *Planning for Post-Disaster Recovery and Reconstruction*. Report No. 483/484. Washington, DC: American Planning Association.
Manual on developing plans for post-disaster recovery. Provides local planners information about identifying hazards, assessing risk, developing recovery plans, and implementing plans.
- Spangle, W., ed. (1987). *Pre-Earthquake Planning for Post-Earthquake Rebuilding (PEPPER)*. Los Angeles, California: Southern California Earthquake Preparedness Project.
Examines the feasibility and practical limits of pre-planning for earthquake rebuilding. Uses Los Angeles to illustrate how the PEPPER process works and the merits of pre-planning for rebuilding.
- USACE. Origins of Federal Flood Control Activity, 1849-1912. USACE Engineering Pamphlet.

Risk, Insurance, Moral Hazard

- Burton, I., Kates, R. W., & White, G. W. (1993). *The Environment as Hazard*. NYC: Guilford Press.
Examines how people respond to natural hazards and how people's interactions with the environment alter the intensity of the disaster impacts.
- Krousky, C. & Zeckhauser R. JARing Actions that Fuel the Floods. In *On Risk and Disasters: Lessons from Hurricane Katrina*, Daniels R., Kettl D., and Kunreuther, H. (eds.). Philadelphia: University of Pennsylvania Press, 2006, pp. 59-73.
- Krousky, C., Luttmner, E. & Zeckhauser, R. (2006). Private Investment and Government Protection. *Journal of Risk Uncertainty*, 33:73-100. Available at Richard Zeckjauser website.
- Lee, K. (1992). Moral Hazard, Insurance and Public Loss Prevention. *The Journal of Risk and Insurance*, Vol. 59, No. 2 (Jun., 1992), pp.. 275-283. Available at: <http://www.jstor.org/stable/253193>

- Pauly, M. (1968). The Economics of Moral Hazard: Comment. *The American Economic Review*, (Vol. 58, No. 3, Part 1). Available at <http://www.jstor.org/stable/1813785>
- Shavell, S. (1979). On Moral Hazard and Insurance. *The Quarterly Journal of Economics*, Vol 93, No. 4 (Nov., 1979). Available at: <http://www.jstor.org/stable/1884469>
- Sunstein, C. & Zeckhauser, R. (2009). Overreaction to Fearsome Risks. For publication in *Environmental and Resource Economics*. Preliminary Draft 1/9/09.

Economics of Disaster, Investment, and Choice Under Uncertainty

- Friesema, H. P., Caporaso, J., Goldstein, G., Lineberry, R., & McCleary, R. (1979). *Aftermath: Communities After Natural Disasters*. Beverly Hills, California: Sage Publications.
- Arrow, K. (1951). Alternative Approaches to the Theory of Choice in Risk-Taking Situations. *Econometrica*, Vol. 19, No. 4 (Oct., 1951), pp. 404-437. Available at: <http://www.jstor.org/stable/1907465>
- Arrow, K. (1966). Exposition of the Theory of Choice Under Uncertainty. *Synthese*, Vol. 16, No. 3/4, On Preference, Probability, and Learning (Dec., 1966), pp. 253-269. Available at: <http://www.jstor.org/stable/20114515>

Disaster Assistance & Disaster Recovery Finance

- May, P. J. (1985). *Recovering from Catastrophes: Federal Disaster Relief Policy and Politics*. Westport, CT: Greenwood Press.
Provides an overview of future policy issues arising around disaster relief. Discusses how political environments differ immediately after a disaster and several years thereafter.

Housing

- Comerio, M. C. (1998). *Disaster Hits Home: New Policy for Urban Housing Recovery*. Berkeley: University of California Press.
Examines through case studies how recovery, particularly rebuilding homes, has changed over the years. Offers new approaches to pre-disaster mitigation to limit housing damage and new criteria for recovery policies.
- Comerio, M. C. (1997). Housing Issues After Disasters. *Journal of Contingencies & Crisis Management*, 5(3), 166.
Examines common issues faced in post-disaster emergency housing in urban areas with a particular focus on housing recovery after the Northridge earthquake. Provides suggestions on critical issues to consider in the pre-planning for housing recovery.
- Olshansky, R. (2006). San Francisco, Kobe, New Orleans: Lessons for Rebuilding. *Soc. Policy*, 36(2), 17-19.
Lists several key ideas to remember as a community starts to rebuild long-term housing after a disaster.
- City of New York. (2009). *Post-Disaster Housing Design Competition*. Retrieved March 16, 2009, from <http://www.nyc.gov/html/whatifnyc/html/home/home.shtml>
- GAO. (1997). *Guidance Needed for FEMA's "Fast Track" Housing Assistance Process*. Report No. GAO/RCED-98-1. Washington, DC: GAO.

Emergence Theory and Recovery

- *Book Reviews of Chaos Organization:*
Coles, E. (2006). Chaos organization and disaster management. *Public Administration*, 84(4), 1088-U6.
- Comfort, L.K. (1994). Self-organization in complex systems. *Journal of Public Administration Research and Theory* 4 (3), 393-410.
- Comfort, L. K., & Haase, T. W. (2006). Communication, coherence, and collective action: The impact of Hurricane
- Denning, P. J. (2006). Hastily formed networks. *Communications of the ACM*, 49(4), 15-20.
- Drabek, T.E. & McEntire, D.A. (2003). Emergent phenomena and the sociology of disaster: lessons, trends and opportunities from the research literature. *Disaster Prevention and Mitigation* 12 (2), 97-112.
- Dynes, R. R. (2006). Social capital: Dealing with community emergencies. *Homeland Security Affairs*, 2(2).
- Kiel, L.D. (1996). Chaos Theory and Disaster Response Management: Lessons For Managing Periods of Extreme Instability. In *What Disaster Response Management Can Learn From Chaos Theory: Conference*

Proceedings, GA Koehler, ed. Sacramento, CA: California Research Bureau. Available at <http://www.library.ca.gov/crb/96/05/index.html> [Accessed on June 11, 2008].

- Kirschenbaum A. 2003. *Chaos Organization and Disaster Management*. Public Administration and Public Policy, 105. New York: Marcel Dekker.
- Quigley, V. (2004). Chaos organization and disaster management. *Journal of Homeland Security and Emergency Management*, 1(3)
- Landy, M. (2008). Review Essay. *Publius: The Journal of Federalism* 38 (1), 152-165.
- Leonard, H. & Curran, D. (2005). *Recovery in Aceh: Towards a Strategy of Emergence*. Working Paper, #05-082. Available at <http://www.belfercenter.org/broadmoor>
- Martin, R. (2007). Battle-proven military principles for disaster leadership. *Fire Engineering*, 160(8), 69-90.
- Nesterenko, M. & Lagadec, P. (2006). Complexity and chaos. *Crisis/Response* 3 (1), 62-64.
- Paul't, H., Rosenthal, U., & Kouzmin, A. (1993). Crisis decision making: The centralization thesis revisited. *Administration and Society, Issue 1*(p.2 12)
- Piotrowski, C. (2006). Hurricane Katrina and organization development: Part 1. Implications of chaos theory. *Organization Development Journal* 24 (3), 10-19.
- Quarantelli EL. (1995). *Emergent Behaviors and Groups in the Crisis Time of Disasters*. Preliminary Paper #226. Newark, DE: University of Delaware Disaster Research Center.
- Rodriguez, H., Trainor, J., & Quarantelli, E. L. (2006). Rising to the challenges of a catastrophe: The emergent and prosocial behavior following Hurricane Katrina. *The Annals, the American Academy of Political and Social Science*, 604, 82-101.
- Scanlon, J. (1999). Emergent groups in established frameworks: Ottawa Carleton's response to the 1998 ice disaster. *Journal of Contingencies & Crisis Management*, 7(1), 30.
- Sellnow, T. L., Seeger, M. W., & Ulmer, R. R. (2002). Chaos theory, informational needs, and natural disasters. *Journal of Applied Communication Research*, 30(4), 269.
- Stallings, R. A., & Quarantelli, E. L. (1985). Emergent citizen groups and emergency management. *Public Administration Review*, 45(Special Issue: Emergency Management: A Challenge for Public Administration), 93-100.
- Stephenson, D. W. & Bonabeau, E. (2007). Expecting the unexpected: The need for a networked terrorism and disaster response strategy. *Homeland Security Affairs*, 3(1).
- Takeda, M.B. & Helms, M.M. (2006). Bureaucracy, meet catastrophe. *International Journal of Public Sector Management* 19 (4), 397 – 411.
- Tierney K & Trainor J. (2004). Networks and resilience in the World Trade Center Disaster. In *Research Progress and Accomplishments, 2003-2004*. Buffalo, NY: Multidisciplinary Center for Earthquake Engineering Research, SUNY Buffalo. Available online at <http://mceer.buffalo.edu/publications/resacom/04-SP01/04-SP01.pdf> (Accessed February 12, 2009).
- Vita, C. & Kramer F. (2008). *The Role of Faith-Based and Community Organizations in Post-Hurricane Human Service Relief Efforts*. Prepared by the Urban Institute for the U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Planning and Evaluation (ASPE) under Task Order Contract RFTO 06EASPE060048. Available online at http://www.urban.org/UploadedPDF/1001245_hurricane_relief_recovery_full_report.pdf
- Wachtendorf, T., & Kendra, J. M. (2004). *Considering Convergence, Coordination, and Social Capital in Disasters*. Preliminary Paper #342a. Newark, DE: University of Delaware Disaster Research Center.
- Wise, C. R. (2006). Organizing for homeland security after Katrina: Is adaptive management what's missing? *Public Administration Review*, 66(3), 302-318.