

Appendix I.

Preparing for Change: Building Resilient Communities



Planners Training Service Workshop
November 11 and 12, 2011

Himanshu Grover, Ph.D., AICP
Walter Gillis Peacock, Ph.D.
Lori Feild Schwarz, AICP
Shannon Van Zandt, Ph.D., AICP



Hazard Reduction & Recovery Center



Preparing for Change: Building Resilient Communities

In regions facing both severe weather conditions and burgeoning populations, the potential for disaster is great. In an era of financial austerity, planning becomes even more important—to provide cost-effective solutions which mitigate harm and provide the foundation for rapid recovery. Featuring real data and interactive technology, instructors use case studies and survey data from Texas coastal communities to demonstrate how community planners can design and defend planning interventions in their own communities, ultimately creating stronger, more resilient communities.

Attendees will be able to:

- Identify the characteristics of a resilient community, and evaluate their own community's level of resilience
- Assess mitigation techniques that are commonly-used in area communities, as well as those that are effective, but often overlooked
- Use American Community Survey data to assess and forecast demographic changes and community needs
- Identify how population characteristics may exacerbate vulnerability and exposure, leading to increased risk for loss of life and damage
- Test different scenarios for how populations may be affected by development scenarios and environmental conditions
- Mobilize community assets (capacity) to strengthen the community's ability to plan and respond
- Ways to incorporate climate change sensitivity in local planning decisions
- Identify opportunities for achieving multiple benefits from traditional planning policies (than may result in new opportunities for generating funds!)

Himanshu Grover, Ph.D., AICP
Walter Gillis Peacock, Ph.D.
Lori Feild Schwarz, AICP
Shannon Van Zandt, Ph.D., AICP



Agenda



FRIDAY

Introductions

Time

8:00-8:30

What is resilience? Concepts and principles

8:30-9:30

The Galveston Experience

9:30-10:00

Short break

What are Texas communities doing?

10:15-11:00

Creating community profiles with the new Census products

11:00-12:00

LUNCH

12:00-1:00

The Coastal Community Planning Atlas

1:00-4:30

SATURDAY

Understanding your community's vulnerability

8:00-9:30

Short break

Assessing and tapping community capacity

9:45-12:00

Planning for climate change and variability to create resilient communities

12:00-2:00

Best practices for resilience

2:00-3:00



Instructors



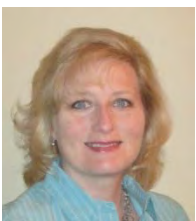
Walter Gillis Peacock, Ph.D., is Professor and Director of the Hazard Reduction & Recovery Center at Texas A&M University. Peacock's research, which has been funded by the NSF, NOAA, the Texas General Land Office, among others, focuses primarily on natural hazards and human systems response to hazards and disaster. Having authored more than 100 journal articles, book chapters, or books on disaster recovery and mitigation, Peacock is one of the world's leading experts on planning for socially vulnerable populations. His current research focuses on the capacity of local communities to implement mitigation plans in Texas. His graduate-level planning courses include courses in statistical methods and hazard mitigation. He holds a Ph.D. in sociology from the University of Georgia.



Shannon Van Zandt, Ph.D., AICP, is Associate Professor and Coordinator of the Master of Urban Planning Program at Texas A&M University. Her work centers on the spatial distribution of housing and its consequences for vulnerable populations. Van Zandt connects her research to both the education of planning graduate students and the planning profession through engagement with real communities along the Texas Coast and elsewhere. She is a faculty fellow of the Hazard Reduction & Recovery Center, the Center for Texas Beaches & Shores, and the Center for Housing and Urban Development. Her graduate-level planning courses include courses in land use planning methods, planning theory, professional communications, and housing policy. She holds a Ph.D. in city & regional planning from the University of North Carolina at Chapel Hill.



Himanshu Grover, Ph.D., AICP, is Assistant Professor at the Urban and Regional Planning Department at University at Buffalo (SUNY). His research focuses on planning policies and design of sustainable and resilient communities. Grover examines and evaluates the impact of local planning policies on the ability of at risk communities to understand, analyze, and respond to environmental threats. He has more than 6 years of professional planning experience, and has been associated with numerous internationally funded projects. His courses include planning for climate change, urban infrastructure management, design of cities, and introduction to urban planning. He holds a Ph.D. in urban and regional sciences from the Texas A&M University at College Station.



Lori Feild Schwarz, AICP, is the Assistant Director of Planning and Special Projects for the City of Galveston. She manages the planning division and also serves as Historic Preservation Officer for the City. Schwarz was hired by the City in 2001 and has participated in numerous city-wide planning efforts, including: 2001 Comprehensive Plan, Beach Access Plan, Hazard Mitigation Plan, Disaster Response Plan for Historic Properties, and the Long-Term Recovery Plan for the City of Galveston. She is currently supervising the large-scale Progress Galveston project, which includes a comprehensive revision of the City's land development regulations and numerous specialized plans. Schwarz holds a Master in Historic Preservation degree from the University of Georgia.

Helpful Resources

Hazard Reduction & Recovery
Center:

<http://archone.tamu.edu/hrrc/>

Coastal Community Planning Atlas:

<http://coastalatlas.tamug.edu>

Center for Texas Beaches & Shores:

<http://www.tamug.edu/CTBS/>

City of Galveston:

<http://www.cityofgalveston.org/>

Appendix 2.

Preparing for Change: Building Resilient Communities

Himanshu Grover, Ph.D., AICP
Walter Gillis Peacock, Ph.D.
Lori Feild Schwarz, AICP
Shannon Van Zandt, Ph.D., AICP

American Planning Association
Planner's Training Service
June 14-15, 2012



**HAZARD REDUCTION
& RECOVERY CENTER**
TEXAS A&M UNIVERSITY



Preparing for Change: Building Resilient Communities

In regions facing both severe weather conditions and burgeoning populations, the potential for disaster is great. In an era of financial austerity, planning becomes even more important—to provide cost-effective solutions which mitigate harm and provide the foundation for rapid recovery. Featuring real data and interactive technology, instructors use case studies and survey data from Texas coastal communities to demonstrate how community planners can design and defend planning interventions in their own communities, ultimately creating stronger, more resilient communities.

LEARNING OBJECTIVES:

Part 1: The Problem- Increasingly More Vulnerable

1. Disasters magnify processes that are already taking place in your community
 - Understand the current and future problems our communities face
 - Discover ways to mobilize your organization and community when incorporating climate change and hazard sensitivity into local planning decisions

2. Resilience can be built in to existing plans using already-available tools
 - Be able to evaluate the vulnerabilities in your community by assessing the three pre-existing community characteristics
 - Be able to use the Coastal Planning Atlas or similar tools to discover current conditions and vulnerabilities
 - Use American Community Survey data and other Census data to assess and forecast demographic changes and community needs

Part 2: The Solution- Increasing our Resilience

3. Increasing resilience to disasters builds better communities (whether a disaster hits or not)
 - Understand the components of resilience and the Disaster Impacts Model
 - Mitigation actions and policies for climate change/variability versus other natural hazards should be treated the same.
 - Assess mitigation and recovery techniques that are commonly used in communities, as well as those that are effective, but often overlooked
 - Identify the ways communities can adaptively learn from past experiences
 - Mobilize community assets (capacity) to strengthen the community's ability to plan and respond

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Instructors



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PART I: Problem-Increasingly More Vulnerable

Focus: Problems, Concerns, & Vulnerabilities

Activity
Presentation

Time	Agenda	Instructor
8:00 AM	Coffee/Breakfast/Topic Questions	
8:15 AM	Introductions	Shannon
8:30 AM		
8:45 AM	01-Problem: Increasingly more vulnerable	Walt and Himanshu
9:00 AM		
9:15 AM		
9:30 AM		
9:45 AM	Climate Change Skepticism Activity	
10:00 AM	BREAK	
10:15 AM	02-Case Study: Galveston, TX	Lori
10:30 AM	How a community at risk responds	
10:45 AM	PCCA Activity	Himanshu
11:00 AM		
11:15 AM		
11:30 AM		
11:45 AM		
12:00 PM	LUNCH	
12:15 PM		
12:30 PM		
12:45 PM		
1:00 PM	03-Understanding Existing Conditions	Walt and Himanshu
1:15 PM	Case Study: Hazard Exposure	
1:30 PM	Coastal Atlas Activity	
1:45 PM		
2:00 PM	Case Study: Physical Vulnerability	
2:15 PM	Coastal Atlas Activity	
2:30 PM		
2:45 PM	Case Study: Social Vulnerability	
3:00 PM	Coastal Atlas Activity	
3:15 PM		
3:30 PM	BREAK	
3:45 PM	04-Getting refined data on your community	Walt
4:00 PM	Using US Census ACS and CSE data products	
4:15 PM		
4:30 PM		
4:45 PM	Onthemap.gov Activity	
5:00 PM		

PART 2: Solution-Increase our Resilience

Focus: Solutions, Assets, & Capacities

	Activity
	Presentation

Time	Agenda	Instructor
8:00 AM	Coffee/Breakfast/Topic Questions	
8:15 AM	Quiz	Walt
8:30 AM	Resilience Through the Senses	
8:45 AM	05-Solution: Increase our Resilience	
9:00 AM	Disaster Phases Activity	Shannon
9:15 AM	Disaster Phases & Injecting Resilience	
9:30 AM		
9:45 AM		
10:00 AM	Mitigation Best-Practice Strategies Activity	
10:15 AM	What are other communities doing?	Walt
10:30 AM		
10:45 AM	High-impact Mitigation Policy Example	Himanshu
11:00 AM		
11:15 AM	Galveston: Mitigation Planning	Lori
11:30 AM		
11:45 AM	Recovery Best-Practice Strategies- Activity	
12:00 PM	Recovery Best-Practice Strategies	Walt
12:15 PM		
12:30 PM	Galveston: Recovery Planning	Lori
12:45 PM		
1:00 PM	Community Capacity: Identifying Resources Activity	Shannon
1:15 PM		
1:30 PM	06-Community Capital and Capacity (Introduction)	
1:45 PM	Community Capacity: Identifying Community Capacity Activity	
2:00 PM	Building Capacity	
2:15 PM	Community Capacity: Your Community Capacity Activity	
2:30 PM		
2:45 PM		
3:00 PM		

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Appendix 3.

Planning for Sustainable Coastal Communities Symposium

Sam Brody
Walt Peacock
Shannon Van Zandt
Wes Highfield
Christine Shepard
Jorge Brenner

Galveston, TX
December 6, 2012



**HAZARD REDUCTION
& RECOVERY CENTER**
TEXAS A&M UNIVERSITY



GALVESTON
TEXAS A&M UNIVERSITY



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LEARNING OBJECTIVES:

- Understand the components of resilience and the Disaster Impacts Model
- Be able to use the Coastal Planning Atlas and similar tools to discover current conditions and vulnerabilities
- Develop a toolbox for mitigation actions and policies for coastal hazards
- Understand the hazard mitigation strategies that are most cost effective
- Assess mitigation techniques that are commonly used in communities, as well as those that are effective, but often overlooked
- Mobilize community assets (capacity) to strengthen a community's ability to plan and respond

Agenda

Planning for Sustainable Coastal Communities Symposium

Texas A&M University at Galveston
Ocean and Coastal Studies Building
Building 3029, 200 Seawolf Parkway
Galveston, Texas 77553

Workshop AICP & CFM CM | 7

Dec. 6th, 9am - 4pm in room# _____

Lunch provided

Introduction.....	Shannon Van Zandt (15 min)
Hazard Mitigation	
Overview.....	Walt Peacock (30-45min)
Mitigation Strategies	
Coastal Policies That are Under-utilized.....	Walt Peacock (30-45 min)
~Break~	
Flood Mitigation- What Works & What Doesn't.....	Wes Highfield (30-45 min)
~Lunch~	
Consistency of Plans.....	Shannon Van Zandt(30min)
Tools for Planning	
The Nature Conservancy's Coastal Resilience Decision Support Tool	
Overview and Intro to the Nearshore Waves Module	Christine Shepard (45min)
Coastal Hazards, Sea Level Rise, and Benefits of Coastal Habitats.....	Jorge Brenner (45min)
~Break~	
Coastal Planning Atlas	
Run-off Scenarios	Sam Brody (45min)
Social Vulnerability Scenarios.....	Walt Peacock (45min)
On the Map.....	Walt Peacock (20min)
Where do I go from here?.....	Walt Peacock (10 min)

Reception

Open House Reception

Dec. 6th, 4pm – 7pm in lobby

Drinks and Hors d'oeuvres

Welcome.....President Smith

Institute of Sustainable Coastal Communities.....Sam Brody

Hazard Reduction and Recovery Center.....Walt Peacock

Tours:

OCSB building

Institute for Sustainable Coastal Communities

Other information:

Registration is free. Participants should bring a personal laptop. Laptops can be made available upon request.

Please RSVP to Taylor Huff, thuff@arch.tamu.edu

Instructors

Institute for Sustainable Coastal Communities



Samuel D. Brody, Ph.D., is a Professor and holder of the George P. Mitchell '40 Chair in Sustainable Coasts in the Departments of Marine Sciences and Landscape Architecture and Urban Planning at Texas A&M University. He is the Executive Director of the Institute for Sustainable Coastal Communities and the Director of Center for Texas Beaches and Shores located on the Galveston campus. Dr. Brody's research focuses on coastal environmental planning, spatial analysis, environmental dispute resolution, climate change policy, and natural hazards mitigation. He recently authored the book, *Rising Waters: The causes and consequences of flooding in the United States*, published by Cambridge University Press. Dr. Brody teaches graduate courses in environmental planning, sustainable development, and dispute resolution. He has also worked in both the public and private sectors to help local coastal communities to draft land use and environmental plans. For more information, please visit www.tamug.edu/ctbs.



Wesley E. Highfield, Ph.D., is an Assistant Professor in the Department of Marine Sciences, Associate Director for the Center for Texas Beaches and Shores at Texas A&M University at Galveston, and Associate Faculty Fellow of the Hazard Reduction and Recovery Center at Texas A&M University. His research is centered on natural hazard mitigation and spatial analysis. Highfield's recent hazard related work includes investigations of the impacts of Hurricane Ike and evaluating the effectiveness of FEMA's Community Rating System. His course offerings include Geographic Information Systems and statistics. He holds a Ph.D. in Urban and Regional Science from Texas A&M University.

Instructors

Hazard Reduction & Recovery Center



Walter Gillis Peacock, Ph.D., is Professor and Director of the Hazard Reduction & Recovery Center at Texas A&M University. Peacock's research, which has been funded by the NSF, NOAA, the Texas General Land Office, among others, focuses primarily on natural hazards and human systems response to hazards and disaster. Having authored more than 100 journal articles, book chapters, or books on disaster recovery and mitigation, Peacock is one of the world's leading experts on planning for socially vulnerable populations. His current research focuses on the capacity of local communities to implement mitigation plans in Texas. His graduate-level planning courses include courses in statistical methods and hazard mitigation. He holds a Ph.D. in sociology from the University of Georgia.



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Instructors

The Nature Conservancy



Christine Shepard, Ph.D., is a Postdoctoral Scientist with The Nature Conservancy's Global Marine Team. Christine's primary research focuses on assessing coastal hazards risk, quantifying the role ecosystems play in reducing risk, and identifying where ecosystem based approaches such as conservation or restoration are likely to be effective for risk reduction. In addition, Christine works to develop innovative spatial analyses and community engagement tools to help decision makers address coastal risks from climate change and coastal hazards like storm surge and sea-level rise. She recently co-authored the 2012 World Risk Report in partnership with United Nations University and Development Works, an alliance of German aid organizations. In addition to assessing the countries most at-risk from natural hazards, this year's report focuses on the role of the environment in reducing risk, and how environmental degradation increases the risk to people. Christine also manages two site based Coastal Resilience projects in Charlotte Harbor, Florida and Galveston Bay, Texas. Christine completed her PhD in Ocean Science at the University of California-Santa Cruz in 2010 and her BSc in Zoology and Psychology at the University of Florida in 2002.



Jorge Brenner, Ph.D., is currently the Associate Director of Marine Science at the Nature Conservancy. Dr. Brenner is interested in coastal resilience ecosystem services' health assessment, integrated valuation models, and conservation science including the spatial dynamics of biodiversity. Dr. Brenner has experience working in related issues in Mexico, the Mediterranean, and the Gulf of Mexico regions. He earned a Ph.D. in marine sciences from the Catalonia Polytechnic University in 2007, a M.S. in environmental engineering, and a B.S. in biochemical engineering and aquatic resources, from the Monterrey Technology Institute University in 1997 and 1995, respectively.