Students in this seminar will explore how planners and urban designers work with communities to understand risk, build resilience, adapt to changing hazard landscapes, and recover from disasters. Through weekly lectures, readings, short writing assignments, and class discussion, this seminar will allow students to explore the practices and ethics of planning and urban design in a world that is increasingly defined by instability and uncertainty.

Urban designers and planners work at multiple scales, from intergovernmental agreements, national policies and regional planning to the design of individual projects. We will take as a premise that the scale of the neighborhood is particularly useful for understanding interaction of natural, social and economic forces that shape the physical environment. It is also the scale at which communities begin to organize and have agency in restructuring their environment.

Students in the seminar will study a neighborhood which is experiencing environmental, social or economic stresses. We will examine how these stresses are likely to affect the neighborhood over time and how they shape the way we plan and build. We will also investigate how these stresses lead to sudden shocks and how well the neighborhood is prepared to manage these shocks. Students will then consider how to address the underlying vulnerabilities in their chosen neighborhood using scenario planning. Scenarios help us ask the right questions: who has the power to act, what resources are needed, when do decisions need to be made, where do we begin?

Changing the status quo is hard work. One of the greatest challenges is building consensus and a mandate to act. This requires the ability to communicate across disciplines and historic socio-economic divisions. It is essential that urban designers and planners be able to communicate clearly and concisely through both writing and visualization. We will work collectively to develop these communication skills through regular short assignments.

Part One: Crisis

9/5: LIPS Lecture: Questions for Houston

9/5: Introductions, course overview.

9/12: Urban Hazards: How does the underlying geography of a place create unique hazards? How do those hazards historically influenced development patterns? How have hazards changed over time as a result of climate change or development? Readings: “Boomtown, Floodtown,” (Links to an external site.) from the Texas Chronicle. Assignment #1: a one paragraph proposal that describes a specific geography and its particular hazards on which to focus during
the semester (see sample in course files). All writing assignments through the term will be less than 150 words on one sheet of paper.

9/19: **Mapping Risk:** Methods for representing risk at various scales. Students will conduct a neighborhood vulnerability assessment for their selected community, considering a number of factors including hazards, demographics, housing stock and affordability, infrastructure, social resilience and economic activity.

9/26: **Scenario Planning.** Students will visit New York City Office of Emergency Management and meet with Director of Planning Heather Roiter, and Housing Program Manager Cynthia Barton. Heather and Cynthia will show how municipal governments prepare for disasters and employ scenario based planning to increase the preparedness of the population and city agencies to respond to disaster. **Students will prepare narrative disaster scenarios for their selected communities.** They should make three short scenarios: a major catastrophe with multiple hazards, a recurring stress, and the default planning scenario.

10/3: **Long Term Planning for Resilience:** Students will meet with Mary Kimball, senior planner from NYC Planning to talk about how to work with communities on understanding climate risk and changing the status quo for urban development. **Students will identify a local partner in their community, set up a phone meeting, and prepare a set of questions based on their disaster scenarios.**

10/10: **Rebuilding by Design:** Students will meet with Amy Chester, director of Rebuild by Design. Amy will explain how this innovative design competition sought to invest resilience in the recovery from Hurricane Sandy. She will be joined by Roberto Moris Iturrieata, a Chilean architect who discuss efforts rebuilding after earthquakes there. **Students will research and describe the current default recovery strategies for their selected community.**

10/17: **Update on Harvey Recovery:** Students will present their first draft recovery strategies.

10/24: **Lessons Learned from Sandy:** On the occassion of five years since Sandy, students will meet with Sandy victims followed by a panel discussion on lessons learned.

10/31: **Summary of past recovery efforts.** Six recent disasters have had recoveries organized in distinct ways. we will discuss lessons learned and pro's and con's of their approaches

11/7: **Election Day**

Part Three: Adaptation

11/14: **Resilience Planning:** Review of ways in which resilience is integrated into post disaster recovery planning

11/21: **Implementation:** Workshop of recovery plan case studies. scoping mitigation projects and recovery and resilience plans.
11/28: **Update on Puerto Rico:** Dr. Ingrid Olivo discussing lessons from Puerto Rico's history that inform the challenges of recovery ahead.

12/5: **Final Review:**