

EMERGENCY RESPONSE AND LAND USE MANAGEMENT
PLANNING: THE HURRICANE ALICIA DISASTER

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Introduction

Hurricanes are a serious national problem. Average annual losses from hurricanes have been projected to reach \$5 billion (1978 dollars) by the year 2000 (Wiggins 1979). Some officials alarmed at intensive coastal population growth pressures and increasing time required to evacuate residents from high risk areas have described hurricane scenarios that could claim the lives of more than 10,000 people in large metropolitan areas (Simpson and Riehl 1981).

Traditionally communities have responded to the risks posed by hurricanes by adopting emergency response and land use management planning programs. Emergency response planning programs are concerned with identifying problems that might arise during a disaster and subsequent design of plans of action aimed at coordinating the immediate response and recovery activities of public and private groups and individuals. Land use management planning programs, on the other hand, deal with long-term risk mitigation issues by attempting to influence the location, density and design of public and private development in hazardous areas.

In this paper, we examine the effectiveness of local emergency response and land use management planning programs during the Hurricane Alicia disaster in August 1983. The primary purpose of this examination is to identify the factors that help explain program effectiveness. The authors also draw some preliminary conclusions about the success of local response.

Data on local response to Alicia were collected through a mail-out questionnaire to 51 jurisdictions within the impact area during the fall of 1984. In those communities with both an emergency management coordinator and a city planner a questionnaire was sent to each official in order to obtain as accurate information as possible for both types of programs. A total of 64 questionnaires were mailed. Fifty-one were returned for an 80% response rate. To provide background material for