

# In the Works

## Hazard Mitigation Planning

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## 1984 Land Use Congress Summary of Proceedings

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### Hazard Mitigation Planning

This Fall, North Carolina was spared the full force of Hurricane Diana. Diana's merciful outcome saved the state's coastal properties from catastrophic damage. While the extent of this hurricane's effect was less than originally expected, its landfall dramatized the need to plan for natural hazards and prepare coastal policies which will minimize their future impacts.

Current research at the University of North Carolina's Center for Urban and Regional Studies is focusing on the mitigation of hurricane and coastal storm damages. A grant from the National Science Foundation supports this research. The study will examine the use of pre-disaster and post-disaster reconstruction development management programs and policies as a basis for reducing hurricane-inflicted property damage and loss of life.

Development management is defined by the researchers as public programs and policies which directly or indirectly influence the location, density, type, quality and timing of urban development. The research will survey the types of development management programs currently employed by localities and states; it will assess their effectiveness in reducing storm damages; and it will attempt to correlate the responsiveness and capacity of such programs with their respective administrative organizations.

In the first year of study, the project involved a number of information gathering activities. An extensive review of the existing literature and ongoing research in hurricane behavior was made; telephone interviews with relevant state and federal agencies were conducted; and a mail survey of four hundred hurricane-prone communities in eighteen Gulf and Atlantic Coast states was administered. The mail survey asked local communities to describe the importance of the storm hazard mitigation efforts in their communities; the specific types of programs and strategies currently in use; and the perceived effectiveness of these local measures. The questionnaire also identified sources of political opposition, problems in implementation, and community attributes which might affect the program's operation and its effectiveness (e.g., population, extent of hazard area, building activity). A preliminary analysis of the survey data provided some interesting results. For instance, the hurricane hazard is considered to be of relatively high importance when compared with other local issues. This high regard for hurricane mitigation contrasts with the relatively low importance scores derived from earlier studies. Preliminary findings also suggest that a majority of hazard-prone communities have adopted an explicit storm hazard reduction plan.

The second year of research will be directed to an analysis of hurricane case studies. These community specific studies will offer more specific information than the questionnaire allowed. Two types of case studies are in progress: 1) follow-up mail and phone surveys of communities identified

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*Hurricane Diana's impact on North Carolina beach-front properties.*

in the original questionnaire; and 2) a detailed analysis of hazard-prone communities involving site visits and interviews with key community actors responsible or affected by hurricane policy. On-site studies for the following communities have already begun: Gulfshores, Alabama (Hurricane Frederick); Biloxi/Gulfport, Mississippi (Hurricane Camile); Galveston, Texas (Hurricane Alicia); Sanibel Island, Florida; and Long Island, New York.

North Carolina areas are also being considered for review. Within the state, primary attention will be given to communities with storm hazard mitigation and reconstruction plans. Researchers will, furthermore, attempt to assess Hurricane Diana's impact on public opinion regarding hurricane threat and perceived needs for hurricane mitigation policy.

The case studies and survey analysis should improve the planning profession's understanding and appreciation for local development management strategies. It will also shed light on the political, economic, and geographical issues important to the adoption and implementation of hazards mitigation programs. The case studies will be completed in April of 1985 and the overall findings of the research will be available that summer. The principal result of this study will be the publication of a guidebook for hazards management. The book will summarize current development management options and storm mitigation strategies available to local communities. It will also describe the process of preparing and implementing such programs.

Investigators for this research include David Brower, David Godschalk, Jane Hegenbarth and Tim Beatley. For more information regarding this project, call (919) 962-3074.

### **1984 Land Use Congress A Summary of Proceedings**

On October 18, 1984, the Land Use Congress' annual conference addressed the topic of changing land uses in North Carolina. Entitled "Urban-Rural Development: What's Happening in North Carolina? What Do We Think About It?", the conference featured four debates in which guest speakers were asked to argue the merits/problems associated with the continued growth and changing land use in North Carolina.

#### **Fiscal Debate**

At issue in the fiscal policy debate was whether governmental finances could stand any more development in the countryside. Raleigh Councilperson Mariam Block argued that urban sprawl is the root cause of high taxes and low returns and hence should be minimized. To illustrate the negative fiscal impact of urban sprawl, she related the story of "Fred Farmer."

Block described her fictionalized character as a person who "is only a farmer at heart. Fred works in the city, but has just bought a great little 2½ acre

place in the country, just 2 miles outside the city." As these types of areas become increasingly populated, the city is obligated to extend costly sewer lines and other public services to them. These new public services must be financed by raising county taxes—and that affects everyone.

The brunt of this tax then falls on "Sam," the city dweller who must subsidize these services that will never benefit him. Meanwhile, the city tax base is diminishing due to the flight of urban retailers out of the city. Not only do urban areas experience negative fiscal impact of poor and reduced quality

for economic development are already in place in urban areas.

Future considerations of various development options should be framed in the following way, according to Chapman: "Do we want to redevelop and strengthen our core areas or do we want to continue subsidizing rural economic development?" Chapman concluded with his own view, "What we need in our future is stronger, healthier cities. If we do not have strong cities, we won't have healthy rural areas."

Chapman's opponent, Durham businessman James Hawkins, stressed the futility of any attempt



public services, but the exit of businesses from central areas creates empty downtowns and inevitable slums.

Environmental activist Louis Jones also spoke on this issue, but he focused his presentation on the ways to prevent sprawl. Jones advocated a statewide, resource land-use management plan. Although such a plan is an expensive undertaking in the short-run, it is cost-efficient in the long-run. An investment in land use plans is a worthwhile, necessary state government project, because "the loss of good land is irreversible."

### Economic Development Debate

Whether our economy requires further growth, and whether much of that growth should be in the countryside were the central issues of the debate on economic development policy. George Chapman, director of planning in Raleigh, strongly disagreed with the notion that more growth should occur in the countryside. Chapman opened by noting that "Economic development is an oxymoron" (a self-contradictory pair of words). He cited the Research Triangle Park as an area that has stimulated the area's economy, but eliminated development opportunities in already urbanized areas. Locating firms in remote, rural areas such as the Park is nonsensical and costly. All the public investments necessary

to control development outside the cities. If access to an area is denied around a particular city, those people interested in moving outside of the city will simply move to another such area; they will not remain in an area that they perceive to be less than desirable.

Secondly, Hawkins contended that North Carolina's inadequate housing supply for moderate income people makes real estate development beyond the urban fringe in the countryside a necessity. For most people, building and/or owning housing within city limits is not feasible as a result of prohibitive real estate costs. The only way to expand the affordable housing stock is by developing housing in rural areas.

### Environmental Policy

Wallace Kaufman, a Chatham County real estate broker, and widely known environmentalist, argued the pro side of the environmental policy debate: the environment will be substantially harmed by further urban-type development in the countryside. His pro stance had an unusual slant, however. Using sarcasm to express his support for the pro environmental position, Kaufman explained, "Development" by definition, "automatically means damage to the environment." Hence, "no development can enhance the environment."

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According to Kaufman, the notion of preventing further growth in the countryside may be desirable, but it is unrealistic. In a free market system, we must assume that development will occur and channel our energies into managing it. In the past, planners have attempted to control growth with the use of traditional land use management tools, but their success has been minimal.

Kaufman attributed this failure to the incompatibility of current planning regulations with the free market system. If planners do not adopt new strategies which are in harmony with the free enterprise system, market forces will continue to overpower planners' tactics. As an alternative, Kaufman suggested that planners develop environmental tactics based on a system of "give and take" between local governments and private industry. The replacement of "stone-age" tools with market-oriented strategies would enable planners to achieve their "high-tech" ideas on growth management.

Adopting a radically different perspective from Kaufman's, Mary Joan Pugh, planning director for the City of High Point, reached a similar conclusion. She began her presentation by stating as her primary assumption that rural areas contain high quality natural areas that should be preserved as open space. She added, however, that not all rural areas are suitable for protection as environmentally significant areas. Scattered development in the countryside is not necessarily damaging to the environment. Development in rural areas simply needs to be soundly and innovatively managed.

Pugh's conclusion is similar to Kaufman's, but her proposals for achieving that end differ greatly. Pugh proposed extensive land use planning as the most effective means of managing growth and mitigating adverse environmental effects caused by urban-type development. In rebuttal to Kaufman's contention that planning is not an effective means of controlling growth, Pugh acknowledged the failure of traditional land use planning and management tools in controlling growth in North Carolina. Nonetheless, that does not preclude the future success that can be achieved with the use of new planning/management tools. Pugh recommended and described some innovative planning and management tools for developing a sound and enforceable land use plan; such as suitability studies for rural areas, rural historic preservation, agricultural zoning, and public acquisition for open spaces. Other land use controls mentioned by Pugh were preferential taxation for active farmers, flood plain zoning, clustered development, and carrying capacity studies.

With the aid of the above-mentioned tools, planners can devise and enforce land use management systems that can accommodate urban-type develop-

ment in rural areas while still protecting environmentally sensitive areas and preserving rural land suitable for agricultural use.

### Agricultural Debate

Anthony San Filippo of the American Farmland Trust defended the debate resolve stating, "our agriculture cannot stand any more urban-type development in the countryside." The first portion of San Filippo's argument was philosophically based. Operating within a democratic framework of government and an economic system inspired by the spirit of individualism, Americans have a right to work where they want, and this includes a right to farm. As sprawl continues and farm acreage is reduced, it will become increasingly difficult for farmers to exercise their American rights.

In addition, San Filippo argued that the long run benefits to the community and the economy favor preservation of agricultural land and open space over rural industrial development. Besides the long-run inefficiencies associated with commercial development in the countryside, San Filippo also claimed that sprawl development is inequitable. Urban development in the countryside is a costly public venture, which is ultimately financed by farmers.

Opposing San Filippo was retired Wake County planning director John Scott. Scott's position was the following: Agricultural productivity increases have more than compensated for any decreases in agricultural acreage; therefore, there is no threat to our agricultural economy from urban-related development in rural areas. In addition, Scott claimed that North Carolina is in no danger of urbanizing most of its rural land in the near future. Currently, there are 26,480,700 acres of rural land in North Carolina, and 18,112,000 acres (68% of it) is suitable for agriculture.

Given those facts, Scott attributed the public fear surrounding urbanizing the countryside to misperception rather than reality. The loss of farm acreage during the past decade has been moderate. In his conclusion Scott urged North Carolinians to reconcile their contradictory attitudes about growth. He said, "North Carolina cannot remain a rural state and, at the same time, take huge pride in growth and development. We can't have it both ways. We can't attract fast-growth industry and not expect to lose some farmland."

failing land use tools

a right to farm

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