

# Risky Sitings: Measuring the cluster siting patterns of the Low-Income Housing Tax Credit

## Data and Methodology:

LIHTC data was used to calculate the mean centers, standard deviational ellipses, and local clustering. The variable is allocated credits, as opposed to built projects, because allocation is an immediate representation of a state's values where development has a significant time-lag. Specific states were chosen based on available data and proximity to significant storms.

Each map is symbolized by FEMA disaster assistance data, identified by counties that requested Public Assistance, Individual Assistance, or both. If a county requested a significant amount of any one source, it was declared a disaster zone. Overall, the spatial statistics tools were used to see where states allocated and approved projects over time within the context of FEMA disaster zones.

## Results:

The distribution of allocated credits does not move significantly from before and after a given storm. The ellipses tend to move towards the coastline, but do generally do not shift significantly from the previous year. In Texas, the distribution of credits becomes more evenly distributed in the year of the storm and the year after. New York and Florida follow similar trends of greater distribution towards the dangerous coastline. In addition, there is clustering across all states along the coast and in these previously designated disaster zones.

## Limitations and Policy Implications:

There are a multitude of political, economic, and social factors that can determine the allocation of tax credits. This research did not explore whether any change, or lack thereof, was specifically due to a hurricane or storm. Still, these maps signify a pattern in the allocation of LIHTCs that lacks geographic change over time. It is time for this pattern to change.

Allocating credits in high risk or extremely vulnerable zones will be very expensive for the state and federal government. The more people in these areas, the more FEMA assistance will be requested. Let alone the cost of displacement and other emergency services. It is in the State and its' constituents best interest to think carefully about the geographic distribution of credits moving forward.

**Introduction:** This project explores whether there is spatial change in how Low Income Housing Tax Credits (LIHTC) are allocated before and after major storms. Low income people carry the largest financial burden after storms, much of that cost can be attributed to where they live. LIHTC funds millions of low income housing projects a year and has power to influence or prioritize where projects are located, and therefore influence the stability of the families they house.

## Projected Coastal Vulnerability :

The basemap displays the Coastal Vulnerability Index created by the Department of the Interior, on a scale of 1-4, 4 being the most vulnerable. There are clearly a few coastal areas safe from sea level rise. This provides important context for these data from previous storms, and

**Coastal Vulnerability Index**

1

2

3

4

