

# Climate migration in the US and New England: A social scientist's view

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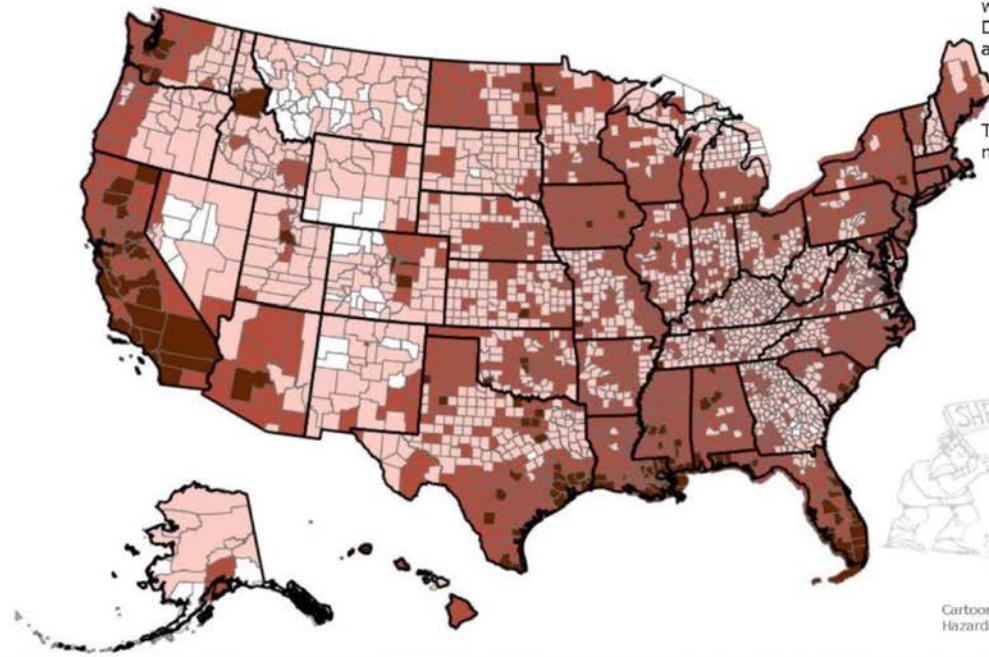
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# Hazards happen (nearly) everywhere

## TOTAL LOSSES FROM NATURAL HAZARDS BETWEEN 1960 AND 2019



Between 1960 and 2019, there were 2,377 Presidential Disaster Declarations (PDDs). The annual average number of PDDs is 40.

The states that received PDDs most frequently were:

Texas	93
California	91
Oklahoma	80
Florida	72
New York	71
Kentucky	64
Louisiana	64
Alabama	63
Mississippi	62
Arkansas	61



Cartoon reprinted with permission from the National Hazards Research Center in Boulder, CO.

Source: Spatial Hazard Events and Losses Database for the US, <https://cemhs.asu.edu/sheldus/>

# Why do people persist in hazardous places?

- FEMA disaster recovery and environmental management policies over the past century or more are oriented to in-place adaptation
- Pro-growth community policies protect people and places
- People are:
  - Invested in communities, e.g. homeowners, place-based employment, social networks, churches, health care providers, etc...
  - Attached to places, e.g. cultural and familial roots
  - Housing affordability and access keep people locked in place
- County population growth after a hurricane tends to follow the pre-hurricane pattern
  - Growing counties grow
  - Stable or declining counties remain stable or continue to decline

# What does environmental migration look like?

- When people are ready to move, environment plays marginal role in location choice
  - Life cycle migration: young adulthood, family formation, empty nesting, retirement
  - Destination choice reflects life cycle needs:
    - Cities concentrate jobs and people
    - Suburbs concentrate single family housing, schools, green spaces
    - Retirement destinations concentrate more affordable cost of living and natural amenities
  - Environmental amenities attract in-migrants and retain residents
    - When does environment become a hazard?
      - Warm weather becomes a heat wave
      - Coastal amenities exposed to extreme storms and sea level rise
      - Mountain views become wildfire pathways

# Climate migration in the future?

- Migration in the US will continue to be influenced by environmental amenities and disamenities
  - Changes in geographic population distribution will be gradual
  - Rapid onset events will displace people temporarily and cause more mobility
- Housing and disaster recovery policies will play a strong role in influencing hazard exposure
  - Housing affordability and access
  - Zoning housing out of repeat hazard areas
  - Disaster recovery public and private insurance policies