

Measuring the Impact of Climate Change on Mobile Home Parks: Evidence From Texas & Florida



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Mobile Homes in the United States

17.5 million people in the United States live in mobile homes, about 6.3% of occupied housing units

2.9 million mobile homes are located in land-lease communities known as mobile home parks

31% of households living in mobile home parks are in poverty, compared to 8.7% of owners and 15.4% of renters

3x Mobile home parks are a substantial share of our affordable housing, providing three times the units as public housing (HUD 2016)

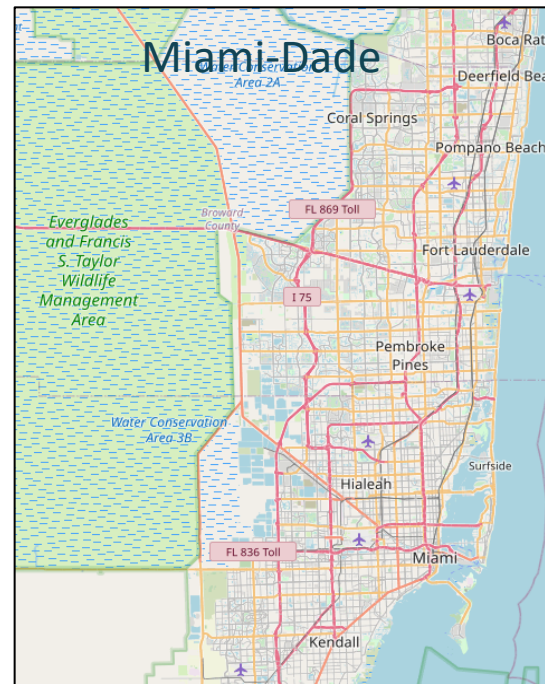
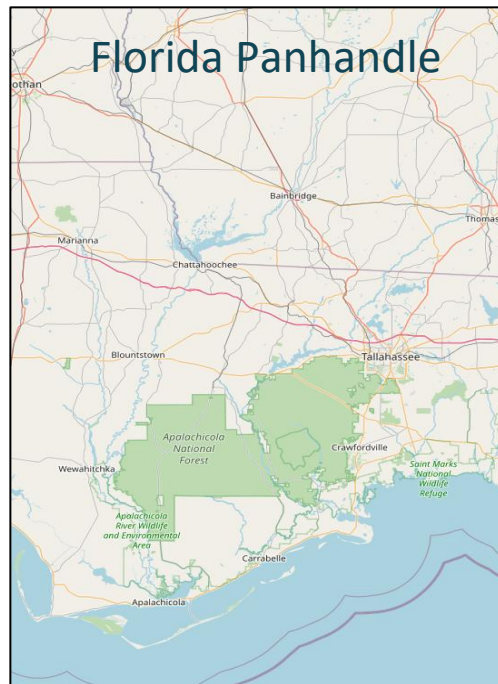
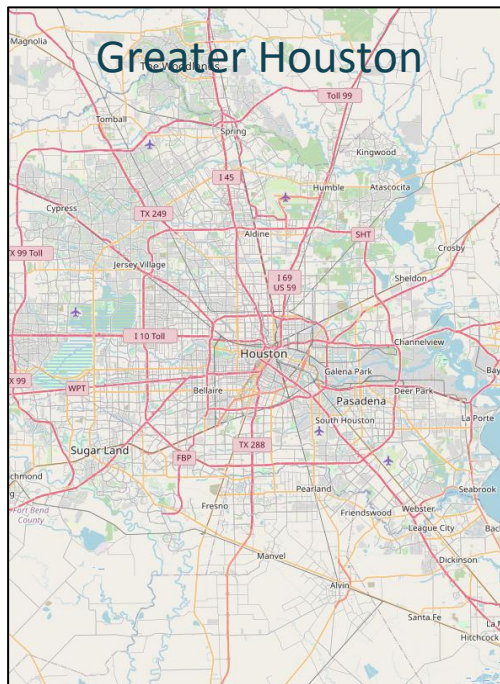
Mobile Home Parks & Climate Change

- In general, mobile home parks are understudied in the disaster and climate change literatures;
- Mobile home parks spatially concentrate socially vulnerable households;
- Mobile home parks are disproportionately exposed to extreme weather events like floods and wildfires;
- They are especially prevalent in the Sunbelt region, which is at high-risk from present and future climate change;
- Mobile home parks are poorly served by hazard mitigation and disaster recovery plans and policies.

How will future climate-related hazards impact mobile home parks in the United States?



Our Study Areas

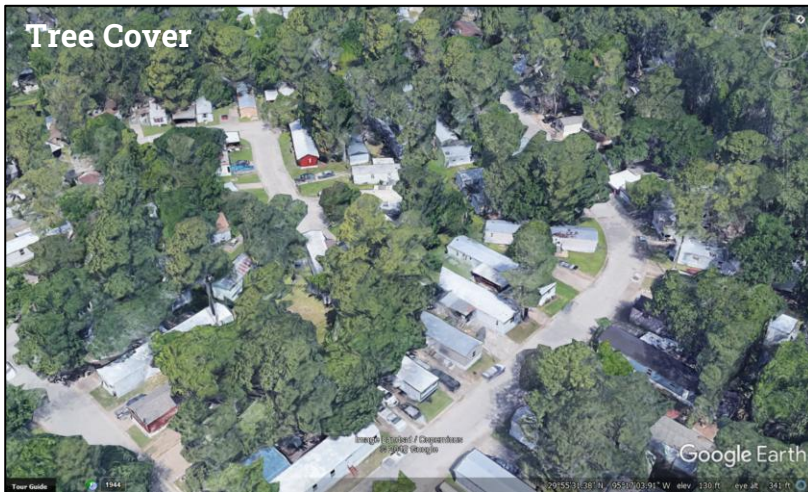




Step 1: Inventorying Mobile Home Parks

- Identified addresses with tax record code indicating mobile home park
- Joined addresses with parcel-level boundary data
- Visually analyzed parcels using pre-disaster satellite imagery to count number of mobile home units

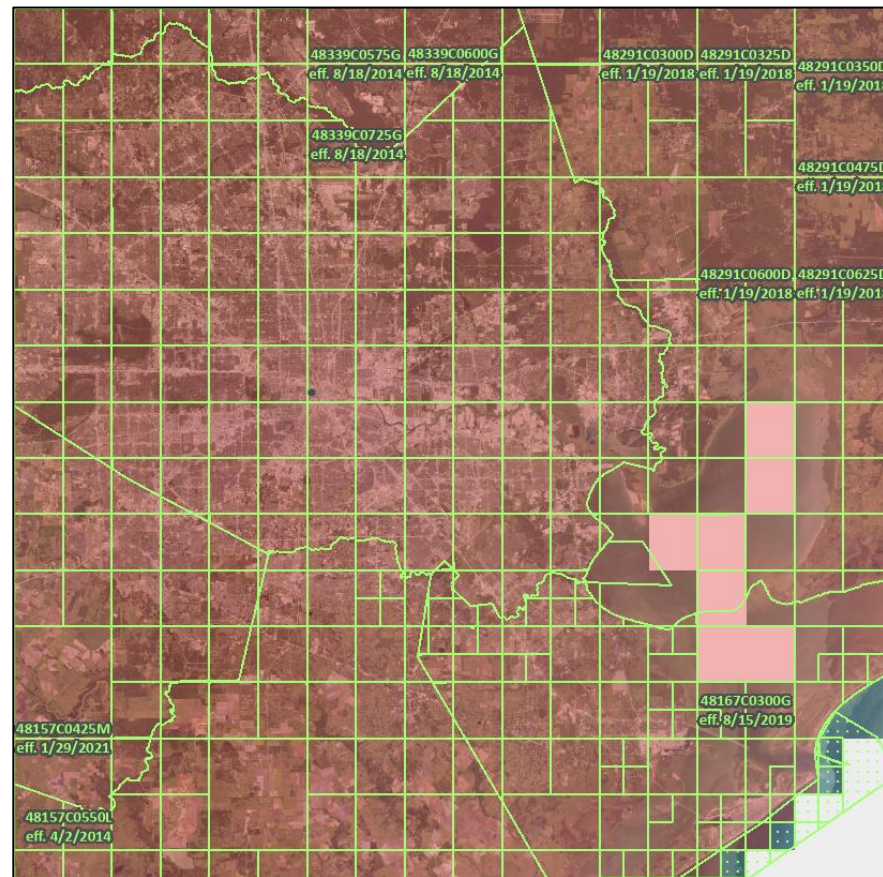






Step 2: Overlay With Regulatory Floodplain Data

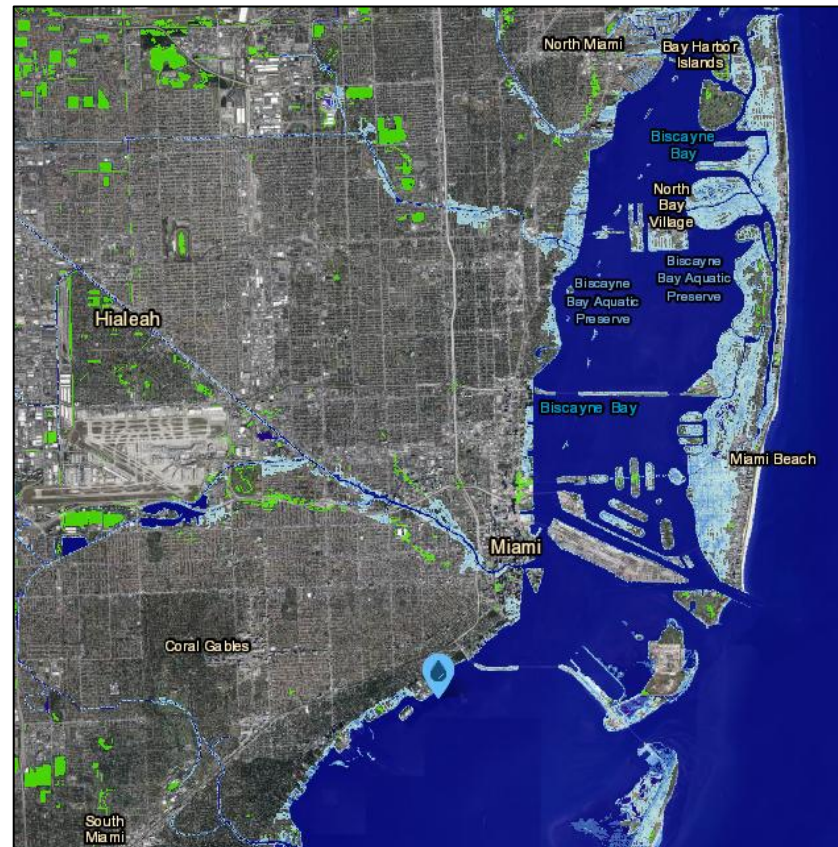
- Imported mobile home park inventories into GIS environment
- Overlaid with best-available regulatory (1% and .2% annual chance) floodplain data
- Parcel intersect method

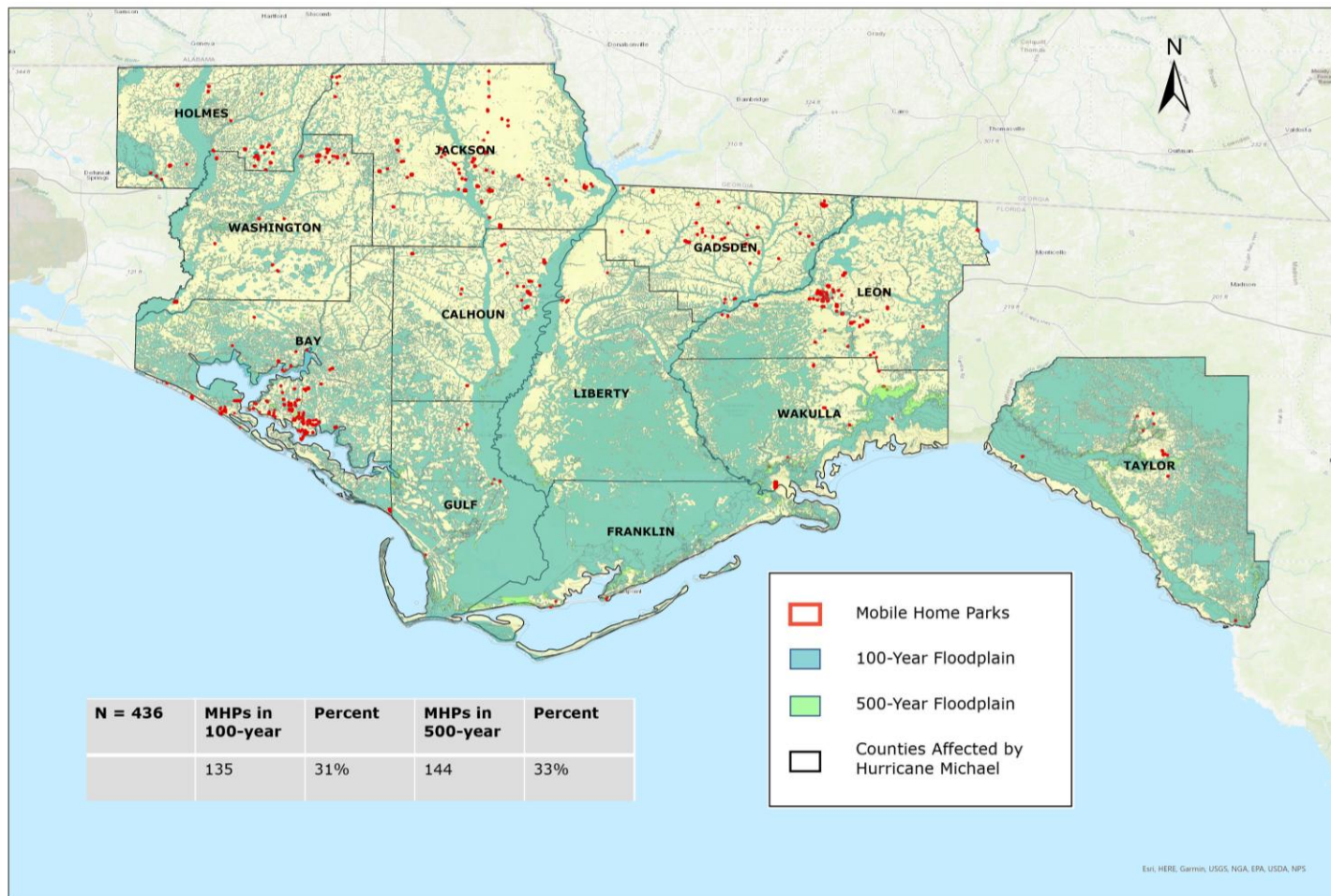




Step 3: Sea-Level Rise & Coastal Flooding

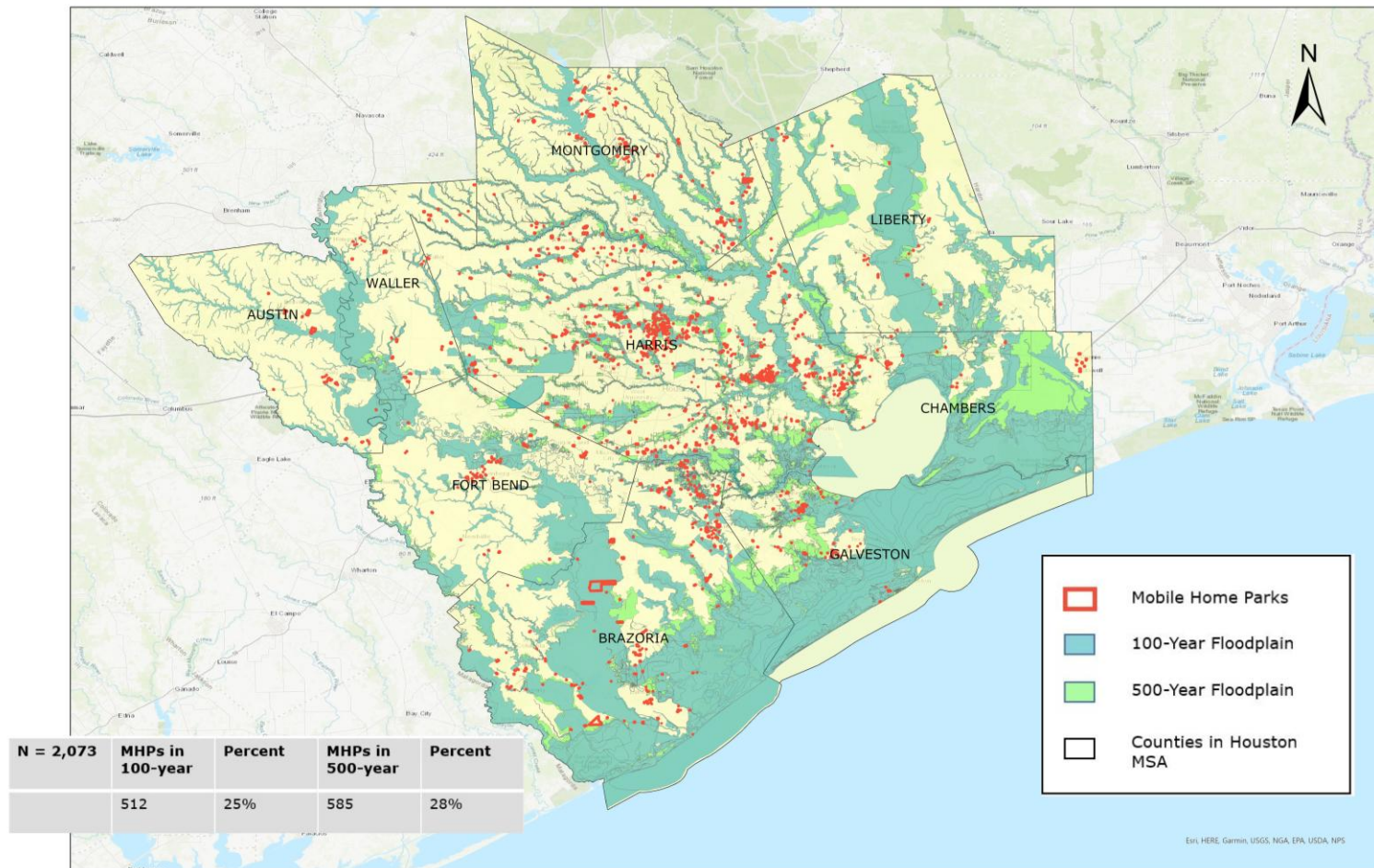
- Incorporate mid-range climate warming scenarios;
- Sea-level rise, coastal storm, and high-tide flooding;
- Ongoing...





Source: FEMA National Flood Hazard Layer Viewer; Florida Geospatial Open Data Portal

0 25.5 51 102 Miles



Golden Meadow



Adaptation Research & Policy Priorities

- Invest in state- and national-level data on mobile home parks;
- Model dynamics of exposure, vulnerability and recovery from extreme events to identify critically at-risk communities;
- Understand risk holistically – i.e. local government regulations are drivers of co-location and major impediment to relocation;
- Make mobile home parks ‘visible’ to federal and state mitigation + recovery programs;
- Develop state- and federal-level mobile home park legislation to guide local government action;
- Explore alternative ownership models.



Acknowledgements

This material is based upon work supported by the Natural Science Foundation under Grant No. 1825341



Thank You!

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