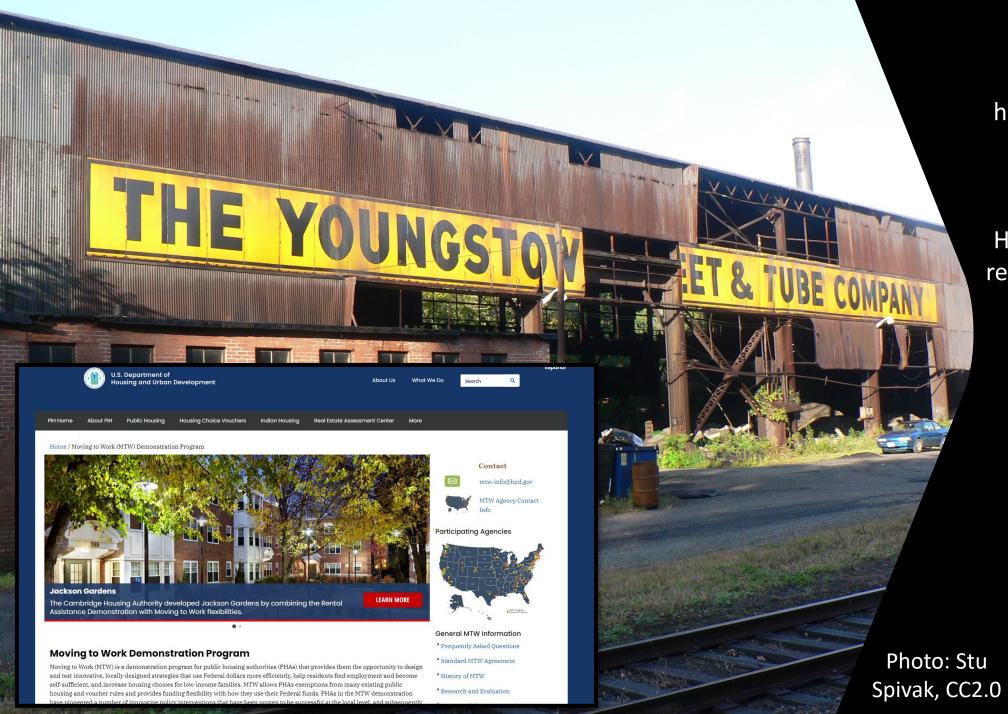
"It is generally agreed that the government should help disaster victims in times of need, but it is debatable whether the fiscal responsibility resides primarily with the federal or the state government."

Congressional Research Service 2017



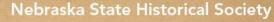
Relocation has happened & is happening. We want to do better.

How is climate-induced relocation different from other types of movement?

Does it matter?



Federal Role Minimal/None: Ignore request to move post office for 5 months



Long Point Cape Cod 1850s

Brighton Beach Hotel 1888 Coney Island New York



BRARA ON WHEELS. of moving on Higher Land, nile and one-half west.

1700s & 1800s Primary responsibility local

Niobrara, Nebraska "The Town Too Tough to Stay Put" (Nebraska Historical Society)

## early 1900s

Responsibility starts to shift 1926 Euclid Zoning (Police Power)

1927 Mississippi River Flood

1928 Flood Control Act











Robert T. Stafford

Disaster Relief and Emergency

Assistance Act, as Amended

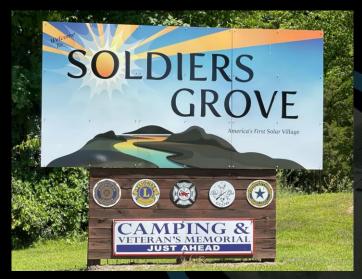


## 1700s & 1800s

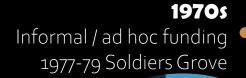
Primary responsibility local "Acts of God" Laissez-faire

#### 1950s

1950 Disaster Relief Act (public aid)
Highways, Social Security, Housing
1958 Civil Defense 50-50 share



Soldiers Grove WI







Valmeyer IL



Pattonsburg MO – St. Joseph Press Photo

# The Stafford Act

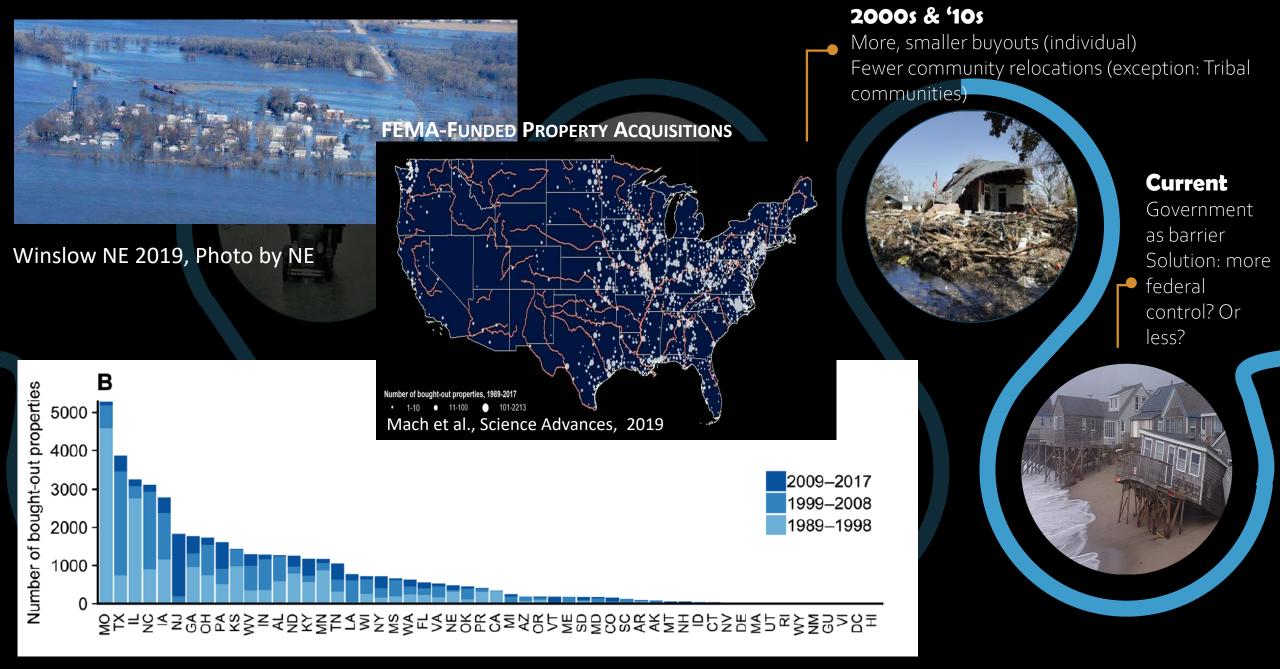
Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended



### 1980s & 90s

1989 FEMA buyout program 1990s Midwest town relocations Individual property acquisitions (rivers)

@sidersadapts



FEMA-funded property acquisitions, Mach et al. 2019

#### early 1900s

Responsibility starts to shift 1926 Euclid Zoning (Police Power)

1927 Mississippi River Flood

1928 Flood Control Act



1968 National Flood Insurance Program

1979 Federal Emergency Mgmt Agency

1979 Soldiers Grove



#### 2000s

# presidential disaster declarations triples Local authority reduced (resist land use control)



### Current

Equity
Debate over
more or less
federal role





## The Stafford Act

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended



### 1700s & 1800s

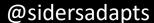
Primary responsibility local "Acts of God" Laissez-faire

#### 1950s

1950 Disaster Relief Act (public aid)
Highways, Social Security, Housing
1958 Civil Defense 50-50 share

### 1980s & 90s

1988 Stafford Disaster Relief & Emergency
 Assistance Act ("Integrated Em Mgmt")
 1989 FEMA approves funding for buyouts
 1990s Midwest relocations



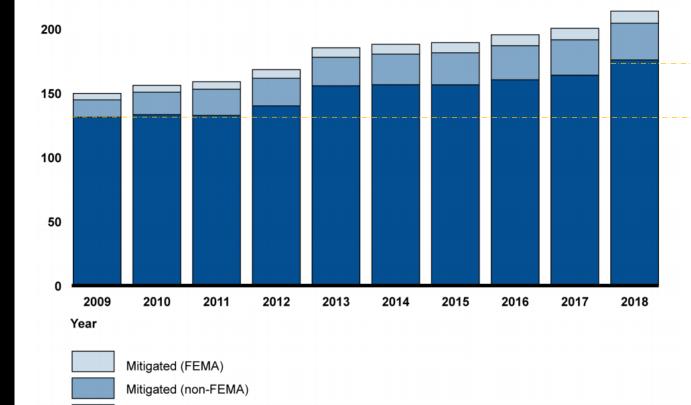
"It is generally agreed that the government should help disaster victims in times of need, but it is debatable whether the fiscal responsibility resides primarily with the federal or the state government."

Congressional Research Service 2017

Figure 6: National Flood Insurance Program, Cumulative Number of Mitigated and Nonmitigated Repetitive Loss Properties, 2009–2018

Number of repetitive loss properties (in thousands)

250



Source: GAO analysis of Federal Emergency Management Agency (FEMA) data. | GAO-20-508

Note: FEMA provided these data as of June each year.

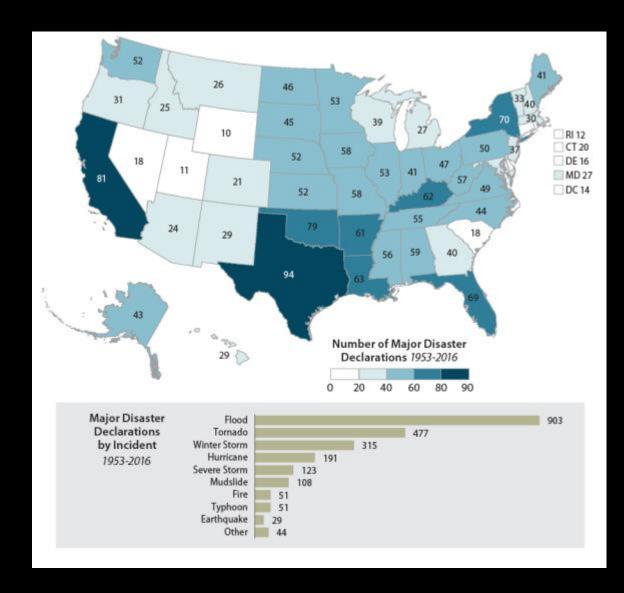
Nonmitigated

GAO-20-509

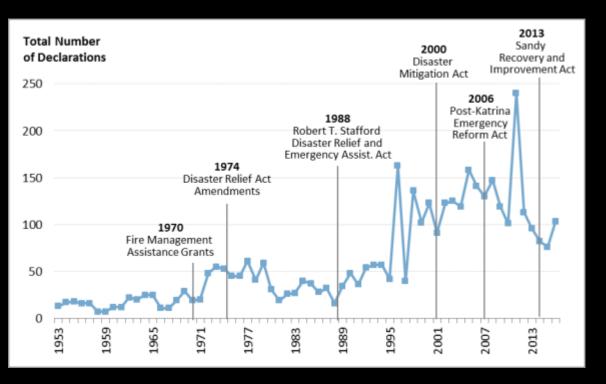
# ~43k households helped

**64,101 NEW** repetitive loss properties (2009-2018)

Households still at risk







Average 18.6 per year 1960-1969 Average 57.1 per year 2000-2009

# **INCREASE FEDERAL ROLE**

- More federal funding
  - to state & local govs
  - to individuals
- Centralized federal framework to support relocation
  - where? who leads?
- Address wider range of hazards (and climate change)
  - e.g., coastal erosion, drought
- Lack of local & state capacity

## **DECREASE FEDERAL ROLE**

- Increase local & state government responsibility
  - raise federal cost share
  - raise 'disaster' threshold
  - disaster deductible
- Increased role private sector?
- Authority-funding mismatch
  - new development in coastal counties growing
  - lack of flood risk disclosure masks market signals
  - does increased federal responsibility come with authority? Not yet...

### **THINGS GOVERNMENT DOES\***

(Bardach, Practical Guide to Policy Analysis)



**TAXES** 



**REGULATIONS** 



**RIGHTS** 



**SUBSIDIES & GRANTS** 



**SERVICES** 



INFORMATION & EDUCATION

THINGS GOVERNMENT DOES* (Bardach, Practical Guide to Policy Analysis)	MANAGED RETREAT CONTEXT  (not comprehensive by a long shot)
% TAXES	Shared lessons on alternatives to property tax revenue models for local governments   Town mergers
REGULATIONS	<ul> <li>Rebuilding restrictions   Armoring restrictions</li> <li>Federal infrastructure siting</li> <li>Cost-benefit requirements &amp; calculations</li> <li>Environmental justice requirements</li> <li>Wetlands &amp; open space protection</li> <li>Model ordinances</li> </ul>
RIGHTS	<ul> <li>Support govs in takings litigations (e.g., amicus briefs)</li> <li>Testing the waters on 'givings'</li> <li>Test limits (existence) of federal public trust doctrine</li> </ul>
SUBSIDIES & GRANTS	<ul> <li>Disaster recovery aid (thresholds &amp; requirements)</li> <li>Requirements for state &amp; local disaster recovery aid (carrots)</li> <li>Disaster mitigation support (need more continuous sources of funding not tied to disasters)</li> <li>Capacity building funding (continuous)</li> </ul>
SERVICES	<ul> <li>Subsidized housing (stop building in floodplains)</li> <li>Dams &amp; flood control (purchase all reservoir land to prevent building)</li> <li>NFIP reform   Community Rating System ambition increase</li> </ul>
INFORMATION & EDUCATION	<ul> <li>Prospective floodplain maps</li> <li>Flood risk communication</li> <li>Flood risk disclosures real estate &amp; rental transactions</li> <li>Technical assistance (BUILD YOUR OWN CAPACITY!)</li> <li>Communities of practice   Shared lessons learned   Evaluation</li> </ul>

#### THINGS GOVERNMENT DOES\* MANAGED RETREAT CONTEXT (Bardach, Practical Guide to Policy Analysis) (not comprehensive by a long shot) Shared lessons on alternatives to property tax revenue models for **TAXES local governments** | Town mergers Rebuilding restrictions | Armoring restrictions Federal infrastructure siting Cost-benefit requirements & calculations REGULATIONS Environmental justice requirements Wetlands & open space protection **Model ordinances** Support govs in takings litigations (e.g., amicus briefs) Testing the waters on 'givings' RIGHTS Test limits (existence) of federal public trust doctrine Disaster recovery aid (thresholds & requirements) Requirements for state & local disaster recovery aid (carrots) **SUBSIDIES & GRANTS** Disaster mitigation support (need more continuous sources of funding not tied to disasters) Capacity building funding (continuous) Subsidized housing (stop building in floodplains) **SERVICES** Dams & flood control (purchase all reservoir land to prevent building) NFIP reform | Community Rating System ambition increase Prospective floodplain maps INFORMATION Flood risk communication Flood risk disclosures real estate & rental transactions

**EDUCATION** 

@sidersadapts

Technical assistance (BUILD YOUR OWN CAPACITY!)

**Communities of practice | Shared lessons learned | Evaluation** 

WAG
WILD AMBITIOUS GOAL

what would wildly ambitious adaptation / hazard mitigation look like?

