


CLIMATE  
RESILIENCE  
FOR AN  
AGING  
NATION



WHY WE MUST  
ASSESS RESILIENCE  
THROUGH THE  
LENS OF AGING

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Regional Solutions Forum

October 2, 2024

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Growing  
Climate  
Risks



Growing  
Share of  
Older  
Adults

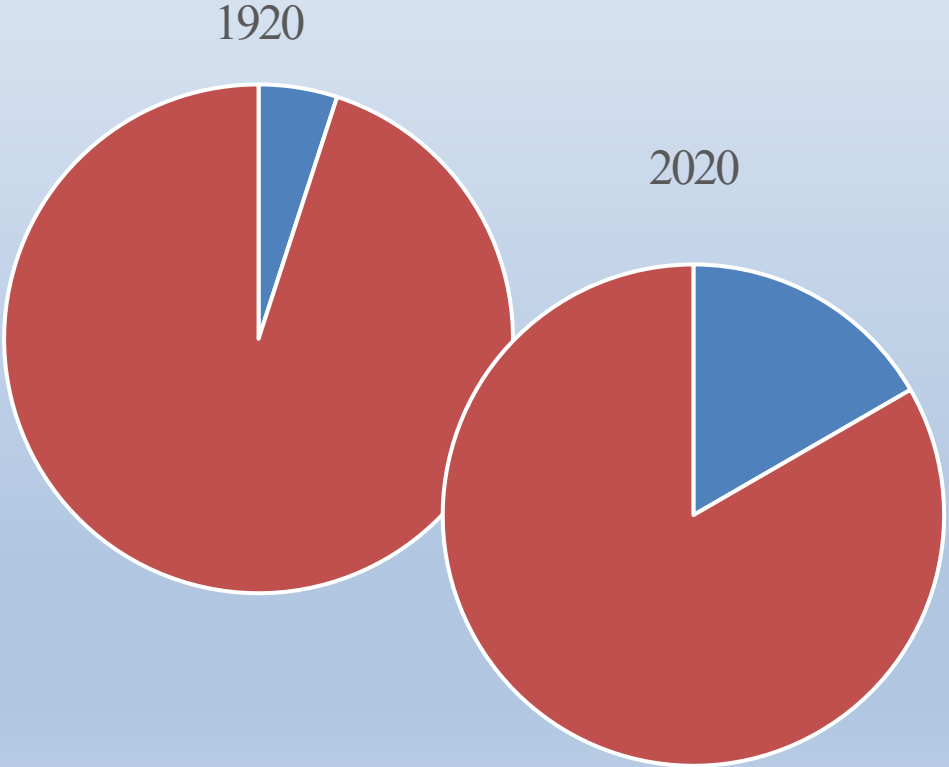
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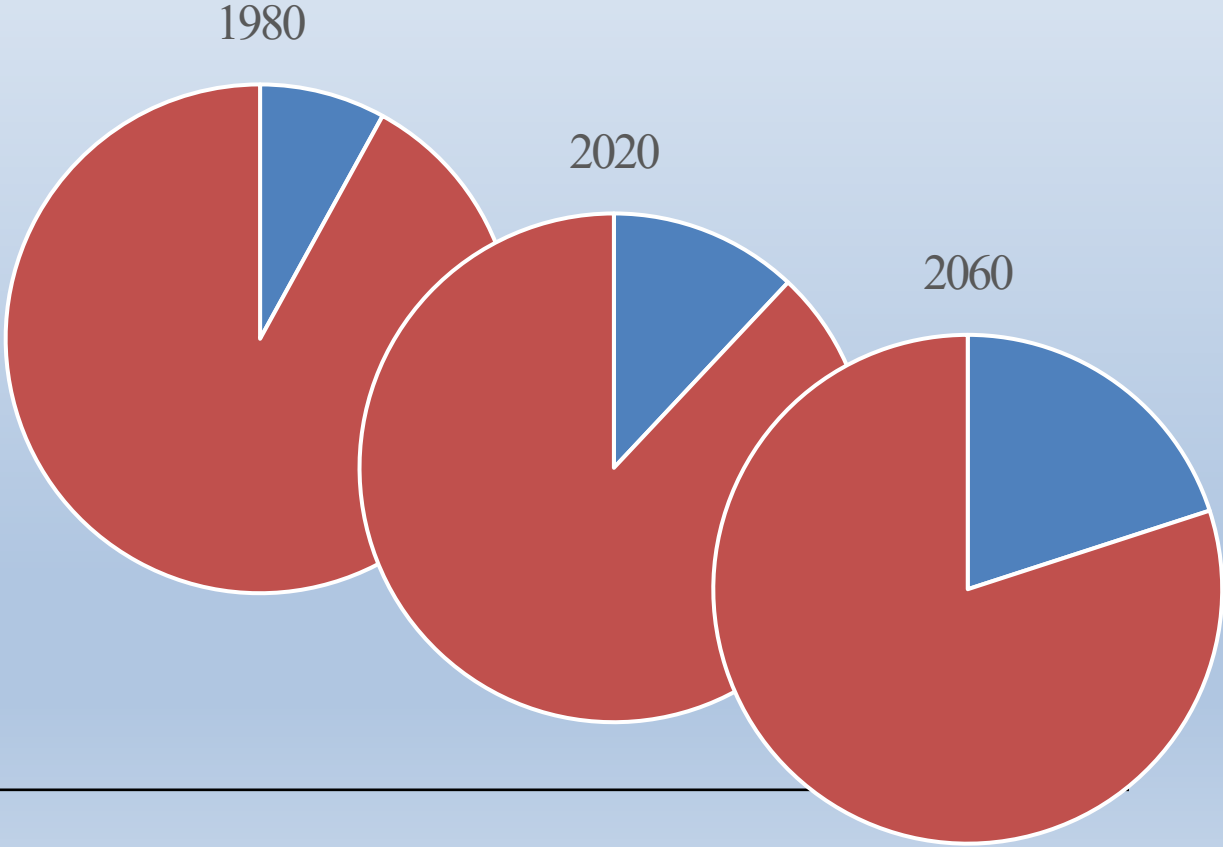
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# GROWING SHARE OF OLDER ADULTS

% of total population, 1920-2020: US

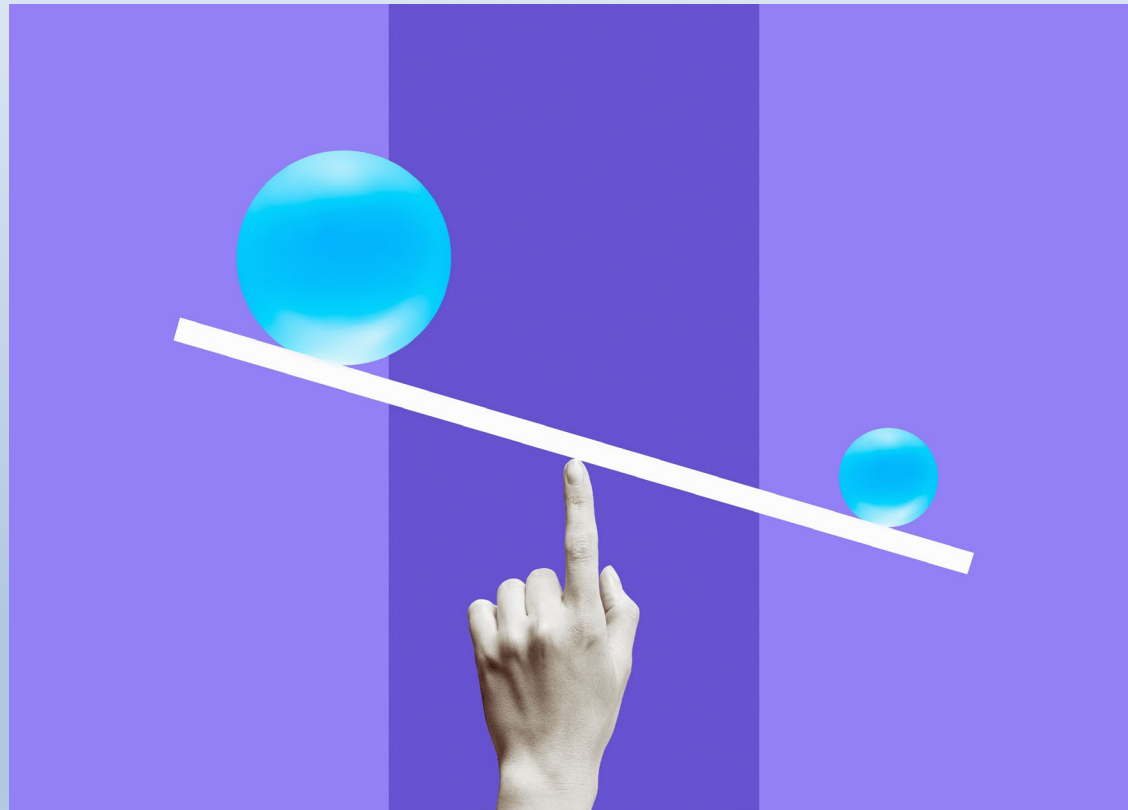


% of total population, 1980-2060: Utah



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# GROWING SHARE OF OLDER ADULTS



by 2034, more people  
**over 65 than**  
**under 18**  
for first time ever

US Census, March 13, 2018, <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>

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# POOR UNDERSTANDING OF OLDER ADULTS



# POOR UNDERSTANDING OF OLDER ADULTS



1 in 6 live in poverty

98% live independently

30% live alone

20% don't drive

1/3 have unmet travel needs

1 in 9 live with dementia

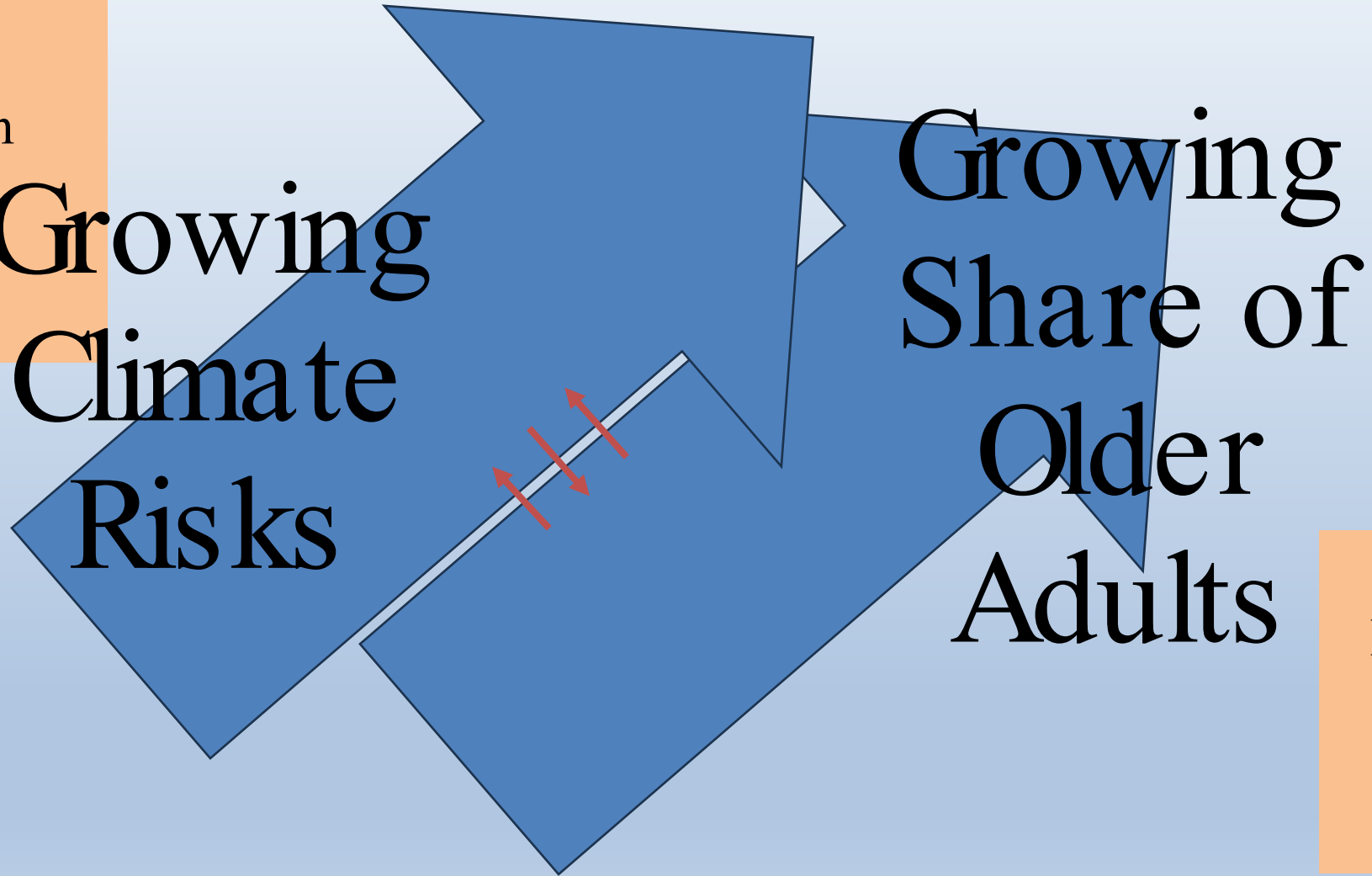
40% have ambulatory  
limitations

80% have 2+ chronic med issues

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Engineers  
Data analysts  
Hazard mitigation  
officers  
Emergency  
managers

Growing  
Climate  
Risks



Growing  
Share of  
Older  
Adults

Gerontologists  
Demographers  
Health care  
Aging  
advocates





# OLDER ADULTS BEAR THE BRUNT

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Louisiana: Hurricane Katrina (2005), 70% of people who died were over 65

California: Camp Fire (2018) 85% were over 60

Oregon (2021): heat waves median age of people who died was 68

Buffalo, NY: Winter storms (2022) 63% of people who died were over 60

Florida: Hurricane Ian (2022) 2/3 were over 60

Hawai'i: Lahaina wildfires (2023) 73% were over 60

Texas: Post-Beryl power outages (2024) 3/4 were over 60

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Over 20 years:  
no change

# PROFILE ON: LAHAINA, HI



## As the Maui fires raged, senior victims had to fend for themselves

By Karin Brulliard and Emily Wax-Thibodeaux

Updated August 6:00 a.m. EDT

- Lived in 35-unit low-income senior complex
- Independent living; not assisted living
- Many didn't drive; use walkers/canes; report difficulty hearing, seeing



Louise Abihai (RIP), age 98

Photo credit: Washington Post/Clifford Abihai

# EMERGING FOCUS ON CLIMATE WITHIN AGING FIELD



June 2021: focus on climate risks in member-facing publication; June 2022: tool kit for local leaders on disaster s



June 2022: 'Generations' focus on climate crisis + establish 'fighting climate change' as policy priority



March 2024: focus on age-friendly communities, heat, adaptation plans, more

# AGING NOT YET A FOCUS IN FEDERAL GUIDANCE

## FEMA STATE HAZARD MITIGATION GUIDANCE

2015 requirements

2022 requirements



### S2. Does the plan describe how the state coordinated with other agencies and stakeholders?

The plan must describe how other state and Federal agencies and other stakeholders were involved in the process. At a minimum, the plan must describe how the state coordinated with other agencies and stakeholders responsible for the following sectors:

- a. Emergency management;
- b. Economic development;
- c. Land use and development;
- d. Housing;
- e. Health and social services;
- f. Infrastructure; and
- g. Natural and cultural resources.

Where coordination with agencies and stakeholders representing these sectors is not practicable, the plan must describe the limitations.

***Involvement in the process*** means engaged as participants and given the chance to provide input to affect the plan's content.

a. The plan must describe how the state coordinated with other state agencies and appropriate federal agencies that were involved in the process and how they were involved in the process. At a minimum, the plan must describe how the state coordinated with other agencies and interested groups, including stakeholders responsible for the following sectors:

- Emergency management (including Safety and Security, Hazardous Materials, and Food, Water, Shelter community lifelines);
- Economic development;
- Land use and development, including the agency or department that regulates building codes;
- Housing (including Food, Water, Shelter community lifelines);
- Health and social services (including Health and Medical community lifelines);
- Infrastructure (including Energy, Communications, Transportation, and Food, Water, Shelter community lifelines); and
- Natural and cultural resources.

Missing:  
aging  
services,  
disability  
services

Source: FEMA's State Mitigation Planning Policy Guide (April 2022)

# AGING NOT YET A FOCUS IN FEDERAL GUIDANCE

## HUD CONSOLIDATED PLAN GUIDANCE



### Public Housing, Affordable Rental Housing, and Housing for Vulnerable Populations

It is important that the grantee analyzes and describes unmet need in various housing categories. To successfully analyze each type of housing, the grantee should coordinate with local public housing authorities (PHAs), State Housing Finance agencies, and other HUD-funded programs (e.g., Section 8 Housing Choice Voucher Program, HOME, ESG, etc.) in the MID areas. When evaluating housing for vulnerable populations, the grantee must describe how CDBG-DR funds (or other sources) will promote housing and address transitional housing, prevention measures to

#### *Critical Partners and Data Tools*

Key agencies that may be helpful in developing the impact and unmet needs assessment are FEMA, the U.S. Department of Transportation and Federal Highway Administration for transportation issues, the U.S. Small Business Administration, the U.S. Census Bureau, the U.S. Department of Agriculture, the U.S. Department of Labor, state departments of transportation, housing, community development, and housing finance agencies.

Focus: low and moderate income households, jurisdictions with unmet recovery needs, underserved communities, protected classes, and *vulnerable populations*.

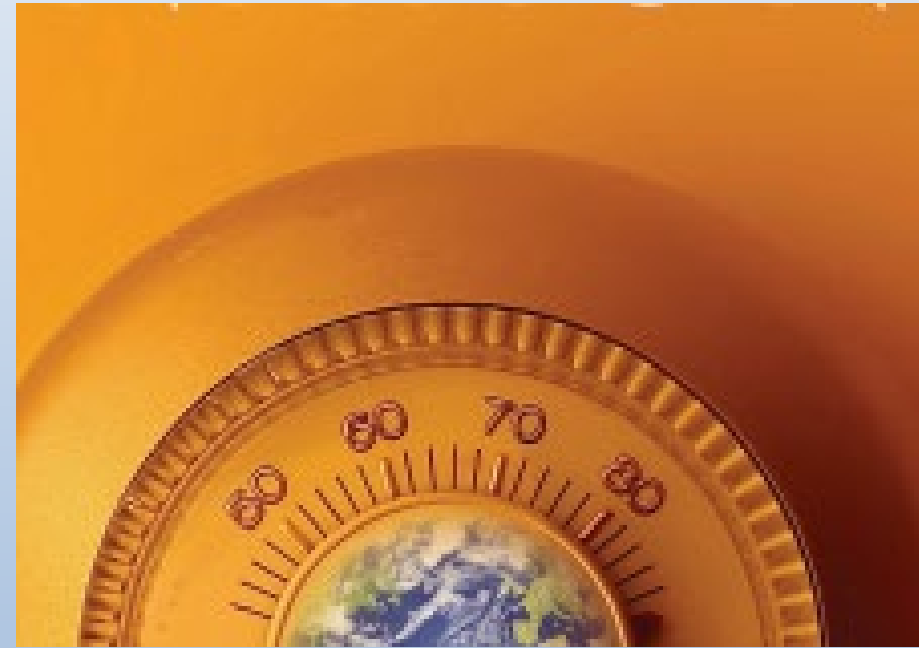
Missing: aging departments, public health agencies

Source: HUD's CDBG-DR Policy Bulletin (November 2022)

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# CURRENT APPROACH TO RISK MITIGATION AND RESILIENCE...

- Doesn't account for older adults' challenges to adapt
- Leaves too many people unserved/underserved
- Fails to account for layered risks of age on top of other vulnerabilities



# PROFILE ON: ITHACA, NY

- New floodplain maps based on Risk Rating 2.0
- Homeowners required to elevate, or get flood insurance
- Complexity of navigating FEMA requirements

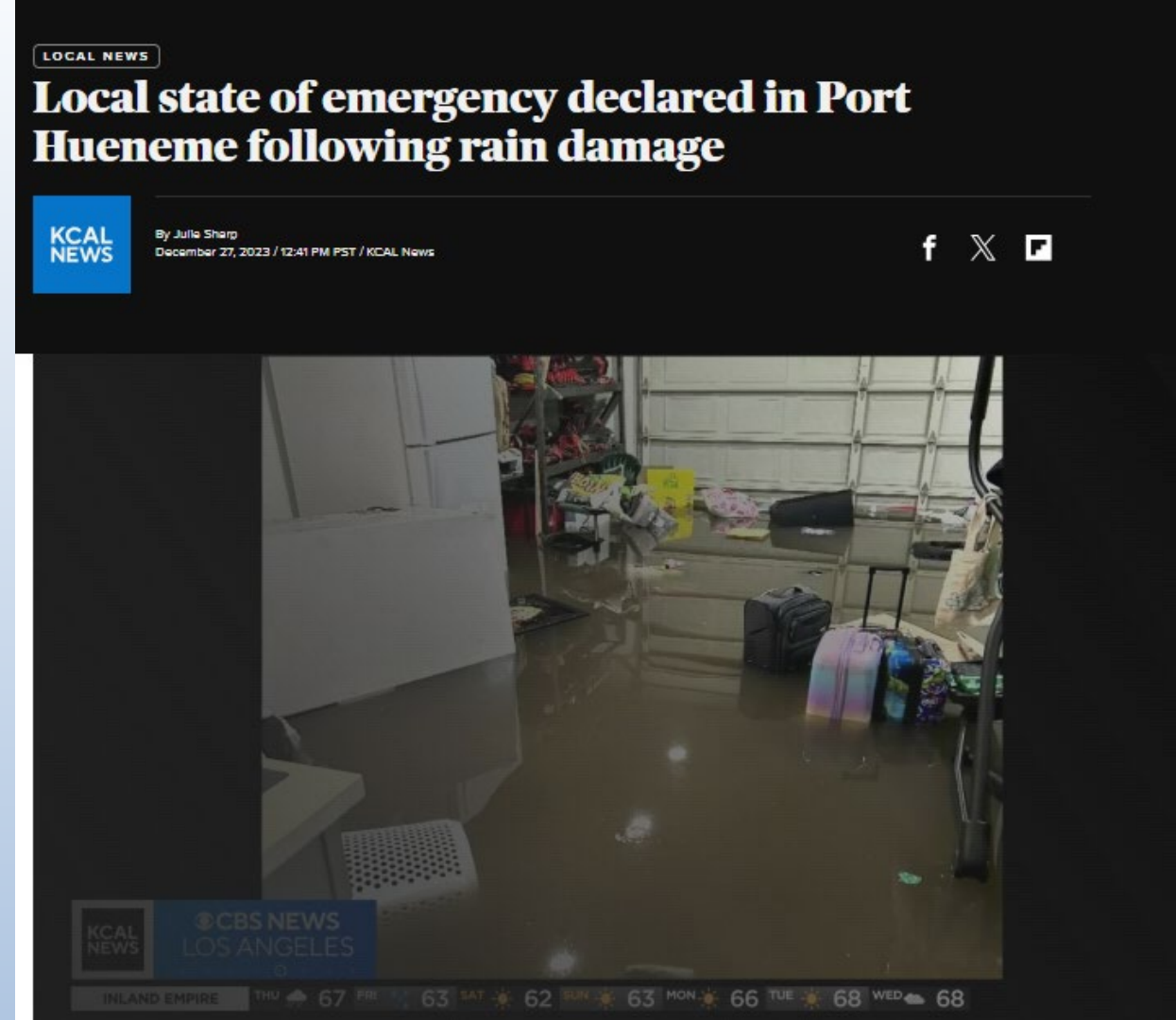


Feb 16, 2024, Ithaca Voice,  
<https://ithacavoices.org/2024/02/new-federal-flood-maps-almost-finalized-pending-municipal-appeal-process/>



# PROFILE ON: VENTURA COUNTY, CA

- 3” of rain in 45 minutes
- 500 homes damaged
  - Older adults, low-income, undocumented
- Costs to repair >\$30k
- Too small to trigger FEMA; just SBA loans



Dec 27, 2023, CBS News,  
<https://www.cbsnews.com/losangeles/news/local-state-of-emergency-declared-in-port-hueneme-following-rain-damage/>

# OLDER ADULTS UNSERVED OR UNDERSERVED

TEXAS:  $\frac{3}{4}$  OF DEATHS FROM POST-BERYL  
POWER OUTAGES WERE OLDER ADULTS

<https://www.houstonpublicmedia.org/articles/news/health-science/2024/07/31/495276/seniors-died-at-higher-rates-after-beryl-many-went-days-without-power-in-the-aftermath>

MONTANA: 1% INCREASE IN 911 CALLS  
WITH EVERY 1 DEGREE OF ABOVE-AVE HEAT

<https://www.npr.org/sections/shots-health-news/2024/08/07/nx-s1-5055828/missoula-montana-911-calls-heat-wave-rural-seniors-health>





98%

of people over 65 live  
outside congregate settings



20%

of older adults 55-64 are  
childless

# 15 PEOPLE DIED

IN A WAREHOUSE AFTER BEING EVACUATED FROM A  
NURSING HOME, FOLLOWING AN APPROVED PLAN

Source: Khimm/Strickler article, NHC News 9/30/21

# CLIMATE IMPACTS FINANCIAL WELL-BEING

- Number of older people who are housing cost burdened is higher than ever
- True cost of housing must account for increasing cost of insurance and utilities

More than

## One in two

older renters in US were housing cost burdened in 2021

## Six in ten

older renters in Utah are cost burdened



# 7 million

Households headed by person >60 had to forego food or medical necessities to pay for utilities

For low-income households, the median cost of utilities =

**8.1%** of annual income

A dramatic landscape with a cloudy sky and a rocky foreground. The sky is filled with heavy, grey clouds, with a bright light source breaking through on the left side, creating a lens flare effect. The foreground is a vast, flat expanse of grey, textured rocks or pebbles that stretch towards the horizon.

**\$842/yr to \$5431**

is the expected annual flood insurance premium in Louisiana following update of FEMA maps



# CLIMATE IMPACTS HEALTH

- Extreme heat effects are more intense for people with pre-existing health conditions
- Increased flooding can lead to poor indoor air quality

12,000

deaths caused by heat-related illness each year

80%

of are people over 60

# More than 200 million seniors face extreme heat risks in coming decades, study finds

**n p r** By Alejandra Borunda  
Published May 14, 2024 at 10:00 AM MDT



November 28, 2023  
Washington Post

**The Washington Post**  
*Democracy Dies in Darkness*

<https://www.washingtonpost.com/nation/2023/11/28/puerto-rico-power-outages-death-rates/>

# Light analysis shows where Puerto Rico hurricane damage was especially deadly

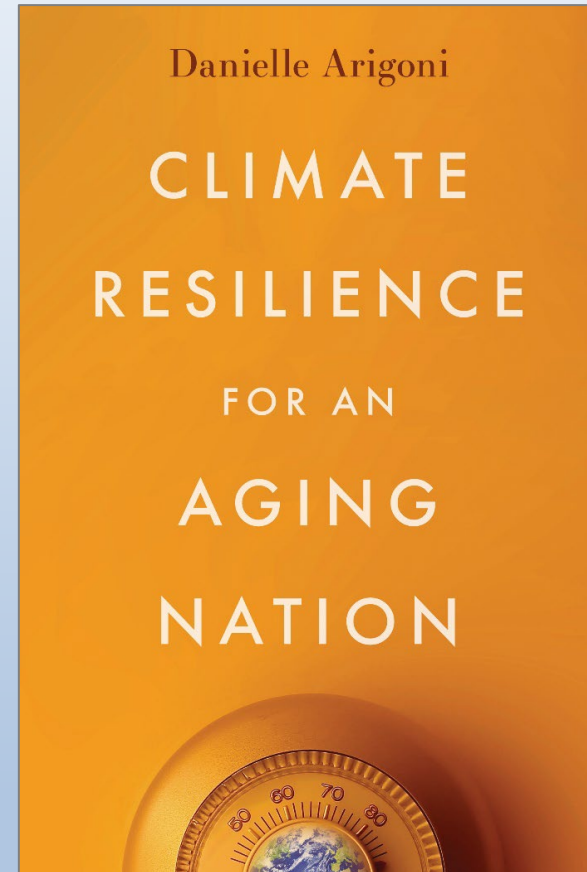
By [Arelis R. Hernández](#), [Andrew Ba Tran](#) and [Dylan Moriarty](#)

November 28, 2023 at 6:00 a.m. EST

- Access to fresh food, clean water
- Power for in-home medical equipment
- Power for building systems (elevators, HVAC)

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What can we do about it?



# TAKEAWAYS TO SPUR ACTION

1. Acknowledge that climate change impacts older adults differently – and not just during disasters
2. Recognize that individual and institutional preparedness is not enough
3. Lean into solutions that build community resilience for all ages.



# COMMUNITY RESILIENCE MEANS...

Climate-responsive  
infrastructure investments

Expanded housing options

Multiple transportation  
alternatives

Improved communication  
during/between disasters



# CLIMATE-RESPONSIVE INFRASTRUCTURE

- Grey and green infrastructure solutions
- (Accessible) open space and more trees
- Parks/public spaces that foster connection
- More resilient and renewable energy

Image: USEPA, Church of Jesus Christ of Latter-Day Saints (LDS) Conference Center

# EXPANDED HOUSING OPTIONS

- More affordable, accessible, green housing options
- Zoning reform and risk-informed decision-making to guide development
- Better building codes, better design
- Greater investment in rooftop and community solar to lower costs and stabilize supply

Image: Wasatch Front Regional Council website



# MULTIPLE TRANSPORTATION ALTERNATIVES

- Better bike/ped infrastructure
- Robust and agile public transit network
- Accessible emergency vehicles
- Shared use agreements
- Human service transportation plans that include disasters

# IMPROVED COMMUNICATION



- Better communication systems (including non-web-based)
- Stronger community-based networks to provide support and information before and during events

# NATURAL CONNECTIONS TO UTAH'S MPA

Six Social Impact End Goals: Utah MPA

Age-friendly ecosystems

Live well everyday

Affordable aging

Plan for life

Networks for care

Embrace technology

Climate-responsive  
infrastructure investments

Expanded housing options

Multiple transportation  
alternatives

Improved communication  
during/between disasters



# NEW PARTNERS ARE NEEDED

Improved policies and practices by utilities  
Explicit consideration of climate in healthcare  
Aging is considered by emergency managers  
Climate seen as the work of aging advocates



After the pronouncement of the judgement before the ECtHR on 9 April 2024  
Photo © Miriam Künzli / Greenpeace

Learn more: <https://en.klimaseniorinnen.ch/>

Reuters article on case: <https://www.reuters.com/sustainability/climate-activists-seek-breakthrough-human-rights-court-ruling-against-european-2024-04-09>

# THANK YOU

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