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A Northeast Safe and Thriving for All

Exploring Climate Migration to the Rustbelt

Linda Shi, Lauren Oertel, Rachel Renders | Cornell University | 9.15.2023



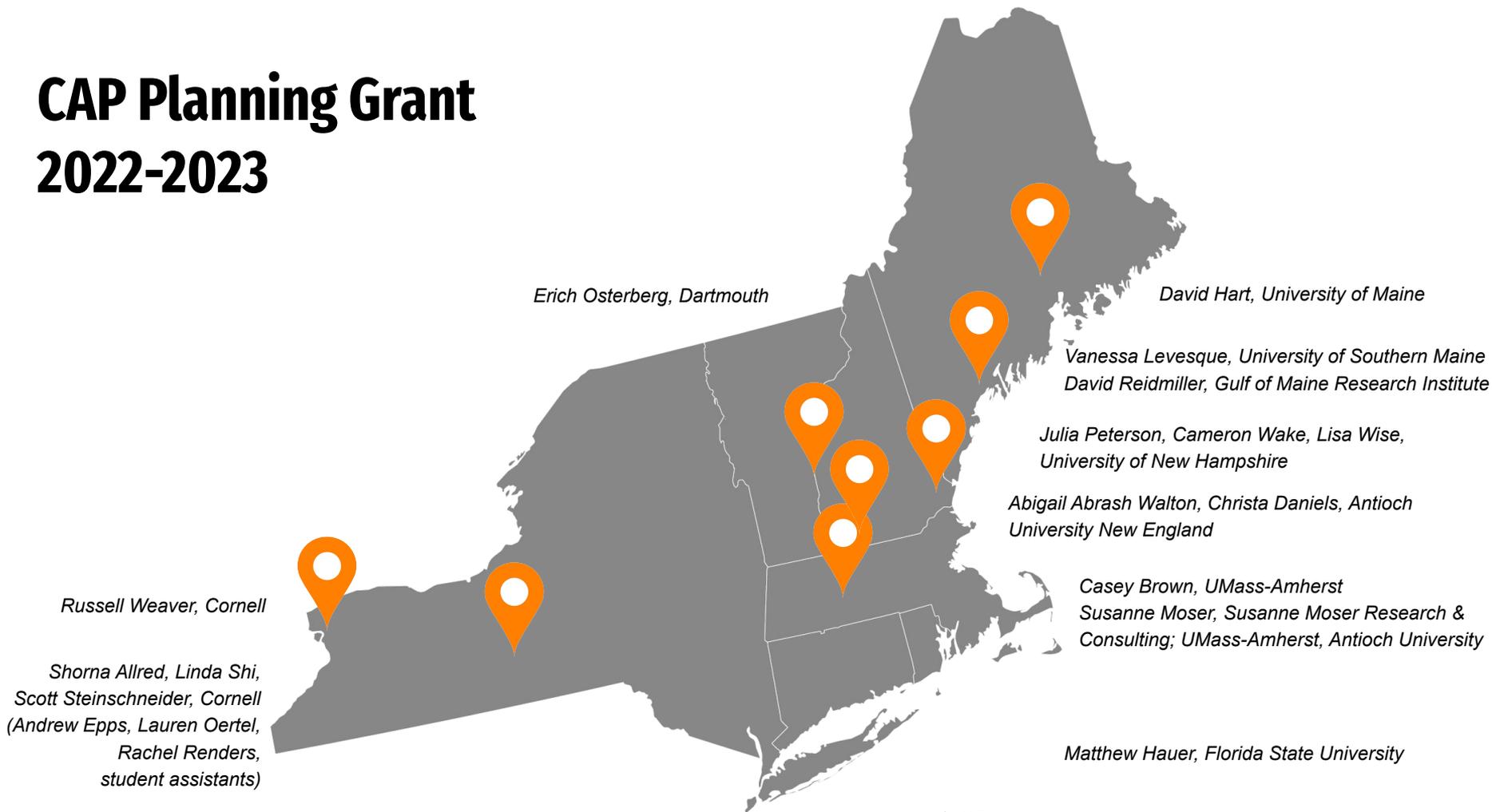


Land Acknowledgement

Cornell University is located on the traditional homelands of the Gayog̃hó:ñ? (the Cayuga Nation). The Gayog̃hó:ñ? are members of the Haudenosaunee Confederacy, an alliance of six sovereign Nations with a historic and contemporary presence on this land. The Confederacy precedes the establishment of Cornell University, New York state, and the United States of America. We acknowledge the painful history of Gayog̃hó:ñ? dispossession, and honor the ongoing connection of Gayog̃hó:ñ? people, past and present, to these lands and waters.

This land acknowledgment has been reviewed and approved by the traditional Gayog̃hó:ñ? leadership.

CAP Planning Grant 2022-2023



Climate Change: Predicted Impact

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By Samantha Allen
Editor

Updated: Nov 12, 2022, 10:05pm

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Who Are America's "Climate Migrants," and Where Will They Go?

Carlos Martin
October 20, 2021



ADAPTATION

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PUBLISHED THU, SEP 16 2021 7:30 AM EDT | UPDATED THU, SEP 16 2021 8:59 AM EDT



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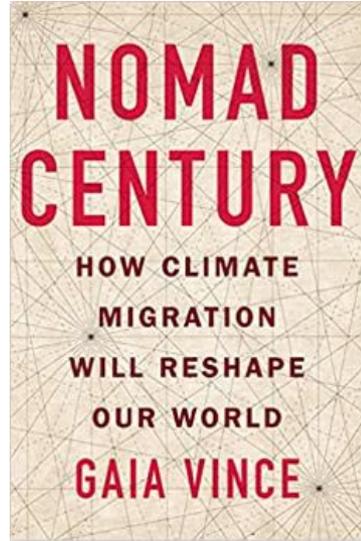


The Springs Fire encroaching on a house in Capistrano, California in 2015. SHIRO HOSOKAWA / GETTY IMAGES

As Climate Fears Mount, Some in U.S. Are Deciding to Relocate

As wildfires worsen and sea levels rise, a small but growing number of Americans are choosing to move to places such as New England or the Appalachian Mountains that are seen as safe havens from climate change. Researchers say this phenomenon will intensify in the coming decades.

BY JON HURDLE | MARCH 24, 2022



Home // Radio // Here & Now



Interior Maine could be a viable climate refuge — but is it ready to host potential refugees?

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[Fred Bever](#) of Maine Public Radio reports.

The great climate migration has started. Are Bay State communities ready?

Massachusetts inland communities will become havens for people fleeing rising seas and temperatures — whether they plan for it or not.

By The Editorial Board Updated November 13, 2022, 4:00 a.m.

The Boston Globe

04-28-22

Buffalo wants to become a climate haven. Is that even possible?

It's impossible to avoid the effects of climate change completely. But some cities are starting to think about how to prepare for the worst of it.



[Photos: DenisTangneyJr/Getty Images, Felix Mittermeier/Unsplash]

Are 'Climate Refugees' Coming to New England? 2020

Data Sure Seems to Say So



Source: Vermont Center for Geographic Information

Research Questions

Goals

01

What forms of climate migration exist in the region and to what extent do existing adaptation research, policies, plans, and projects address these issues?

Reveal the equity tradeoffs and tensions created by climate change and climate-exacerbated migration

02

How do social differences shape vulnerability to and perceptions of climate migration?

Surface opportunities for solidarity across social difference

03

What regional governance gaps inhibit efforts to support climate migration that is just and equitable? How might a regional science-policy/practice network meet these gaps?

Create a network of networks poised to co-create research and planning processes that support transformative adaptation

01

Who moves to / within Northeast and why?

02

What impacts have migrants had to the region and its localities?

03

Case Studies & Lessons Learned

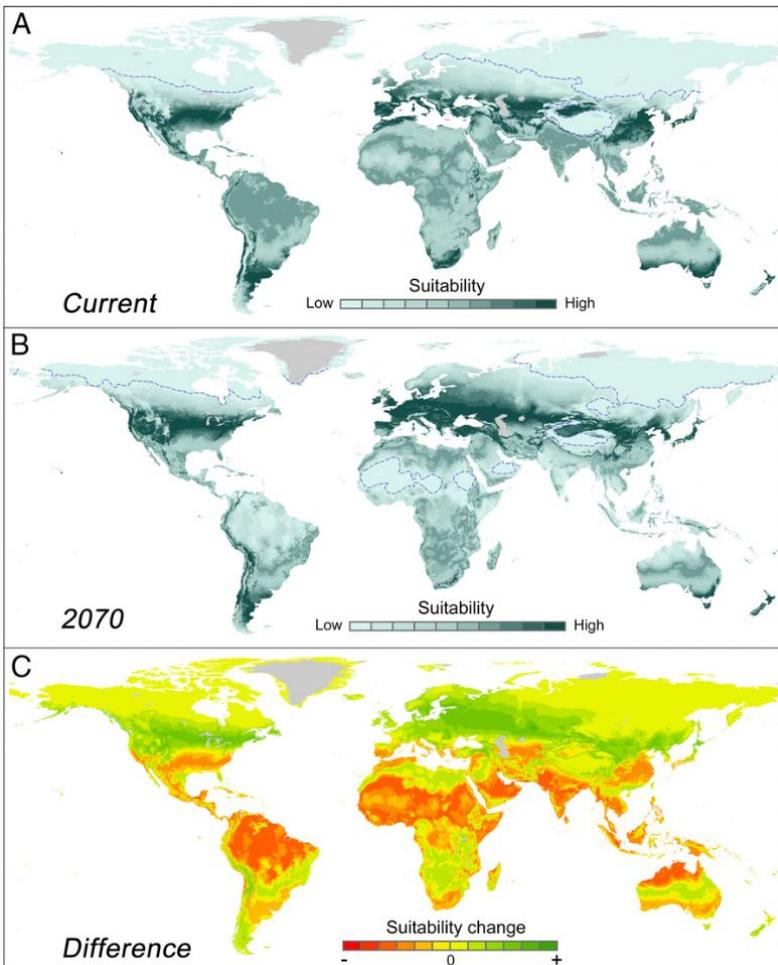
04

Predicted impact of climate change on where people live



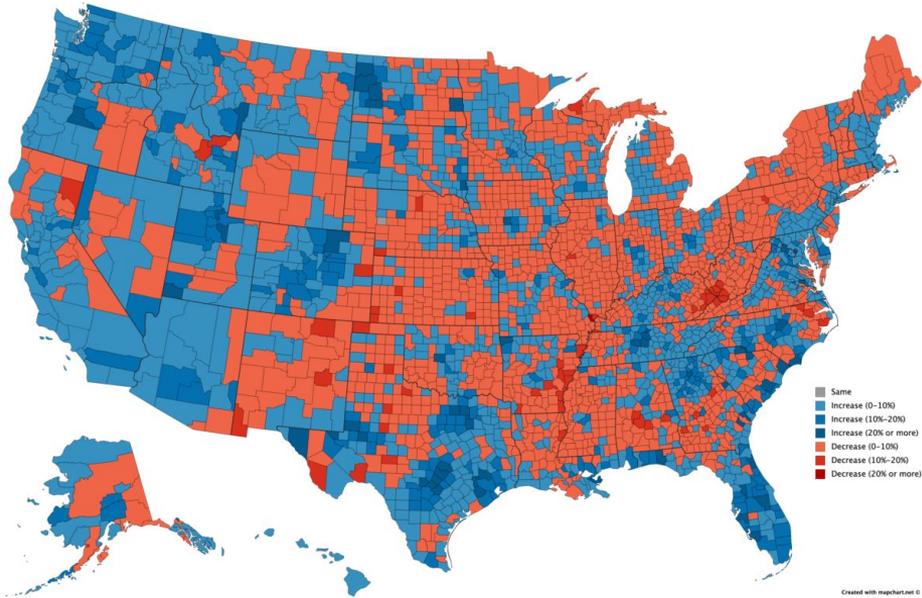
**What is the state of
research about
climate migration?**

Demographic + Climate Projections



Xu, C., Kohler, T. A., Lenton, T. M., Svenning, J.-C., & Scheffer, M. (2020). Future of the human climate niche. *Proceedings of the National Academy of Sciences*, 117(21), 11350–11355.

Population Change 2010-2018



EPA County Resilience Index

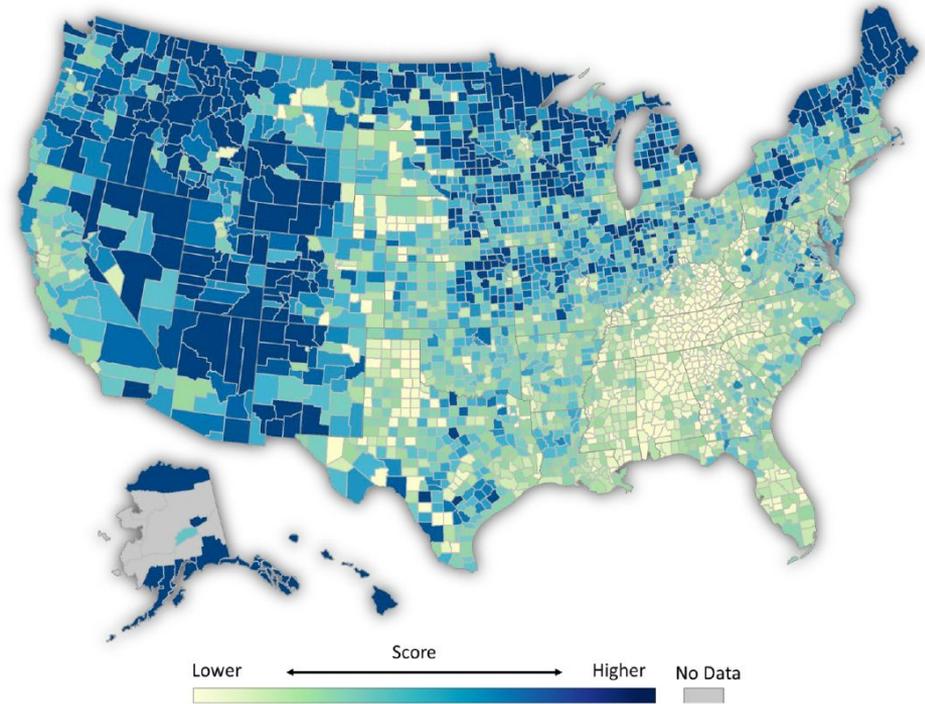
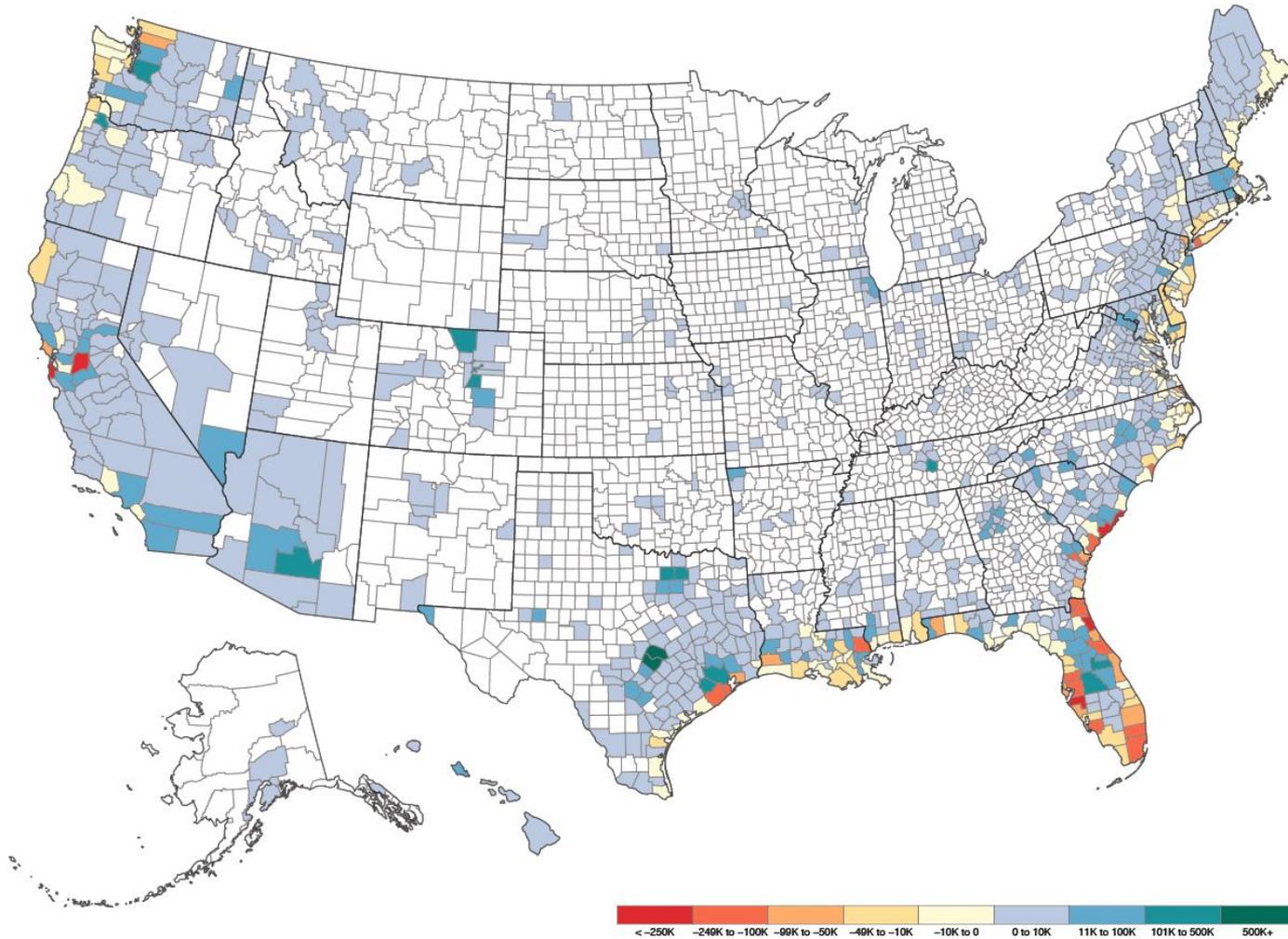


Figure E-2. Map showing distribution of final CRSI Scores across the U.S. (2000-2015). Darker colors indicate higher resilience scores; lighter colors indicate lower resilience scores.



Hauer, M. E., Jacobs, S., & Kulp, S. A. (under review). Climate Migration Amplifies Demographic Change and Population Aging. *Proceedings of the National Academy of Sciences*.

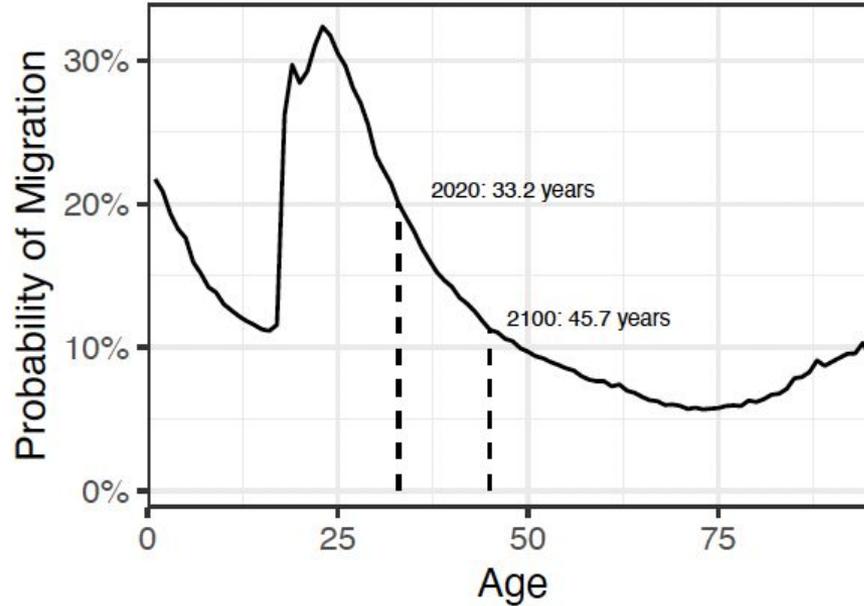
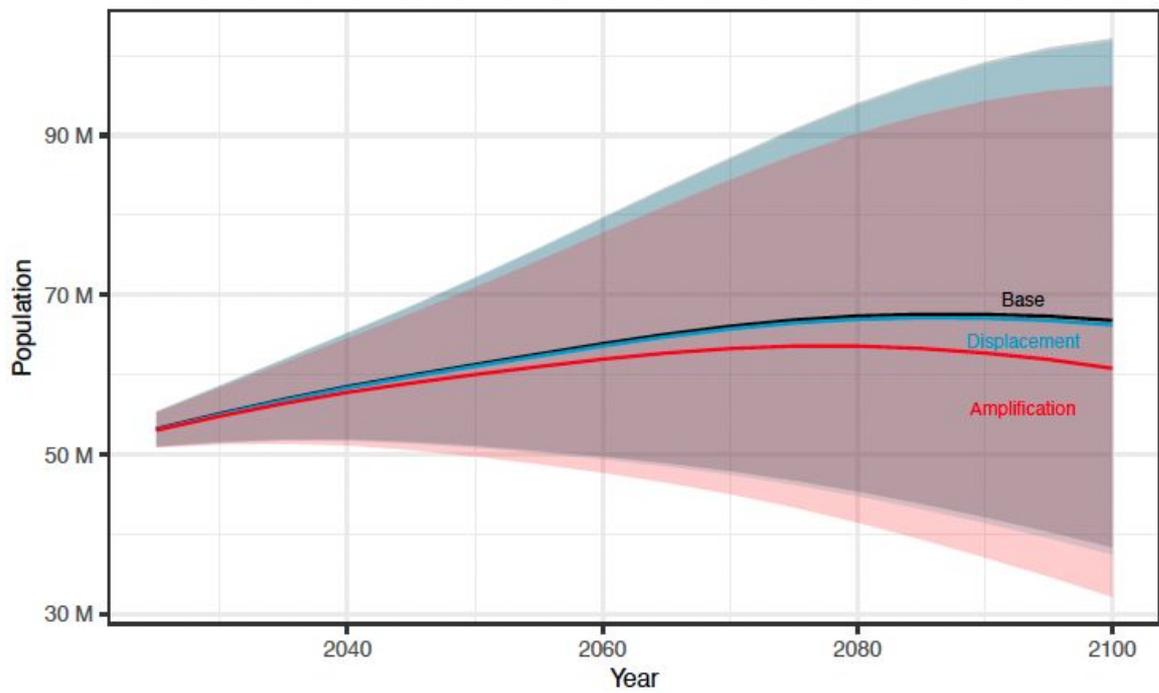


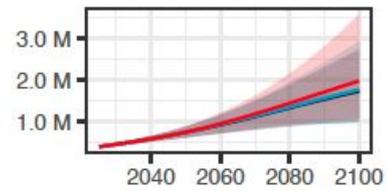
Fig. 1. The classic probability of Migrating by Age and Median Age in 2020 and 2100 for the whole United States. Dashed vertical lines are median ages in 2020 and 2100. Median age based on Shared Socioeconomic Pathway 2 (25). Figure generated using IPUMS-USA data (26). Barring any additional information, this curve suggests that migration will lessen as the US population ages this century.

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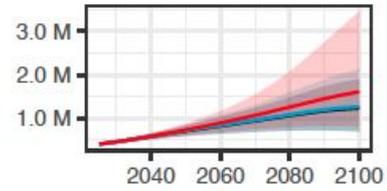
a All Coastal Counties Impacted by SLR



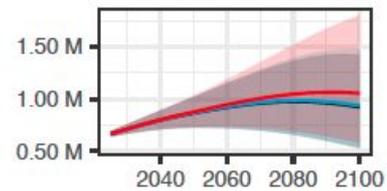
b Rutherford, TN



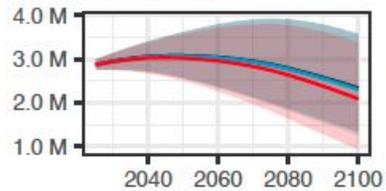
c Douglas, CO



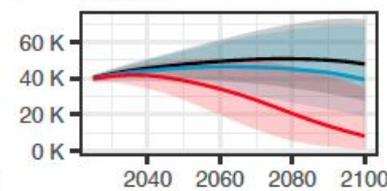
d Washington, OR



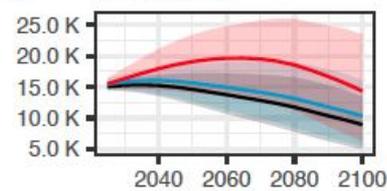
e Miami-Dade, FL



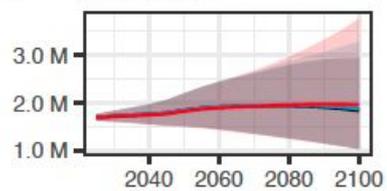
f Dare, NC



g McIntosh, GA



h New York, NY



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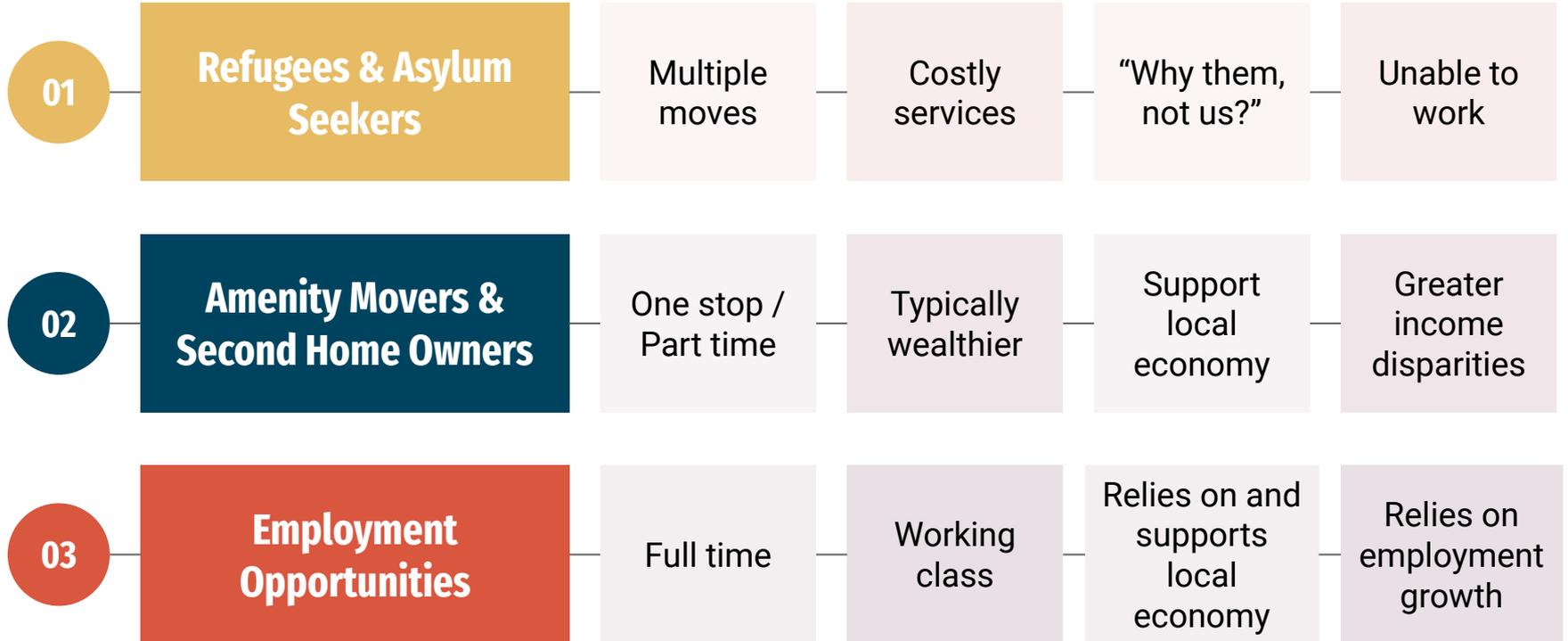


Teicher, H. M., & Marchman, P. (2023).
Integration as Adaptation: Advancing
Research and Practice for Inclusive Climate
Receiving Communities.
*Journal of the American Planning
Association*, 0(0), 1–20.

Emerging research: Receiving communities

- We don't track disaster migration
- Most people who take a buyout or who relocate post-disaster do not move far
- Pandemic: higher income workers moved to smaller cities and towns
- 2021 census population: 68% of large urban counties lost population and 81% of exurban counties gained population
- Much to learn from studies of immigrant integration, economic development efforts

(Some) Types of Movers



Why Do People Move?

Push factors

Pull factors

Housing/Job Availability

Economic

Lower cost of living
Better Jobs

Discrimination & Conflict

Social

Quality of live &
Kinship Ties

Natural Disasters

Environmental

Milder Climates

Covid-19 Pandemic

Less Populated Areas

Slide credit: Andrew Epps
MRP '23 Cornell University

Most research on individual movers

Home Improvement > Features > 30% Of Americans Cite Climate Change As A Motivator To Move In 2023

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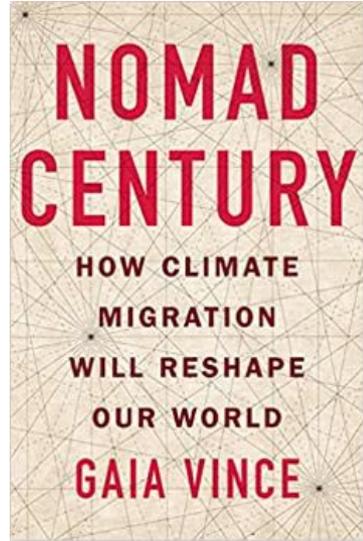


The Springs Fire encroaching on a house in Capetito, California in 2015. SOURCE: NEWSPHOTO / GETTY IMAGES

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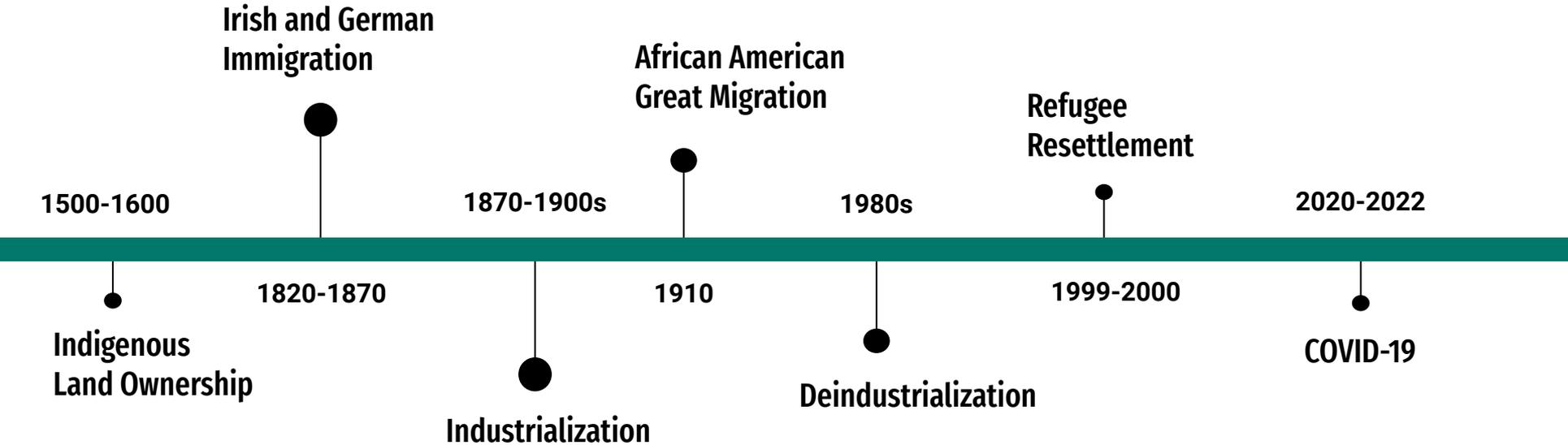


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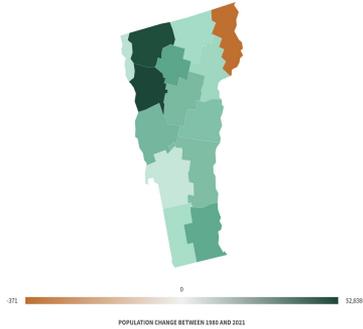
**What has characterized
the experience of
migration in the
Northeast?**

Major Migration Events in New York

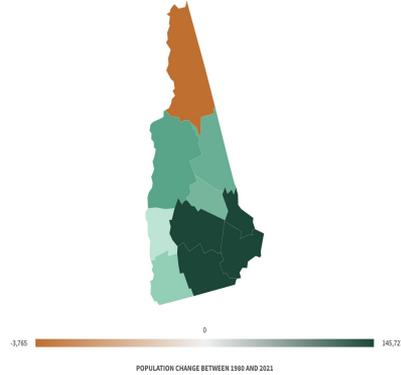


Migration is a Lifeline for Northeastern Communities

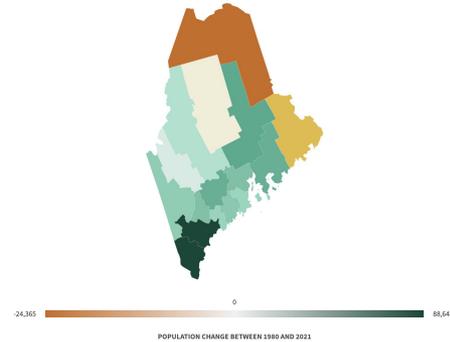
Vermont



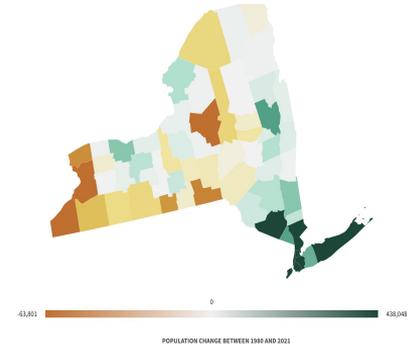
New Hampshire



Maine



New York



Population Change between 1980 and 2021

- Pop. Loss
- Largest Pop. Gain

Domestic Migration:

Movement of populations that occurs during specified periods of time within the United States

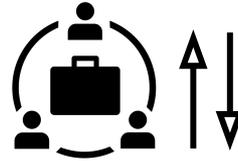
Challenges Receiving Communities Face



Displacement of
local populations



Housing



Economic
opportunities



Culture Clashes

All of these are challenges communities are currently dealing with and they will only be exacerbated by climate change



Case Study: Rochester

Puerto Rican in-migration mid-20th century & post-Hurricane Maria 2017

Economic opportunities, family ties,
and political factors in 1960's were
leading factors

Eventual successes

- Housing assistance
- Donations and fundraisers
- Language and education
- Job training and employment assistance





Case Study: Buffalo

Refugee in-migration in the late 20th and early 21st century

Refugee resettlement programs in Buffalo brought refugees from Southeast Asia, the Balkans, and the Middle East

“Refugee Renaissance”





Case Study: Utica

Recent refugee in-migration

Refugee resettlement programs in Utica brought refugees from Myanmar, Somalia, and Syria

Successes:

- Increased demand for housing
- Job training programs
- English language and education programs
- “Welcoming City” initiative



	Displacement	Housing Improvement	Economic Opportunity	Cultural Clashes	
Migration Events	Industrialization	✗	✗	✓	✓
	African American Great Migration	✗	✗	✓	✓
	Covid-19	✓	✗	✗	✓
Case Studies	Utica	✗	✓	✓	✓
	Rochester	✗	✓	✓	✓
	Buffalo	✗	✓	✓	✓

Takeaways

01

Climate migration is uncertain and difficult to project. Communities have **agency** in how much to attract or resist in-migration.

02

In-migration inevitably creates tensions between existing working class residents, international refugees, wealthier amenity migrants. Cultural, class, religious, and **social differences underlie conflicts over jobs, housing, and land use, but are rarely discussed in planning.**

03

The region can learn from each other's experiences with retaining residents and attracting and living with in-migrants. Very little is known about migration programs' effectiveness and impact.



THANK YOU!

If you have follow up questions please feel free to reach out to:

Linda Shi - lindashi@cornell.edu - on NEST

Russell Weaver - rcweaver@cornell.edu - on PPG