

Talking COVID, Learning for Climate Migration

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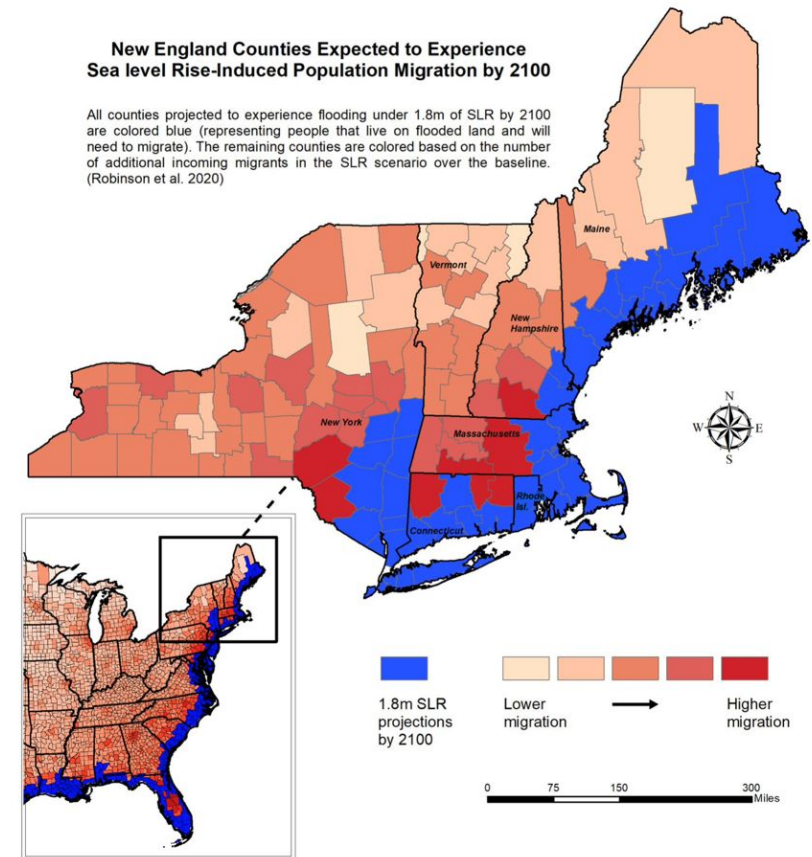
November 7, 2023

Wentworth by the Sea, New Castle, New Hampshire



Climate Migration (CM) & New England (NE)

- Up to 13.1 million U.S. citizens to migrate due to SLR (Hauer et al. 2016)
- Extreme heat, as a motivation for relocations (Shaw 2020; Fan et al. 2016; Gemenne 2011).
- Mobility towards suburban/exurban areas—similarly to post-COVID-19 trends (Teicher, Phillips & Todd, 2021)
- Destinations of CM: relatively nearby, inland & north, movement facilitated by socio-technical changes (Wallace 2019)
- Pressure on 25 million people living in receiving areas (Robinson et al, 2020)



Migration and SLR data replicated from: Robinson C, Dilkina B, Moreno-Cruz J (2020) Modeling migration patterns in the USA under sea level rise. PLoS ONE 15(1): e0227436; Hydrography data created by the Connect the Connecticut project (2018) and the U.S. Geological Survey National Hydrography Dataset (2019). Map by A. Coleman, December 2020.

Counties Sending and Receiving SLR Migrants in NE by 2100
(Source: Robinson et al. 2020)

COVID and Migration in New England

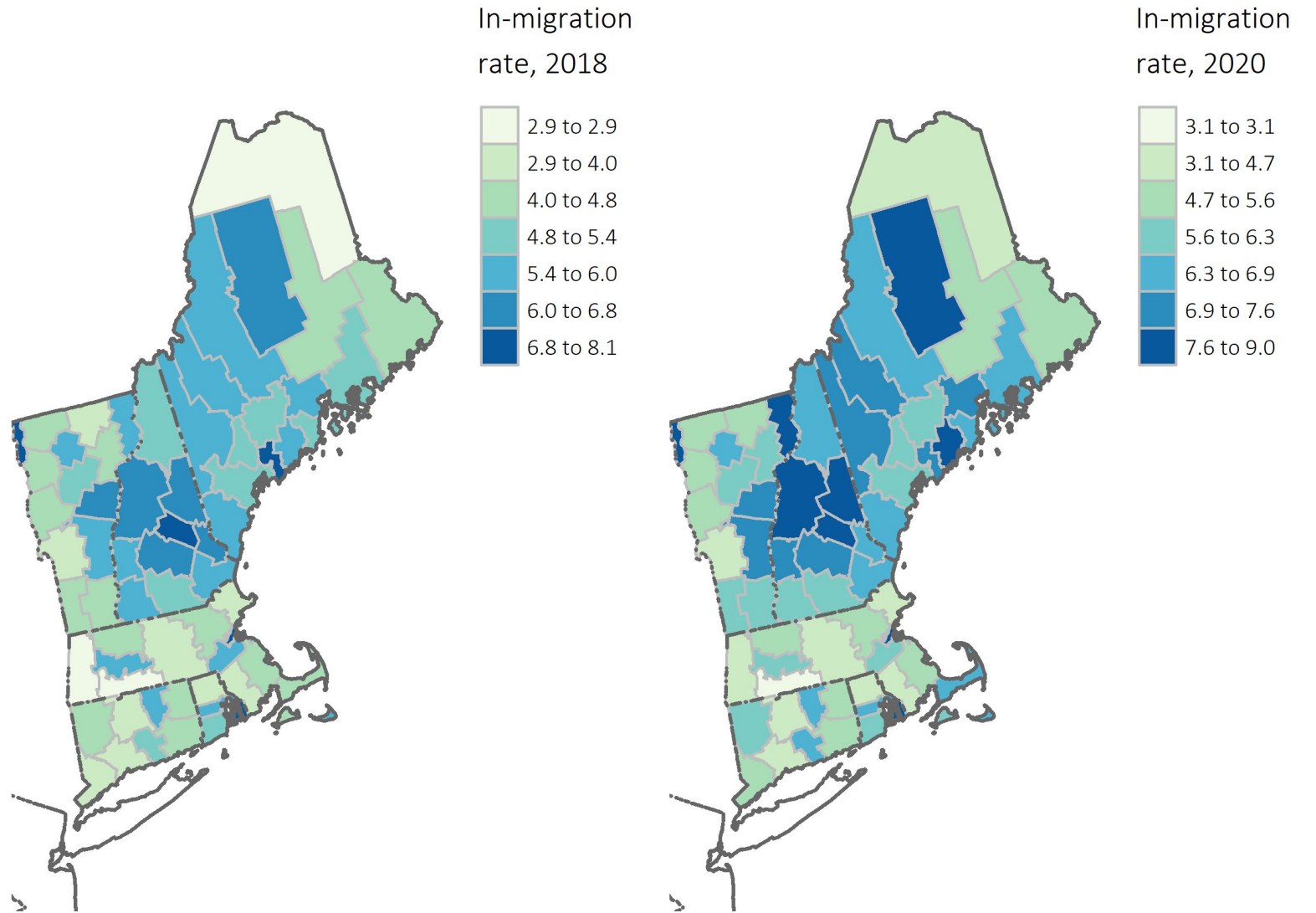
- IRS data on county-to-county moves
- Notably higher inflows in Northern New England in 2020
- No post-Covid IRS data



Source: Internal Revenue Service, Statistics of Income (SOI), Author's calculations

Which Counties?

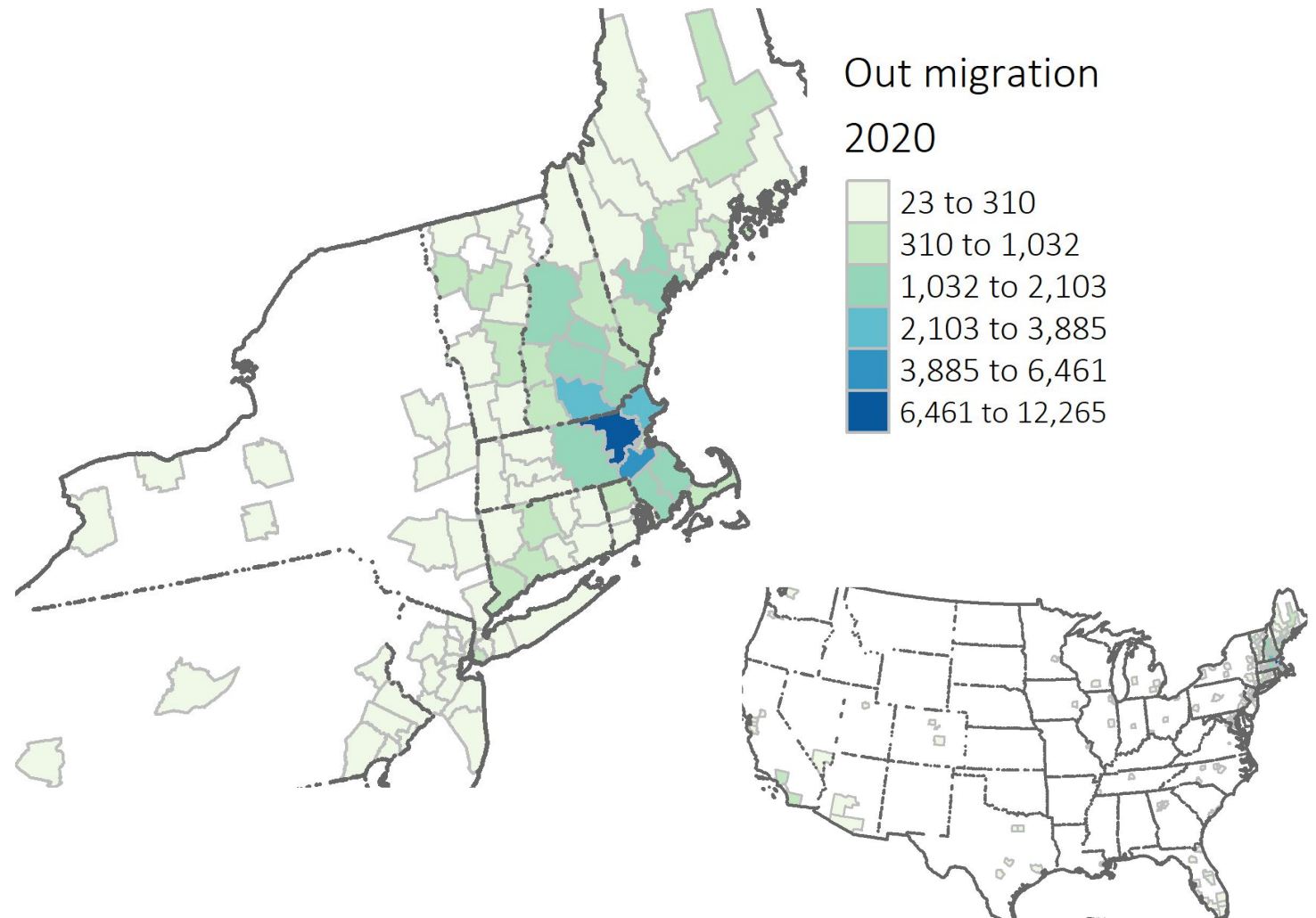
- Rural, predominantly interior counties seeing relatively higher inflows
- Mid-coast Maine



Source: Internal Revenue Service, Statistics of Income (SOI), Author's calculations

Where did they come from?

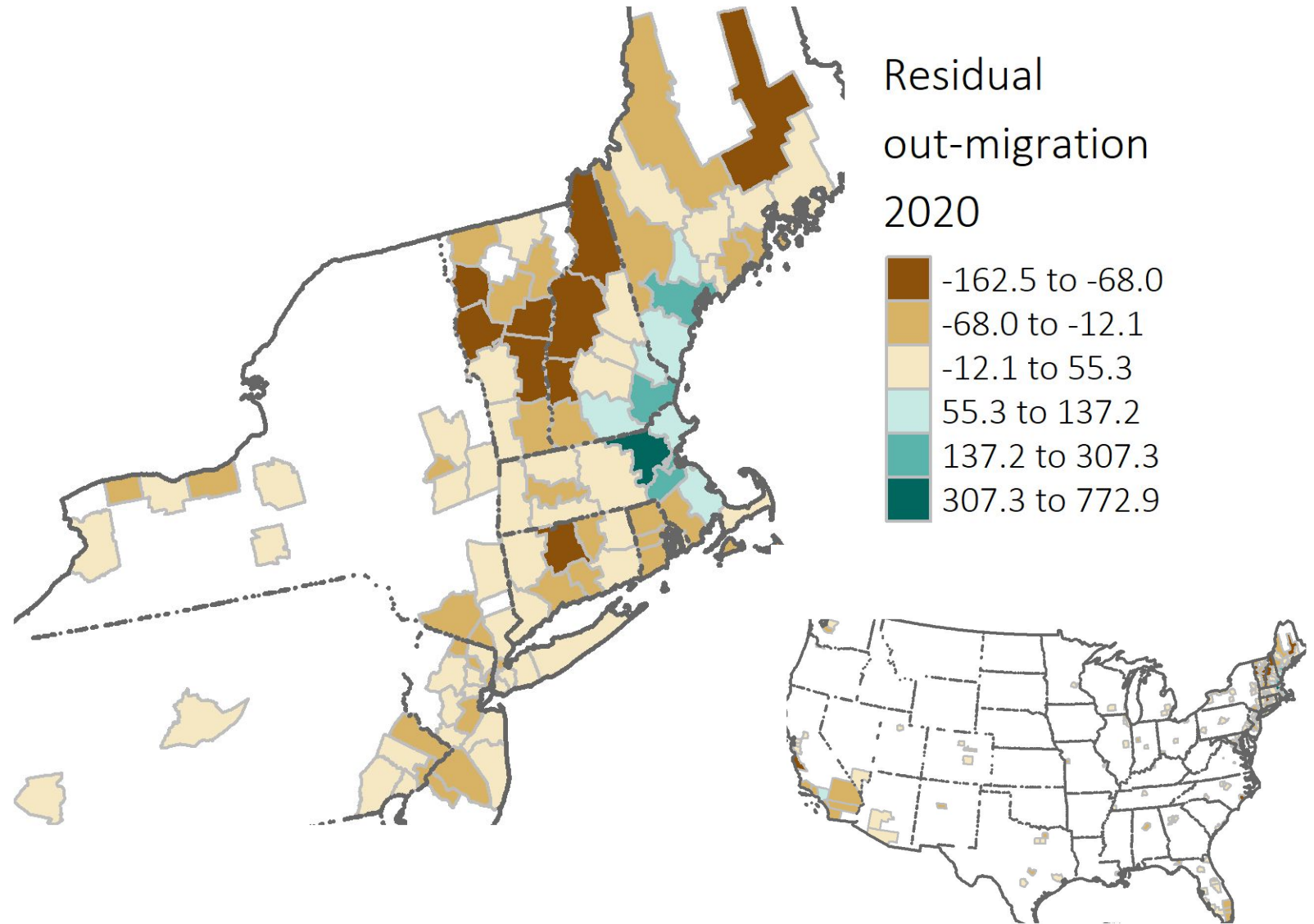
- Focusing on the top 75% receiving counties
- New residents largely from elsewhere in Northeast
- Are these new origins or same-old, same-old?



Source: Internal Revenue Service, Statistics of Income (SOI), Author's calculations

Where did they come from?

- Control for “normal” levels of migration pre-Covid
- Darker teal –higher than expected migrants in 2020 compared to 2014 to 2018 averages
- Movement from densely populated coast to inland



Source: Internal Revenue Service, Statistics of Income (SOI), Author's calculations

Lessons

- During 2020 there was an influx into amenity-rich inland counties & mid-coast Maine
 - Not huge numbers, but noticeable
- Mostly from coastal population centers in southern New England, New York & New Jersey
- Temporary or permanent?
- Climate or Covid?

Case Study: Local Perspectives on CM

- **R.Q.-1:** *Is CM happening yet, according to locals (i.e., real estate brokers and housing experts)?*
- **R.Q.-2:** *What housing and infrastructure changes/challenges should rural areas expect if CM really takes off, according to brokers ?*



Burlington, Vermont
(Source: EcoWatch, 2022)

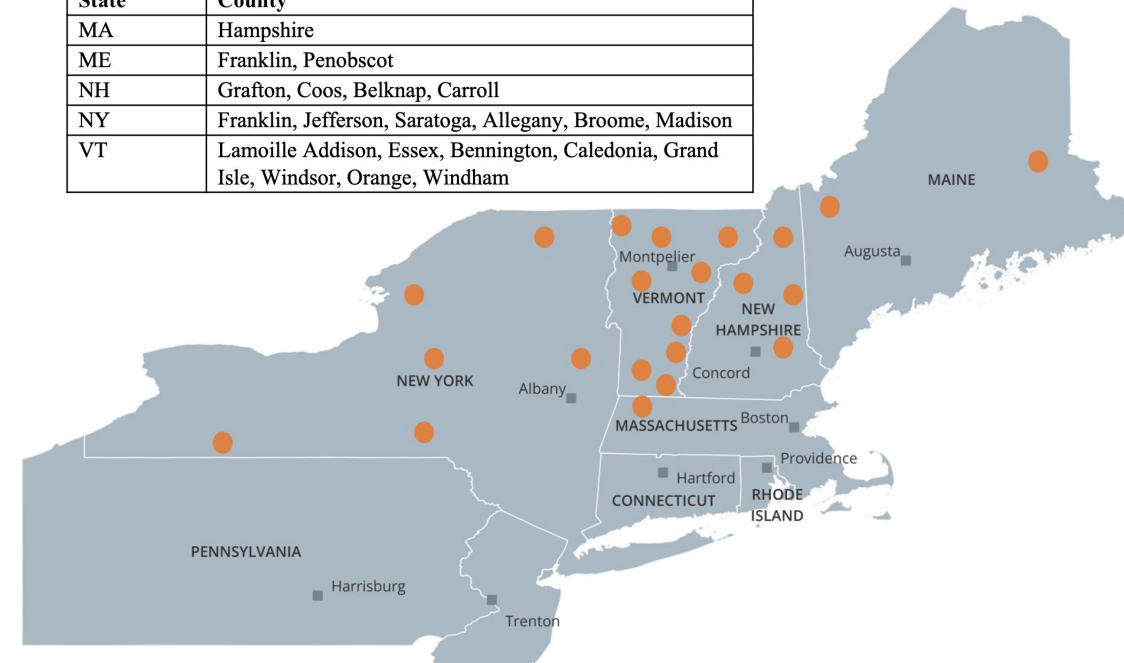
Research Methodology

Case Study

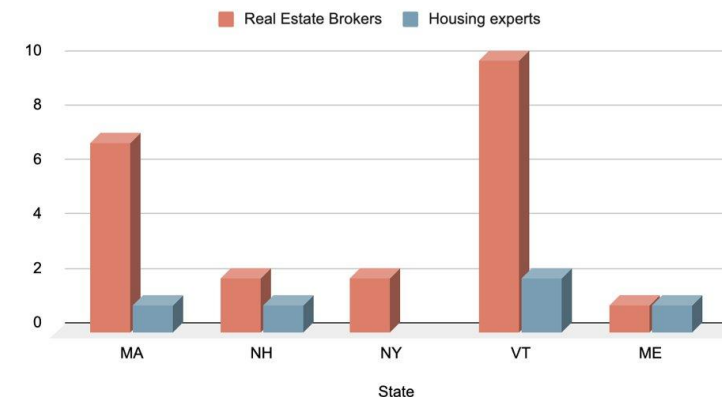
- **Hotspots:** 22 counties in MA, CT, RI, ME, NH, VT and NY that have;
 - Highest inflow (btw. 2016-2020)/population (2020) ratio (8% or more)
 - 20% or more out-of-region inflow within 5% or more overall (IRS, 2020, ACS, 2020)
 - Rural characteristics (excluded #1 metro counties (Urban Rural Continuum Codes, 2020); neighbors of metro cities; counties including cities with > 50K pop.; coastal (Atlantic) counties)
- **Data Collection:**
 1. Focus groups (n=7) with local real estate brokers & housing experts (n=27)
 2. Secondary source review (IRS, 2020; Census data (ACS, 2020))
- **Data analysis:** content analysis (NVivo 14)

Counties

State	County
MA	Hampshire
ME	Franklin, Penobscot
NH	Grafton, Coos, Belknap, Carroll
NY	Franklin, Jefferson, Saratoga, Allegany, Broome, Madison
VT	Lamoille Addison, Essex, Bennington, Caledonia, Grand Isle, Windsor, Orange, Windham



Focus Group Participants



Findings (Preliminary)

Is CM happening yet?

- Some newcomers from climate-impacted areas (e.g., FL, CA, CO, OR), not in large numbers
- Climate, not a major concern/motivation
- Majority of influx, from bigger cities within the region (e.g., NYC, Boston) motivated by:
 - Remote working,
 - Amenities—second homes turning into primary residences
 - Familial/friendship ties
 - NE towns, being liberal attract urbanites
 - Ecological rural lifestyle
- Exacerbated after COVID-19, "acute increase"
- CM, expected to be an additional motivation

*It [climate change] probably **does not play a significant role for the vast majority of people.** [...] But there could be [people] myself included... I moved this past year out of a floodplain. That wasn't climate migration... It was, you know, one of the factors in the list. [...] It doesn't seem like a major factor...but maybe inherently... in more cases than we think.*

A housing official, VT

Findings (Preliminary)

Housing changes/challenges

- Small number of influx, relatively large impact on housing market
 - Affordable for incomers vs. Locals
 - Pressures on already-limited housing market
 - Tightened rental market, already very limited (pressured by short-term rentals e.g., AirBnb)
 - Increased homelessness
- Limited capacity
 - Lack of affordable housing
 - Limited land available to build on
 - Strict land use/zoning regulations
 - Aging housing, incapable of meeting the community's needs (e.g., heating, cooling)
 - Poor capacity for climate resilience

*[The] out of state **cash buyers**...have **a median income that is way higher** than then what...the residents of Vermont's medium income is. And it's actually added to what's a housing crisis in Vermont because we don't have enough units. And we're not producing enough [...] The folks who are coming... from places like **California ...Colorado...New York** [...] that have such **high price for real estate**, were able to come in with cash... That's made quite a bit of difference when it comes to competing with the locals who are doing financing.*

Broker, Grand Isle County, VT

*Since COVID, we definitely have seen the **rental market tightened** [...] There's very, **very few properties on the market**. And our housing stock is **extremely old**.*

Broker, Broome, NY

Findings (Preliminary)

Infrastructure changes/challenges

- Transportation, increasing burden on traffic/no public transportation
- Electricity
- Internet

Limited Social Capacity

- Not resilient/challenged by the recent climate disturbances in NE (e.g., extreme precipitation & flooding in NE)
- Social infrastructure (esp. schools, hospitals, nursing homes), no capacity to absorb new population
- Lack of human resources to meet the needs in communities (e.g., contractors)



*This [flood in July 2023] is going to take us years to recover. And if it's going to take us years to recover. And if it happens twice a year, can you imagine what that looks like? [...] The communities that we have currently built are **not suitable to take large influxes of people, or even to deal with our current populations in a resilient way.***

Broker, Windsor, VT

Discussion/Conclusion

- CM, not happening yet, an additional factor on top of other drivers (e.g., remote working, COVID-19)
- No place is a "safe haven"
- NE has the potential to be a safer haven than many other places, in case planned ahead
- Regional planning;
 - Understanding the needs of receiving communities
 - Building capacity – in equitable housing options, physical and social infrastructure
 - Improving resilience—in both housing stock and infrastructure of existing communities
 - Seeking ways to fund/incentivize planning efforts to reduce tax burden on the communities
- Planning with/for the communities—various approaches to CM across the towns (welcoming vs. reacting)

ANY
QUESTIONS
?

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Question 1:

In your areas, is in-migration still significant post-pandemic and is it connected to climate change?

(11:55 – 12:10)



Question 2:

If climate migration really takes off, what concerns and opportunities would be created for your communities?

(12:10 – 12:25)

