What Does Current Research Tell Us About How Climate Change Affects Migration Factors?

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Portland 6th most popular destination for young, college educated

A new study from Portland State University ranked the city as sixth in the nation for young, college-educated people looking to relocate. (Kristyna Wentz-Graff)

By Kale Williams | The Oregonian/OregonLive
Email the author | Follow on Twitter
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In findings that are likely to surprise few Portlanders, the city remains high on the list of destinations for young, college-educated people looking for a new place to settle. Portland ranked sixth in a new study by Portland State University.

The study, conducted by Provenance, examined data from Facebook to determine where young, college-educated people are moving. Portland came in at the top of the West Coast, following New York City, San Francisco, Los Angeles and Seattle.

In the midwest, Portland also ranked highly, topping Minneapolis and Chicago. In the south, it pitted higher than Charlotte, Raleigh and Austin.

Provenance divides the population into four age brackets: 18-24, 25-34, 35-44 and 45 and older. The data was then broken down by gender and race. The study also lists the average income of each age bracket.

The findings, which were released to the Portland Monthly, are consistent with findings from the 2014-15 American Community Survey, which found that Portland ranks among the most educated cities in the nation.

"Portland has a rich history of attracting young, educated people," said University of Portland assistant professor of urban studies Peter Ortiz. "There's a lot of excitement around the city and it's a place that tends to adapt to the needs of the population. That's something that Portland does really well."
Environmental migrants breathing easier in Canada

Canada is home to a growing number of environmental migrants — people leaving behind horrendous pollution or climate change — to seek a better life.

For Irene Parvin, clear blue sky is a rarity in her birth country of Bangladesh. The former university professor was plagued by chronic asthma in Bangladesh, but it has virtually disappeared since she moved to Canada.

By: Nicholas Keung Immigration reporter, Published on Fri Mar 11 2016

The enemy they were fleeing was pollution — not persecution.

For Irene Parvin, it meant leaving behind her family's huge mansion in Bangladesh, two cars, two drivers, a cleaner, the nanny for their two boys, and successful careers — she was a university professor and her husband, a pediatrician.
PNW: a safe haven from climate change?

The five best places to live in the world, and why

Bored with Blighty? Then why not up sticks and move somewhere else? Tom Dyckhoff spotlights five perfect places – from a surfer’s paradise in Hawaii to a bohemian rhapsody in Portland, Oregon.
Take home messages in 1 slide

• Global & USA population = growing rapidly...
• ...especially in areas that are hot & dry, storm-prone, coastal
• Climate change will make these areas hotter, dryer, stormier & more flood-prone
• These will likely reinforce already-high rates of migration to PNW
• Sustainability planning = more essential than ever
Reasons why people move

- Lifestyle
- Love
- Money
- Survival
Environmental change affects all of these

- Lifestyle
- Love
- Money
- Survival
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• Lifestyle
Environmental change affects all of these

• Love

• Marriage-related migration in Ethiopia declines during periods of drought

Gray and Mueller 2012
Environmental change affects all of these

- Money

- Natural disasters are followed by a pulse of labor out-migration
Environmental change affects all of these

- Survival 🙁

- Several US coastal communities need to be relocated right now
General characteristics of environmental migration

• Mostly takes place within countries
• When international, is usually between contiguous countries
• Young adults of working age are most mobile
• Usually follows existing migrant networks
• Is mostly rural-to-urban
The American Experience with environmental migration
Beneficial climatic conditions or events

Temporary migration

Adverse climatic conditions or events

Indefinite migration

Raleigh
Different types of climate disasters have different migration outcomes

Rapid onset events
• Are followed by migration ‘churn’

Progressive disasters
• Generate slow, predictable migration
Post-Katrina migration in NOLA
Post-Katrina migration in NOLA

• Initial evacuation = everyone displaced
• First returnees = people who owned homes that weren’t excessively damaged
• Followed by influx of young Latino males (construction workers) and people whose properties could be repaired
• Who were least likely to return? Young families, renters, urban poor
Drought migration on Great Plains
Drought migration on Great Plains

• Because droughts unfold gradually, cyclically, people have time to adapt in other ways (e.g. water conservation, crop insurance)
• Migration ensues when drought outlasts or exceeds available adaptations
• Young adults leave first
• Property owners and non-mobile groups (elderly, infirm, poor) stay behind
“MESA”

\[ M = f(E, S, A) \]

- \( M \) = potential for environmentally induced Migration
- \( E \) = physical nature of the Environmental risk
- \( S \) = Sensitivity of livelihoods & socio-economic systems
- \( A \) = options for Adapting other than by migration
Planning for future population growth in an era of rapid environmental change
Planning for future population growth in an era of rapid environmental change

- Know your existing migration flows
- Know the vulnerabilities of your migrant source areas
- Know your own vulnerabilities and work quickly to reduce them
- Build capacity & flexibility to adapt quickly to changes in migrant characteristics
Portland population growth

Source: https://commons.wikimedia.org/wiki/File:Portland_population_growth.png
How long did it take to add 100,000 people?

- 15 years
- 15 years
- Little change for 30 years
- 20 years
- 10 years
- 40 years

Source: https://commons.wikimedia.org/wiki/File:Portland_population_growth.png
Accelerating rates of in-migration

- Since 2013, Oregon has had the highest % of incoming moves of any US state (69%)
Portland population profile

Data = 2010. Source: https://www.portlandoregon.gov/bps/article/414463
When people move to Portland, where do they come from?
Monitor climate vulnerability in migrant source areas

- Rest of Oregon & southern Washington: Droughts/water issues, floods, fire hazards
- California, Arizona: rural and urban droughts, water pricing, agricultural restructuring, fires
- Rest of the US + Mexico: droughts, coastal hazards, floods
Planning for uncertainty
Planning for uncertainty

• Will climate change increase the # of people migrating to the PNW? Most likely.
• How many more will come? Depends on how bad the situation gets elsewhere.

What should we do?
• Tackle existing needs for urban physical & social infrastructure
• Protect the watershed!
• Build flexibility & capacity to respond to sudden changes in population #s, characteristics
Planning for uncertainty

Key uncertainty: Will the demographic characteristics of incoming migrants change?

• If not, you already know what your needs are in terms of urban physical & social infrastructure

• If they do change, additional needs will emerge – make sure you have the flexibility & capacity to respond to these
What not to do
Thanks! Merci!

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