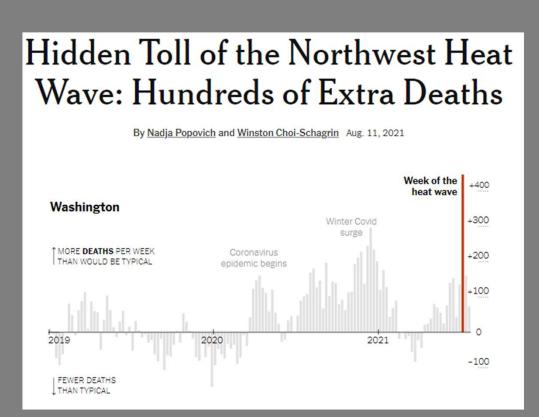
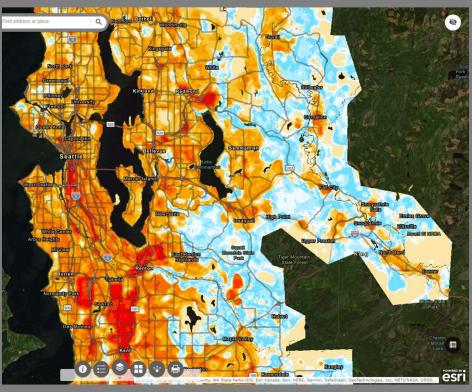
EarthLab Energy Assistance and Thermal Safety Research Team

Sam Kay kay.samuel.j@gmail.com Visiting Assistant Professor Department of Geography, University of Washington



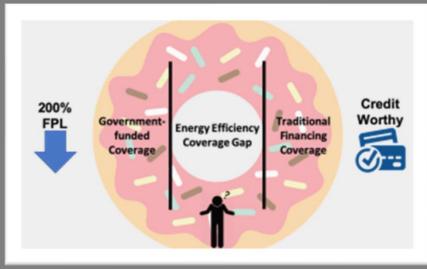
An Incomplete Thermal Safety Net





Weatherization is needed to improve: thermal safety, energy costs, indoor air quality

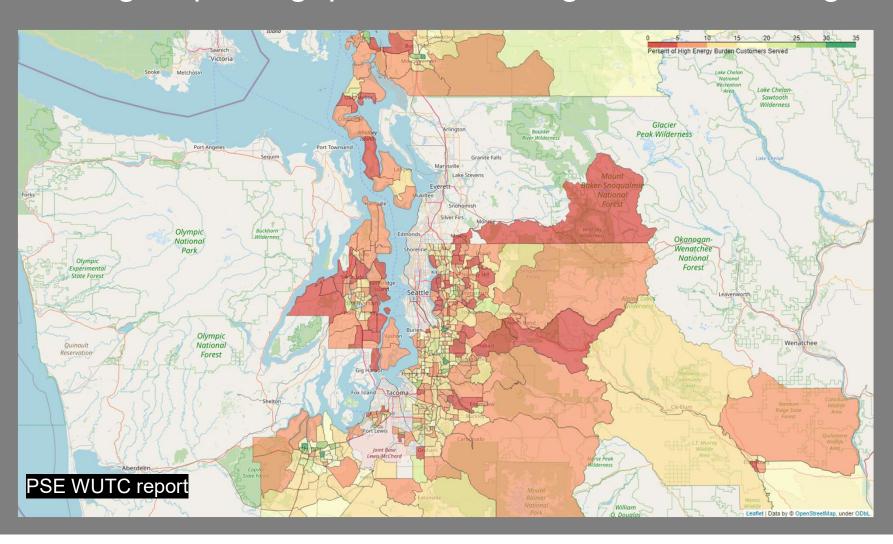
- Government-funded weatherization is reaching a very low percentage of eligible households
- Many households that can't afford weatherization independently also don't qualify for WAP





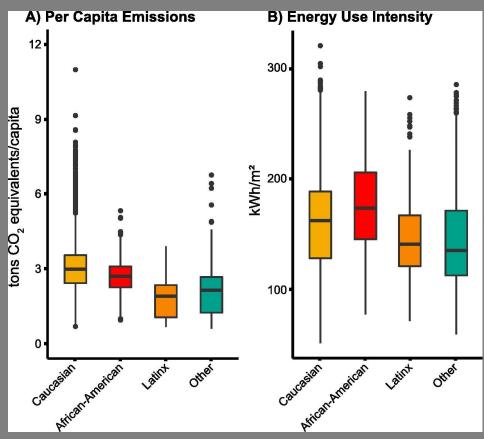
Forrester, S. P., & Reames, T. G. (2020). Understanding the residential energy efficiency financing coverage gap and market potential. Applied Energy, 260, 114307.

Initial findings: uptake gaps are even larger than we thought



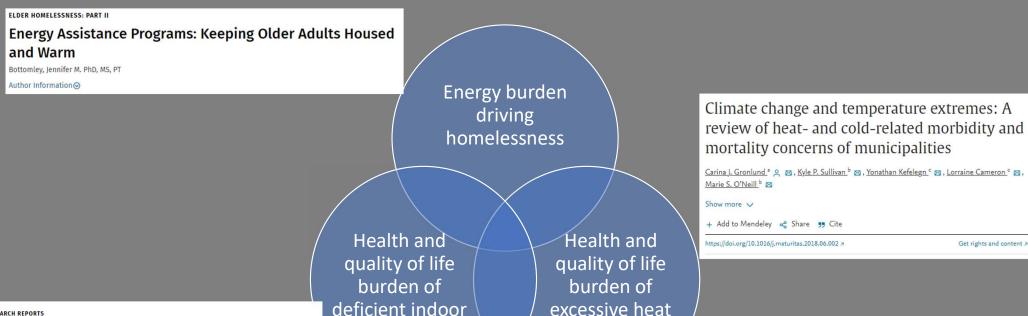
Housing justice $\leftarrow \rightarrow$ Energy justice

- Low-income households spend 16.3% of income on energy vs. 3.5% for non low-income households
- Very different energy use intensity by race owing largely to housing inequity
- Energy costs drive homelessness



From Goldstein, B., Reames, T. G., & Newell, J. P. (2022). Racial inequity in household energy efficiency and carbon emissions in the United States: An emissions paradox. *Energy Research & Social Science*, 84, 102365.

Weatherization in a Cumulative Impacts Context



air quality

and cold

RESEARCH REPORTS

Federal Weatherization and Health Education Team up: Process Evaluation of a New Strategy to Improve Health Equity for People With Asthma and Chronic Obstructive **Pulmonary Disease**

De Souza, Rachael MN, MPH, RN; Evans-Agnew, Robin PhD, RN; Espina, Christine DNP, MN, RN

Journal of Public Health Management and Practice 25(1):p E21-E24, January/February 2019. | DOI: 10.1097/PHH.0000000000000786

review of heat- and cold-related morbidity and

Shutoffs are unsafe, and disproportionately impact the most vulnerable households

- Massive uptake gap for both energy assistance and weatherization
- Little awareness of energy assistance
- Limited access due to language barriers, documentation barriers, and other administrative burdens
 - Documentation (whether income or medical, etc.)
 - Hours to reach the right agency/person
 - Lost childcare, eldercare, and work hours
- Many who are energy burdened are not eligible for some aid
- 32-90 range is not safe in many cases, based on both underlying vulnerability (age, disability status, health burden) and weatherization
- Shutoff prevention through vastly increased outreach for energy assistance and weatherization

Thank you

Sam Kay
Acting Assistant Professor, Department of Geography
University of Washington
kay.samuel.j@gmail.com