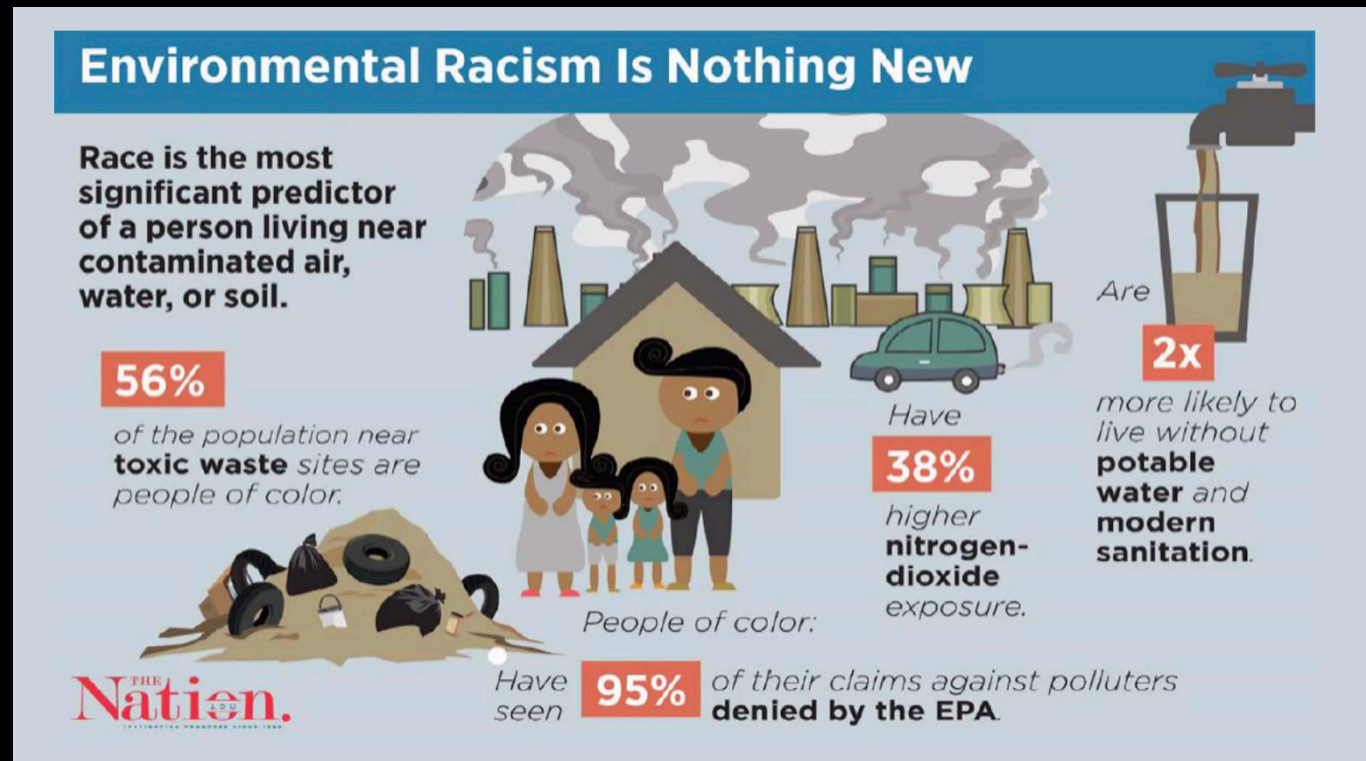


Environmental racism

- Strong correlations with race (even more correlated than wealth)
- Scientists didn't notice this for a **long** time
- Work of Dr. Robert Bullard in 1980s proved strong links
 - First showed that middle class Black neighborhoods in Houston had high pollution burdens

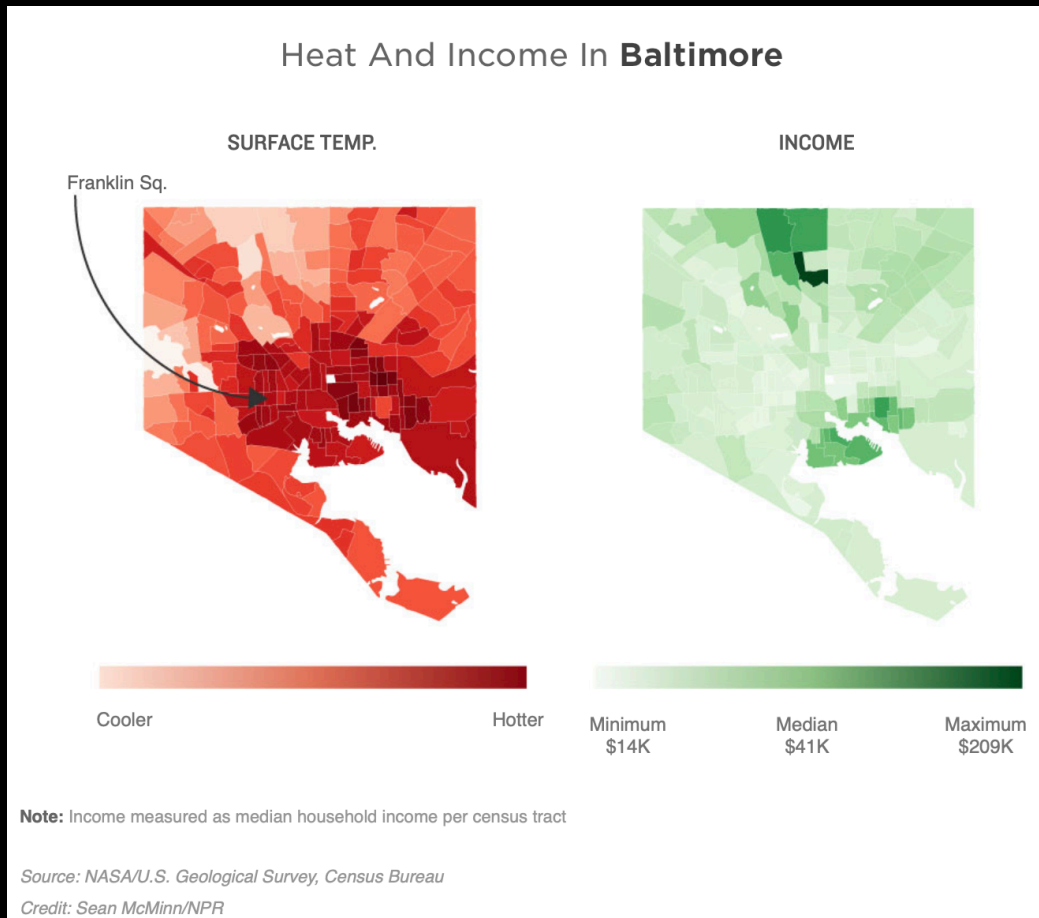


Environmental Racism

- Communities near fossil fuel energy infrastructure like fracking sites and coal-fired power plants suffer serious health challenges (asthma, respiratory disease, cancer, etc)
- Most of these communities are low income or communities of color
- More African Americans live near power plants than any other demographic group in the U.S.
- Over the past several decades, approximately 68% of African Americans live or have lived within 30 miles of a coal-fired power plant

Urban Heat

- High temperature is associated with lower income across cities in the US
- Lack of vegetation, more cement are factors

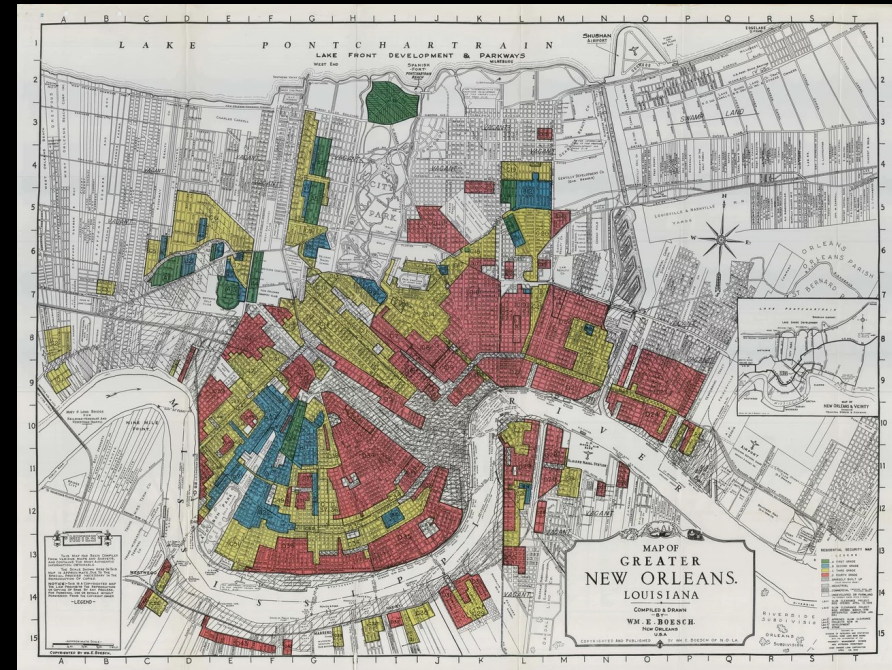


Environmental Racism

- It really is about race first and foremost
 - 75 percent of Black people, regardless of being impoverished or middle-class, have a higher chance of living near facilities that produce hazardous waste in a toxic environment than White people who make less than \$10,000 — Dr. Robert Bullard
- Due both to government policies until 1960s, and intentional or unintentional racism embedded in real estate industry

Redlining

- Home Owner's Loan Corporation (HOLC) was New Deal program founded in 1930s, underwrote \$120 billion in new housing loans
 - Less than 2% went to non-white families
- Assessed financial value & risk of properties in 200 cities
 - Hazardous (minority) neighborhoods were marked in red and were used by banks to deny loans
 - Formed basis for highly racist practices in real estate industry



Redlining

- “Areas surrounding a location are investigated to determine whether incompatible racial and social groups are present, for the purpose of making a prediction regarding the probability of the location being invaded by such groups. If a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same social and racial classes. A change in social or racial occupancy generally contributes to instability and a decline in values.”

Source Underwriting Manual (paragraph 937)

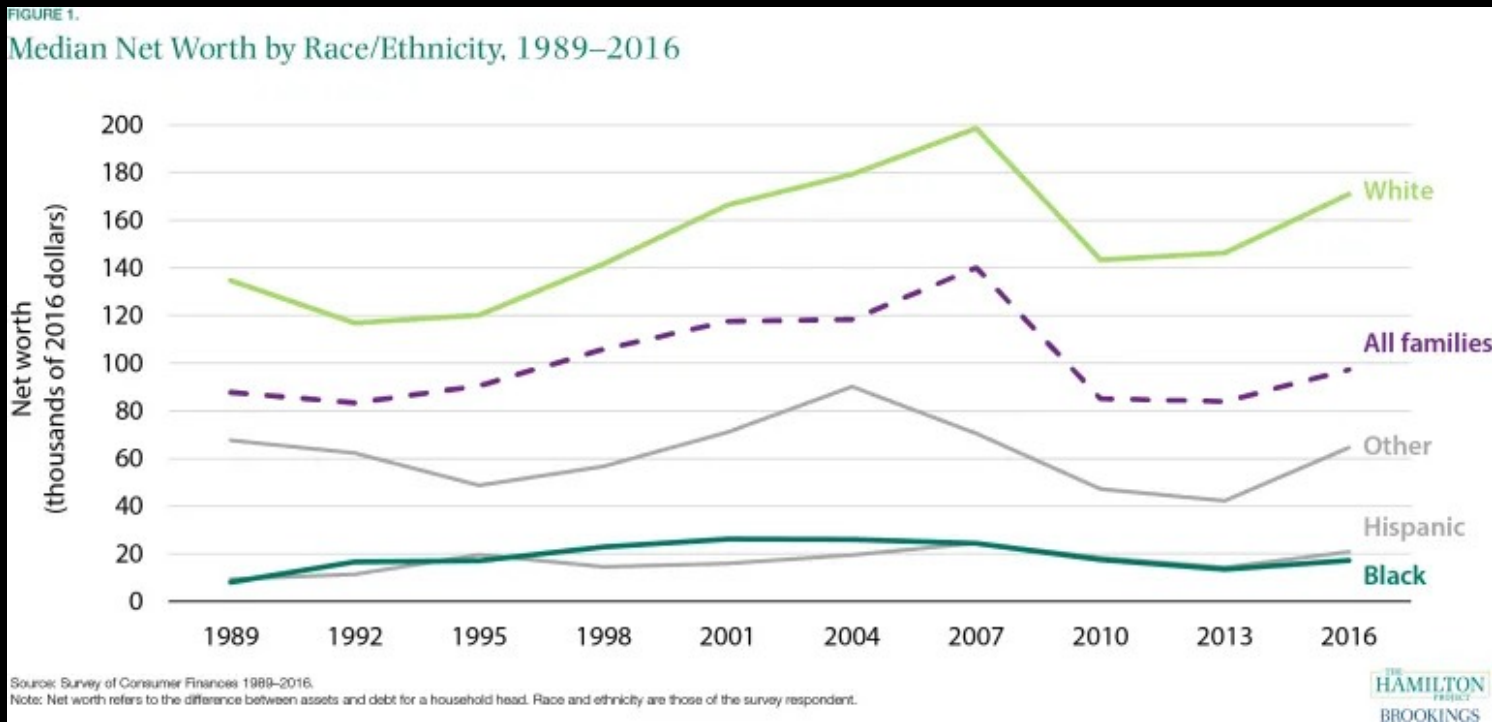
Persistence of housing gap

- Fear of minorities moving in would affect availability of loans
 - Massively increased segregation
- Wyoming neighborhood along 8 Mile Road in Detroit was told they were too close to Black communities
 - Built a wall to separate from the Black neighborhoods, which then allowed the white community to get loans
- Home ownership gap is huge, wider than 1960
 - Applicants of color are still more likely to be denied a mortgage



Racial Wealth Gap

- Racial wealth gap persists and is largely due to housing



[Racial wealth gap video](#)

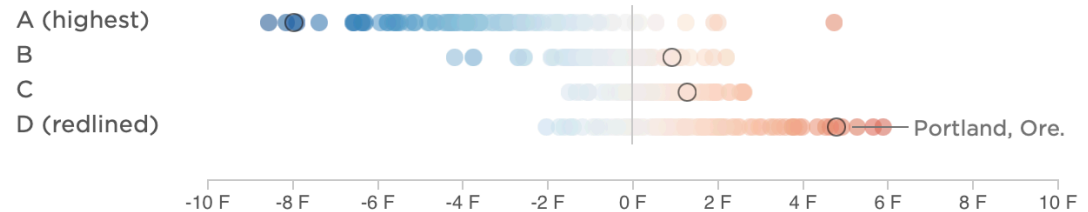
Redlined neighborhoods are hotter today

- As much as 12 degrees F hotter
- Portland, Ore, Denver, Minneapolis, Columbus, Ga. all have over 10 degree F difference among neighborhoods

In Formerly Redlined Areas, Americans Live With Hotter Temperatures

In the 1930s, the federal government rated neighborhoods in urban areas to help mortgage lenders assess risk. Low ratings were determined largely by race and ethnicity. New research in 108 cities shows that today those redlined neighborhoods are often hotter than other neighborhoods in the same city, with the most drastic difference found in Portland, Ore.

NEIGHBORHOOD DIFFERENCE BETWEEN AVG. CITY TEMP. AND AVG. NEIGHBORHOOD TEMP RATING



Source: Portland State University, the Science Museum of Virginia and Virginia Commonwealth University

Credit: Sean McMinn/NPR

How to fix?

- Reparations
- Enforce housing discrimination laws
- Increase supply of affordable housing
 - “Only the federal government can intervene in housing at a scale that actually responds to the level of crisis that exists in housing affordability and accessibility.” — Prof. Keeanga-Yamahtta Taylor, author of *Race for Profit*
- Map inequality and invest into frontline communities
 - “Frontlines go to the front of the line”

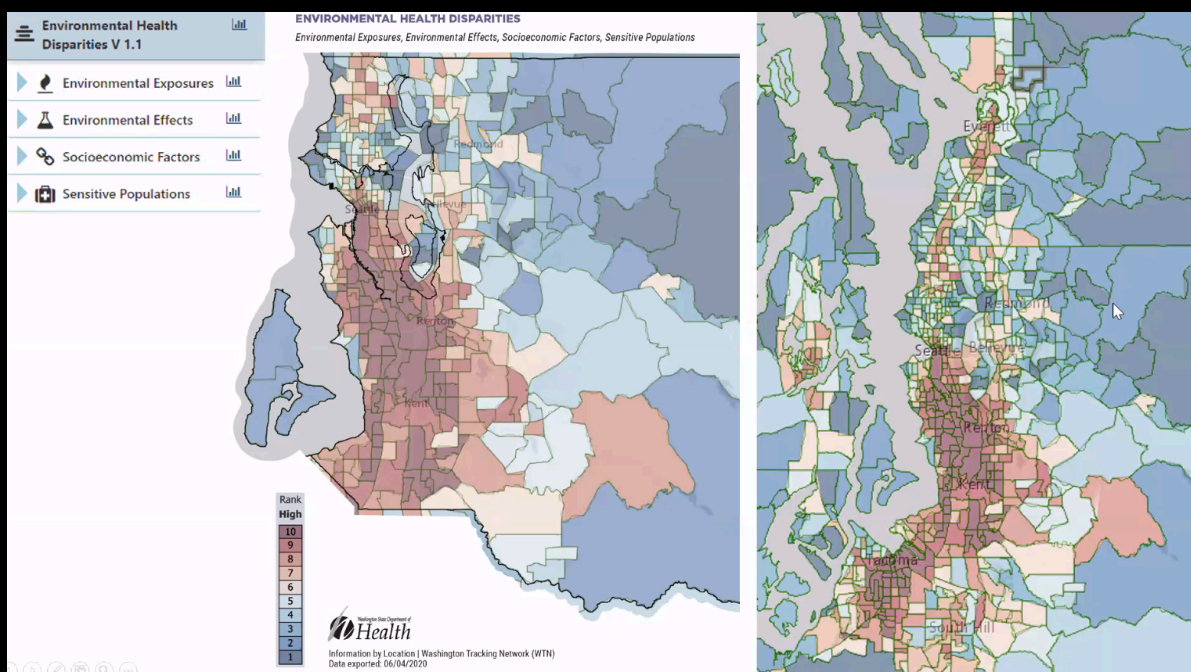
Importance of pollution monitoring

- Simply measuring the pollution and mapping exposures is still of critical importance
- Louisiana Bucket Brigade with low-cost air quality buckets to measure toxins (\$75 versus \$2k for EPA version) >>



Washington Environmental Health Disparities Map

- Quiz section activity last week on map created with local environmental justice organization Front and Centered and UW researchers



Use of maps in policy

- King County zero buses with King County Metro
- “Frontlines to the front of the line” in other policies could help with equity & justice
- There are environmental justice mandates in some recent commitments

Metro [Zero Emission Bus Equity Analysis](#)

- Combined air quality, health, and other demographic risk factors to determine communities most vulnerable to air pollution
- Bus routes highest priority for zero-emission
- Deploying at South Base greatest equity benefit – 62% routes serve most at-risk communities
- Analysis reviewed and informed by a community stakeholder panel

[Poll Ev link for next slide](#)

