



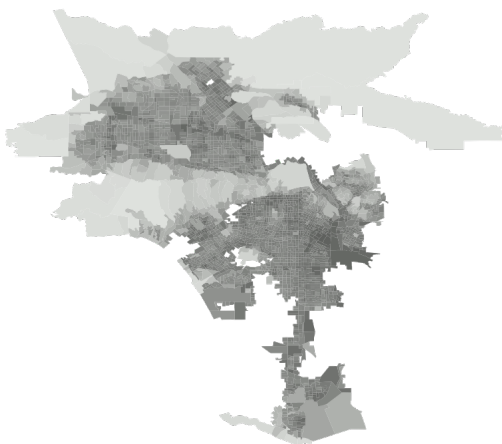
Impervious Surfaces in the Most Populous US Coastal Cities

Using Ecopia AI land cover data, we determined the average percentage of impervious surface per census block group in the most populous coastal city of each state covered by NOAA’s Digital Coast program.

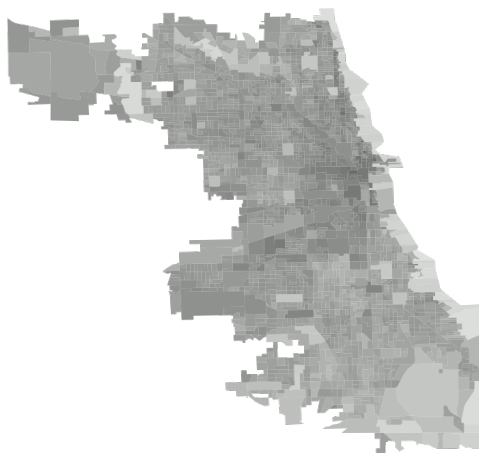
Analyzing this land cover data with median household income, we can better visualize and understand climate inequity within these vulnerable communities.



New York, NY



Los Angeles, CA



Chicago, IL

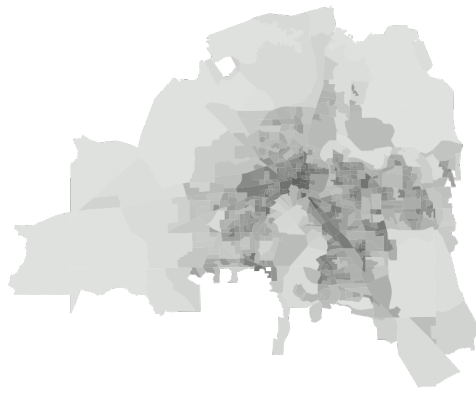


Houston, TX

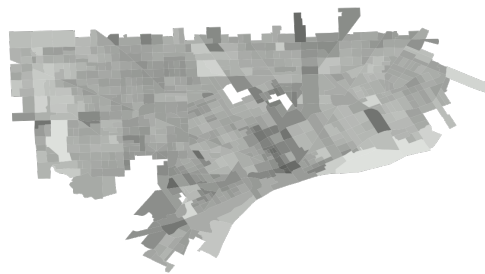
	New York, NY	Los Angeles, CA	Chicago, IL	Houston, TX
Population	8.8M	4.4M	2.9M	2.4M
% Impervious	77%	70%	65%	52%
% Impervious, Top 20% Income	78%	55%	69%	49%
% Impervious, Bottom 20% Income	75%	81%	62%	52%



Philadelphia, PA



Jacksonville, FL



Detroit, MI



Boston, MA

Population

1.6M

1M

790K

784K

% Impervious

67%

30%

50%

64%

% Impervious,
Top 20% Income

63%

21%

51%

62%

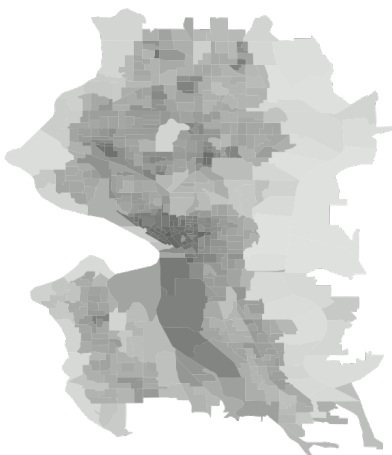
% Impervious,
Bottom 20% Income

70%

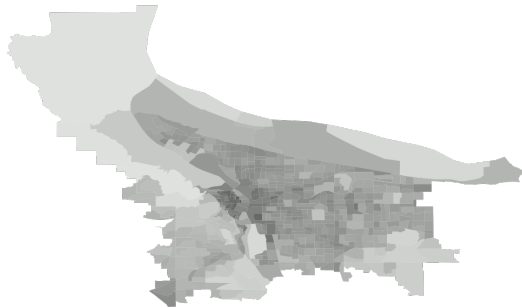
37%

50%

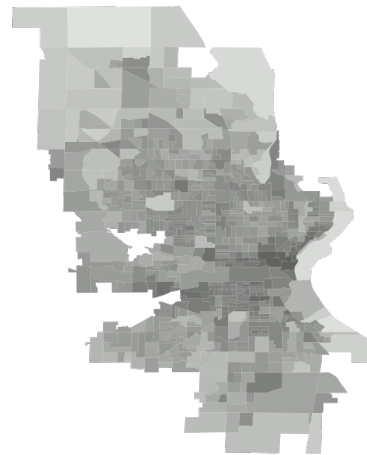
67%



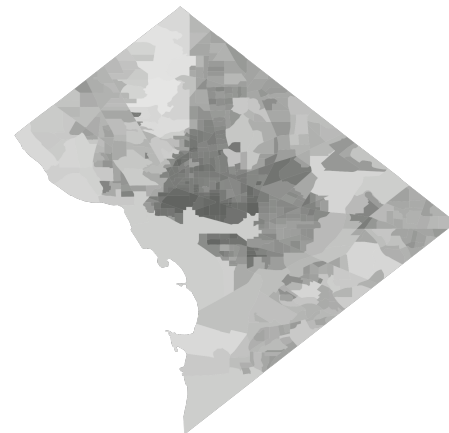
Seattle, WA



Portland, OR



Milwaukee, WI



Washington, DC

Population

774K

731K

719K

683K

% Impervious

54%

53%

54%

58%

% Impervious,
Top 20% Income

46%

47%

47%

51%

% Impervious,
Bottom 20% Income

64%

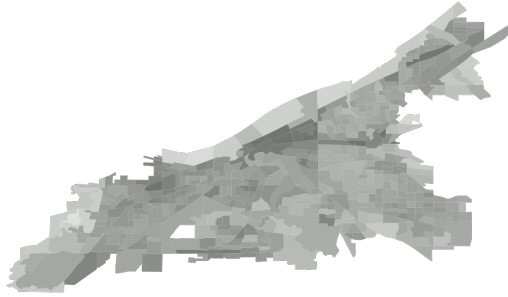
60%

58%

51%



Baltimore, MD



Cleveland, OH



Virginia Beach, VA



New Orleans, LA

Population

592K

472K

458K

435K

% Impervious

55%

51%

38%

54%

% Impervious,
Top 20% Income

53%

50%

29%

56%

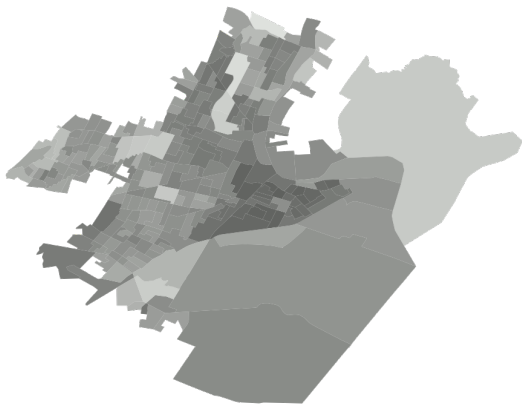
% Impervious,
Bottom 20% Income

62%

51%

48%

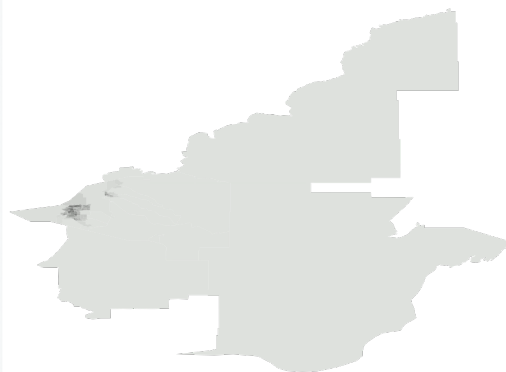
54%



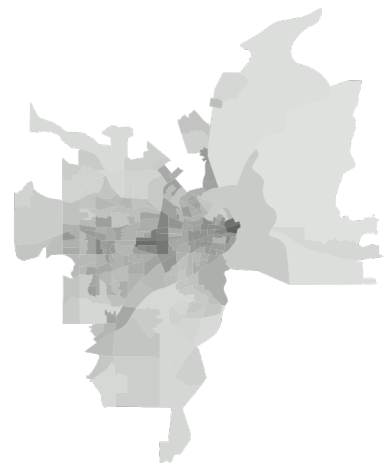
Newark, NJ



Honolulu, HI



Anchorage, AK



Mobile, AL

Population

381K

372K

298K

248K

% Impervious

69%

64%

40%

29%

% Impervious,
Top 20% Income

59%

48%

21%

26%

% Impervious,
Bottom 20% Income

66%

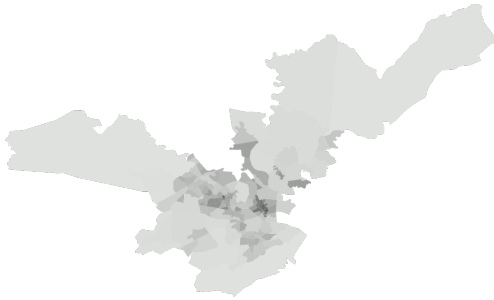
75%

51%

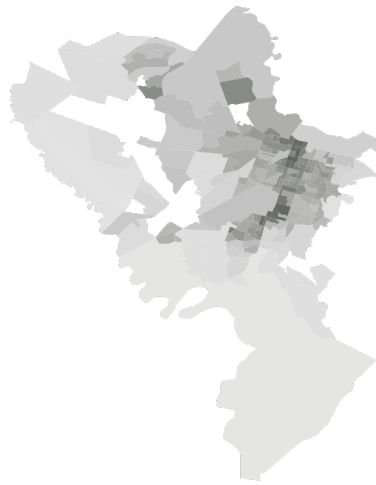
34%



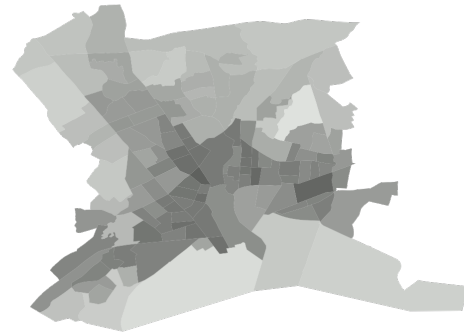
Providence, RI



Charleston, SC



Savannah, GA



Bridgeport, CT

Population

246K

232K

226K

177K

% Impervious

59%

27%

31%

53%

% Impervious,
Top 20% Income

53%

20%

21%

32%

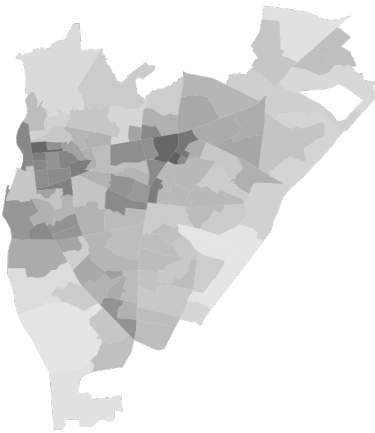
% Impervious,
Bottom 20% Income

65%

32%

38%

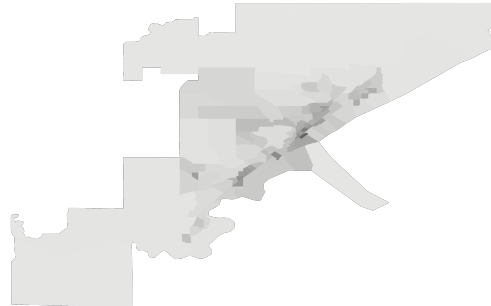
68%



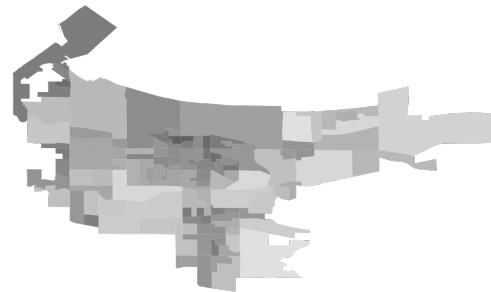
Wilmington, NC



Manchester, NH



Duluth, MN



Gary, IN

Population

158K

149K

110K

108K

% Impervious

33%

41%

27%

35%

% Impervious,
Top 20% Income

26%

24%

17%

33%

% Impervious,
Bottom 20% Income

43%

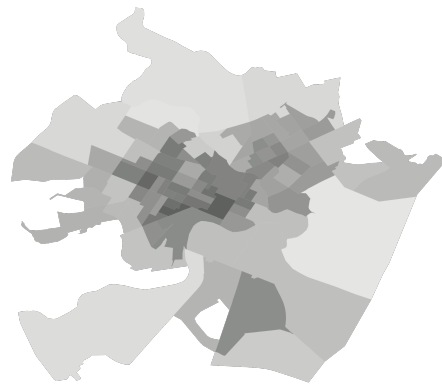
62%

43%

39%



Portland, ME

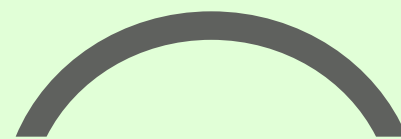


Wilmington, DE



Biloxi, MS

Population	95K	90K	74K	
% Impervious	38%	53%	23%	
% Impervious, Top 20% Income	23%	43%	12%	
% Impervious, Bottom 20% Income	45%	62%	33%	



Learn more at ecopia.ai



Data sources:

Land cover data provided by Ecopia AI as part of ongoing work with NOAA*

Population and income data sourced from US Census Bureau (2021)

*Baltimore, Washington DC, Wilmington (DE), & Virginia Beach land cover data sourced from Chesapeake Conservancy; Philadelphia land cover data sourced from City of Philadelphia via PASDA