Estimated Increases in the White-Black Wealth Gap between 1999 and 2013 Attributable to Natural Hazards Damage*



*Source: Howell, Junia and James R. Elliott. "Damage Done: The Longitudinal Impacts of Natural Hazards on Wealth Polarization in the United States." Social Problems. DOI: 10.1093/socpro/spy016 Note: Circle diameters are proportion to the amount of increased White-Black Wealth inequality attributed to Natural Hazard Damages.

Metro Name (Central County) ¹	Cumulative Natural Hazard Damages ²	Received FEMA Aid ³	Estimated Increase in Wealth Gap Attributable to Natural Hazards ⁴	Additional Estimated Increase in Wealth Gap Attributable to FEMA Aid ⁴	Total Estimated Increase in Wealth Gap from Natural Hazards and FEMA Aid
New York City (New York)	4,465,041	7,940,562,384	40,044	104,647	144,691
Los Angeles (Los Angeles)	157,579,552	149,387,748	71,799	86,585	158,384
Chicago (Cook)	6,550,665	412,127	43,453	59,444	102,897
Dallas (Dallas)	1,699,598,940	49,440,287	93,002	81,595	174,597
Houston (Harris)	916,638,216	1,142,893,098	87,489	95,993	183,482
Washington, D.C. (D.C.)	189,447,323	45,069,245	73,420	81,092	154,512
Miami (Miami-Dade)	4,328,576,410	899,678,458	101,355	94,958	196,313
Philadelphia (Philadelphia)	58,553,512	19,272,522	62,954	77,153	140,107
Atlanta (Fulton)	146,811,846	221,833,510	71,147	88,397	159,544
Boston (Suffolk)	47,856,925	52,570,020	61,157	81,750	142,907
Phoenix (Maricopa)	3,565,074,228	1,716,125	99,621	66,170	165,791
San Francisco (San Francisco)	27,812,013	0	56,323	0	56,323
Riverside (Riverside)	13,671,349	9,591,807	50,000	73,904	123,904
Detroit (Wayne)	101,186,640	4,874,995	67,829	70,861	138,690
Seattle (King)	2,314,284,084	74,889,559	95,760	83,514	179,274
Minneapolis (Hennepin)	454,789,983	11,191,458	81,233	74,725	155,958
San Diego (San Diego)	2,315,278,134	86,561,133	95,764	84,179	179,943
Tampa (Hillsborough)	176,783,042	32,265,306	72,804	79,556	152,360
Denver (Denver)	27,220,601	5,090,654	56,131	71,019	127,150
Baltimore (Baltimore City)	101,747,180	14,665,985	67,879	75,918	143,797

Estimated Influence of Natural Hazards and FEMA Aid on White-Black Wealth Gap, 1999-2013

¹ Because analysis is at the county level, we selected the central county of the 20 most populated metropolitan areas to illustrate our findings, which are based on data from the Panel Survey of Income Dynamics and Spatial Hazard Events and Losses Database for the United States.

² These totals reflect only direct property damages from 1999 to 2013; they do not include indirect losses attributable to disruption of production and commerce.

³ This aid includes Immediate Needs Funding, Individual and Household Program funding, and loans from the Small Business Administration. It does not include fire assistance grants for mobilizing equipment and personnel.

⁴ These estimated increases denote the increase in White-Black Wealth Inequality holding all other personal and neighborhood factors constant, including age, nativity, education, homeownership, wealth in 1999, residential moves, marital status, number children living in the household, insurance payments, and neighborhood status.