Snapshot Wildfire Smoke in the Los Angeles Metro Area

Wildfires have been increasing in frequency, duration, and intensity, measurably affecting communities. Heavy smoke is denser and more likely to be harmful or disruptive. Wildfire smoke can travel thousands of miles, potentially impacting industrial and commercial centers far from fires.

How is wildfire smoke changing?

A "person-day" (one person being under smoke for one day) describes the potential impact of smoke to a region. The annual average person-days of heavy smoke in the Los Angeles metro **increased 1,796%** in 2017-2021, compared to 2011-2015.

The average person in the Los Angeles metro area went from experiencing about 1 day per year of medium smoke overhead to an average of **7 days per year** in the second half of the decade.

Heavy smoke in the Los Angeles metro area went from about 1 day every 4 years to about 5 days each year.



Possible economic impact of wildfire smoke

Wildfire smoke is more likely to disrupt and harm frontline workers. The Los Angeles region, home to **1.3 million** frontline workers, experienced more than **6 million frontline worker-days of heavy smoke in 2021**.

	Utilities, Transportation & Warehousing	Agriculture, Fishing & Mining	Construction	Manufacturing
% of the industry in frontline jobs	61%	68%	76%	51%
frontline workers as % of LA workforce	6%	<1%	6%	10%
industry's economic output (2020)	\$34.3B	\$900M	\$36B	\$104B

Prioritizing resilience through the Community Reinvestment Act (CRA)

Communities that experience dramatic 350 Smoke Density: Person-Days Among CRA-Eligible increases in disruptive smoke-such Liaht Medium 300 Heavy as low- and moderate-income 250 and underserved or distressed (Millions) communities - may be eligible for 200 existing financing programs through 150 the CRA that could help build resilience 100 to smoke-related damages. 50 38% of the LA Metro 0 population is CRA-eligible 2015 2017 2011 2013 2019

Data in this snapshot comes from the SF Fed research brief "Disruptions from Wildfire Smoke: Vulnerabilities in Local Economies and Disadvantaged Communities in the U.S." and from the U.S. Bureau of Economic Analysis. Learn more at https://sffed.us/wildfire-smoke

Federal Reserve Bank of San Francisco

2021