

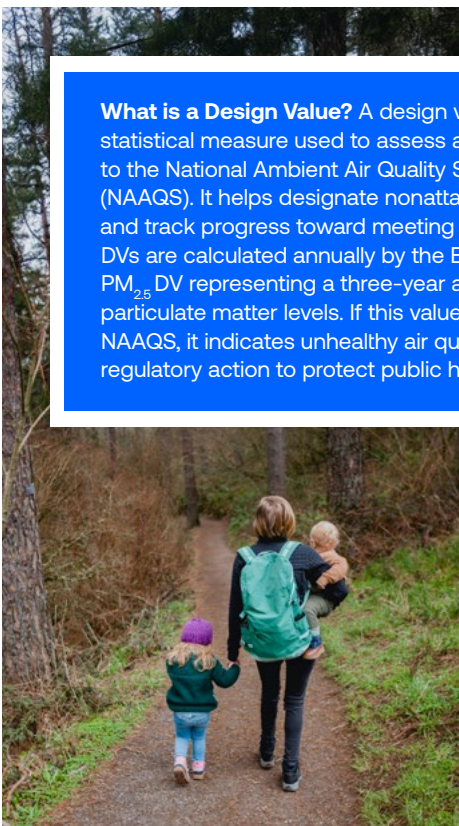
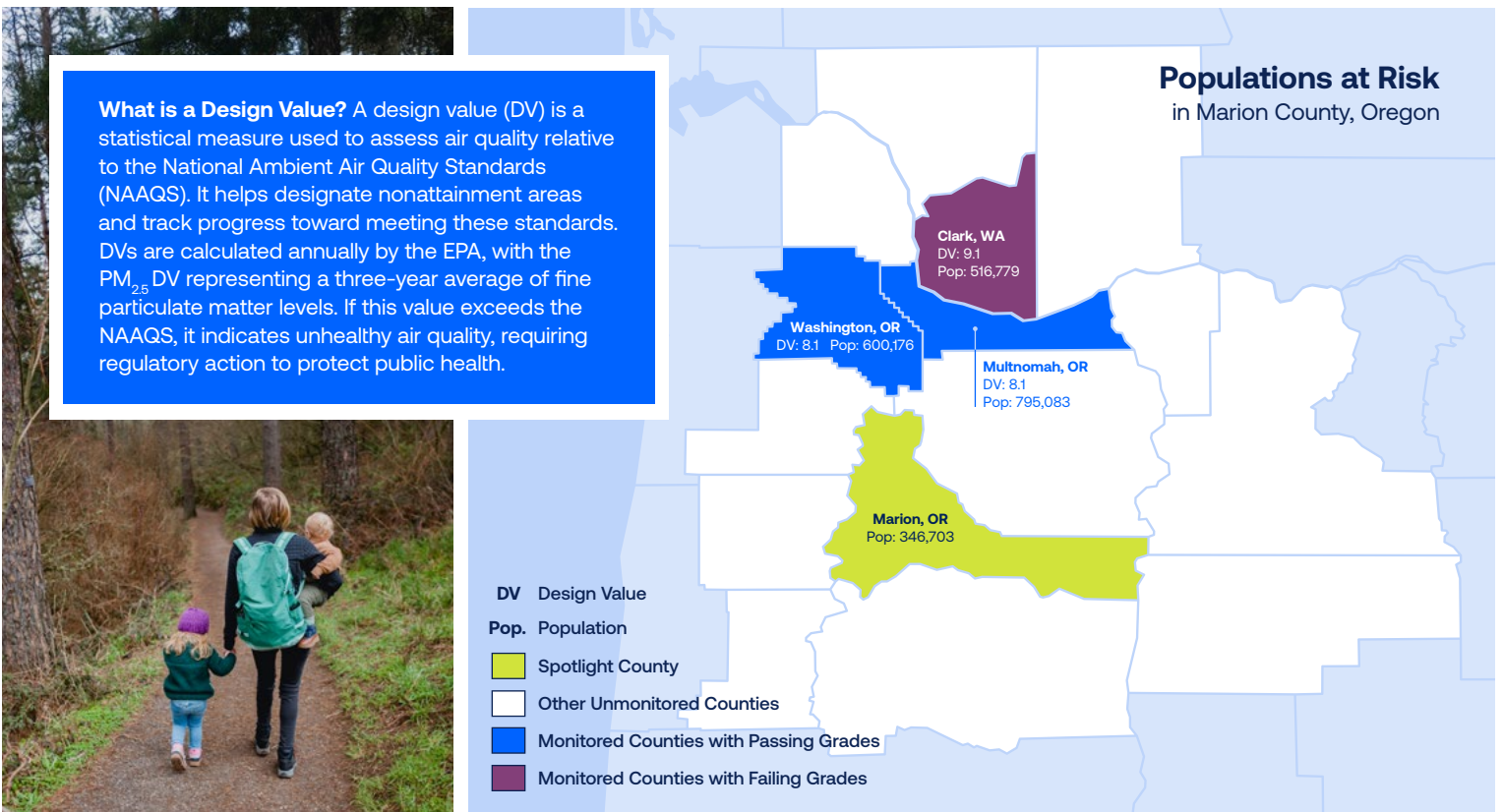
Something in the Air

Marion County, Oregon



The American Lung Association’s “State of the Air” 2024 found that **39% of people in the U.S.—131.2 million people—live in places with unhealthy levels of ozone or particle pollution.** The report relies on data collected at official EPA air quality monitoring sites, which are limited in scope, leaving many counties without a grade for deadly particle pollution.

This new, supplemental report taps into the power of satellite-derived data to spotlight potentially unhealthy levels of air pollution in hundreds of counties without regulatory monitors, including Marion County, Oregon as one example.



Marion County, located in Oregon's Willamette Valley, is known for its diverse landscape of urban areas, farmlands, and forests. Home to Salem, the state capital, it has a population of nearly 350,000. Marion is part of the Portland-Vancouver-Salem metro area, which ranks 65th worst for annual particle pollution out of 204 U.S. metropolitan areas in "State of the Air" 2024.

Marion County is surrounded by other counties, without regulatory monitors, limiting information on the impact of its neighbors' air quality. Nearby monitored counties, Washington and Multnomah, received passing grades for $PM_{2.5}$ with DVs of $8.1 \mu g/m^3$, while Clark County, WA, received a failing grade (DV $9.1 \mu g/m^3$). Marion's topography, nestled between the Cascades and Coast Range, traps pollution from industry, traffic along I-5, and agricultural practices. The area has also been increasingly affected by wildfire smoke from Oregon, Washington, and California.



Marion County is home to over 100,000 residents who are at increased risk of health harm from exposure the unhealthy levels of air pollution, including many vulnerable children and seniors. Over 37% of the population are people of color, including a large number of migrant and seasonal farmworkers. These workers and their families experience combined exposures to $PM_{2.5}$ from wildfire smoke, agricultural chemicals, and diesel equipment. The demographics of the county highlight the need for accurate air quality information and targeted interventions to protect public health.

Although satellite-derived data can offer insights into potential pollution hotspots, the absence of regulatory monitors in Marion County and its immediate neighbors has the potential to leave residents underinformed about potential health risks from elevated $PM_{2.5}$ and without the information they need to advocate for cleaner air. Fortunately for residents, the state of Oregon has deployed some monitors of its own for public information and air quality planning purposes, including in Marion County.

To learn more about the American Lung Association's work using emerging technology to understand local air quality, visit, [Lung.org/something-in-the-air](https://www.lung.org/something-in-the-air).