

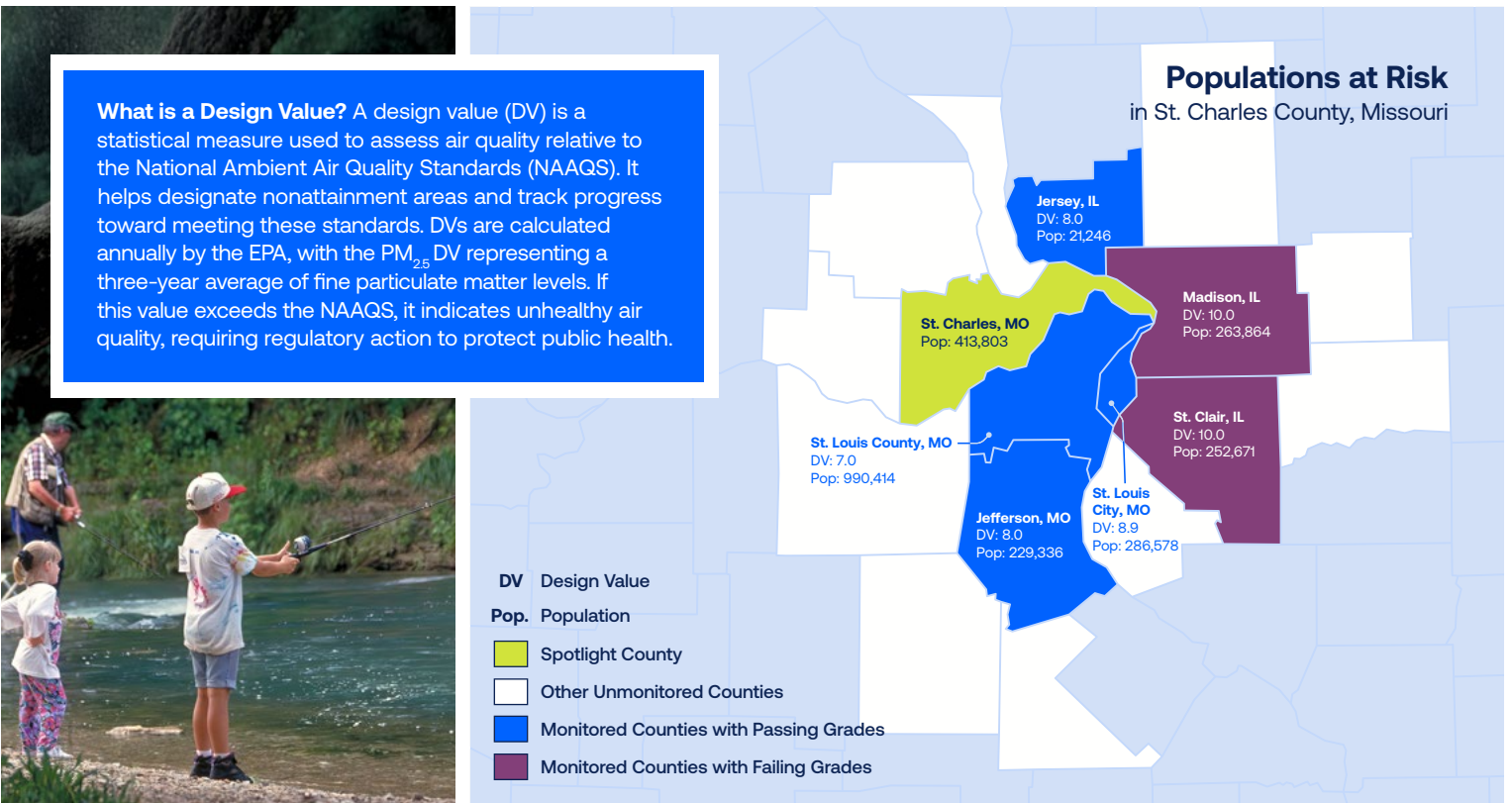
Something in the Air

St. Charles County, Missouri



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 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 official monitors, including St. Charles County, Missouri as an example.



St. Charles County is located at the confluence of the Missouri River to the south and the Mississippi River to the north. It is part of the St. Louis metropolitan area. The region has a long history as an important population center and hub for transportation and industry.

With over 400 thousand residents, St. Charles County is the wealthiest and third most populous county in Missouri.

It is a mix of small cities, towns and suburbs. The surrounding metro area is home to heavy industry, including chemical manufacturing, refineries and several coal-fired power plants, and an extensive transportation network that links numerous ports and rail yards and well as multiple interstate highways.



The St. Louis metro region ranked 33rd worst out of 204 metro areas in “State of the Air” 2024. Of the region’s 17 jurisdictions in Illinois and Missouri, only 6 monitor particle pollution. Madison County ($10 \mu\text{g}/\text{m}^3$) and St. Clair County, IL, ($10.1 \mu\text{g}/\text{m}^3$) received failing grades while the other four surrounding St. Charles reported passing DVs.

St. Charles County is home to more than 100,000 residents from groups that are particularly vulnerable to health harm from exposure to unhealthy levels of particle pollution. The county population is older and more likely to be living in poverty than the national average. One quarter of the population are people of color, who often face disproportionate environmental health risks.

Despite its sizable population and proximity to multiple pollution sources, St. Charles County lacks local air quality monitoring, leaving residents underinformed about potential health risks from elevated $\text{PM}_{2.5}$, and without the information they need to advocate for cleaner air.



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).