American Lung Association
Something in the Air

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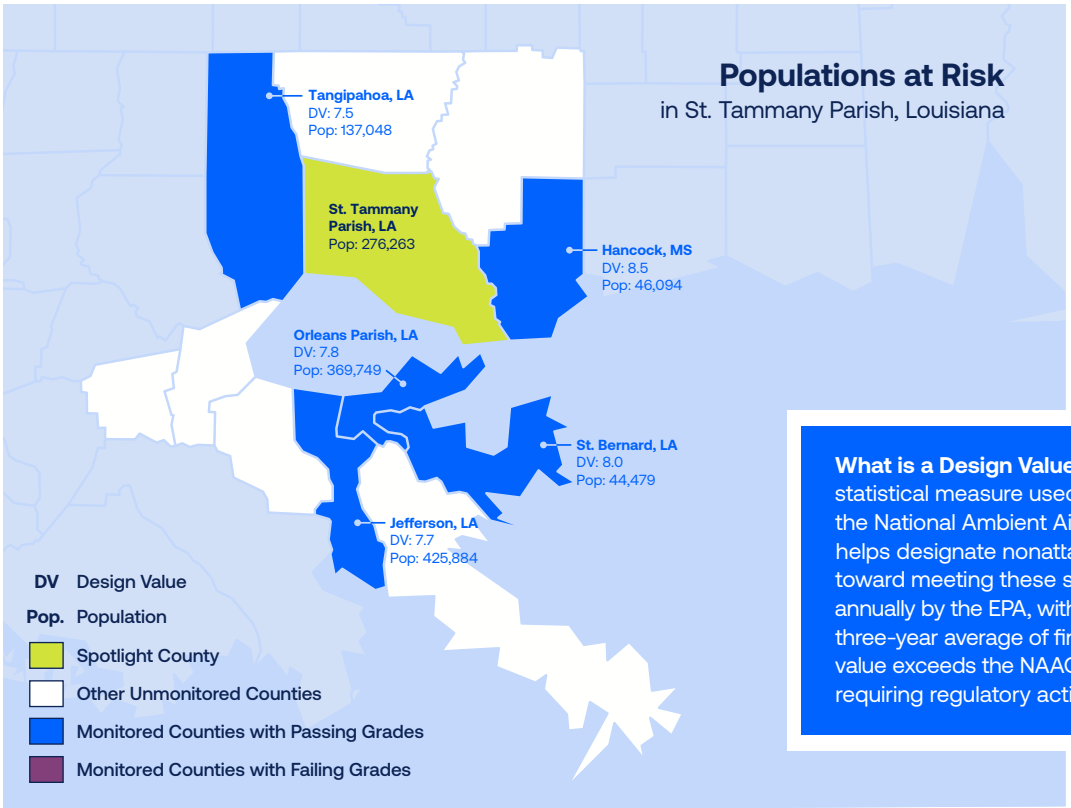
St. Tammany Parish, Louisiana

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. Tammany Parish, Louisiana as one example.

Populations at Risk
in St. Tammany Parish, Louisiana



What is a Design Value? A design value (DV) is a statistical measure used to assess air quality relative to the National Ambient Air Quality Standards (NAAQS). It helps designate nonattainment areas and track progress toward meeting these standards. DVs are calculated annually by the EPA, with the $PM_{2.5}$ DV representing a three-year average of fine particulate matter levels. If this value exceeds the NAAQS, it indicates unhealthy air quality, requiring regulatory action to protect public health.

St. Tammany Parish, located in southeastern Louisiana, is part of the greater New Orleans metro area. The parish has a population of over 250,000 and is a rapidly growing suburban region, absorbing population growth and hurricane refugees from New Orleans.

Air quality in the area is impacted by vehicle emissions from commuters and tourists using the three interstate highways that run through the region, as well as industrial sources including mining, quarrying and oil and gas extraction.

Of the 11 counties in the New Orleans metro area, five are monitored, and all received passing grades for annual particle pollution in "State of the Air" 2024. Hancock County, Mississippi, had the highest DV at 8.5 µg/m^3, with others at or below 8.0 µg/m^3.

Satellite data for $PM_{2.5}$ sometimes overestimates pollution in the southern U.S., especially in areas with higher temperatures and precipitation, such as the Gulf Coast. That may explain why St. Tammany Parish appears to be among the 2% of most polluted unmonitored counties nationwide even though neighboring monitored counties all get passing grades.

The parish 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, including children, people of color and people living with chronic lung disease. These demographics highlight the need for accurate air quality information to protect at-risk communities and give residents the information they need to advocate for cleaner air.

Collecting localized air quality data in St. Tammany Parish would help clarify its impact on residents, given moderate $PM_{2.5}$ levels in nearby monitored parishes and the known sources of potentially harmful pollutants.

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**.