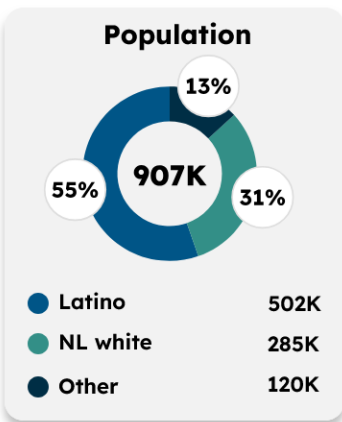
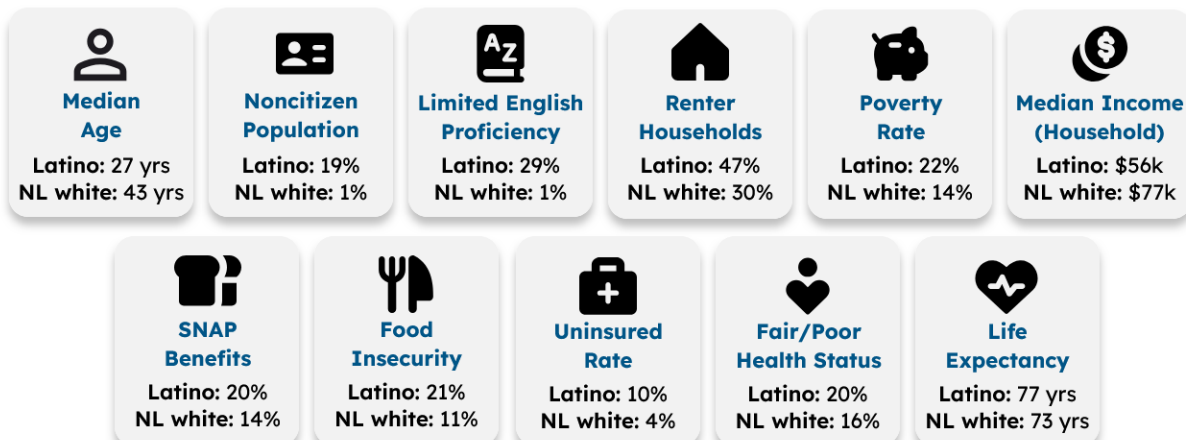
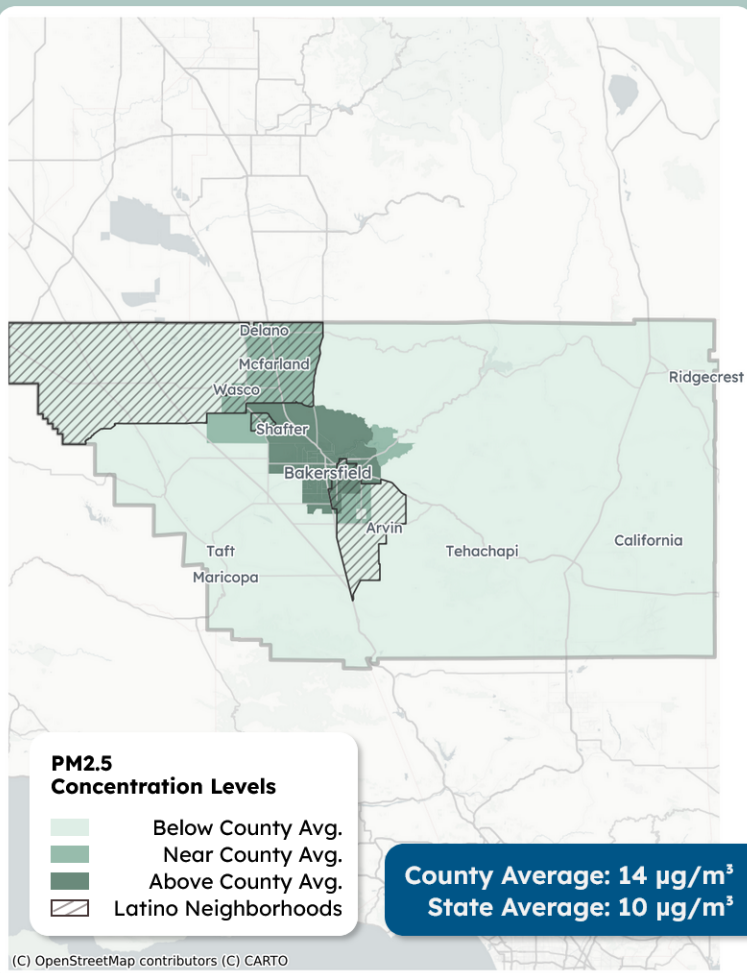


**Kern County****County Statistics****Factors Influencing Exposure to Air Pollution**

\*NL white = Non-Latino white

**Neighborhood Statistics****Air Pollutants****Latino Neighborhoods and Exposure to Particulate Matter 2.5 (PM2.5), 2015-2017**Note:  $\mu\text{g}/\text{m}^3$  = one-millionth of a gram per cubic meter of air.Note: California's state standard for PM2.5 is an annual average of 12  $\mu\text{g}/\text{m}^3$ , while the federal standard is 9  $\mu\text{g}/\text{m}^3$ . There is no state or federal or state standard for Diesel PM.**PM2.5**

**PM2.5** is produced from sources like vehicle exhaust, wildfires, and industrial activity. These fine air particles enter the lungs and bloodstream and worsen conditions like asthma and heart disease.

Latino neighborhoods had **higher exposure** to PM2.5 than NL white neighborhoods.

**Diesel PM**

**Diesel emissions** from vehicles and heavy-duty equipment release harmful particulate matter. Exposure to diesel exhaust can raise blood pressure, trigger heart attacks, and worsen lung conditions.

Latino neighborhoods had **higher exposure** to diesel PM than NL white neighborhoods.



Latino neighborhoods = Census tracts with 70%+ Latino residents  
 NL white neighborhoods = Census tracts with 70%+ NL white residents

## Neighborhood Statistics (cont.)

### Proximity to Major Sources of Air Pollution

**Note:** Exposure and proximity scores take into account the number of sites/facilities and their proximity to neighborhoods.  
**Higher scores = more exposure to pollutants for residents.**

**Cleanup sites**, such as Superfunds, are polluted with materials like lead and asbestos. Examples include old and abandoned processing plants and manufacturing facilities.

**Exposure Score**

9	Latino neighborhoods
4	NL white neighborhoods

**Hazardous waste facilities** are treatment, storage, and disposal sites. They can release toxic substances such as carcinogens, mercury, and asbestos into the air, water, and soil.

**Exposure Score**

0.8	Latino neighborhoods
0.3	NL white neighborhoods

**RMP facilities** are sites where hazardous chemicals—like propane, pesticides, ammonia, and explosives—are present, posing risks to the environment and communities if released.

**Proximity Score**

1.0	Latino neighborhoods
0.4	NL white neighborhoods

### Vehicle Types and Traffic

**Lower-emission vehicles (LEVs)** use battery electric, plug-in hybrid, or hybrid technology to reduce greenhouse gas emissions.

**% of LEVs owned**

1%	Latino neighborhoods
4%	NL white neighborhoods

**Clunker vehicles** (vehicles 20 years or older) emit high levels of pollutants because they lack advanced emission-control equipment.

**% of clunker vehicles owned**

12%	Latino neighborhoods
13%	NL white neighborhoods

**Traffic density** measures the concentration of vehicles on roads within an area. Neighborhoods near major roadways face greater exposure to harmful emissions released from vehicles.

**Vehicle kilometers per hour**

445 km/hr	Latino neighborhoods
453 km/hr	NL white neighborhoods

### Vulnerable Groups

**Age**

Children and older adults are more vulnerable to air pollution and have a higher risk of developing respiratory and cardiovascular diseases.

8%	8%	5%	27%
ages 0-5	ages 65+	ages 0-5	ages 65+
Latino neighborhoods		NL white neighborhoods	

**Health**

Air pollution worsens pre-existing health conditions like asthma and coronary heart disease, increasing emergency visits and health complications. Long-term exposure to air pollution can cause chronic illness and premature death.

**% of Adults (18+) with Pre-Existing Conditions**

5%	7%	11%	10%
Latino neighborhoods	NL white neighborhoods	Latino neighborhoods	NL white neighborhoods
Coronary Heart Disease		Asthma	

**Emergency Department Visits (per 10,000 people)**

21	19	67	58
Latino neighborhoods	NL white neighborhoods	Latino neighborhoods	NL white neighborhoods
Heart Attacks		Asthma Attacks	

**Low Birth Weight (LBW) Babies**

LBW babies are born under 5 lbs. LBW increases the risk of infant mortality, developmental delays, and chronic health conditions. Exposure to air pollution, such as PM2.5, contributes to higher rates of LBW babies.

**% of Infants**

6%	5%
Latino neighborhoods	NL white neighborhoods
👶👶👶👶👶	👶👶👶👶

### Disadvantaged Communities

The CA Environmental Protection Agency defines disadvantaged communities based on their environmental pollution burden and population characteristics. Under Senate Bill 535, revenue from CA's Cap-and-Trade Program is partly directed toward these communities through the CA Climate Investments program to reduce pollution, enhance climate resilience, and improve health and economic well-being.

**% of Disadvantaged Communities**

87%	21%
Latino neighborhoods	NL white neighborhoods