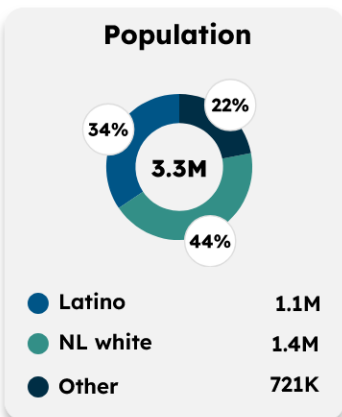


# AIR POLLUTION

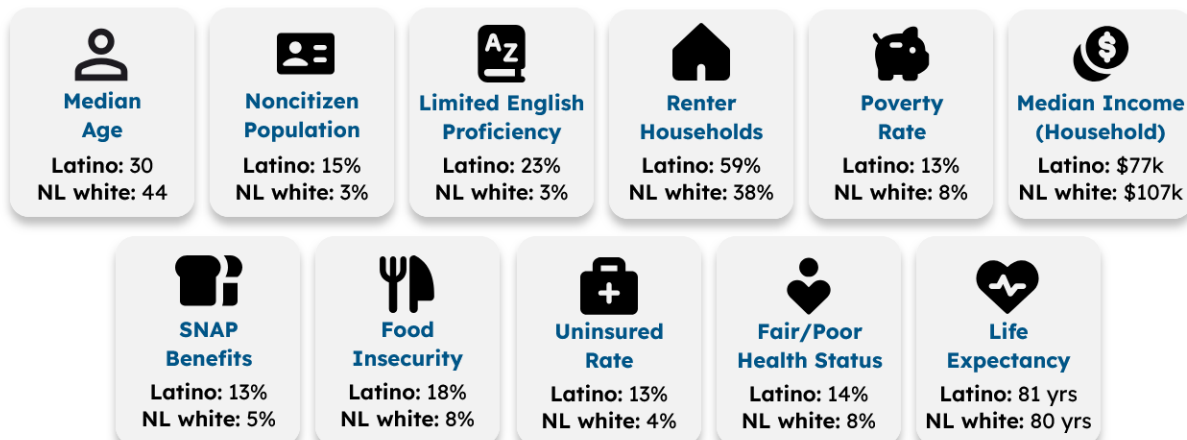
## San Diego County

### County Statistics

#### Factors Influencing Exposure to Air Pollution



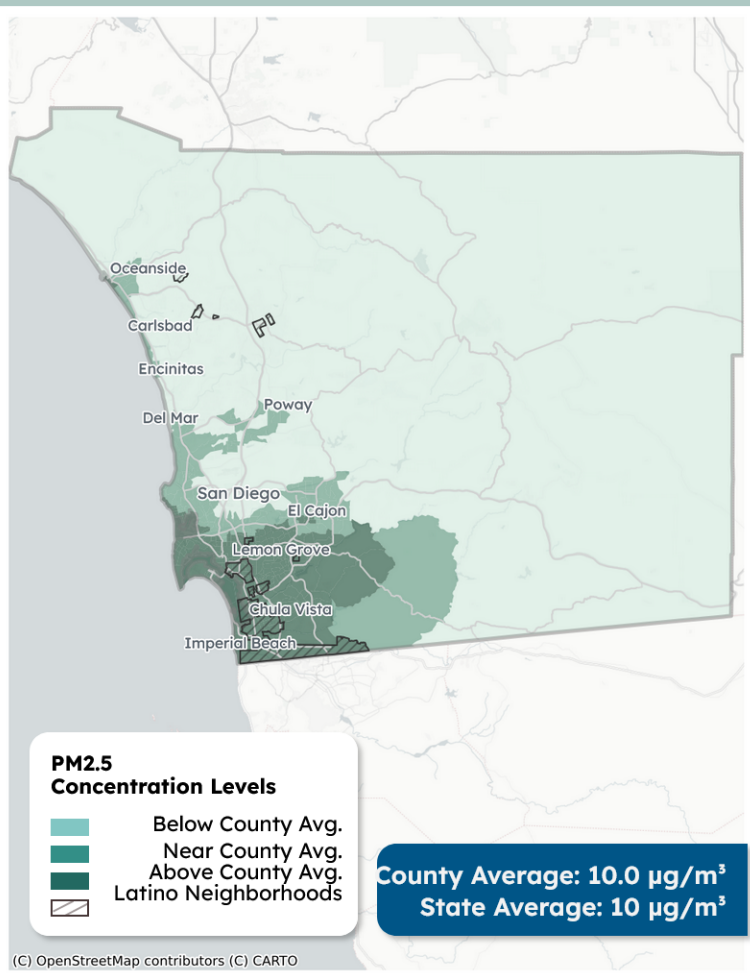
\*NL white = Non-Latino white



### 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 airNote: 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. **$11.0 \mu\text{g}/\text{m}^3$** 

Latino neighborhoods

 **$9.0 \mu\text{g}/\text{m}^3$** 

NL white neighborhoods

Annual mean concentration

#### 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.**0.28 tons/year**

Latino neighborhoods

**0.13 tons/year**

NL white neighborhoods

Emissions

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

<b>2</b>	Latino neighborhoods
<b>3</b>	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

<b>0.7</b>	Latino neighborhoods
<b>0.4</b>	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

<b>0.2</b>	Latino neighborhoods
<b>0.2</b>	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

<b>3%</b>	Latino neighborhoods
<b>11%</b>	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

<b>11%</b>	Latino neighborhoods
<b>9%</b>	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

<b>1904 km/hr</b>	Latino neighborhoods
<b>847 km/hr</b>	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.

<b>6%</b>	<b>11%</b>	<b>5%</b>	<b>22%</b>
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

<b>5%</b>	<b>5%</b>	<b>10%</b>	<b>9%</b>
Latino neighborhoods	NL white neighborhoods	Latino neighborhoods	NL white neighborhoods
<b>Coronary Heart Disease</b>		<b>Asthma</b>	

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

<b>13</b>	<b>8</b>	<b>59.4</b>	<b>23.5</b>
Latino neighborhoods	NL white neighborhoods	Latino neighborhoods	NL white neighborhoods
<b>Heart Attacks</b>		<b>Asthma Attacks</b>	

#### 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

<b>5%</b>	<b>4%</b>
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

<b>47%</b>	<b>0%</b>
Latino neighborhoods	NL white neighborhoods