# Making Long Beach a Breathable City

GEOG/ESP 450 - SP21

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Despite the strides made with the Clean Air Act of 1970, poor air quality persists in pollution disparity which continues to impact respiratory health. Long Beach has one of the highest rates of pollution in the country, with the main contributors being the Port of Long Beach, Port of Los Angeles, the 110, 405, and 710 freeways. As a result of living and working near these major sources of pollution, low income and minority communities are disproportionately affected. In order to make Long Beach a more breathable city for everyone, urban planning techniques like planting trees near heavy traffic, creating safe bike lanes, and building community gardens must be executed.

## Most Polluted Ozone in the US

Residents of LA County experience **60% more pollution** from vehicles. Particulates/nitrogen oxide from vehicles contribute to **lung** 

inflammation/asthma attacks.

Prolonged exposure --> strokes/heart attacks, cancer
Toxins can spread up to **10 miles** from refineries
largest single source of air pollution in Southern California and produce **100 tons of smog a day** 

Asthma Spatially modeled, age-adjusted Los Angeles rate of emergency department visits Santa Monica for asthma per 10,000 (2011-2013) < 21.4 45.4 - 52.9 53.0 - 60.9 27.2 - 32.9 61.0 - 72.3 (Top 30%) Long Beach 33.0 - 38.8 72.4 - 92.1 (Top 20%) 38.9 - 45.3 > 92.2 (Top 10%)

#### Environmental Racism

times more hospitalized for asthma. Black (43%), Latinx (39%), and Asian (21%) residents are exposed to 2.5PM significantly more than their white counterparts.

### I Dig Long Beach and LB Office of Sustainability

Plans to plant 10,000 trees by 2022 which will not only improve air quality as natural air purifiers but also create an inviting environment for pedestrians and bicyclists.

#### Clean Energy Goals for the Port

2030: zero-emission cargo-handling equipment 2035: zero-emission trucks by 2035.





#### Conclusion

The City of Long Beach is actively addressing environmental disparities that afflict vulnerable populations by setting goals and executing on small, but impactful solutions like tree planting to combat a myriad of environmental health issues.



Long Beach Post Long Beach Business Journal NRDC

Long Beach Government page
Past Students' Reports (on Wordpress)



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