Nathan Kirk Mike Ryu Senior Seminar February 2nd, 2025

Project A Early Work

What is the main cause of air pollution?

"Most air pollution comes from energy use and production," says John Walke, director of the Clean Air team at NRDC.

Why does LA have unhealthy air quality?

"Traffic is considered a leading contributor to so-called "bad ozone," which can damage living cells in the lungs and cause breathing issues." - CBS News, Marissa Wenzke. May 2, 2024

"The region's challenges stem from a combination of ongoing emission sources, including vehicle exhaust, industrial activities, and port operations, coupled with temperature inversions that prevent pollutant dispersion." - LA Mag Dec 4, 2024

What health problems are caused by air pollution?

"Particles in smoke can get deep into the lungs and cause health problems, including asthma attacks, increases in emergency room visits, and hospitalizations," - National Weather Service.

Other health problems include shortness of breath, coughing, chest pain, and fatigue which can be caused my fine particles. Ground-level ozone can cause difficulty breathing deeply, sore throat, coughing, and fatigue. - Minnesota Pollution Control Agency.

Has air quality improved in Los Angeles over the past 5 years?

Yes, it has slightly improved, the number of good and moderate-quality air days has improved while the number of unhealthy air days has decreased. - La Almanac summary of AQI

What is the impact of COVID-19 to air quality?

The lockdown response to COVID-19 greatly improved air quality. According to IQAir, Los Angeles had record air quality during that time. This was driven by a lack of emissions and energy consumption with people staying indoors.

What is your neighborhood's air quality?

My home city (Irvine) has good air quality. Most of the time it fluctuates between 20-40, but recently it has been moderate in the 60-80 range. - IQAir.

How could we reduce air pollution in Los Angeles?

A shift towards electric vehicles could help reduce air pollutants in Los Angeles. We could also emit less with our ships and power plants, though that is unrealistic and unlikely to change. Wildfires are also largely outside of our control, but some fire prevention methods may help reduce air pollution. - IQAir

What are the major air pollutants?

The major air pollutants are: "ground-level ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead" - EPA