

ADDRESSING AIR POLLUTION IN YOUR CITIES: A STARTER GUIDE FOR MAYORS

I. THE PROBLEM:

Air pollution is a silent killer, with impacts concentrated in cities where traffic, industry, and population density drive exposure. In the most polluted counties, more than 60% of residents are people of color, revealing stark racial and geographic inequities. Mayors have a powerful role to play—city-level solutions can save lives, reduce disparities, and boost local economies. With every \$1 invested in clean air returning up to \$30 in economic benefits, the case for action is strong. And with federal support for air quality programs in flux and EPA regulations shifting, local leadership is more important than ever. The time to act is now.



39% OF AMERICANS live in areas with unhealthy air quality, contributing to:



+ 100,000 premature deaths annually



+ \$790 BILLION annually in healthcare costs and productivity losses

II. WHY IT MATTERS

- **Pollution drives early death, heart & lung disease, and adverse birth outcomes.** Long-term exposure raises the risk of death from heart attacks and strokes by up to 24% and worsens asthma and chronic obstructive pulmonary disease. Exposure during pregnancy is linked to preterm births and low birth weight.
- **The pollution burden is concentrated & unequal, varying up to 8x within a city block.** It disproportionately affects the elderly, children, and people with lung disease. People of color are 64% more likely to live in areas with poor air quality, often near highways and industrial sites. U.S. neighborhoods with higher percentages of residents of color experienced 7.5x higher pediatric asthma rates and 1.3x higher premature mortality rates due to pollutants compared with mostly White communities.
- **Pollution drains local economies, costing the U.S. \$790 billion annually in health care costs and productivity losses.** It drives more hospital and ER visits, missed workdays, lower productivity and greater risk of work-related accidents.
- **Pollution impairs mental health & learning.** Exposure is linked to increased risk of mental health disorders, including depression and anxiety. In schools, air pollution is linked to poor exam performance and increased absenteeism.

III. WHAT YOU CAN DO: A ROADMAP FOR LEADERSHIP

1. Understand the problem: Where & how bad is the pollution?

- **Start with what you know.** Identify your city's biggest pollution sources—traffic, buildings, ports, and industry—and where they are concentrated.
- **Use trusted tools & partners.** Tools like the U.S. Climate Vulnerability Index can help visualize neighborhood-level pollution and health risks. Your teams can also consult emissions inventories, sensor measurements, and air quality model outputs via resources like the Clear Collaborative Directory. Partner with local universities or air pollution control agencies to analyze trends and target mitigation actions.
- **Determine if additional monitoring is needed.** If existing data doesn't capture the neighborhood-level differences needed to guide decisions, consider deploying hyperlocal sensors to reveal block-by-block variation.

2. Cut emissions where they start.

While some pollution sources are regulated by state or federal agencies, cities have strong levers to act locally:

Sector	Starting Actions	Medium Actions	Big Moves
 Transportation	• EV charging infrastructure • E-bike subsidies • Car-free initiatives • Anti-idling campaigns	• Improve public transit, cycling & pedestrian infrastructure • Municipal vehicle electrification • Smart traffic management to reduce congestion	• Low-emission zones • Congestion pricing • Electric vehicle (EV) incentive programs
 Industry & Ports	• Diesel equipment emissions reduction policies for city projects • Use air quality data in evaluating permits for approval	• Idle reduction programs • Fugitive dust ordinances & control measures	• Zero-emission freight zones • Shore power mandates • Investigate pollution violations & enforce local or state laws
 Buildings	• Clean construction initiatives	• Energy efficiency retrofit & weatherization incentives • Community-engaged air quality monitoring	• Building energy efficiency ordinances • Building electrification programs

3. Protect residents from existing pollution by reducing exposure and building resilience.

- **Make neighborhoods safer to breathe in.** Expand tree canopies and green infrastructure, reroute truck traffic away from homes and schools, and reduce speed and congestion during peak exposure times.
- **Upgrade indoor environments.** Improve ventilation and filtration in schools and homes and ensure new city-owned buildings meet indoor air quality standards.
- **Create clean air spaces.** Designate and equip places like libraries and recreation centers with air filtration systems to provide refuge during heavy smoke and smog days.

4. Equip residents with tools and information to protect their health and get involved.

- **Educate and inform.** Launch campaigns on air quality risks and protective behaviors. Use visuals and real-time air quality alerts to help residents take action.
- **Partner with trusted institutions.** Work with schools, health centers, and community organizations to prepare response plans and prioritize support for the most vulnerable.
- **Engage the community directly.** Support advisory boards, participatory budgeting, and resident-led projects on clean air planning.

The Community Data Health Initiative is a collaboration between the Data-Smart City Solutions at the Bloomberg Center for Cities at Harvard University, the African American Mayors Association, the Environmental Defense Fund, and Meharry Medical College. To learn more or get involved, contact Nisha Kumar. For tools and local examples on air pollution mitigation, explore resources from CDHI and EDE.