



Research, Best Practices & Logic Model – PHYSICAL ENVIRONMENT_AIR QUALITY

Research says:

- While San Diego does not meet all health-based ambient air quality standards, San Diego's air quality is the best in 60 years of monitoring (1).
- The long-term benefits of regular physical activity in air with pollution levels seen in San Diego, generally outweigh the short-term risks. Indeed, regular physical activity in a polluted environment may ameliorate the adverse effects of pollution just as it reduces the adverse health effects of obesity and diabetes. However, certain sensitive individuals, including young children, the elderly, athletes, and people with respiratory conditions, may need to manage their exposure to air pollutants (2).
- Air quality decisions will increasingly include greenhouse gas (GHG) reductions.
- Policies intended to reduce GHG emissions will have more health benefits, especially in low-income and minority communities, if accompanied by complementary policies that target emissions of harmful co-pollutants from sources (3).
- Providing additional infrastructure for walking, bicycling, and transit can shift trips from driving to these less-polluting and healthier travel modes (4).
- Negative consequences of ambient air pollution include (5-7):
 - decreased lung function
 - chronic bronchitis
 - asthma
 - and other adverse pulmonary effects

1. California Air Resources Board's Aerometric Data Analysis and Management System -- <http://www.arb.ca.gov/adam/trends/trends1.php>)
2. US Dept. of Health and Human Services, 2008, *Physical Activity Guidelines Advisory Committee Report*)
3. James K. Boyce and Manuel Pastor, *2012, Cooling the Planet, Clearing the Air: Climate Policy, Carbon Pricing, and Co-Benefits*)
4. Urban Land Institute, *2007, Growing Cooler: The Evidence on Urban Development and Climate Change*)
5. Pope CA, Dockery DW, Schwartz J. Review of epidemiological evidence of health-effects of particulate air-pollution. *Inhal Toxicology*. 1995;7(1):1-18.
6. Bascom R, Bromberg PA, Costa DA, et al. Health effects of outdoor air pollution. *Am J Respir Crit Care Med*. 1996;153:3-50.
7. Bell ML, McDermott A, Zeger SL, Samet JM, Dominici F. Ozone and short-term mortality in 95 US urban communities, 1987-2000. *JAMA*. 2004;292:2372-2378.

Best Practices Are:

- In a changing regulatory environment, continue to implement all feasible District regulatory measures to reduce harmful pollutant emissions from stationary sources (e.g., manufacturing, drycleaning, fueling stations) and mobile sources (1).
 - Engage the public through both electronic (website, apps, videos, online presentations, factsheets, and reports, targeted emails, etc.) and in-person (community events, school visits, community presentations, trainings for regulated industries, etc.) communication strategies to encourage community changes and lifestyle choices that reduce emissions of both traditional pollutants and greenhouse gases (GHGs) (2).
 - Reduce vehicle miles travelled by working with SANDAG, local governments, and stakeholders to provide safe and attractive alternatives to driving (3).
1. US-EPA, Taking Toxics out of the Air, <http://www.epa.gov/airprog/oar/oaqps/takingtoxics/p1.html>
 2. PROGRESS REPORT OF THE INTERAGENCY CLIMATE CHANGE ADAPTATION TASK FORCE – 2010; <http://www.whitehouse.gov/sites/default/files/microsites/ceq/Interagency-Climate-Change-Adaptation-Progress-Report.pdf>
 3. SANDAG, Transportation: Moving People and Goods, http://www.sandag.org/rcp_revised_draft/chapter4b.pdf



Logic Model:

EXAMPLE OF COLLECTIVE ACTION FOR MEASURABLE IMPACT:

