PIMA COUNTY AIR QUALITY

We are fortunate in Pima County to have healthy air and clear skies, allowing residents to see for miles in all directions. Clean air is important for maintaining a healthy lifestyle and our economic prosperity.

The U.S. Environmental Protection Agency (EPA) establishes health standards for ambient air, and currently Pima County’s air meets these standards. Occasionally, air pollution levels in the region may reach unhealthy levels during the hot summer months due to traffic congestion or strong winds. Several air pollutants (ground-level ozone, particulate matter, carbon monoxide) are of key significance in our area. Of these three, ground-level ozone is of the greatest regulatory concern since levels are close to exceeding the EPA health standard. At high levels, pollutants can make breathing difficult and can damage our hearts and lungs. In Pima County, motor vehicle emissions are the major man-made source of air pollution.

Pima Association of Governments (PAG) is the lead air quality planning agency for the Tucson region. This report is developed annually to educate the public on air quality trends.

COUNTY AIR QUALITY MONITORING AND TRENDS

The Pima County Department of Environmental Quality (PDEQ) monitors the levels of pollutants in the air throughout the region. The air pollution monitoring data shown were provided by PDEQ and represent information from select monitors around the County.

The greenhouse gas data are taken from the PAG Regional Greenhouse Gas Inventory (2017).
Ozone levels hover near health standard.

Ozone is not directly emitted from vehicles, paints and industrial sources but is formed when the chemicals released from these sources combine to form ozone in sunny, hot conditions. Ozone levels tend to be higher in our natural areas, like Saguaro National Park. Over the past 15 years, County ozone levels have hovered near the EPA’s health standard. The EPA issued a lower ozone standard (70ppb) in 2015. Simple actions like refueling during summer evenings, keeping your car properly maintained, and carpooling, taking the bus, biking or walking can help keep our air healthy.

For more information on how to keep our air clean, visit http:\www.PimaCleanAir.com.
Carbon monoxide levels continue to drop.

PIMA COUNTY CARBON MONOXIDE CONCENTRATIONS
2008-2015

PIMA COUNTY CARBON MONOXIDE (CO) TRENDS
In the last 30 years, stricter federal regulations on tailpipe emissions and fuels, and mandatory pollution control equipment on vehicles are responsible for a sharp decline in CO emissions. Although CO levels are well below federal standards, driving less, combining errands and limiting idling can further reduce CO levels as well as ozone precursors and particulates.
Particulate matter can affect breathing and respiration, cause lung damage and possibly cause premature death. Children, the elderly and people with heart or lung disease are especially at risk.

There are two types of particulate matter that affect health: Coarse Particulate Matter (PM$_{10}$) and Fine Particulate Matter (PM$_{2.5}$). The number indicates the size of the particle in microns. Recent research shows that the smaller particles pose a greater threat than the larger particles because they can travel deep within the lungs. These particles can be made up of hundreds of different chemicals and are emitted from construction sites, unpaved roads, agricultural and vacant fields, smokestacks, dust or fires.

Particulate levels are generally within a healthy range, but strong winds can easily cause the concentration to rise to unhealthy levels. Everyday habits such as staying on paved roads and existing trails, limiting wood-burning fires and choosing manual tools for landscape maintenance can help keep particulate levels down.
Recent greenhouse gas emission trends show a decline.

**EASTERN PIMA COUNTY GREENHOUSE GAS EMISSIONS 2012-2014**

Over the past two years, total regional greenhouse gas emissions dropped by 5 percent. Reductions were observed in energy use, transportation and waste emissions. Electricity and onroad vehicle use continue to be the major sources of regional GHG emissions.

Lowering our electricity and water use in addition to reducing travel can decrease GHG emissions and make our environment healthier.

Data source: