Air Quality Update
Valley Metro
April 25, 2018

Timothy Franquist, Air Quality Director
Our Mission

To protect and enhance public health and the environment by ensuring that ambient air is healthy to breathe, visibility in national parks and forests is pristine, and air quality does not negatively impact environmental systems. AQD accomplishes that mission by controlling current and future sources of air pollution.

Percentage Change from 1990

Sources
Gross Domestic Product for Arizona: U.S. Bureau of Economic Analysis
Vehicle Miles Traveled in Arizona: Arizona Department of Transportation
Population of Arizona: U.S. Census Bureau
Energy Consumption in Arizona: U.S. Energy Information Administration
National Emissions Inventory for Arizona: U.S. Environmental Protection Agency
Air Quality Metric

% Population Breathing Air Meeting Federal Standards

- April '17: 90.4%
- May '17: 95.2%
- Jun '17: 99.0%
- Jul '17: 99.9%
- Aug '17: 99.4%
- Sep '17: 98.5%
- Oct '17: 98.8%
- Nov '17: 98.5%
- Dec '17: 99.8%
- Jan '18: 99.8%
- Feb '18: 100.0%
- Mar '18: 100.0%

Chart generated on April 3, 2018.
National Ambient Air Quality Standards

Ozone
(NO<sub>x</sub> & VOC)

Nitrogen dioxide

Sulfur dioxide

Carbon monoxide

Lead

Particulate Matter
(PM10 & PM2.5)
Health Effects of Ozone and Particulate Matter

Source: http://www.lung.org/our-initiatives/healthy-air/sota/health-risks/
Ozone NAA - Industry & Public Health Costs

Annual Ozone Nonattainment Costs – Maricopa County

- Industry & Commercial: $250,000,000
- Public Health: $50,000,000

Sources:
Option A: Proposal to keep 2008 Maricopa-Pinal Nonattainment Area

EPA Proposed Ozone Nonattainment Area
EPA Proposed Yuma Nonattainment Area

Legend

O3 Monitors (ppm)
F2015
0.075000 - 0.076999

2015 Proposed Yuma NAA
Tribal Land
Preliminary PM10 Exceedance Analysis

Area currently at or exceeding PM10 Federal health-based standard*

Area currently approaching PM10 Federal health-based standard*

*May include Exceptional Events
Community-based Effort & Partnership
**EV Counter Measures**

- **Purchase Cost**
  - Electric: $30,000
  - Gasoline: $25,000

- **Life Cycle Cost**
  - Electric: $40,000
  - Gasoline: $35,000

- **Life-time Impact to Air Quality**
  - EV (tons pollution): 0
  - Gasoline (tons pollution): 400

What Can We Do to Help Air Quality?
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