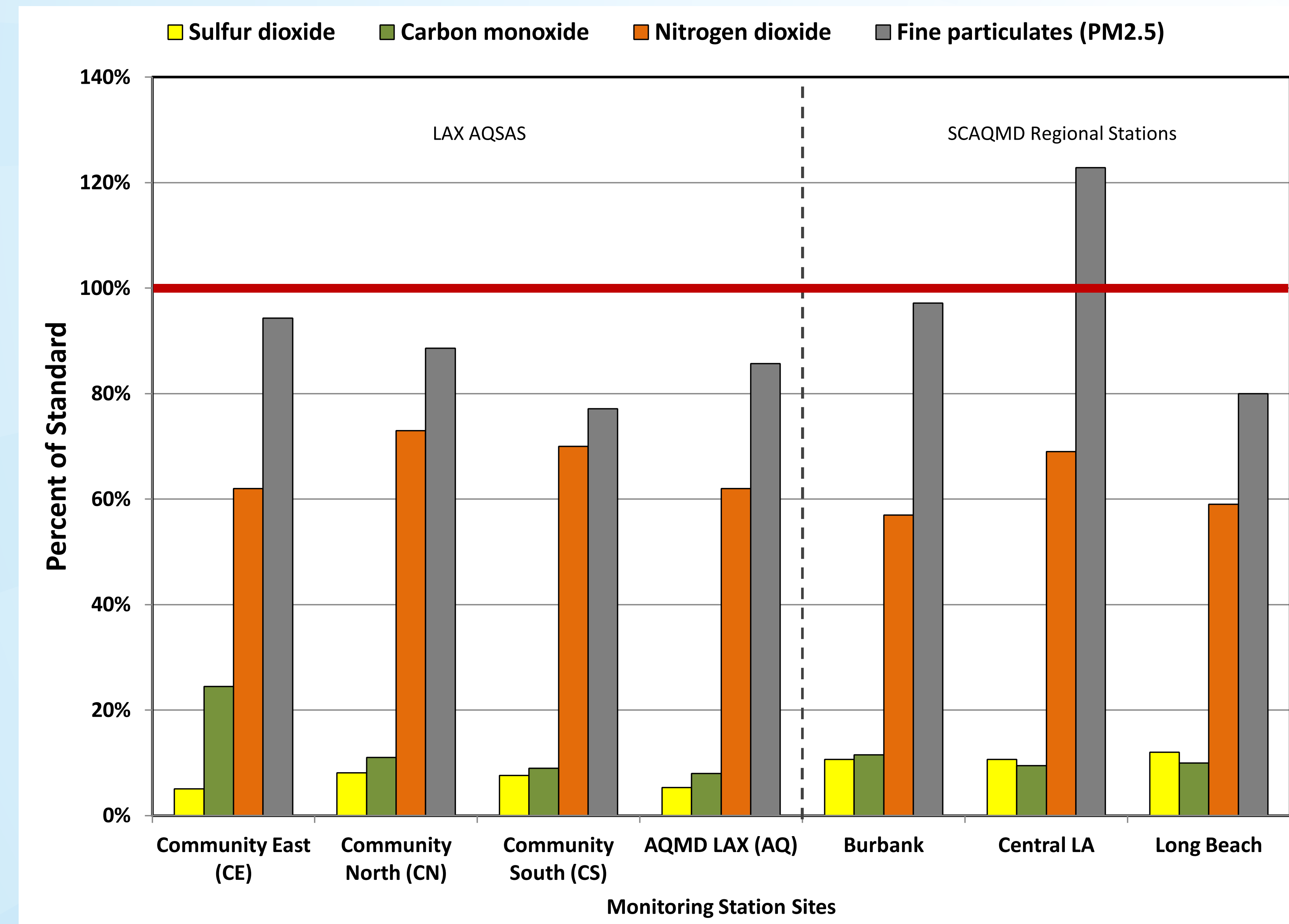


Key Findings & Conclusions



Los Angeles
World Airports

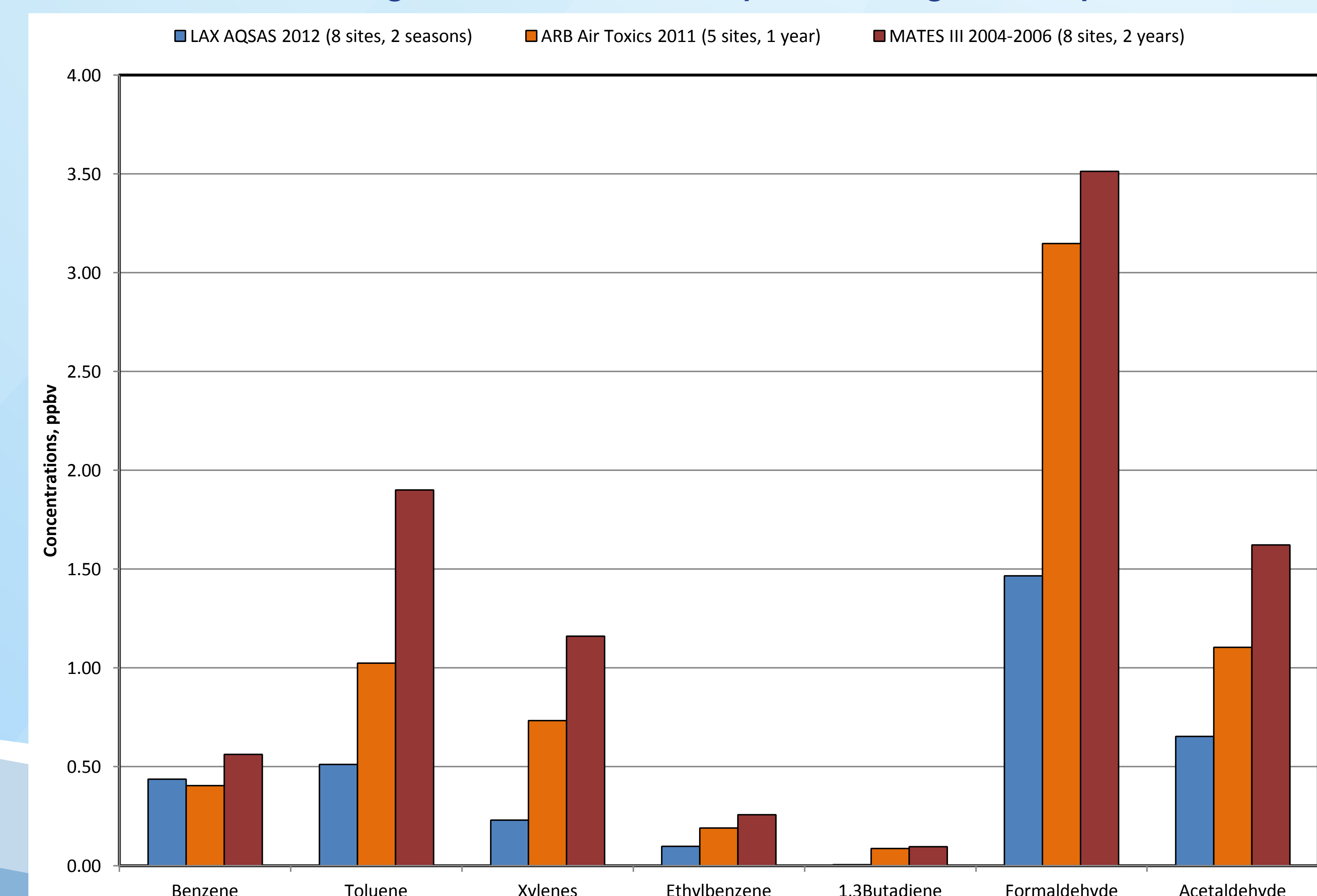
✓ All major pollutants were below National Ambient Air Quality Standards & California Ambient Air Quality Standards



NOTE: The generally lower pollutant concentrations in the LAX area can be attributed to its coastal location and the typical daytime sea breeze that helps to disperse local emissions.

✓ Air toxics are comparable or lower than elsewhere in the South Coast Air Basin (SoCAB)

Period Average Concentrations of Key Volatile Organic Compound



SoCAB includes all of Orange County and the non-desert regions of LA County, Riverside County and San Bernardino County.

✓ Air pollutant concentrations show sharp decreases as distance from the source of emissions increases.

NOTE: The concentrations of most measured pollutants were generally higher east of LAX compared to monitoring locations north or south of the airport. This is due, in part, to the predominant wind direction at LAX being from west to east.

NOTE: The contributions of airport-related emissions can vary by hour of the day, day of the week, and by season. Factors such as airport activity levels, wind direction, wind speed, ambient temperature, and other meteorological parameters, affect the contribution of airport-related emissions to local ambient air quality.

✓ Main sources of Oxides of Nitrogen (NOx), Carbon Monoxide (CO), and Black Carbon (BC) in the Study Area were motor vehicles in local traffic near the I-105 and I-405 freeways.

✓ 90% of the ambient Particulate Matter (PM) concentration in the Study Area is from non-airport related sources and regional background including secondary aerosols

Non-airport related sources include major off-airport stationary sources such as refinery and power plant facilities, motor vehicle travel on nearby roadways and freeways that is not attributed to the airport, marine vessels off-shore, off-road equipment, and other such sources beyond the airport boundary.

Secondary aerosols are particles that form in the atmosphere from other compounds such as nitrates, sulfates, or large organic compounds and are not emitted directly from a source.

✓ Main source areas for Sulfur Dioxide (SO2) are around the Central Terminal Area (CTA), and the North and South Airfields where aircraft operations occur.

Sulfur is a component of jet fuel.

✓ Based on data analysis from first season sampling, a supplemental study was conducted to further investigate Ultrafines (UFP) sources. The following was determined:

- ◆ Larger UFP particles indicated an association with vehicle emissions.
- ◆ Smaller UFP particles indicated an association with jet exhaust and possibly secondary particles.

Ultrafines (UFP) Ultrafines (UFP) is particulate matter with an aerodynamic diameter of less than 0.1 micron. This is a subset of Fine Particulate Matter but does not have a separate air quality standard.