

## PUBLIC AGENCY POLICY FOR CONSTRUCTION EQUIPMENT

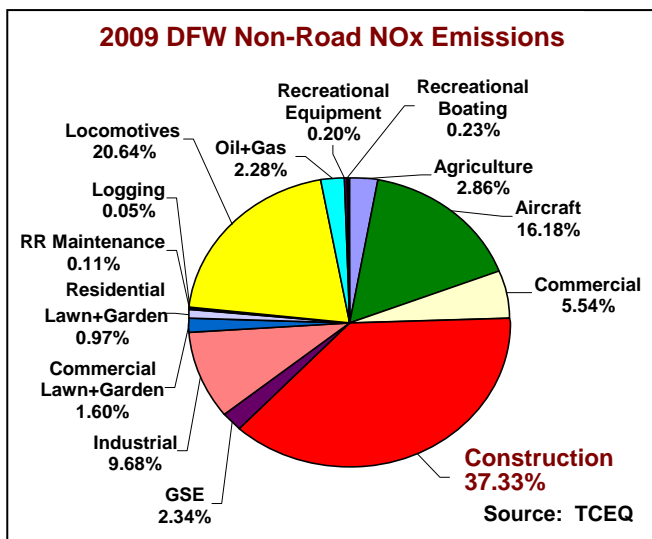
### Why Construction Equipment?

**Nine counties in the North Central Texas region have been designated by the Environmental Protection Agency (EPA) as nonattainment for the pollutant ozone** under the National Ambient Air Quality Standards, or NAAQS. The NAAQS is the maximum allowable concentration of a pollutant and is determined largely by the impact of that pollutant concentration on human health. The current NAAQS for ozone designates 85 parts per billion (ppb) as the maximum allowable concentration over an eight-hour period.

Ozone precursors are pollutants that react in the presence of sunlight and heat to form ground-level ozone. The two primary ozone precursors are oxides of nitrogen (NOx) and volatile organic compounds (VOCs). In North Central Texas, ozone formation is more highly impacted by the level of NOx in the atmosphere; thus, **strategies designed to reduce ozone formation and improve air quality often focus on reducing NOx emissions.**

**Emissions of NOx from construction equipment in the North Central Texas region comprise approximately 40 tons per day, or 10 percent, of all North Central Texas NOx emissions.**

Construction emissions are the single largest source of all non-road mobile emissions at approximately 37 percent (followed by locomotives and aircraft at approximately 20 percent and 16 percent, respectively). Therefore, **strategies that reduce emissions from construction equipment have the potential to make a great impact on the region's overall air quality.**



Furthermore, construction equipment typically is in use for decades and has a slow rate of fleet turnover. Thus, old technology lasts well beyond the advent of new regulations unless programs are created specifically to accelerate the influx of advanced equipment. The EPA is moving toward stronger regulations for non-road engines in the next five years; thus a policy to encourage fleet turnover and the phase-in of cleaner technologies in the existing fleet is appropriate and timely.

### Why Public Agencies?

**Public agencies exist to serve the community as a whole and thus have a responsibility to protect citizens' quality of life.** They also have an opportunity to be a standard-bearer for other sectors and can expedite integration of the newest, cleanest technologies to the mainstream market. Because public sector agencies also have access to federal funding programs, they may be able to leverage such financial resources to partially offset the costs of upgrading existing equipment or purchasing new equipment.



**Public agencies are responsible for a large portion of all construction projects** (approximately 23 percent nationally). Due to the magnitude of public agency-funded construction projects, a policy adopted by these entities has a large potential impact.