

Overview of Air Pollution

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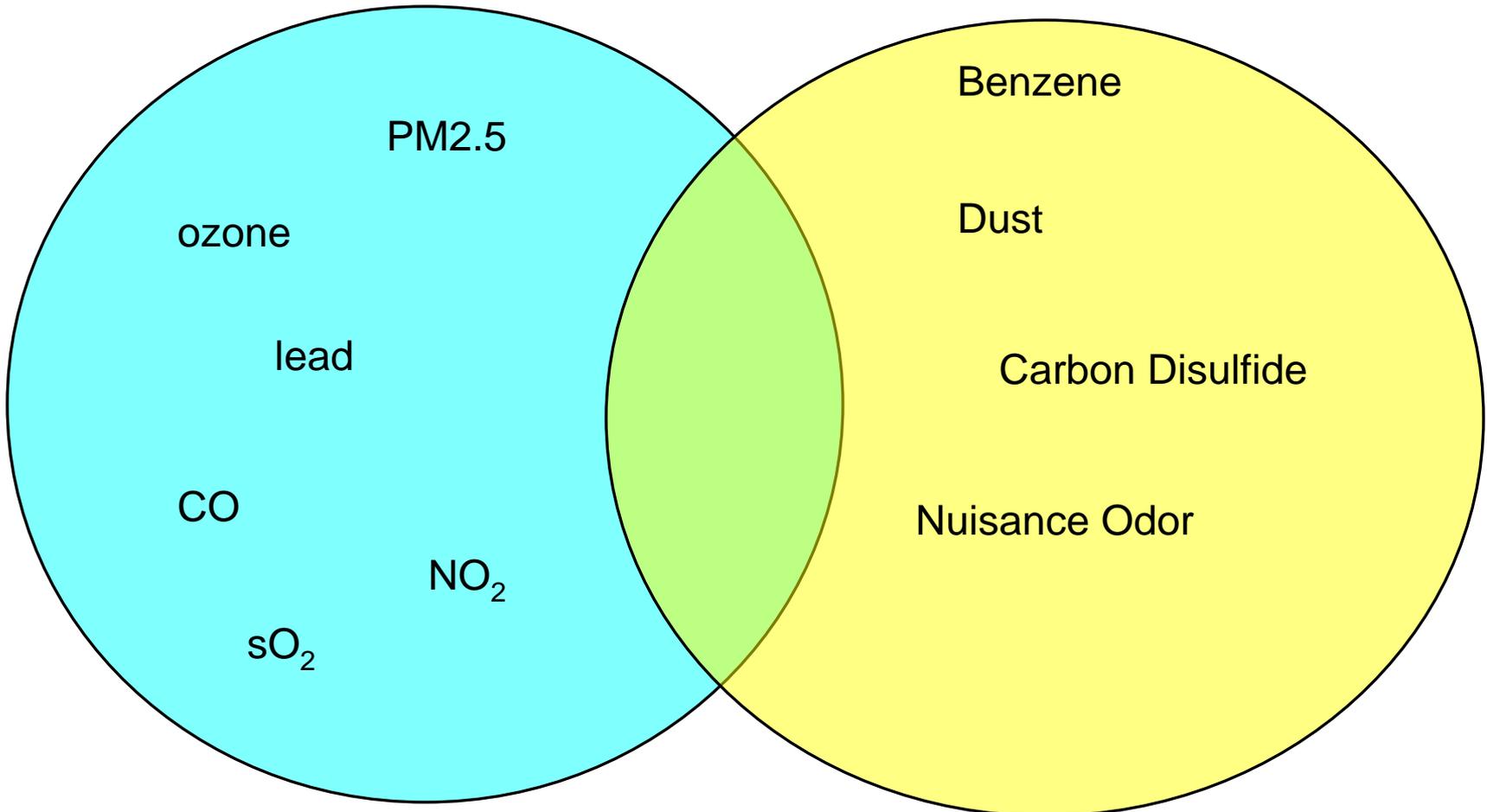
What is Air Pollution?

- The presence of substances that interfere with human health or welfare, or produce harmful environmental effects
 - Chemicals
 - Particulate matter
 - Biological materials
- The Federal Clean Air Act Amendments (1990)
 - State Delegation

Federal Clean Air Act

NAAQS

Air Toxics



National Ambient Air Quality Standards

- Set standards for pollutants considered harmful to public health and the environment.
 - ***Primary standards*** protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.
 - ***Secondary standards*** protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

National Ambient Air Quality Standards

Standards set for six principal pollutants

- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- **Ozone**
- Particulate Matter
 - 10um
 - 2.5um
- Sulfur Dioxide

National Ambient Air Quality Standards

Dallas/Fort Worth MSA

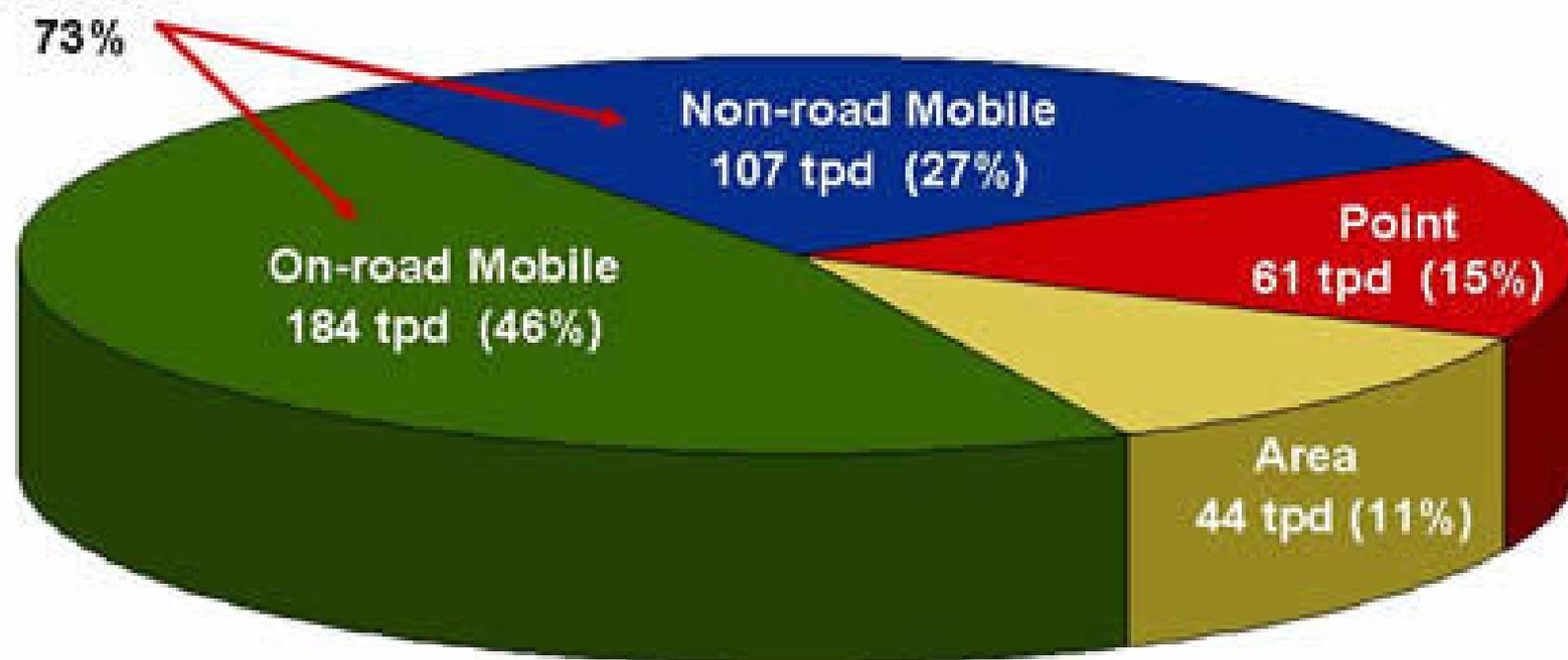
- In non-attainment for Ozone Standard
 - 0.085 ppm (*8-hour concentration*)
- Sources of Ozone
 - None
 - No one emits ozone as a waste or by product
 - Atmospheric Chemical Reaction
 - Oxides of Nitrogen (NO_x)
 - Limiting factor
 - Volatile Organic Chemicals (VOC)
 - Non-methane
 - Background concentrations enough to support reaction

STATE OF AIR QUALITY IN NORTH TEXAS

2009 Nitrogen Oxide (NO_x) Emission Inventory

Source Category Estimates

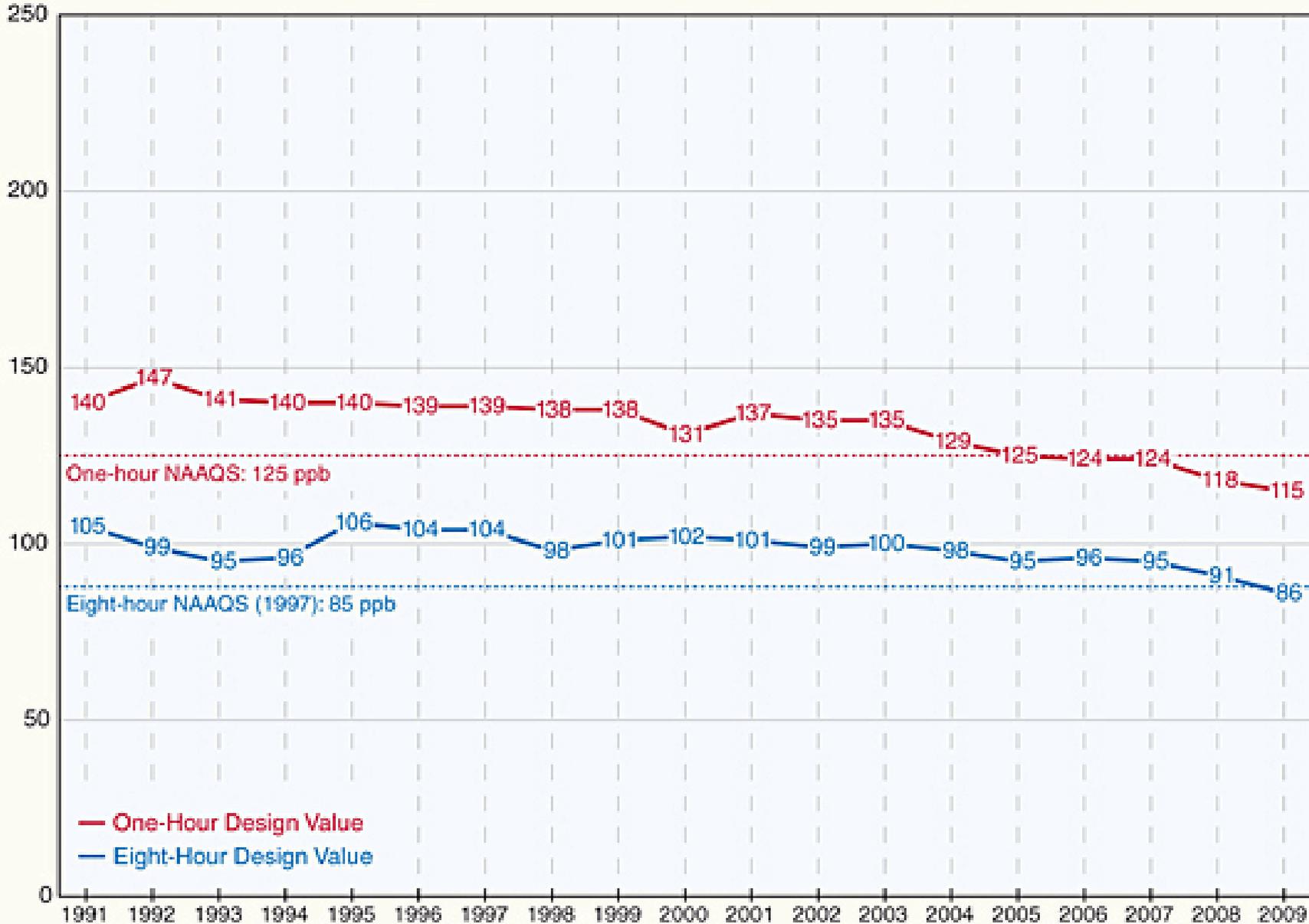
Total Mobile Sources
73%



Total NO_x = 396 Tons Per Day (tpd)

Ozone Design Values for the DFW Area

Design Value
(ppb)



2009 data is as of October 6, 2009, and is subject to change.

Toxicological Evaluations

- Ambient Air Monitoring Data conducted annually by TCEQ Toxicologist
 - Permanent Monitor at Meacham Airport
 - Automated Gas Chromatograph
 - Canister samples
 - Particulate monitors

Toxicological Evaluations

- 2008 Health Effects Review
 - Completed by TCEQ
 - Concentrations below both short and long term, health-based comparison values and odor thresholds
 - No adverse effects anticipated

