

Idling Reduction

KC Lunch and Learn

Speakers

Jennifer Logan (Johnson County Environmental Dept)

Mike Boothe (Johnson County Environmental Dept)

Moderator

Ryan Hamel (Pollution Prevention Institute)



Webcast logistics

- You will not be able to speak during the seminar
- Can't hear? Use your phone. Click on the phone button and dial the number/pin number. Mute your line.
- Ask questions by typing them into the long text box at the bottom of the screen and pressing enter.
- Slides will advance automatically.
- Questions? Call the help-desk at 785-532-7722
- Presentation will be archived, survey sent via email

K-State's Pollution Prevention Institute (PPI)

PPI services

- Multimedia (air, waste, water)
- Environmental compliance assistance
- Free to small- and medium- sized businesses
- Confidential
- Staff located throughout the state



Kansas City Lunch and Learns funded by the EPA through a Pollution Prevention grant

How it all fits...

Kansas State University

- **Engineering Extension**

- **Pollution Prevention Institute (PPI)**

- Small Business Environmental Assistance Program (SBEAP)

Contact Information:

Web site: www.sbeap.org

Hotline: 1-800-578-8898

Email: sbeap@ksu.edu, rhamel@ksu.edu (Ryan Hamel)

IDLING

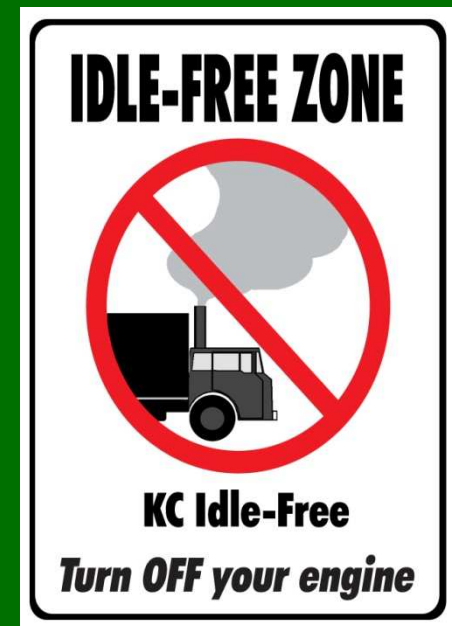
Why and Why Not?

Lunch and Learn

August 2008

Jennifer Logan, Mike Boothe, 913-715-6900

Johnson County Environmental Department



Thanks to the Kansas Department of Health and Environment for Supporting this Activity

Fun Facts About Idling

- Idling burns about 1 gal/hour of gasoline.
- If you idle >30 seconds, turn your engine off, or you're wasting fuel.
- During winter, passenger vehicles need to idle <30 seconds before driving.
- Commercial freight trucks and rail consume over 55 billion gallons of fuel today, and travel over 200 billion miles
- Diesel and gasoline exhausts contain > 40 hazardous pollutants. Idling your vehicle w/ the a/c on can increase emissions by 13 %.

Different Kinds of Idling

This is not the kind of idling we will talk about today.

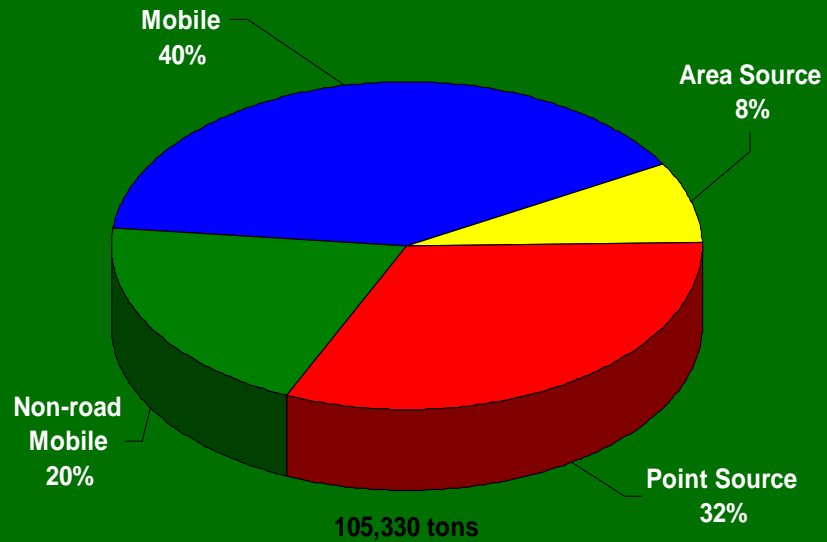


Vehicles/Equipment

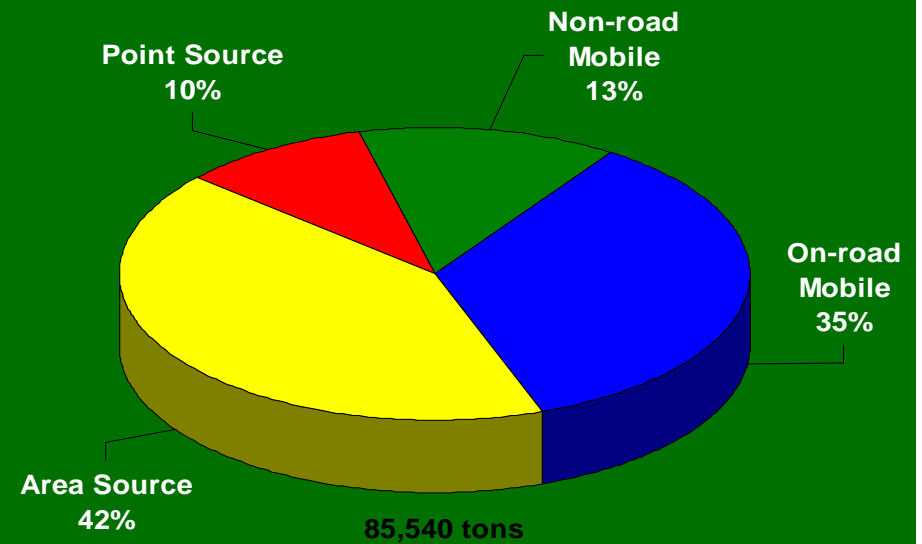
- Passenger Vehicles
- Emergency Vehicles
- Fleet Vehicles (Delivery, Corporate)
- Large Diesel Vehicles
- Locomotives



Mobile Source Emission by Sector - 2002



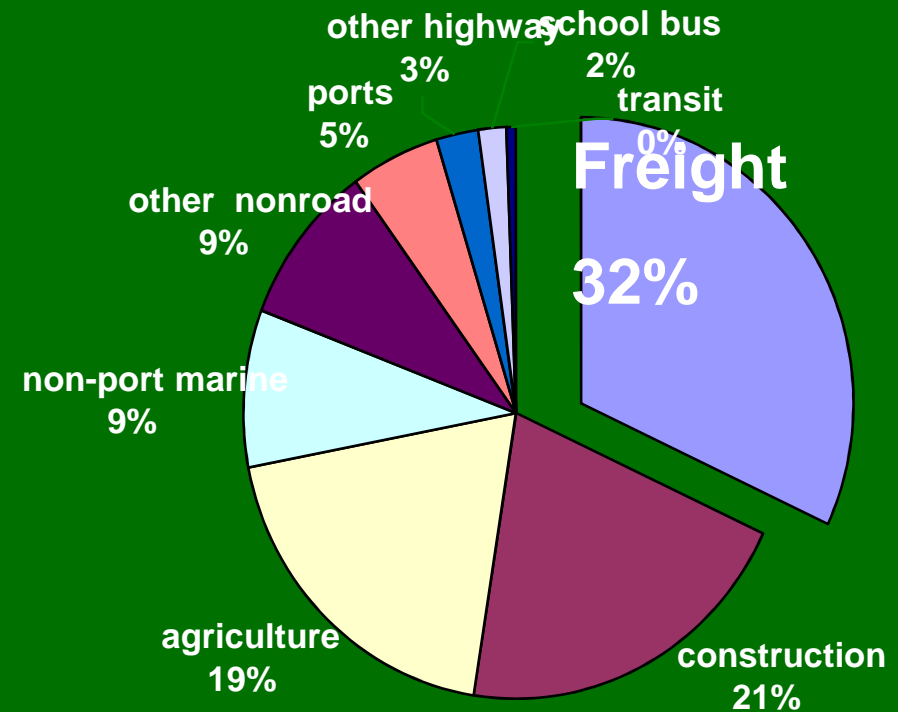
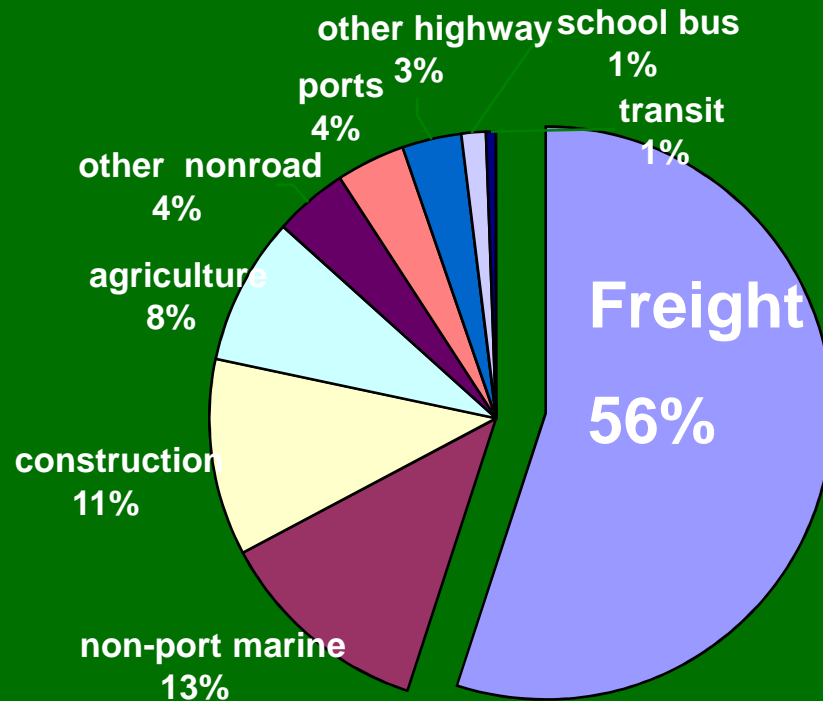
VOC Emissions



Mobile Source Emissions - Diesel (2004)

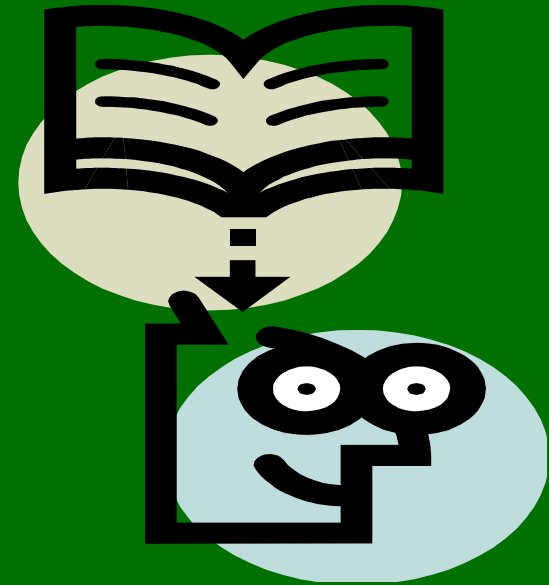
NO_x
(6.3 million tons)

PM 2.5
(305,000 tons)



Why Do We Care?

- Health
- Quality of Life
- Wasteful – Resources & Costs Money
- Government Regulations



Health



- Individuals-one out of 10 children in Johnson County has asthma.
- Diesel exhaust is highly visible.
- Worker Productivity-employees are affected with asthma and other respiratory illness that cause absenteeism

Wasteful



- Idling gets zero miles/gallon/hour
- Pollution emitted
- Green House Gases-the commercial freight and rail industry alone produce more than 350 million metric tons of CO₂.
- Increases dependency on foreign oil-over 65% of our country's oil dependency come from transportation
- Decreases natural resources

Transportation & Climate Change

US Oil Consumption



Personal Vehicles 40%

Other Transportation 27%

Other Sectors 33%

**Transportation accounts for about:
2/3 of oil consumption and
1/3 of total CO2 emissions.**

US Carbon Emissions

**Includes all fuel sources*



Other Sectors 68%



Other Transportation 13%



Personal Vehicles 19%

Quality of Life

- Businesses
- Highways/Streets
- Schools
- Shopping Areas
- Drive-Thru's
- Transportation Hubs
 - Airports, Train Stations, Bus Stops, Rest Stops, Warehouses



Government Regulations

- Ozone Issues-KC area violated EPA standard in 2007. Over 50% of KC's ozone emissions come from fuel combustion.
- Green House Gases-CO₂ is not currently regulated EPA is stepping up it's want for measurements
- Idling Regulations-both Missouri & Kansas should have final rules by early 2009.



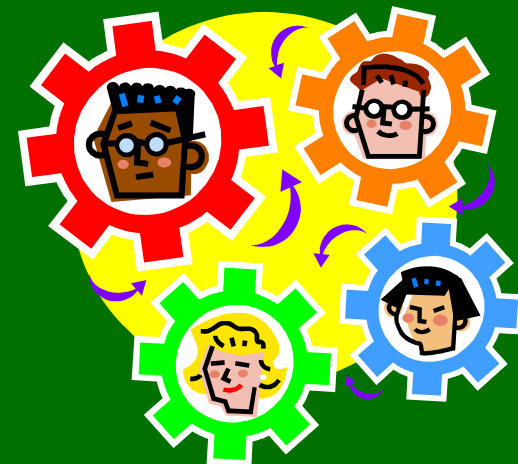
How To Change

- Develop Policies-Coca Cola, UPS
- Change Equipment-
Deffenbaugh
- Retrofit Equipment-
School Buses in Metro,
City of Olathe
- Think Outside the Box



Develop Policies

- Review Operations/Inventory/Understand What You Have
- Listen to Drivers and Stakeholders to Understand what is Needed
- Signage
- Communicate!
Communicate!
- Review



Signage



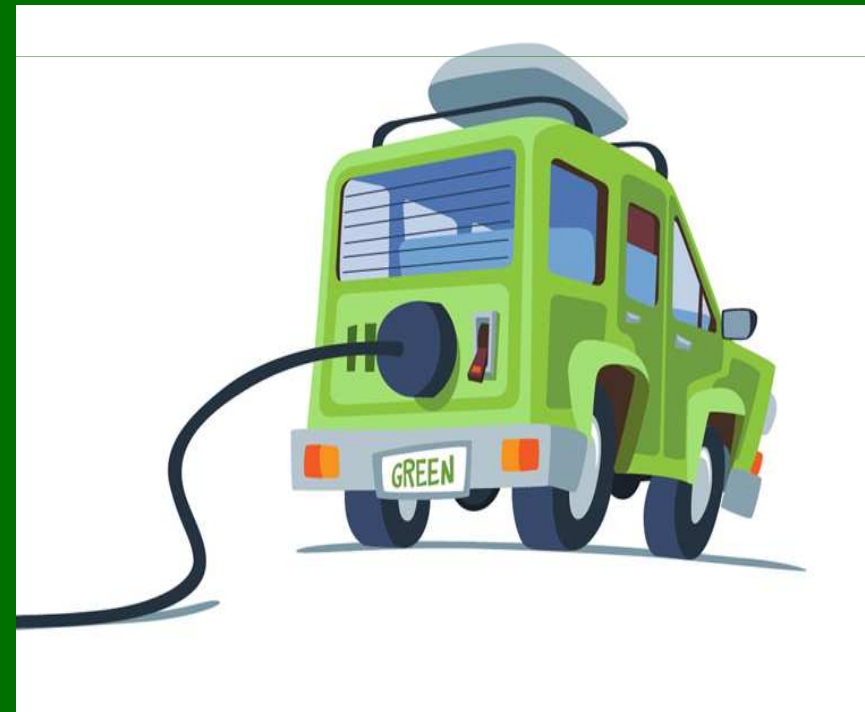
Change Equipment

- Alternatives-Examine What Is Necessary
- Alternative Fuels
- Own/Lease
- Smaller?
- Consider Options for New Equipment



Retrofit Equipment

- Auxillary Power Units
- Automatic Shut-Offs
- Diesel Oxidation Catalysts
- Power Units
- Plug-Ins
- Electrification



Think Outside the Box

- Creature Comforts
- Routing Upgrades
- Parking for Drivers
- Community Support
- Communicate with Vendors



Community Support

Girl Scout Troop #164



What is Happening Now

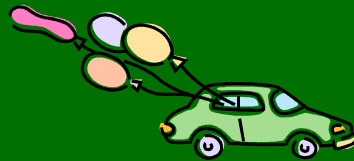
- Idling Rules
- Changes in Manufacturing
- Low-Sulfur Diesel/Biodiesel
- Available Funding
 - Diesel Emissions Reduction Act
 - Congestion Mitigation Air Quality
- Blue Skyways
- Smart Ways
- Sustainable Skylines
- DOE's Clean Cities Program



Questions??????????

Contacts:

- Jennifer Logan, jennifer.logan@jocogov.org
- Mike Boothe, michael.boothe@jocogov.org



- KSU SBEAP, <http://www.sbeap.org/>
- Diesel Technology Forum, www.dieselforum.com
- Smartway, epa.gov/smartway/idling.htm
- BlueSkyways, <http://www.blueskyways.org/>
- Clean Cities, www.eere.energy.gov/cleancities
- EPA, www.epa.gov/otaq/