

LA Times Headline:

Cancer risk from toxic air drops by 17% in Southland

An AQMD report cautions that many areas still have dangerously high levels of pollution. Diesel exhaust is the largest problem.

By Janet Wilson

Los Angeles Times Staff Writer, January 5, 2008

“..Cancer risk from Southern California's air pollution has declined 17% over the last seven years but remains dangerously high across the region, particularly near ports and rail yards, along truck-laden freeways and in parts of the Inland Empire, according to a study released by regional air regulators Friday. ..

..South Coast Air Quality Management District officials attributed the decline to tough regulations on dry-cleaners and industry; grants to fund cleaner technologies and fuels; and emission-reduction programs at the ports of Los Angeles and Long Beach. ..

..Diesel exhaust from ships, trains and trucks remains the single largest problem, the analysis found. ..

..’Diesel exhaust is the 900-pound gorilla,’ said board member Dennis Yates, mayor of Chino. ..”

emphasis added

air quality urban myths

- Cars create most of our air pollution.
- Transit, as actually executed in Utah, is an effective air pollution strategy.
- Scolding the driving public constitutes good policy.

half truths and misinformation

Utah DAQ Website – Choose Clean Air

Ozone

- Ground level ozone (sometimes called smog) is formed from **automobile**, industrial, and other pollutions by chemical reactions when there is bright sunshine with high temperatures. The Utah Department of Environmental Quality calls an “Air Action” when we’re forecasting exceptionally high concentrations of ground-level ozone. **Air pollution from vehicles accounts for more than half of the air pollution along the Wasatch Front.** By simply parking your vehicle for one day, the **average driver** would keep just over ¼ pound of pollution out of the air. While that may not seem like much, if **every driver**⁽¹⁾ along the Wasatch Front would park his/her vehicle for one day per week, emissions would decrease by 125 tons that week^(2,3).

Utah DAQ Website - Summer Driving

- **Over half of all of our air pollution** comes from **vehicle** emissions.

Deseret News June 16th 2007

- Quoting a DAQ air standards professional and referring to ozone (photochemical) pollution. **“The largest source is automobiles..”**

Salt Lake Tribune Editorial, July 31st 2007

- “...Motorists contribute mightily to air pollution in Utah, **producing about half of all emissions. Automobile exhaust is a principal ingredient of ozone**, a chemical stew of man-made fumes that cooks under a hot summer sun, posing a variety of health risks. And it's **a prime source for the fine-particle pollution...** Officials at the state Department of Environmental Quality's Division of Air Quality are trying to find a dedicated funding stream...”

Notes:

1. **Every** driver parks one day per week = approximately 14.3% VMT reduction. Give me a break!
2. Only if every commercial, freight and public safety driver parks his or her vehicle one day per week.
3. Actually since the pollutants, other than CO, come disproportionately from heavy duty vehicles, the real requirement would be that perhaps every commercial, freight and public safety driver parks two or three days a week.

National Passenger Vehicle Contributions to Criteria Air Pollutant Inventories⁽¹⁾

POLLUTANT	NO _x	VOC	PM ₁₀	PM _{2.5}	CO
All Highway Vehicles. % of Total Inventory	34.9%	27.5%	0.9%	2.2%	55.5%

Gasoline Fuel Light Vehicle Contributions to Criteria Air Pollutant Inventories (Calculated)

POLLUTANT	NO _x	VOC	PM ₁₀	PM _{2.5}	CO
Gasoline Fuel Light Vehicle, MC & Lt Truck % of Highway Inventory ⁽²⁾	48.4%	91.1%	40.2%	28.8%	94.2%
Gasoline Fuel Light Vehicle % of Total Inventory	16.9%	25.1%	0.4%	0.6%	52.3%

Utah Emissions Inventory by Source Category⁽³⁾

POLLUTANT	NO _x	VOC	PM ₁₀	PM _{2.5}	CO
On-road Mobile	44.0%	4.0%	36.0%	20.0%	56.0%

Sources and Notes:

1. Transportation Energy Databook: Edition 25, US Dept of Energy, Oak Ridge National Laboratory, 2005, ORNL-6974 Ed 25 of ORNL-5198 p 219-226 pdf ver
2. Cars, Motorcycles, Light Trucks and SUVs - collectively passenger vehicles. However this category also includes light trucks in commercial service.
3. Utah DAQ Annual Report 2006 Figure 12 DAQ Annual Report 2006 Figure 12

US Heavy Vehicle Contribution to Criteria Air Pollutant Inventories(1)

POLLUTANT	NO _x	VOC	PM ₁₀	PM _{2.5}	CO
Heavy Duty Gasoline Fuel Vehicle % of Highway Inventory	5.5%	4.4%	4.4%	4.7%	4.1%
Heavy Duty Diesel Fuel Vehicle % of Highway Inventory	45.9%	4.4%	54.4%	65.1%	1.6%
Heavy Duty Vehicle (G+D) % of Highway Inventory	51.4%	8.8%	58.8%	69.8%	5.7%
Heavy Duty (G+D) % of Total Inventory	17.9%	2.4%	0.5%	1.5%	3.2%

Source:

Transportation Energy Databook: Edition 25, US Dept of Energy, Oak Ridge National Laboratory, 2005, ORNL-6974 Ed 25 of ORNL-5198 p 219-226 pdf version

mass transit non-solution

- Mass transit in Utah does not improve air quality by any objective or statistically significant measure.
- The largest mass transit programs in Utah, (UTA bus, Trax expansions and FrontRunner), by statistically significant and objective measures, actually damage air quality.

real solutions

- **Clean Diesel Fuel**
 - Now universally required
 - Eliminates 95% of *all* diesel SO₂ emissions
 - Significantly reduces PM_{2.5} formation
- **EPA 2007 Heavy Duty On-Highway and Heavy Duty Non-Highway Standards**
 - Reduce HDD NO_x by approximately 76%
 - Significantly reduce HDD PM₁₀ and PM_{2.5} emissions
- **EPA Tier 2 Emissions Standards**
 - Significantly reduce automobile NO_x
 - Significantly reduce automobile CO
 - Significantly reduce large passenger vehicle emissions

real solutions (cont)

- **Focus on Gross Emitters**
- **UTA Van Pool**
- **Gasoline Market Price**
- **Market Penetration of PZEV Automobiles**
 - 48 MPG Prius and other Hybrids
 - 120 MPG Chevy Volt and other Plug-in Hybrids
 - Significantly reduce large passenger vehicle emissions
- **Advanced Traffic Management**
 - UDOT an apparent leader therein

So, where's the harm?

- **By promulgating half-truths and misinformation DAQ misleads the public and the media.**
- **Eventually, YOUR institutional credibility will suffer.**
- **By focusing on non-solutions:**
 - **The public eventually senses the reality and simply stops listening.**
 - **Opportunities for real solutions will be missed.**
 - **Expensive, ineffective choices are made and public funds wasted.**