

# LEAD EMISSIONS AT AURORA STATE AIRPORT

Most citizens don't know that aviation fuel is a major source of lead pollution, and while removed from automobile fuel in 1995, is still allowed in aviation gas (avgas). In fact, avgas is now the largest source of lead in the air in the US (about 50% of lead emissions)(2004 National Emissions Inventory, US EPA, 2010).

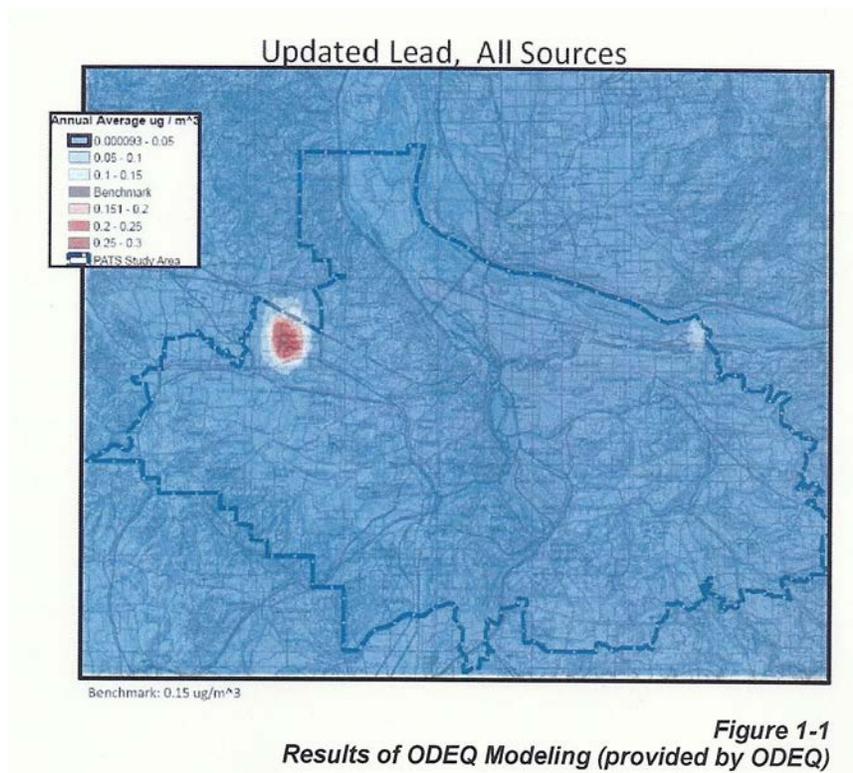
Aurora State Airport is Oregon's third busiest airport, and among the airports in Oregon with the fourth highest levels of lead emissions ( over 400 lbs/year).

Hillsboro	Washington County	0.6 tons/year
Portland International	Multnomah County	0.4 tons/year
Corvallis Municipal	Benton County	0.3 tons/year
Eugene Mahlon Sweet Field	Lane County	0.2 tons/year
Aurora State Airport	Marion County	0.2 tons/year

Source: October 2008 report by the U.S. Environmental Protection Agency, *Lead Emissions from the Use of Leaded Aviation Gasoline in the United States - Technical Support Document. (EPA20-R-08-020). Assessment and Standards Division Office of Transportation and Air Quality,*  
[http://www.epa.gov/ttn/chief/net/tsd\\_avgas\\_lead\\_inventory\\_2002.pdf](http://www.epa.gov/ttn/chief/net/tsd_avgas_lead_inventory_2002.pdf)

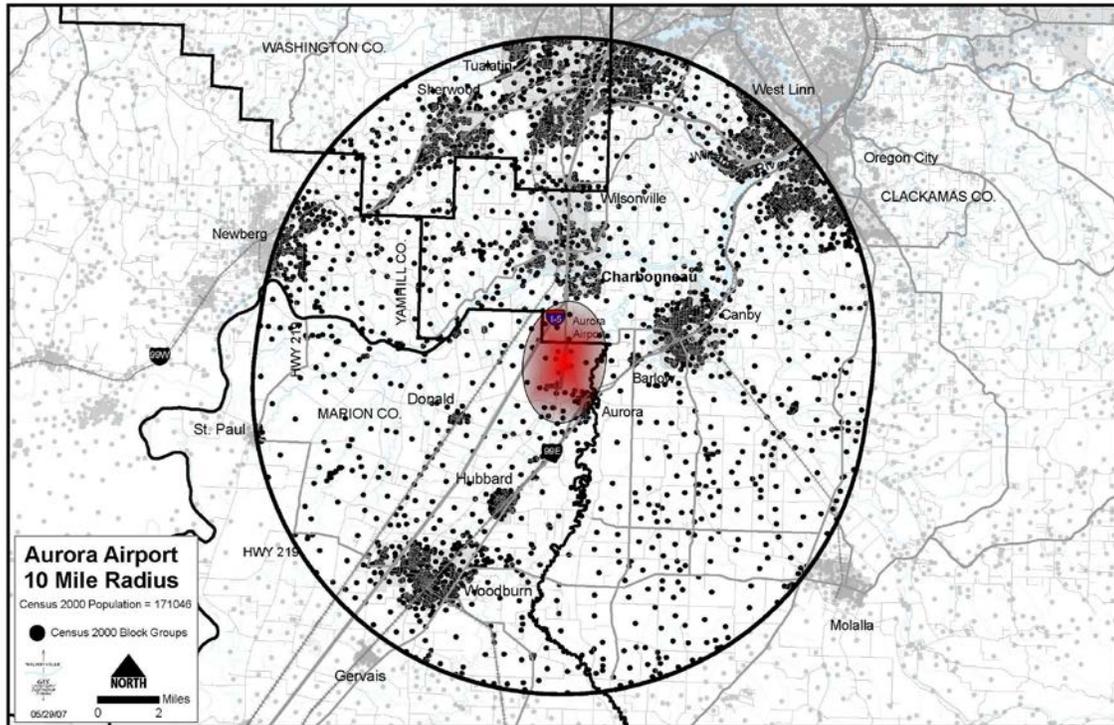
## Dispersal of Lead Emissions at Hillsboro Airport

In 2010 Oregon Department of Environmental Quality (ODEQ) completed an inventory of lead emissions from airports in the state and using air dispersion modeling (the CALPUFF modeling system) illustrated the lead dispersion associated with lead from all sources at Hillsboro Airport (HIO).



## Dispersal of Lead Emissions at Aurora State Airport

Aurora State Airport has only one runway vs. two at HIO. Both airports have helicopter operations in addition to general aviation aircraft. Weather patterns and terrain are similar. Extrapolating from the HIO lead emissions dispersion modeling to assess the corresponding scope of lead dispersal at Aurora shows:



*[This image is for illustrative purposes only, by assuming similar dynamics and variables at Aurora and HIO, and creating an equivalently sized dispersion area centered on the Aurora runway.]*

## Children Living Near Airports Have Higher Blood Lead Levels

In July of 2011 Miranda et al. published a study analyzing blood lead levels of children living around airports in six counties of North Carolina. They concluded, "living within 1000 m [2/3 mile] of an airport where aviation gasoline is used may have a significant effect on blood lead levels in children. Our results further suggest that the impacts of aviation gasoline are highest among those children living closest to the airport."

**According to the Centers for Disease Control (CDC), "no level of lead in a child's blood can be specified as safe." Oregon Dept. of Aviation is about to begin construction of an air traffic control tower at Aurora Airport, followed by runway extension in the future, with no environmental analysis. Both will increase the number of flight operations and the amount of lead emitted.**

**Contact Friends of French Prairie to help stop it!**

For additional information see: *Impacts of Lead in Aviation Gas* at [www.friendsoffrenchprairie.org](http://www.friendsoffrenchprairie.org)