

# A!ert

dvrpc | October 2015

*Alert is a monthly update on transportation and air quality planning activities in the Delaware Valley.*



## Health and Air Quality

### Recent Analysis from University of Chicago Quantifies Improvement to Life Expectancy Since Enactment of Clean Air Act

In September of 1970, the U.S. Congress passed a significant update to the Clean Air Act which was originally adopted in 1955. This update and subsequent amendments in 1977 and 1990 have significantly improved the quality of life and life expectancy of millions of Americans.

Recent analysis from Michael Greenstone, the Milton Friedman professor of economics at the University of Chicago, and head of the Energy Policy Institute, uses mortality rates in China along with historical fine particulate matter (PM<sub>2.5</sub>) data from American cities to calculate the life expectancy benefits of the Clean Air Act for American cities since 1970.

The analysis used mortality rates from China because since 1955, the Chinese government distributed free coal to the northern half of the country for heating fuel. The south of China did not receive the coal and subsequent differences in life expectancy between the two regions offer statistical insight to the impacts of PM<sub>2.5</sub> pollution on life expectancy.

The analysis finds that life expectancy in American cities improves with a corresponding decrease in PM<sub>2.5</sub> pollution. The analysis also found significant improvements in small U.S. cities that hosted polluting industries but had fewer environmental regulations than their big city counterparts. So while life expectancy for New Yorkers and residents of Chicago increased by an average of two years (based on statistical analysis of pollution exposure) since 1970, a child born in Steubenville, Ohio today can expect to live five years longer than one born in 1970.

When the analytical techniques is applied to China and India, the analysis shows that China can improve life expectancy by five years or more and India can improve life expectancy by three years if they improve air quality to meet current U.S. standards.

The author acknowledges that all of the emissions reductions are not attributable to the Clean Air Act. Other factors such as local regulations and the off-shoring of polluting industries have played a role in improving air quality across America, but he cites the Clean Air Act as the driving force of the improvements to American air quality.

For more information on the University of Chicago analysis on life expectancy due to air pollution regulations please visit:

[www.nytimes.com/2015/09/25/upshot/the-connection-between-cleaner-air-and-longer-lives.html](http://www.nytimes.com/2015/09/25/upshot/the-connection-between-cleaner-air-and-longer-lives.html)



## Save the Date

**Saturday,  
October 10, 2015**

### **Fourth Annual LaSalle University Community Health Fair**

**12:00 – 3:00 pm**

*Location of Event:*

*Shops at LaSalle  
1900 W. Olney Avenue  
Philadelphia, PA*

**Tuesday,  
October 20, 2015**

### **Transportation Alternatives Program Information**

**Session**

**2:00 pm**

*Location of Meeting:*

*DVRPC Conference Center  
8<sup>th</sup> Floor  
6<sup>th</sup> and Race Streets  
Philadelphia, PA*



## Air Quality Regulations

### U.S. EPA Claims that Volkswagen Tampered with Emissions Controls on 482,000 Diesel Vehicles Sold in America

On Friday, September 18, 2015, the Obama administration directed Volkswagen to recall nearly a half-million cars, saying the automaker illegally installed software in its diesel-powered cars to evade standards for reducing ground-level ozone pollution.

The Environmental Protection Agency (EPA) accused the German automaker of using software to detect when the car is undergoing its periodic state emissions testing. According to the EPA, the cars' full emissions control systems are only turned on during the emissions testing. During normal driving situations, the controls are turned off, allowing the cars to emit as much as 40 times the pollution as allowed under the Clean Air Act.

Agency officials issued the car company a notice of violation and said it had admitted to the use of a defeat device. The recall involves 4-cylinder Volkswagen and Audi vehicles from model years 2009-15. The software was designed to conceal the cars' emission of the pollutant nitrogen oxide, which contributes to the creation of ozone.

Experts in automotive technology said that disengaging the pollution controls on a diesel-fueled car can yield better performance, including increased torque and acceleration. "When the pollution controls are functioning on these vehicles, there's a trade-off between performance and emissions," said Drew Kodjak, executive director of the International Council on Clean Transportation.

It was Mr. Kodjak's group, in conducting research on diesel vehicles that first noticed the discrepancy between Volkswagen's emissions in testing laboratories and on the road. They brought the issue to the attention of the EPA, which conducted further tests on the cars, and ultimately discovered the use of the defeat device software.

Over the next year, EPA officials said, owners of the affected vehicles should expect to receive recall notices from the company, including information about how to get their cars repaired at no cost to them. The recall covers roughly 482,000 diesel passenger cars sold in the United States since 2009.

A Justice Department investigation could ultimately result in fines or penalties for the company. Under the terms of the Clean Air Act, the Justice Department could impose fines of as much as \$37,500 for each recalled vehicle, for a possible total penalty of up to \$18 billion. The notice of violation is part of a broader, more aggressive enforcement effort by federal regulators on the auto industry. Analysts and activists said it was intended to send a message to automakers that they would be harshly treated for compromising federal rules.

"This is several steps beyond the violations that we've seen from other auto companies," said Tyson Slocum, director of the energy program at Public Citizen, a consumer advocacy group. "They appear to have designed a system with the intention to mislead consumers and the government. If that's proven true, it's remarkable and outrageous. It would merit a heck of a lot more than just a recall and a fine. We would see criminal prosecution."

A spokeswoman for Volkswagen confirmed that the company had received the notice and said the automaker was cooperating with the investigation. She declined to comment further on the case.

For more information on EPA's enforcement action against Volkswagen, please visit: [www.epa.gov](http://www.epa.gov) and search "Clean Air Act".



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