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



Health and Air Quality

New Studies Reinforce Link between Childhood Asthma and Near-roadway Pollution

Research conducted by University of Southern California (USC) scientists, published in the September 2012 issue of the journal *Environmental Health Perspectives* reinforces the link between childhood asthma rates and proximity of residences to busy roadways. The researchers claim the findings should have implications for urban planning, especially when designing transit oriented and compact developments that may place residential areas near heavily travelled roads.

The USC researchers used epidemiological data from the USC's Children's Health Study, a long-term investigation on the effects of air pollution on children's health, air quality data from the US Environmental Protection Agency, air pollutant dispersion modeling, and area maps to estimate the incidence of childhood asthma caused by exposure to near roadway pollution in Los Angeles County.

The researchers used roadway classifications, data on Vehicle Miles Traveled (VMT), and average speeds to develop emissions rates and pollutant profiles for the freeways, highways, and major arterials in the county. Analysis of the data indicated that children living within 250 feet of a major roadway are at increased risk for developing asthma. Previous research and dispersion modeling indicate that near-road air pollutant concentrations were highest within 300 to 600 feet of the roadway.

In the article, the authors address the implications of their study's finding for anti-sprawl legislation and the promotion of compact development. State and local legislation, such as California's *Sustainable Communities and Climate Protection Act (2008)*, promote development patterns that reduce sprawl, enhance public transportation, and reduce VMT and the attendant air pollution. The researchers support these policies, as having positive environmental and health benefits, but note that the health impacts of exposure to near-road air pollution from transportation sources should be considered when designing projects and implementing these policies.

The study concludes that more research is needed to determine the optimal mix of policies to clean-up vehicle emissions, reduce sprawl, encourage walking and use of mass transit to reduce air pollution, VMT, and greenhouse gas emissions while reducing children's exposure to near roadway emissions.

To view the article *Near Roadway Pollution and Childhood Asthma: Implications for Developing "Win-Win" Compact Urban Development and Clean Vehicle Strategies*, please visit: <http://www.ehponline.org/>



Save the Date

**Monday,
October 15, 2012
Philadelphia Diesel
Difference Working Group
10:00 am**

*Location of Meeting:
DVRPC Conference Center
8th Floor
6th and Race Streets
Philadelphia, PA*

**Tuesday,
November 20, 2012
Greater Philadelphia
Clean Cities Stakeholders
Meeting
10:00 am**

*Location of Meeting:
DVRPC Conference Center
8th Floor
6th and Race Streets
Philadelphia, PA*



Transportation and Air Quality

New Jersey Legislature Considers Alternative Fuel Options

In September 2012, the New Jersey Senate Environment and Energy Committee began deliberating on a package of legislation aimed at promoting alternative fuel vehicles and refueling infrastructure in order to spur consumers to purchase more alternative fuel and low emissions vehicles.

In the 2004, New Jersey adopted the California Low Emission Vehicle initiative (CalLEV II) in order to improve the state's air quality. One of the provisions of the program was that automobile dealers would be required to sell 19,000 low emission, plug-in electric vehicles by 2018 and 77,000 low emission vehicles by 2025. These requirements are a concern for the New Jersey Coalition of Automotive Retailers, who according to President James Appleton, "just doesn't see the market for these vehicles right now." In 2011, 236 electric vehicles were sold in the state.

Clean energy advocates cite the lack of refueling infrastructure as a major impediment to the adoption of not only plug-in electric vehicles but also compressed natural gas vehicles in New Jersey. Which fuel type to promote and what incentives to employ are at the heart of the deliberations taken up last month by the Senate Environment and Energy Committee. Committee Chair, Senator Bob Smith, stresses the importance of developing the right mix of incentives and alternative fuel infrastructure investment while planning ahead for transportation funding that relies on the gas tax to fund transportation projects in the state. To that end, the committee approved legislation that would create a "Zero Emissions Vehicle Commission" to further study the relevant issues and serve an advisory role to assist the state legislature navigate these issues.

Questions about the environmental dangers of hydraulic fracturing, used to extract natural gas, to New Jersey's drinking water supplies, the cost and range of alternative fuel vehicles, and state budgetary concerns about providing tax incentives all complicate the decisions about which fuels to invest in and how best to create the fueling infrastructure that will ultimately be needed if New Jersey is to meet the mandated goals of its CalLEV II initiative by 2018.

For more information on New Jersey's Low Emission Vehicle program, please visit: <http://www.njspotlight.com> and search "alternative fuels"



Information

NRG Energy is Bringing Solar Power to Lincoln Financial Field

The Philadelphia Eagles have formed a sustainable energy partnership with the Princeton, New Jersey, energy utility NRG. As part of the partnership, NRG will provide power to the Lincoln Financial Field (Linc), the bulk of which will be generated by 11,000 solar panels installed along 11th street and the south façade of the stadium. The solar panels are expected to generate three megawatts of power annually, which is roughly six times the energy used at the stadium's eight Eagles home games. The panels will not be able to provide all of the power needed during a game but will continue to add clean, renewable energy to the grid throughout the year.

NRG has also installed solar panels at the home stadiums of the Washington Redskins, New York Giants and Jets, New England Patriots, and has plans for an installation at the new San Francisco 49ers stadium in Santa Clara, California. The installation at the Linc is largest solar installation in the NFL and in the Philadelphia region.

Installation of the solar panels along with 14 wind turbines on the top of the stadium are currently under construction and are expected to be completed by the end of this football season.



DVRPC, 8th Floor
190 N. Independence Mall West
Philadelphia, PA 19106-1520
Phone: 215.592.1800 | Fax: 215.592.9125 | Web: www.dvrpc.org