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



Air Quality Regulations

U.S. EPA Extends Deadline to Designate Ozone Non-Attainment Areas by One Year.

On October 1, 2015, the U.S. Environmental Protection Agency (EPA) strengthened the primary and secondary air quality standards for ground-level ozone to 70 parts per billion (ppb), based on extensive scientific evidence about ozone's effects on public health and welfare. This regulatory action started a procedure in which states would recommend to EPA areas that are in non-attainment of the new 2015 Ozone National Ambient Air Quality Standard (NAAQS). EPA is required to review the states' recommendations and issue the final ozone non-attainment area designations by October 2017.

Delaware, New Jersey, and Pennsylvania submitted recommendations to the EPA to designate non-attainment areas for the new 2015 Ozone standard based on air quality monitoring data and a five-part analysis that includes travel patterns, meteorology, and jurisdictional boundaries in late 2016.

Most counties in the DVRPC region were expected to be classified as having a "marginal" ozone problem and thus would be given three years to attain the 2015 Ozone NAAQS. The Philadelphia-Camden-Wilmington Non-Attainment Area for the 2008 Ozone NAAQS included sixteen counties in Delaware, Maryland, New Jersey, and Pennsylvania, including the entire DVRPC region.

On June 28, 2017, EPA Administrator Scott Pruitt extended the deadline for EPA to issue the non-attainment designations by one year, from October 1, 2017 to October 1, 2018. Mr. Pruitt stated that there is insufficient information to complete area designations for the new ozone standards due to complex issues regarding the 2015 Ozone NAAQS and its implementation, such as understanding the role of background ozone levels and appropriately accounting for international transport of pollutants. Mr. Pruitt announced that the deadline extension would allow the agency to develop additional flexibilities for states to comply with the ozone NAAQS and to consider completely all designation recommendations provided by state governors, including full consideration of exceptional events impacting designations, and to provide new agency officials time to complete their review of the 2015 Ozone standards.

Under this action, the EPA will also be establishing an Ozone Cooperative Collaborative Task Force, whose purpose will be to develop flexible strategies for states to address complying with the ozone NAAQS. Mr. Pruitt



Save the Date

**Monday
October 18, 2017**

**Changing Lanes Conference
9:00 AM – 3:00 PM**

*Location of Event:
Union League of Philadelphia
140 South Broad Street
Philadelphia, PA*

www.dvrpc.org/changinglanes

**Tuesday
October 24, 2017**

**Vibrant Ports – Healthy
Ports Workshop
9:00 AM – 3:00 PM**

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

acknowledged that this regulatory flexibility may influence the final non-attainment designations. This action is not a revocation of the 2015 Ozone NAAQS but may have impacts on the way that standard is implemented.

After EPA finalizes the ozone nonattainment area designations, the affected states are required to take additional actions to improve air quality, including developing implementation plans outlining how the areas will attain and maintain the standards by reducing air pollutant emissions contributing to ground-level ozone concentrations. Until the non-attainment area designations for the 2015 Ozone NAAQS are finalized and implementation guidance for the new standards are implemented, the DVRPC region will continue to comply with requirements outlined by the 2008 Ozone NAAQS, including demonstrating transportation conformity of the DVRPC Long-Range Plan and Transportation Improvement Programs.

For more information on this EPA action, please visit: www.epa.gov/ozone-designations/extension-deadline-area-designations-2015-ozone-standards.



Air Quality Information

Research Shows that Carpooler Compatibility Increases Rideshare Program Success

Research conducted by the University of Waterloo in Ontario, Canada, and published in the *Journal Transportation Research Part C*, showed that ensuring would-be carpoolers are riding with people they actually like could potentially decrease carpooler's single occupancy vehicle usage by nearly 60 percent. The researchers used social media analytics, algorithms, and computer simulation to match potential carpoolers with people driving to work. The researchers termed the analysis "GRAAL" or the "GReen And Social Optimization of Crowd Sourced Data".

"Usually carpooling is about just matching people depending on geographical location and time of schedule," said Bissan Ghaddar, professor of management engineering at the University of Waterloo and author of the study. "We wanted to include the social aspect into the equation, because it's always awkward when there is silence in the car, especially if it's a long commute."

In compiling the study, Ghaddar worked with colleagues at IBM and two universities in Italy to analyze the Twitter feeds of potential carpoolers, looking for insights into their personal interests. They then examined the users' social circles to see if they followed like-minded friends or sought out people with different views and fed that information into a computer algorithm designed to match carpoolers based on their geo-tagged location, time preferences, as well as their personalities. The researchers used online surveys to align their analysis results to the experiences of actual carpoolers.

As a final step, they simulated the impact of their matchmaking using real-world data from Rome and San Francisco. They found that if carpoolers are compatible, people's satisfaction significantly increased and car-use dropped by 57 percent in Rome and by 40 percent in San Francisco.

This article is the latest in a body of emerging research on using social media and crowd-sourced data to develop more effective rideshare programs. The authors acknowledge the need for more field studies to better test their software's impacts on real world carpool matching systems.

For more information on "The GRAAL of carpooling: GReen And social optimization from crowd-sourced data," please visit: <https://uwaterloo.ca/>



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