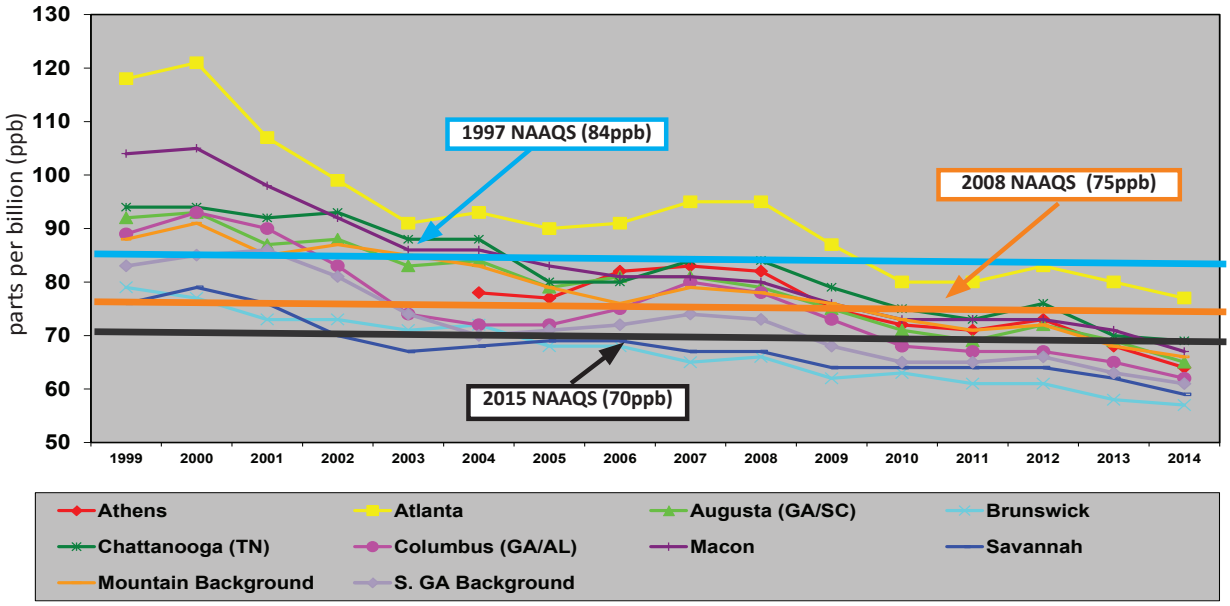
New Lower Ozone Standard

US EPA has raised the bar by again lowering the National Ambient Air Quality Standard (NAAQS) for ozone. This has happened in 1997, in 2008, and most recently in October 2015.

As you can see in the chart below, ozone pollution in all parts of Georgia has steadily declined over the years -- as have EPA's thresholds (in parts per billion) for unhealthy air and ozone violations (see 1997, 2008 and 2015 NAAQS levels).



How will this affect you?

If you notice more smog alerts in the 2016 ozone season, it simply reflects a more stringent standard that offers greater protection for your health. This does not mean that the air quality is getting worse. It means that you are being notified earlier, at a lower pollution level, so that you can take quicker precaution measures.

What does this mean? Is Orange the new Yellow?

"Breakpoint" numbers in the Air Quality Index (AQI) have been lowered. During the 2015 and earlier ozone seasons, an air quality reading of 55ppb would not have triggered a smog alert. It would have been classified as a CODE GREEN or "Good" air quality day. This year during the 2016 ozone season, that same reading will trigger a CODE YELLOW or "Moderate" air quality day. So although a CODE YELLOW smog alert indicates that there may be a moderate health concern for those people who are unusually sensitive to air pollution, the actual level of air pollutants may be no greater than it was last year during a CODE GREEN day. See the chart below to understand the actual changes to the "Breakpoints."

AQI Category	Index Values	2015 ozone season: Breakpoints in the 2008 AQI (ppb, 8-hour average)	2016 ozone season: Updated Breakpoints (ppb, 8-hour average)
Good	0 - 50	0-59	0-54
Moderate	51 - 100	60-75	55-70
Unhealthy for Sensitive Groups	101 – 150	76-95	71-85
Unhealthy	151 – 200	96-115	86-105
Very Unhealthy	201 – 300	116-374	106-200
Hazardous	301 –500	375 to the Significant Harm Level*	201 to the Significant Harm Level*

71ppb

In 2015 was CODE YELLOW
In 2016 will be CODE ORANGE

87ppb

In 2015 was CODE ORANGE
In 2016 will be CODE RED

**The Significant Harm Level for ozone is 600 ppb, two-hour average*

The quality of the air is not changing – just the way the data is interpreted.

What do the colors in the AQI represent?

The AQI is an index for reporting daily air quality. It tells you how clean or polluted the air is and what associated health effects might be a concern for you. The AQI is divided into six categories. Each category is assigned a specific color to make it easier to understand whether air pollution is reaching unhealthy levels. For example, the color orange means that conditions are "unhealthy for sensitive groups," while red means that conditions may be "unhealthy for everyone," and so on.

Good	Air quality is considered satisfactory, and air pollution poses little or no risk
Moderate	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	Health alert: everyone may experience more serious health effects

As of October 2015, the "Breakpoints" within each category that determine the color or severity of the smog alert are now lower - so the alert is activated at a lower number of pollutants in parts per billion.

Why did EPA release a new standard now?

Under the Clean Air Act, EPA is required to review the health standards for certain pollutants every five years. As part of that review, the agency convenes a group of independent scientific advisors, called CASAC (Clean Air Scientific Advisory Committee) to review the latest health information and make a recommendation. CASAC advised EPA that the current standard of 75 parts per billion (ppb) is not fully protective of public health and recommended a new stricter standard between 60 and 70 ppb, leaving the policy decision of what standard provides an "adequate margin of safety" to EPA's Administrator as required by the Clean Air Act.

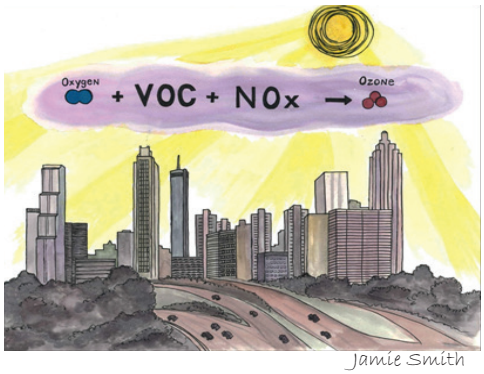
On October 1, 2015, EPA tightened the ozone standard to 70 ppb. At the same time, EPA adjusted the AQI index levels or "breakpoints" to reflect the new standard.

What are some of the harmful effects of ground-level ozone on public health?

Breathing in ground-level ozone can trigger a variety of health problems, including chest pain, coughing and throat irritation. It can worsen bronchitis, emphysema and asthma. Ground-level ozone also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. Even small amounts in the air can have harmful effects.

What exactly is ground-level ozone?

Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between nitrogen oxides (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities, electric utilities and motor vehicle exhaust are some of the major sources of NOx. Major sources of VOC are gasoline vapors, chemical solvents and some natural sources such as trees and vegetation. In Georgia, ozone pollution occurs mainly during our hot summer days.



Jamie Smith

When is Ozone Season?

In Georgia, ozone season occurs between April and September since hot sunny days can intensify the creation of ozone. During these months, a team produces a daily ozone pollution forecast for metro Atlanta and Macon, and includes the ozone forecast in the daily "smog alert" using the color coded Air Quality Index or AQI. During Ozone Season, you can sign up to receive the daily smog alert.

How do I sign up to receive an ozone forecast or "smog alert?"

You can sign up to receive daily email smog alerts at Georgia Commute Options.

For more information about Georgia air quality, please visit Georgia Air Protection Branch. For more information about general air quality, please visit EPA AirNow.