

Changes to the NAAQS

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What are NAAQS?

- NAAQS stands for National Ambient Air Quality Standards
- Affects the six Criteria Pollutants
 - Carbon Monoxide (CO)
 - Lead (Pb)
 - NO₂
 - SO₂
 - Particulate Matter (PM)
 - Ozone (O₃)
- Criteria Pollutants are common and found all over the US
- States have primary responsibility for ensuring attainment and maintenance of NAAQS once EPA establishes them.

Ozone Timeline

- March 2008 - New primary and secondary Ozone Standard of 0.075 PPM set by EPA
- September 16, 2009 – EPA announced it would reconsider the 2008 Ozone Standard
- January 6, 2010 - EPA proposed ranges for primary and secondary standards, publishes January 19, 2010.
- March 22, 2010 – Public comment period ends
- August 31, 2010 - Final standard(s) to be issued
- January 2011 – States recommend boundaries
- April 2011 – EPA proposes boundaries
- August 2011 – Designations become final
- December 2013 – SIPs due
- 2014 – 2031 – Attainment – depending on severity

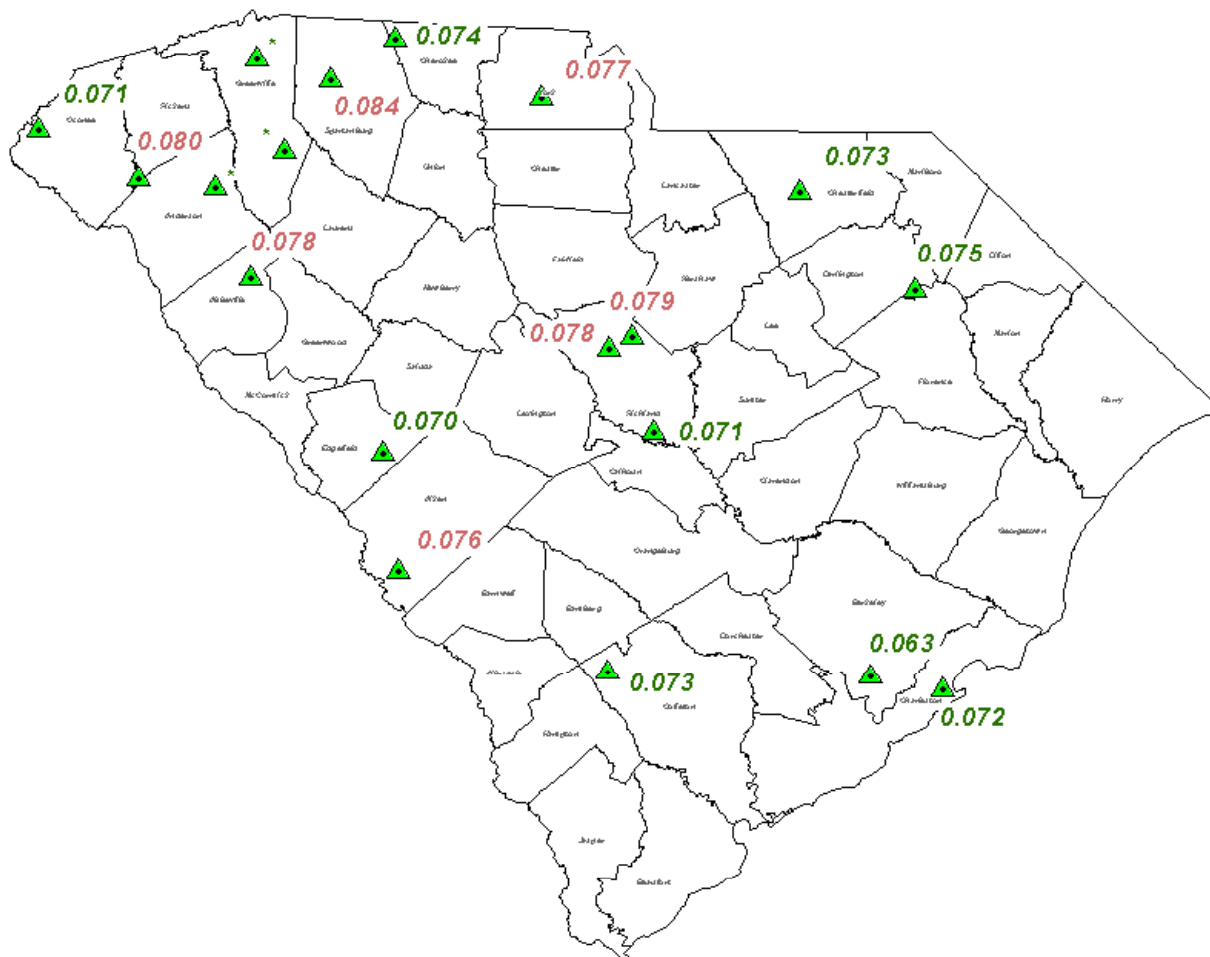
Reconsideration of the primary and secondary NAAQS for ozone

- Both standards was set in March 2008 at 0.075 ppm
- Primary standard proposed at a lower level within the range of 0.060 to 0.070 parts per million (ppm)
- Secondary standard proposed at new cumulative, seasonal standard, cumulated over 12 hours per day (8 am to 8 pm) during the consecutive 3-month period within the ozone season set at a level within the range of 7 to 15 ppm-hours

Reconsideration of the primary and secondary NAAQS for ozone

- Written comments on this proposed rule must be received by March 22, 2010.
- Three public hearings but none in EPA Region 4
- The primary standard will be final by August 31, 2010. The secondary may be delayed longer.
- New nonattainment designations will be effective August 31, 2011.

South Carolina Ozone Design Values - 2008



Legend

- Ozone Sampler
- County Line

* = Insufficient data to calculate 3-year design value.

04.59 18 27 36 Miles

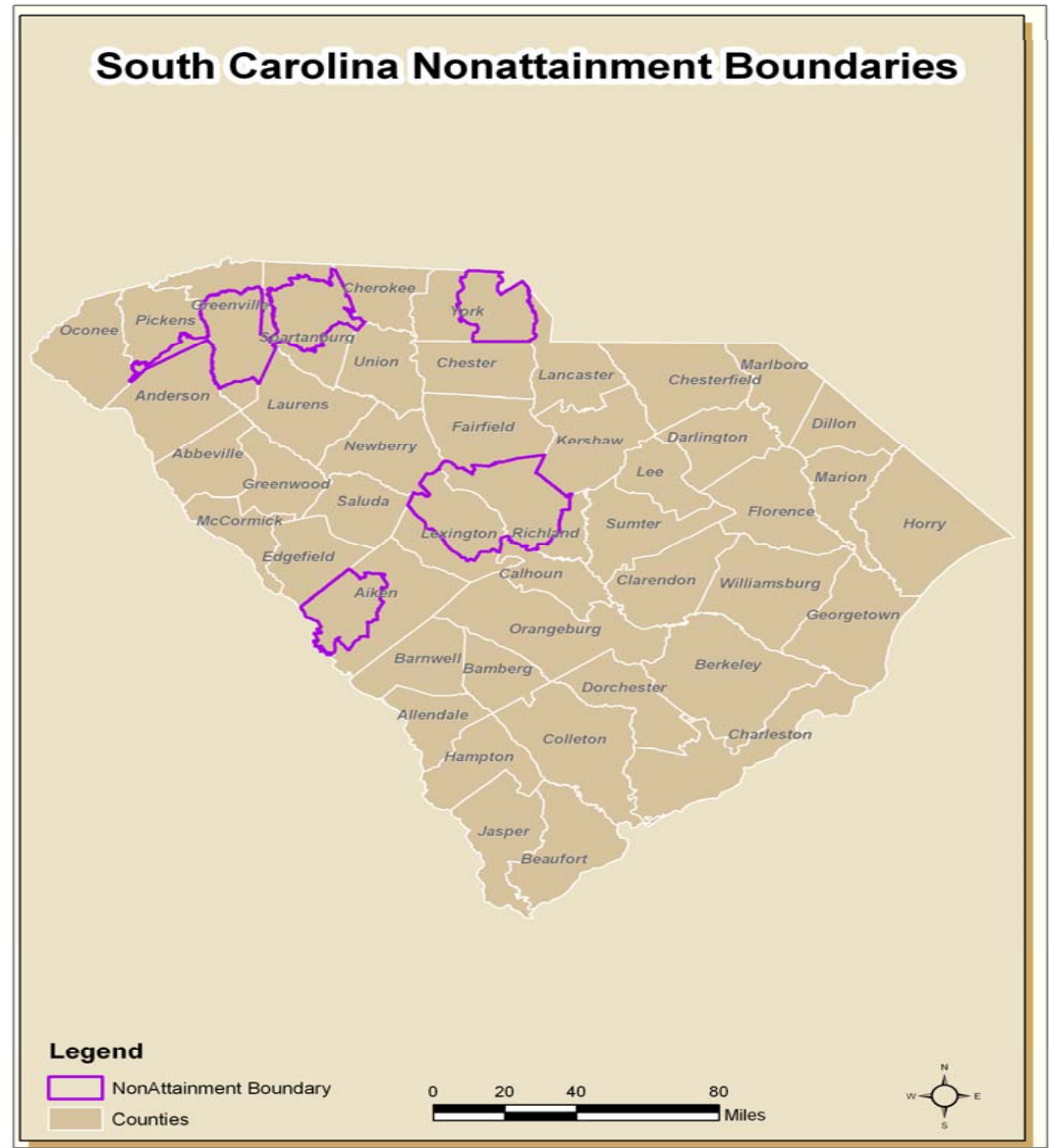
This map is a product of DHEC. Reasonable efforts have been made to ensure the accuracy of this map. DHEC disclaims any liability with regards to this map.
Map Created: 04/10/2009 ttr

Ozone Standard: 0.075 ppm (3-year average).

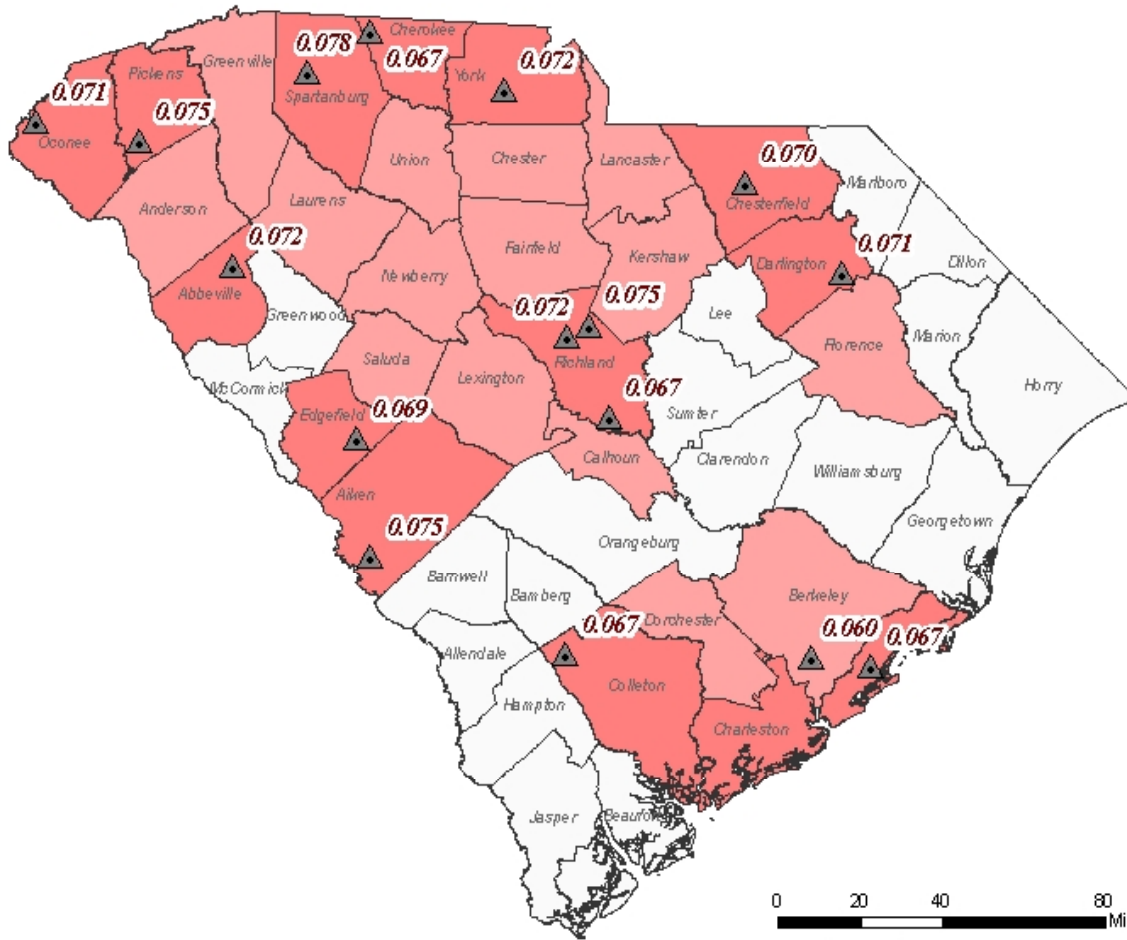
Sample design value based on primary Federal Reference Method from data downloaded from EPA-AQS in Jan. 2009.



In March 2009, the Department made the following boundary recommendations to EPA



2009 Ozone Design Values*



Legend

- Ozone Monitor
- County with DV > 0.060 ppm
- Area of Concern

Note: 15 of 16 monitors have DV's above 0.060 ppm.

Colors do not represent future nonattainment boundaries. All counties will be evaluated based on EPA boundary guidance.

* Ozone design value calculations per current EPA data handling regulations.



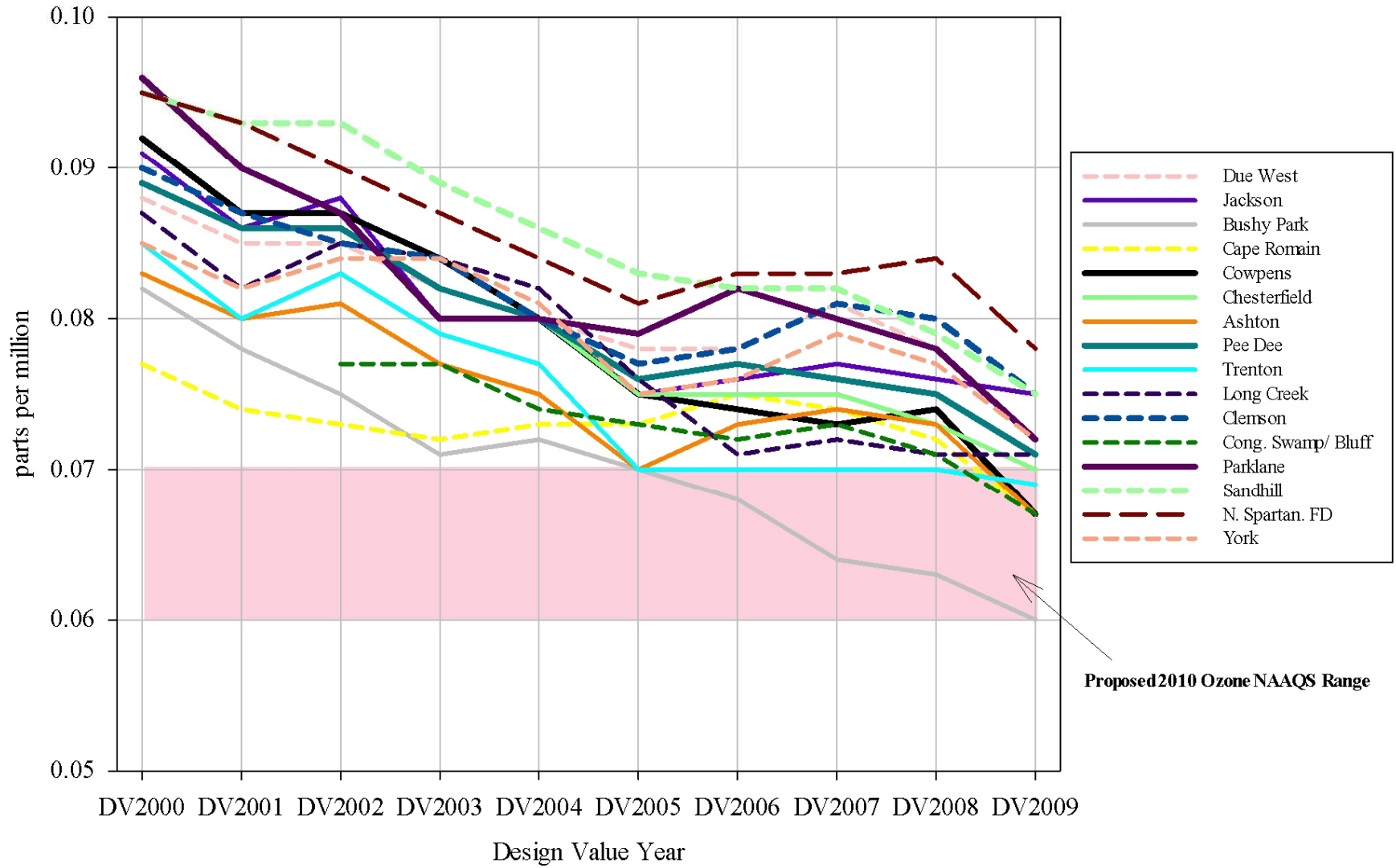
Note: Although this map is believed to be fundamentally accurate, no guarantees as to its accuracy or completeness can be implied. DHEC disclaims any liability with regards to this map.

Source: South Carolina Department of Health and Environmental Control Bureau of Air Quality

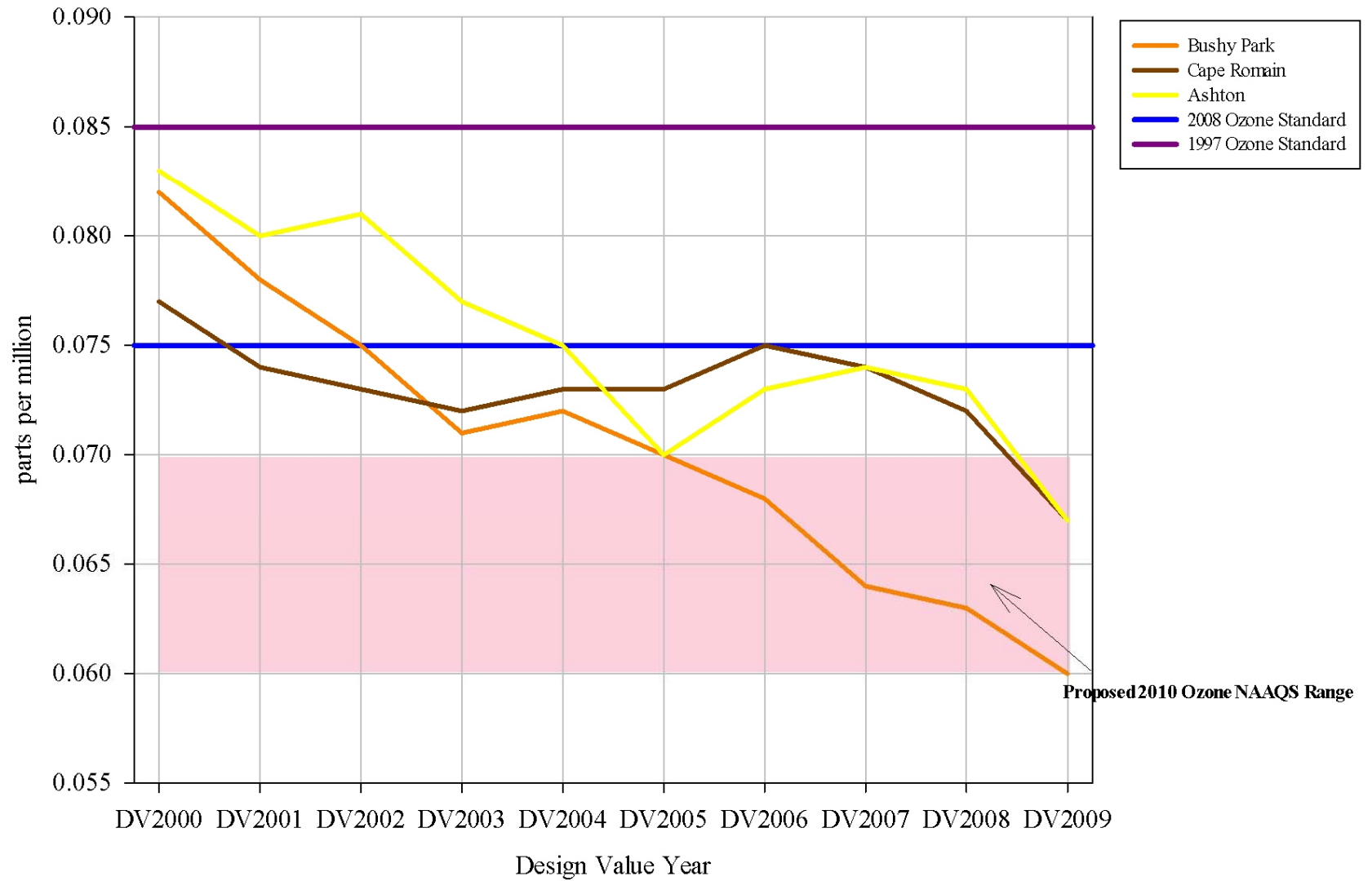


20100115 (SR) "Ozone 2009 DV_60ppb"

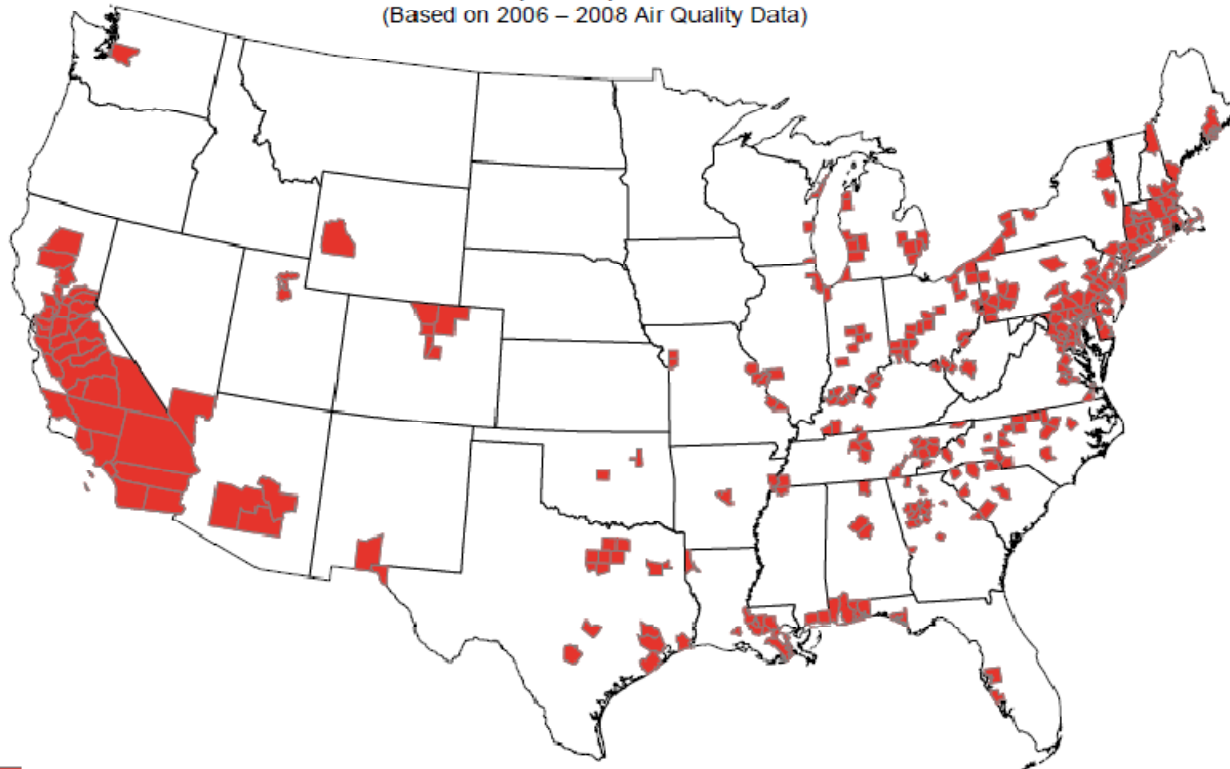
SC Historical Ozone Design Value Trends and 2010 Proposed EPA Ozone NAAQS Range



SC Historical Coastal Ozone Design Value Trends and 2010 Proposed EPA Ozone NAAQS Range



Counties With Monitors Violating the March 2008 Ground-Level Ozone Standards
0.075 parts per million
(Based on 2006 – 2008 Air Quality Data)



322 of 675¹ monitored counties violate the standard

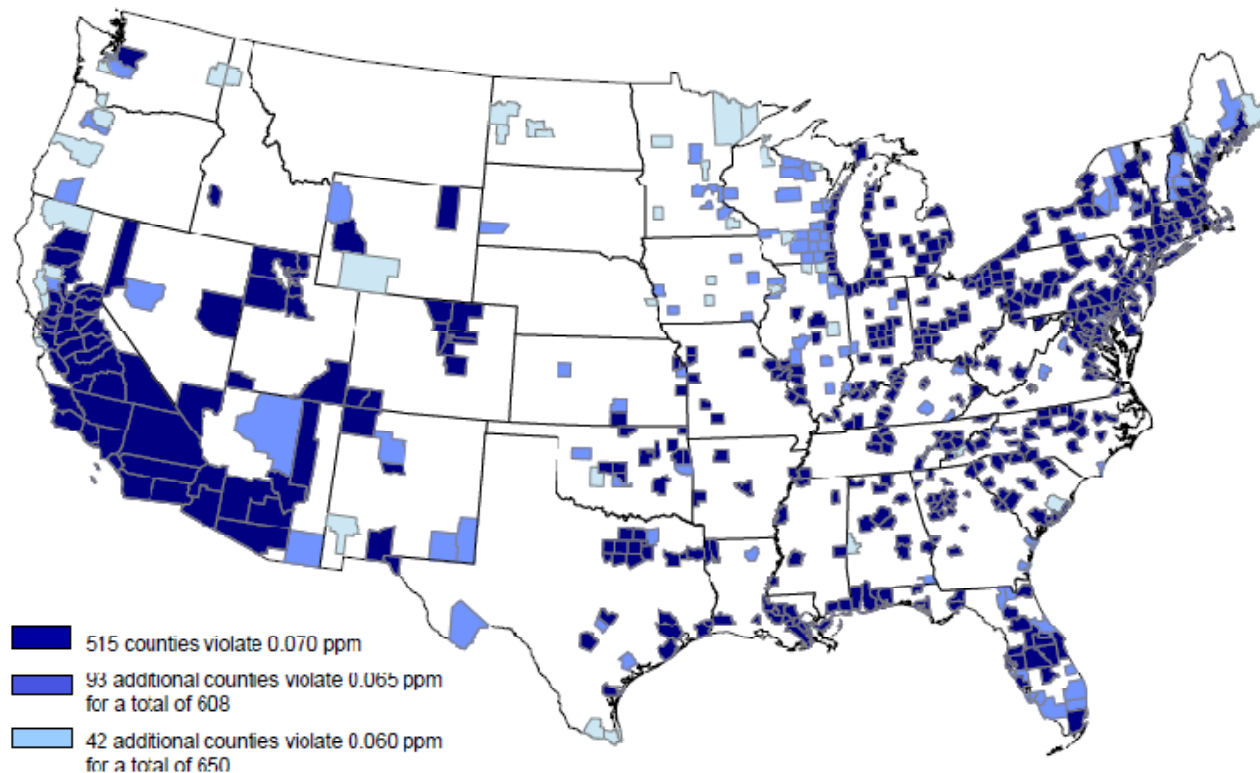
Notes:

1. Counties with at least one monitor with complete data for 2006 – 2008
2. To determine compliance with the March 2008 ozone standards, the 3-year average is truncated to three decimal places.

Counties With Monitors Violating Proposed Primary 8-hour Ground-level Ozone Standards 0.060 - 0.070 parts per million

(Based on 2006 – 2008 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



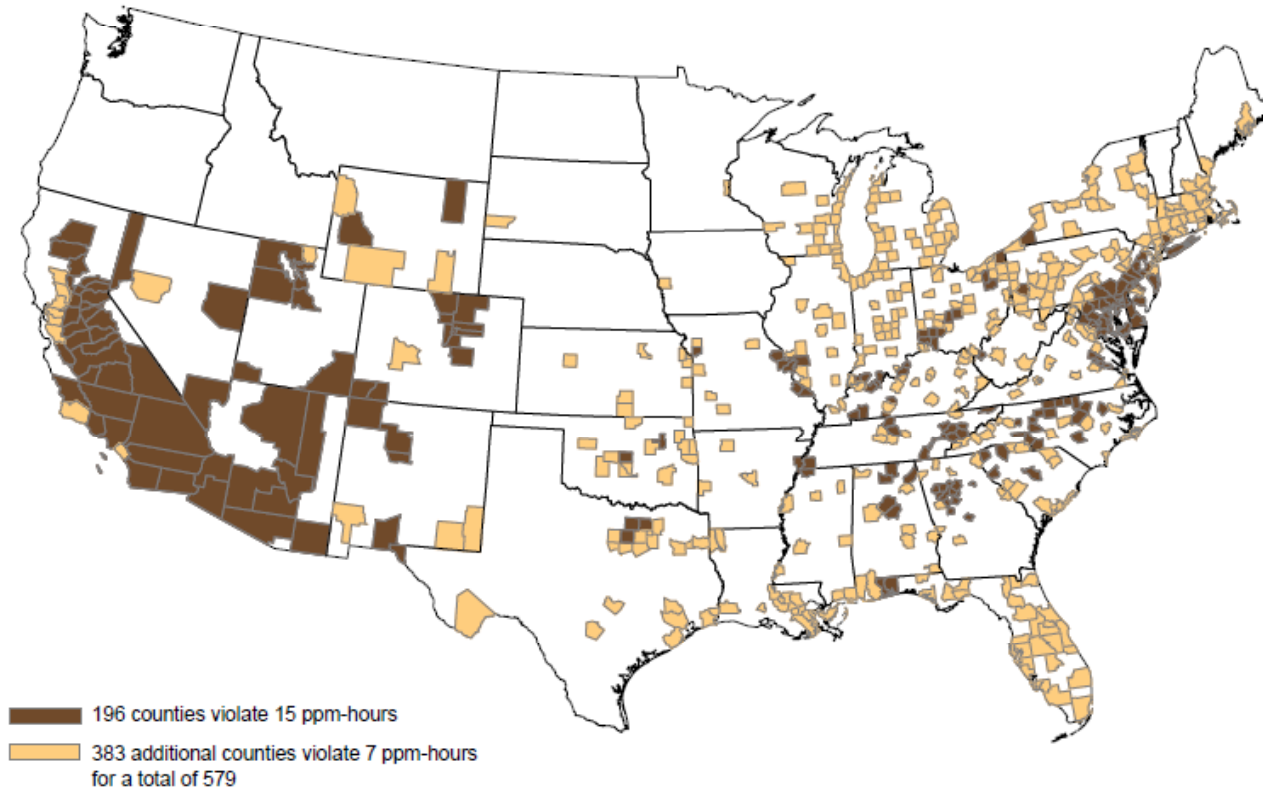
Notes:

1. No monitored counties outside the continental U.S. violate.
2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

Counties With Monitors Violating Proposed Secondary Seasonal Ground-Level Ozone Standards 7 – 15 parts per million - hours

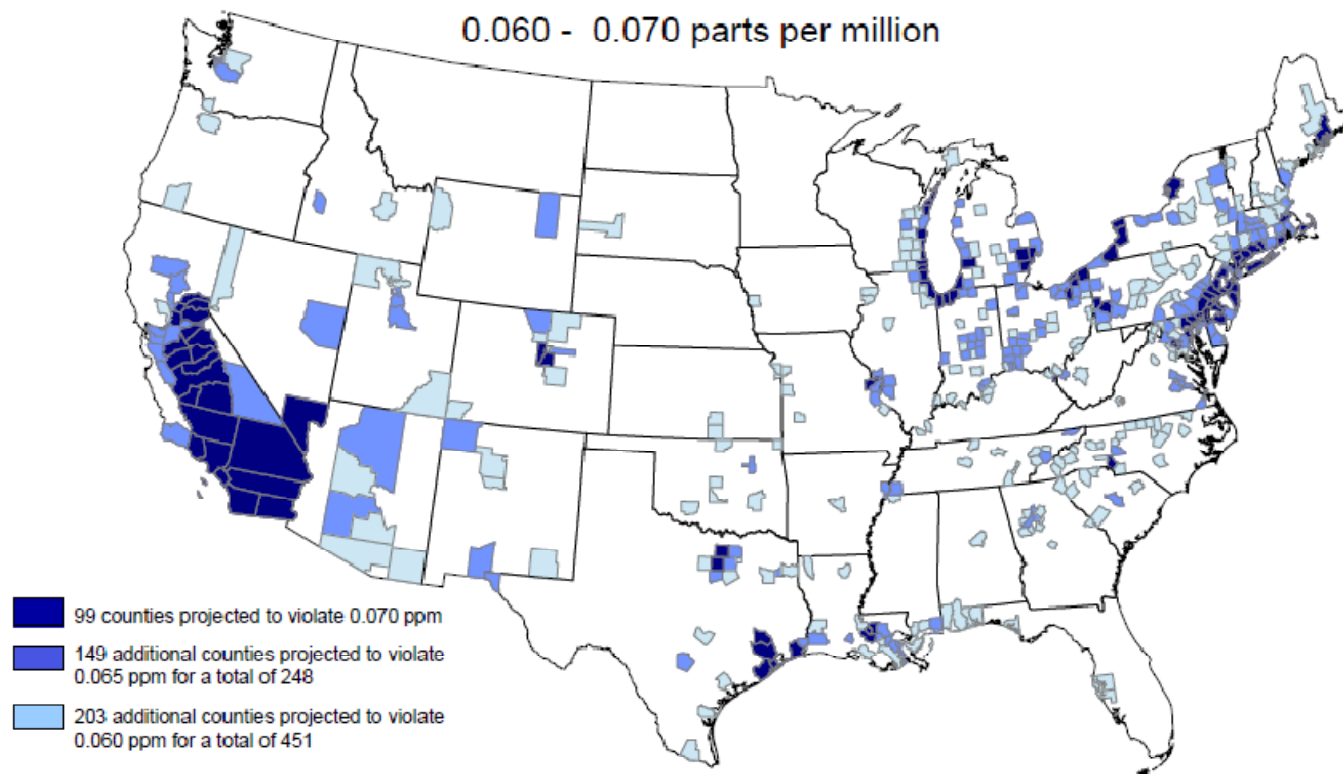
(Based on 2006 – 2008 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



No monitored counties outside the continental U.S. violate.

Counties With Monitors Projected to Violate Proposed Primary 8-hour
Ground-Level Ozone Standards in 2020
0.060 - 0.070 parts per million



Notes:

1. The modeled emissions in 2020 reflect the expected emissions reductions from federal programs by 2020 including: the Clean Air Interstate Rule, the Clean Air Mercury Rule, the Clean Air Visibility Rule, the Clean Air Nonroad Diesel Rule, the Light-Duty Vehicle Tier 2 Rule, the Heavy Duty Diesel Rule, the proposed rules for Locomotive and Marine Vessels and for Small Spark-Ignition Engines, and an estimate of State-level mobile and stationary source controls that were projected to be needed to attain pre-existing PM 2.5 and ozone standards.
2. Controls applied are illustrative. States may choose to apply different control strategies for implementation.
3. EPA did not model future violations outside the continental U.S.
4. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

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