

## EPA Proposal to Revise the National Ambient Air Quality Standard for Ozone & Its Implications

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### EPA Proposal

- November 25, 2014 - EPA proposed to revise the current primary and secondary 8-hour ozone standards published in 2008 (75 parts per billion, ppb)
  - Primary standard: Public health; Sec. standard: Public welfare (Plants & trees)
- Proposed revised Pr./Sec. 8-hour ozone standards = A range between 65 ppb - 70 ppb
- EPA also seeking comments on as low as 60 ppb and retaining the current 75 ppb standards
- EPA is also proposing to update the Air Quality Index (AQI) for ozone

## Reasons for Revision of Standard

EPA's proposal to revise the 2008 ozone standard is based on following key scientific evidence:

- Evidence from a large number of clinical and epidemiological studies - Current standard (75 ppb) not adequate to protect public health
- Ozone causes adverse respiratory effects in healthy adults
- Children, people with asthma and other respiratory diseases, and older adults likely to experience more serious effects than healthy people
- People with certain health conditions, such as obesity or diabetes, may be at increased risk of ozone-related health effects
- Recent studies consistently report associations between ozone exposures and mortality from respiratory and cardiovascular causes

## Air Quality Index (AQI) - Proposed Changes

AQI Category	Index Values	Current Breakpoints (2008 AQI) (ppb, 8-hour average)	Proposed Breakpoints (ppb, 8-hour average) <i>Note: parentheses indicate a range</i>
Good	0 - 50	0-59	0 to (49-54)
Moderate	51 - 100	60-75	(50-55) to (65-70)
Unhealthy for Sensitive Groups	101 - 150	76-95	(66-71) to 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*

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

## Proposed Changes – Ozone Monitoring

- **Extension in ozone monitoring season**
  - Lower threshold for code orange means ozone needs to be monitored in Spring and early Fall months to alert citizens
  - ozone monitors located at the multi-pollutant NCore monitoring sites would be required to operate year round
  - The expanded monitoring season requirements would become effective January 1, 2017
  - A new monitoring method is being introduced

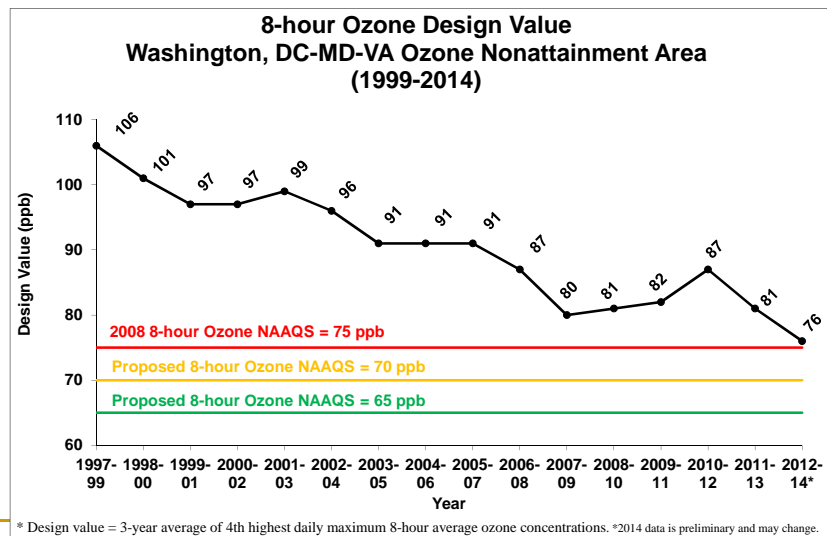
## Benefits & Costs

- **Benefits** (Nationwide, excluding California)
  - \$6.4 to \$13 billion annually in 2025 – 70 ppb
  - \$19 to \$38 billion annually in 2025 – 65 ppb
  - Benefits include the value of avoiding asthma attacks, heart attacks, missed school days and premature deaths, among other health effects
- **Costs** (Nationwide, excluding California)
  - \$3.9 billion annually in 2025 - 70 ppb
  - \$15 billion annually in 2025 – 65 ppb

## Proposed Implementation Schedule

Milestone	2015 Ozone Standard
Signature—Final Rule	October 1, 2015
State Designation Recommendations to EPA	October 1, 2016
Final Designations	October 1, 2017 (Likely based on 2014-16 data)
Attainment Demonstration SIPs Due	2020/2021 (for Moderate and above NAA)
Attainment Dates	2020-2037 (depending on level of nonattainment designation)

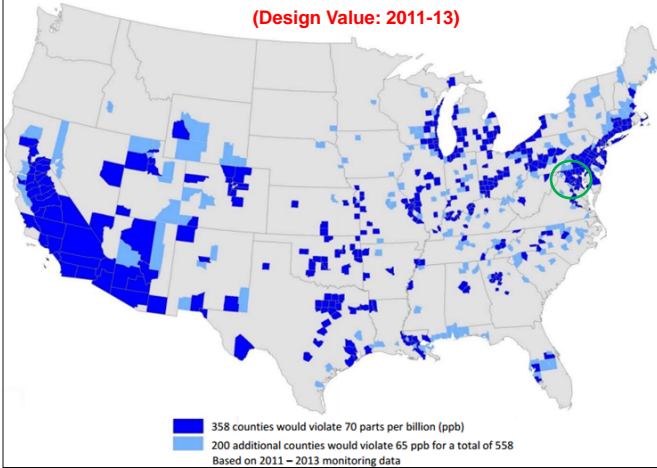
## Proposed Standard & Ozone Levels (Washington Region)



## Current Regional Ozone Levels

Counties Where Measured Ozone is Above Proposed Range of Standards (65 – 70 parts per billion)

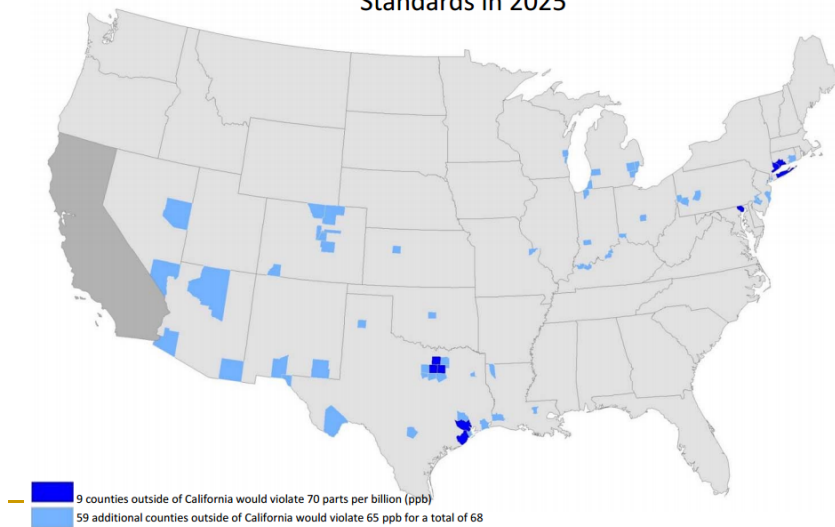
(Design Value: 2011-13)



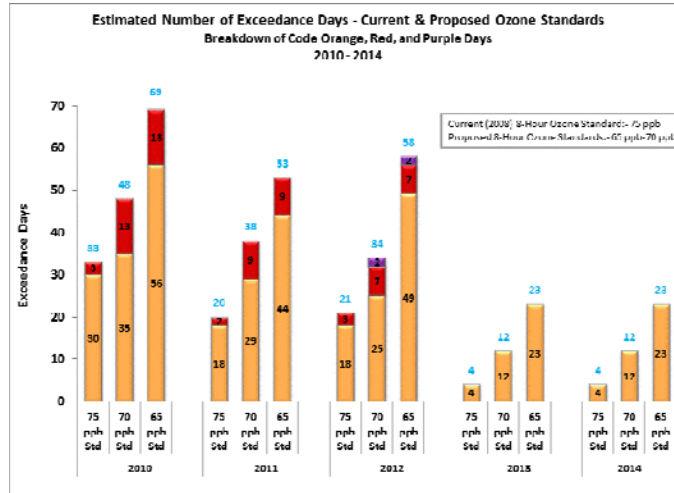
Jurisdiction	Design Value (2011-13)	Design Value (2012-14, Draft)
District	79	71
Calvert	77	73
Charles	77	72
Prince George's	81	76
Frederick	74	70
Montgomery	74	68
Loudoun	71	67
Arlington	79	74
Fairfax	79	73
Prince William	69	66

## Ozone Levels - 2025

EPA Projects Most Counties Would Meet the Proposed Range of Standards in 2025



## Implications of Proposed Standard (Washington Region)



Code Orange/Red/Purple for 75 ppb standard – Based on current 75 ppb standard AQI  
Code Orange/Red/Purple for 65 ppb & 70 ppb – Based on proposed 65 ppb & 75 ppb standard AQIs respectively

## Current control measures to help in attaining proposed standard

- Mercury and Air Toxics Standards
- Requirements to reduce the interstate transport of air pollution
- Regional Haze regulations
- Proposed Clean Power Plan
- Tier 3 Vehicle Emissions and Fuels Standards
- Light-Duty Vehicle Tier 2 Rule
- Mobile Source Air Toxics Rule
- Light-Duty & Heavy-Duty Greenhouse Gas/Corporate Average Fuel Efficiency Standards
- Reciprocating Internal Combustion Engines (RICE) Rule
- Industrial/Commercial/Institutional Boilers and Process Heaters Rules

## Comments on Proposal

- Proposed revised ozone standard to be published shortly in Federal Register
- Comment period : 90 days from FR publication date
- 3 Public hearings planned – Locations and schedules to be announced shortly