



## Research

# President Obama's Air Pollution Record

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Recent air pollution data and regulatory actions by the Obama Administration demonstrate that Americans are paying more for less. Between 2005 to 2009, the nation experienced a decline of 11,116 days of [moderate to hazardous](#) air pollution (across all jurisdictions). During the Obama Administration, this decline slowed to 3,897 fewer days of moderate to hazardous pollution, despite the economic recession and billions of dollars more in regulatory costs. From 2009 to present, EPA regulations, primarily to reduce air emissions, have added more than [\\$295 billion](#) in net present value costs, while air pollution's decline is not nearly as pronounced as in the past. That's roughly \$75 million spent for each day of cleaner air.

## Methodology

The Environmental Protection Agency (EPA) [tracks air quality](#) of a variety of pollutants, including the [six criteria pollutants](#) and [greenhouse gas emissions](#). The EPA's categorization of days with either "good" to "hazardous" air pollution includes concentrations of ground-level ozone and fine particulate matter. The American Action Forum (AAF) gathered air pollution data from 2005 to 2014, including days that EPA labeled air pollution moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, and hazardous for any jurisdiction in the United States (defined as "unclean air"). AAF also collected data on the major air quality regulations from EPA during this time. Then, AAF compared the cost of reducing moderate to hazardous air pollution days from 2005 to 2014. Complete data on 2015 will be made available by early next year.

## Findings



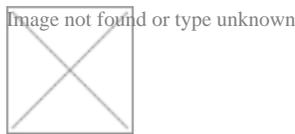
Not surprisingly, air quality has increased as the number of unclean air days has steadily declined; the number of "good" days increased from 196 days per jurisdiction to more than 251, a 28 percent increase during just one decade. This finding isn't startling because EPA strictly regulates the amount of particulate matter and ground-level ozone in the U.S. The number of moderately bad days declined by more than 20 percent, from an average of 84 days per jurisdiction to less than 67. These "moderate" days are not necessarily unhealthy, as EPA cautions that "air quality is acceptable," but "a very small number of people who are unusually sensitive" might have problems with the air.

Extreme, China-like days of air pollution are mostly a relic of decades past. The average jurisdiction saw just 1.4 "unhealthy" days in 2005 and now that figure has dropped to 0.77, a decline of almost 50 percent, but unhealthy days were already rare. For "very unhealthy days," which EPA describes as "health warnings of

emergency conditions,” the nation has not improved. In 2005, there were 46 “very unhealthy” days in the entire U.S. (not just for the average jurisdiction); in 2014, there were also 46 “very unhealthy days.” The conditions that contribute to these health emergencies revolve largely around local factors. For example, only four jurisdictions (located in Arizona, California, Nevada, and New Mexico) experienced more than one “very unhealthy” day in 2014. Nevertheless, despite billions of dollars in investments, there has been no improvement in these health emergency events.

## Diminishing Returns for Obama Administration

During the last decade, Americans are breathing healthier air, but are the current investments as beneficial as previous actions? The graph below tracks the number of unclean air days per jurisdiction and the rate of change. From 2005 to 2009, the rate of unhealthy days per jurisdiction declined 20.7 percent. Compare this to the recent decline during the Obama Administration: 9.2 percent. The black line below is a linear trendline.



The air pollution investments, despite growing more expensive, are yielding fewer returns. Between 2005 to 2009, Americans enjoyed a total of 11,166 fewer days of unclean air. However, during the Obama Administration, there were only 3,897 fewer days of unclean air. In 2005, the average jurisdiction could expect roughly 100 unclean air quality days (moderate to hazardous). By 2009, that figure dropped to 78 unclean days, a decline of more than 20 percent. During the Obama Administration, by contrast, the decline has been just 9.2 percent.

The growth in U.S. air quality has slowed and Americans are paying more for these reduced gains. In other words, there are diminishing returns for increased investments, often in the billions of dollars, for reducing the six criteria pollutants. According to the Office of Information and Regulatory Affairs, EPA’s office of Air and Radiation finalized 14 “economically significant” regulations from 2005 to 2009. During the Obama Administration, EPA has finalized 22 economically significant measures. Despite this steep increase, air quality gains have actually slowed.

To monetize these investments, AAF looked at five of the most significant air quality regulations of the last decade by their effective date:

- 2006 Particulate Matter Rule: **\$5.4 billion** in annual cost;
- 2011 Heavy-Duty Truck Efficiency Rule: **\$600 million** in annual cost;
- 2012 Mercury Air Toxics Standard (MATS): **\$9.6 billion** in annual cost;
- 2013 Particulate Matter Rule: **\$350 million** in annual cost; and
- 2014 Tier 3 Fuel Sulfur Rule: **\$1.5 billion** in annual cost.

Combined, these measures have imposed \$17.4 billion in annual costs to achieve air pollution goals. However, Obama Administration regulators have imposed \$12 billion of this figure or 69 percent. Yet, the rate of air pollution decline continues to stagnate. This list of five major air regulations is hardly exhaustive. Indeed, in EPA’s recent ozone proposal the agency listed roughly a dozen major air regulations that have contributed to

lower particulate matter and ground-level ozone. However, there is little doubt that regulatory activity at EPA has increased substantially and Americans are paying more to achieve only slight improvements in air quality.

Some may argue that it is too soon to judge the effectiveness of these rules, but it is important to note how quickly they can take effect. Although EPA's cost-benefit analyses often examine the environmental impact decades later, affected entities generally adjust their practices even before the rule is finalized. For instance, even in light of the Supreme Court decision [challenging MATS](#), experts agree companies have [already largely implemented](#) the regulation, regardless of its ultimate legal standing. Rules of this magnitude should demonstrate some noticeable additional benefits within a relatively short time.

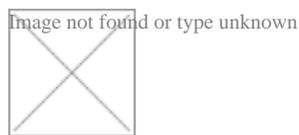
One curious trend in the Obama Administration's air pollution record is particulate matter. According to some in the administration, there is no safe amount for human inhalation, although this is [hotly debated](#). With virtually every EPA air measure, the "co-benefits" result from reducing fine particulate matter or PM 2.5. For example, in EPA's MATS rule, PM 2.5 was responsible for 99 percent of the benefits. In addition, for the proposed "Clean Power Plan," which is supposed to directly regulate greenhouse gases, PM 2.5 "co-benefits" reductions contributed \$24 billion to \$56 billion in ancillary benefits or roughly 56 percent of all benefits.

Yet, with the other criteria pollutants continuing to fall, PM 2.5 is increasingly the number one air pollutant. The graph below displays this trend.



In 2005, PM 2.5 was the main pollutant 110 days annually for the average jurisdiction. By 2014, that figure rose 29 percent, to 142.5 days. As a result, this pollutant continues to be an attractive target for regulators looking to find potential benefits. Generally, if a regulation results in burning less fossil fuel, there will be resulting PM 2.5 reductions. The rise of particulate matter as the dominant source of air pollution continues to give regulators an attractive option for boosting benefits.

However, the current concentration of PM 2.5 is technically already legal, generally meeting EPA guidelines. The following chart displays the weighted average particulate matter concentrations in the U.S.



Particulate matter is declining, as it should do under EPA regulations. Generally, all jurisdictions meet EPA's guidelines because the law requires it. Despite this legally "clean air," the number of days when PM 2.5 is the main pollutant continues to increase. It's no surprise regulators routinely use this pollutant to justify unrelated regulatory measures.

## Conclusion

Americans are paying more than \$17.4 billion annually for air pollution benefits, with at least \$12 billion from

this administration alone. However, the benefits are becoming increasingly more expensive under the Obama Administration. Gains in air quality are slowing, yet the pace of regulation continues to accelerate. With a major rule pending on ozone and the implementation of the [Clean Power Plan](#), Americans can expect to pay more for the few remaining air quality benefits.