

EPA's Review of the Ozone NAAQS

Greg Bertelsen

Director, Energy & Resources Policy

gbertelsen@nam.org

National Association of Manufacturers

www.nam.org/ozone

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Agenda

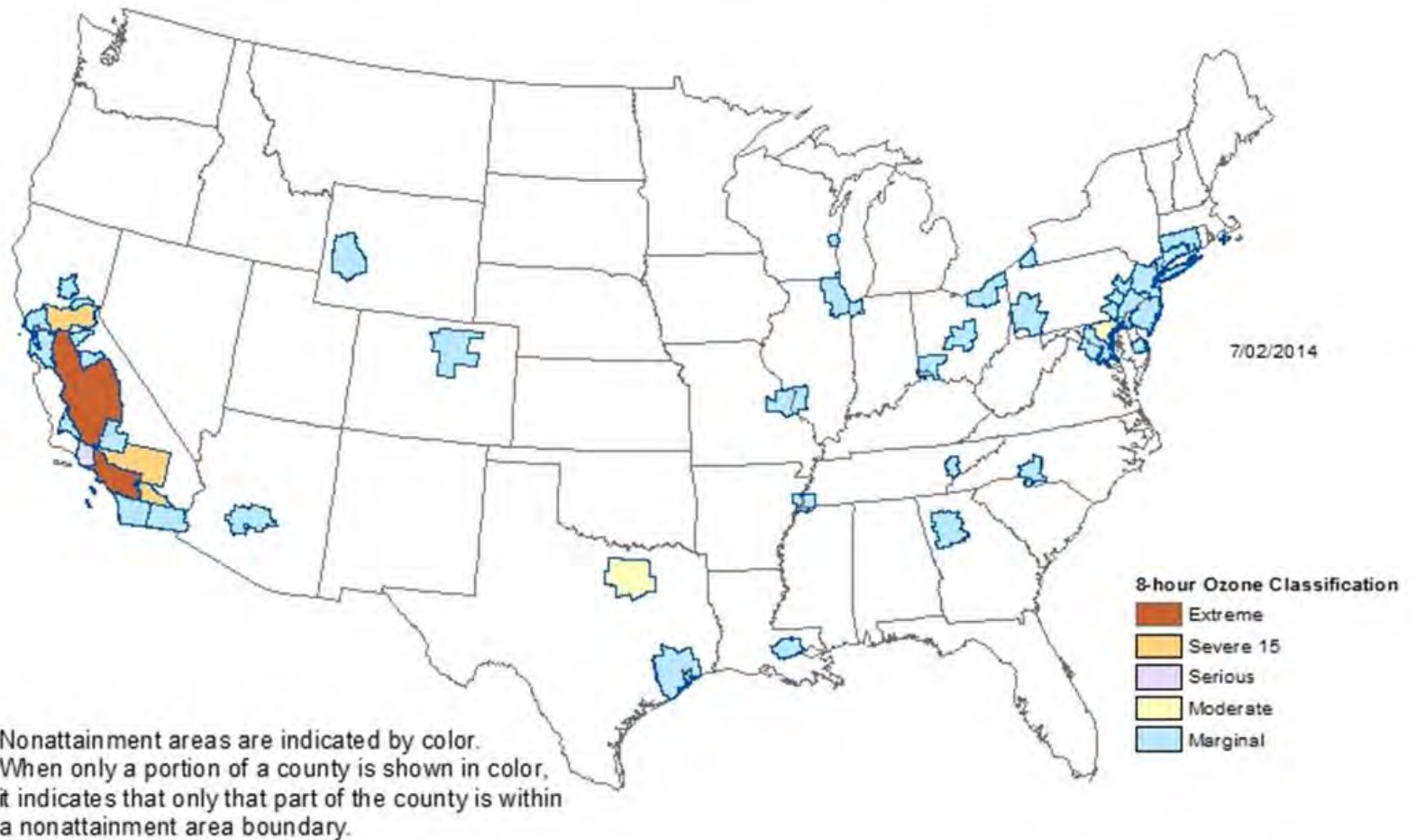
- Overview of EPA's Proposed Rule
- Discussion of the Costs: EPA's v. Reality
- Advocacy
- Q/A

EPA Proposed Tightening National Ambient Air Quality Standard (NAAQS) for Ozone

- Ground-level ozone, often referred to as smog, forms when Nitrogen Oxides (NOX) and Volatile Organic Compounds (VOCs) interact with sunlight
- 5-year deadline for reviewing the ozone NAAQS was March 2013
- Nov. 26, 2014 EPA proposed tightening standard from 75 parts per billion (ppb) to between 65 – 70 ppb
 - Accepting comments down to 60 and up to 75
- 90-day comment period
- Final rule October 15, 2015
- Likely the most expensive regulation ever



8-Hour Ozone Nonattainment Areas (2008 Standard)



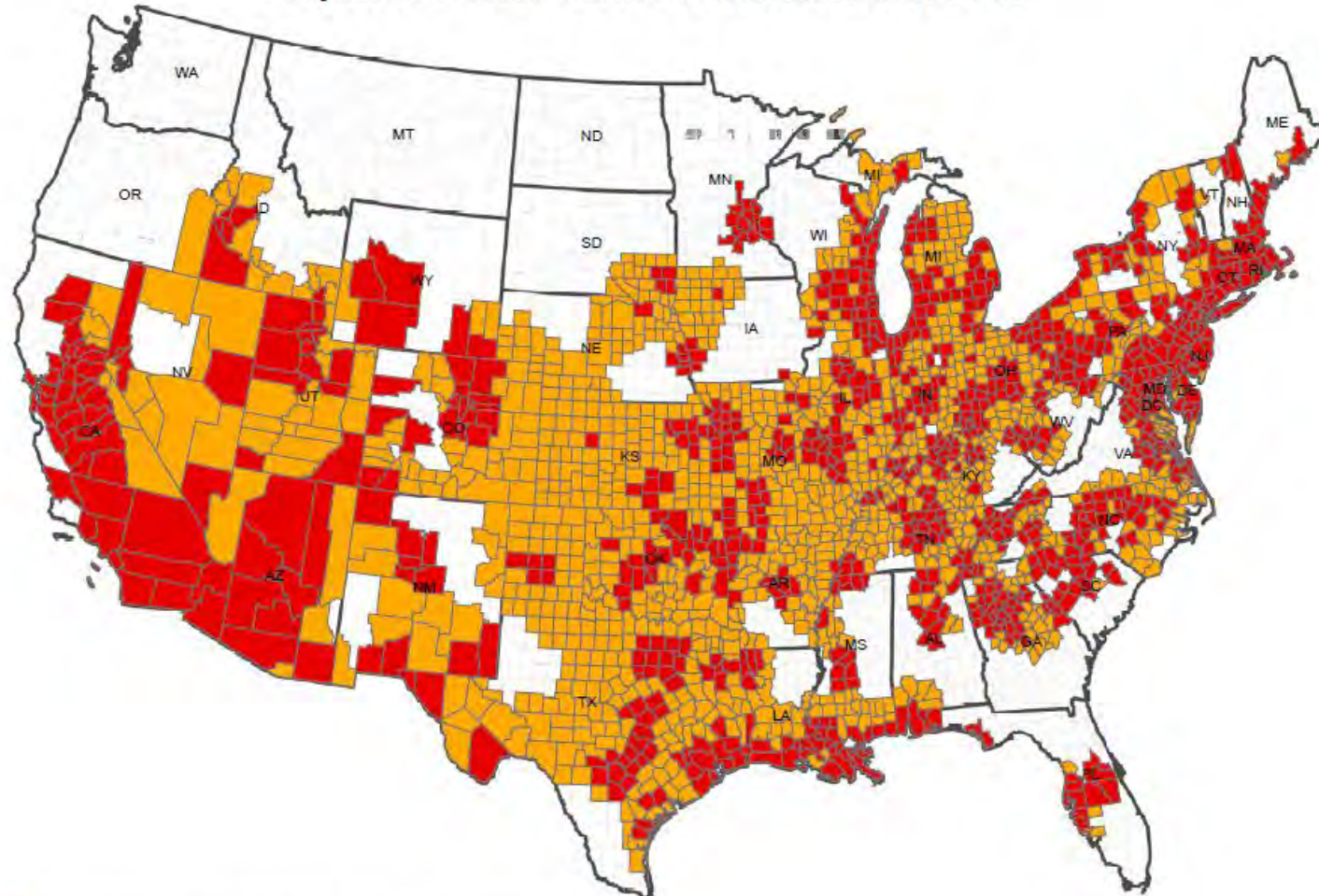
Source: Environmental Protection Agency



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Nonattainment at 65 ppb

Projected 8-Hour Ozone Nonattainment Areas

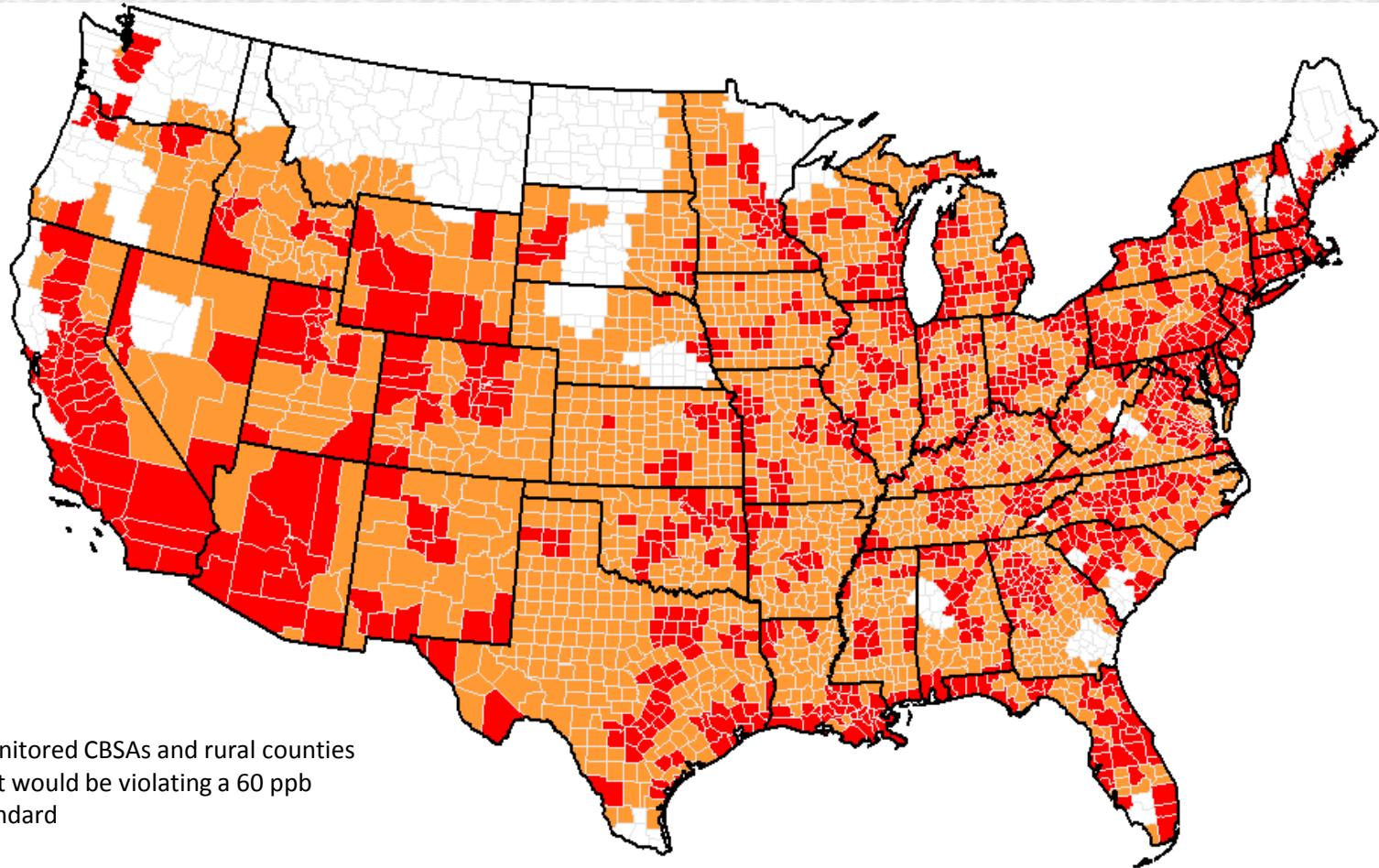


■ Monitored CBSAs and rural counties that would be violating a 65 ppb standard
■ Unmonitored areas that are anticipated to violate a 65 ppb standard based on spatial interpolation

Based on a 6-year period, 2011-2016

Based on 2011-2013 data accessed from <http://www.epa.gov/airtrends/> and <http://www.epa.gov/airdata/> on 6/2/2014

Nonattainment at 60 ppb



Monitored CBSAs and rural counties
that would be violating a 60 ppb
standard

Unmonitored areas that have estimated
ozone levels that would be violating a
60 ppb standard (based on spatial
interpolation)

Based on 2011-2013 data accessed from <http://www.epa.gov/airtrends/> and <http://www.epa.gov/airdata/> on 6/2/2014

Most Expensive Regulation of All Time

EPA **2025** Compliance Cost Estimate 2014 Proposed Rule

Ozone Standard	Cost Estimate in 2025
70 ppb	\$3.9 billion
65 ppb	\$15 billion
60 ppb	\$39 billion

Source: EPA Proposed Ozone Rule, RIA (Nov. 2014)

Comparison of **Total** Cost Estimates EPA 2011 v. NERA Economic Consulting (2017 – 2040)

EPA Cost Estimate 60 ppb	NERA Economic Consulting 60 ppb
~\$900 Billion	\$2.2 Trillion

Source: EPA 2011 Ozone RIA and NERA Economic Consulting July 2014 Study



Why EPA's \$15 Billion/Year Vastly Underestimates the True Costs of 65 ppb

- Only considers counties that are currently monitored – ***excludes ~76% of U.S. counties***
- Includes emission reductions from ***proposed*** Clean Power Plan
- Does not consider costs of states attaining standard ***before 2025***
- ***Excludes*** California
- Assumes ***unknown controls are less expensive*** than known controls (\$/ton).



Potential Impacts of New Ozone Regulation

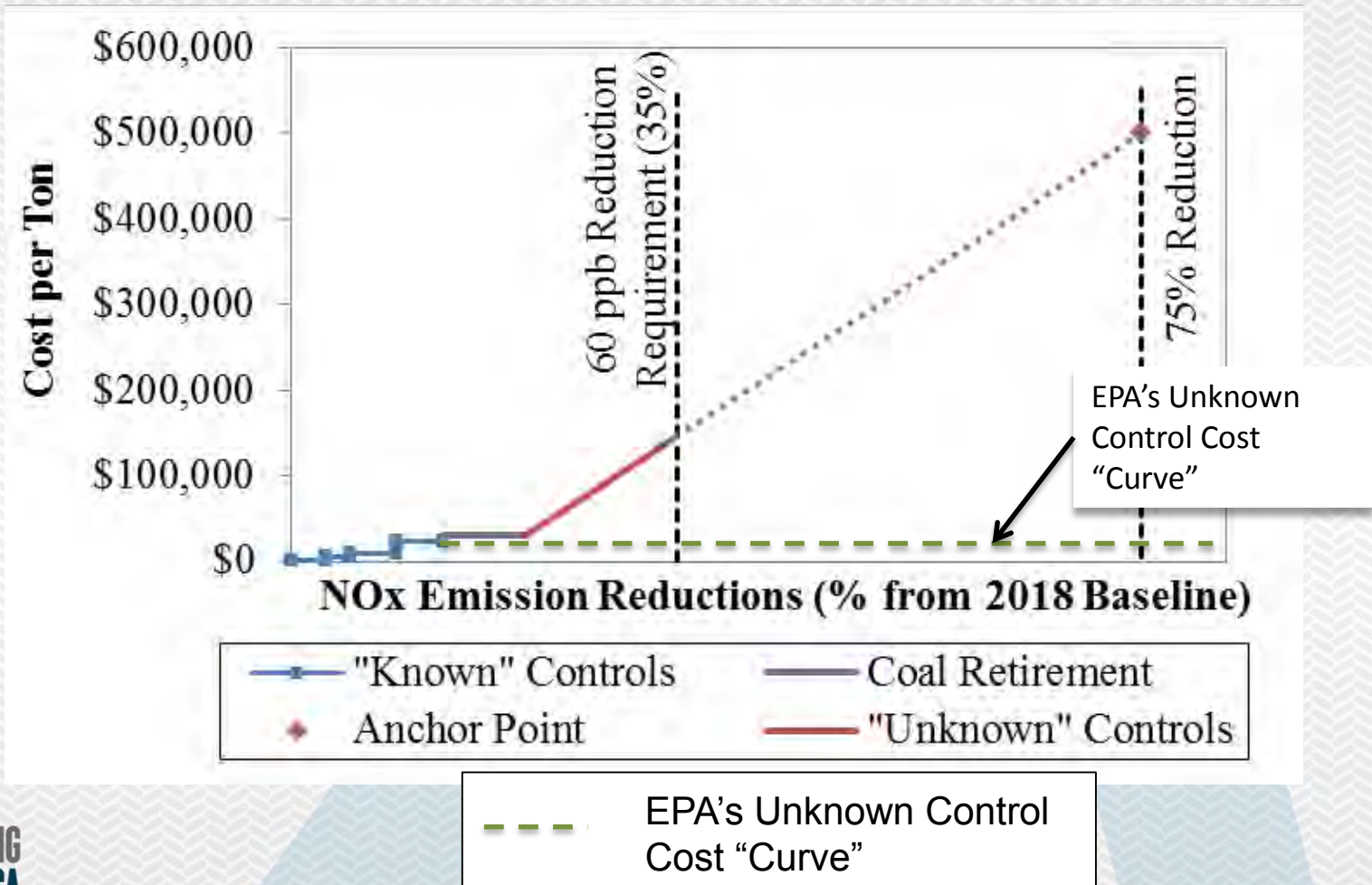
Analysis Performed by NERA Economic Consulting (60 ppb)

- Reduce U.S. GDP by \$270 billion per year and as much as \$3.4 trillion over the period from 2017 to 2040;
- Result in 2.9 million fewer job-equivalents per year on average through 2040;
- Cost the average U.S. household \$1,570 per year in the form of lost consumption;
- Retirement of 101 GW of Coal-Fired Capacity
- Increase natural gas costs up to 52% and electricity up to 23%

Source: NERA Economic Consulting, *Assessing Economic Impacts of a Stricter National Ambient Air Quality Standard for Ozone*. Study can be found at: www.nam.org/ozone

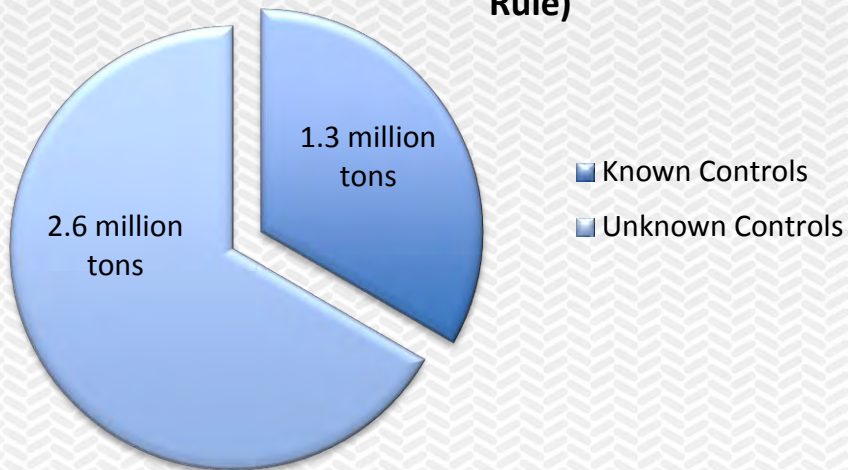
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Cost Curves for NOX Reductions

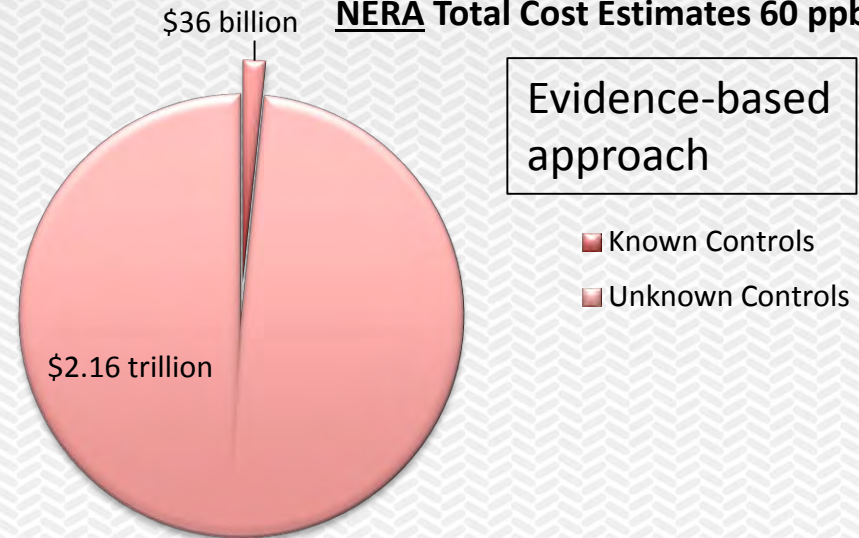


The “Unknown” Controls

EPA 60 ppb Annual NOX Reductions (2010 Rule)



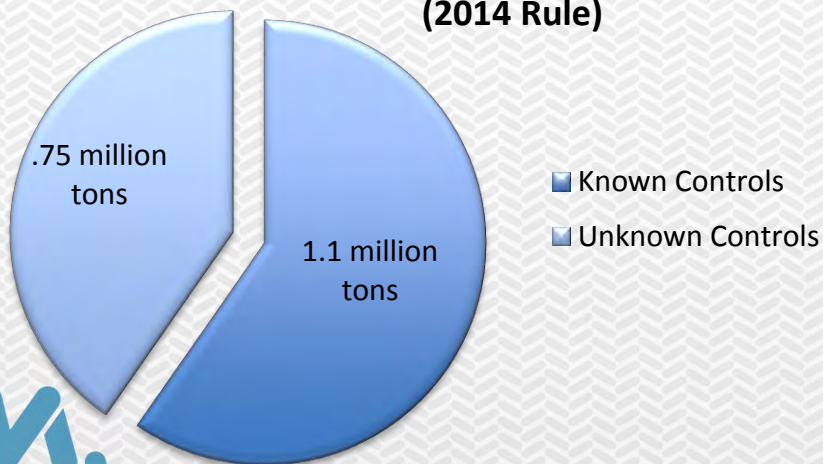
NERA Total Cost Estimates 60 ppb



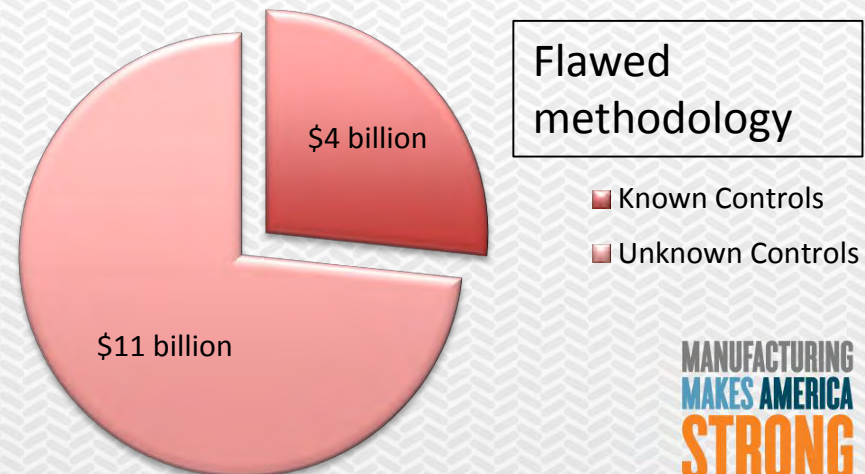
Evidence-based approach

- Known Controls
- Unknown Controls

2014 EPA 65 ppb Annual NOX Reductions (2014 Rule)



EPA 2025 Cost Estimates 65 ppb

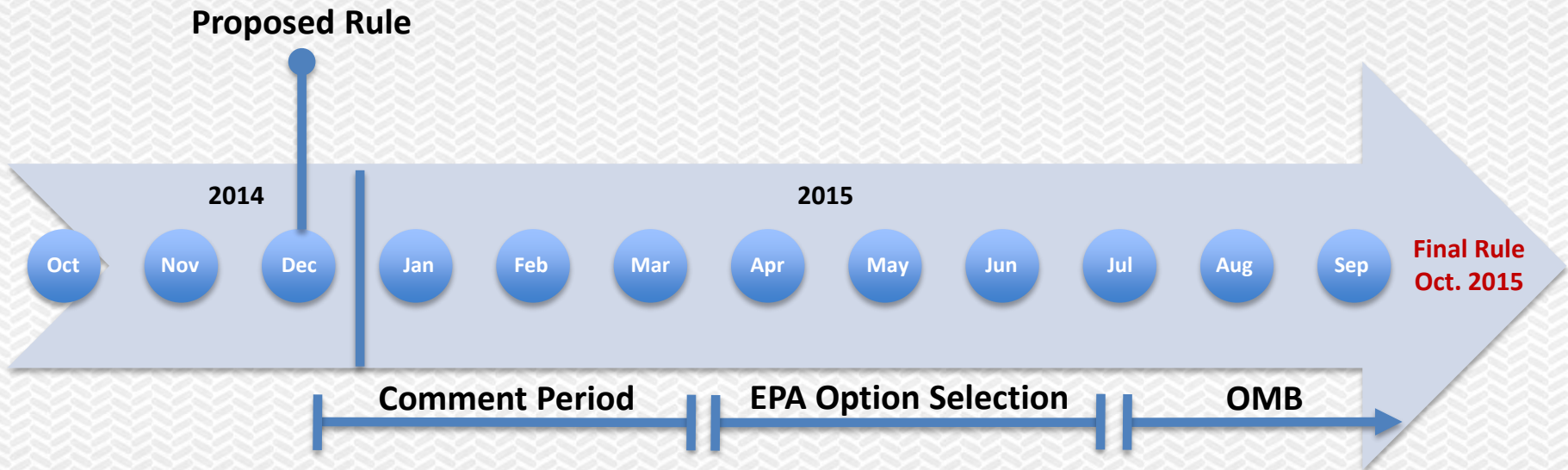


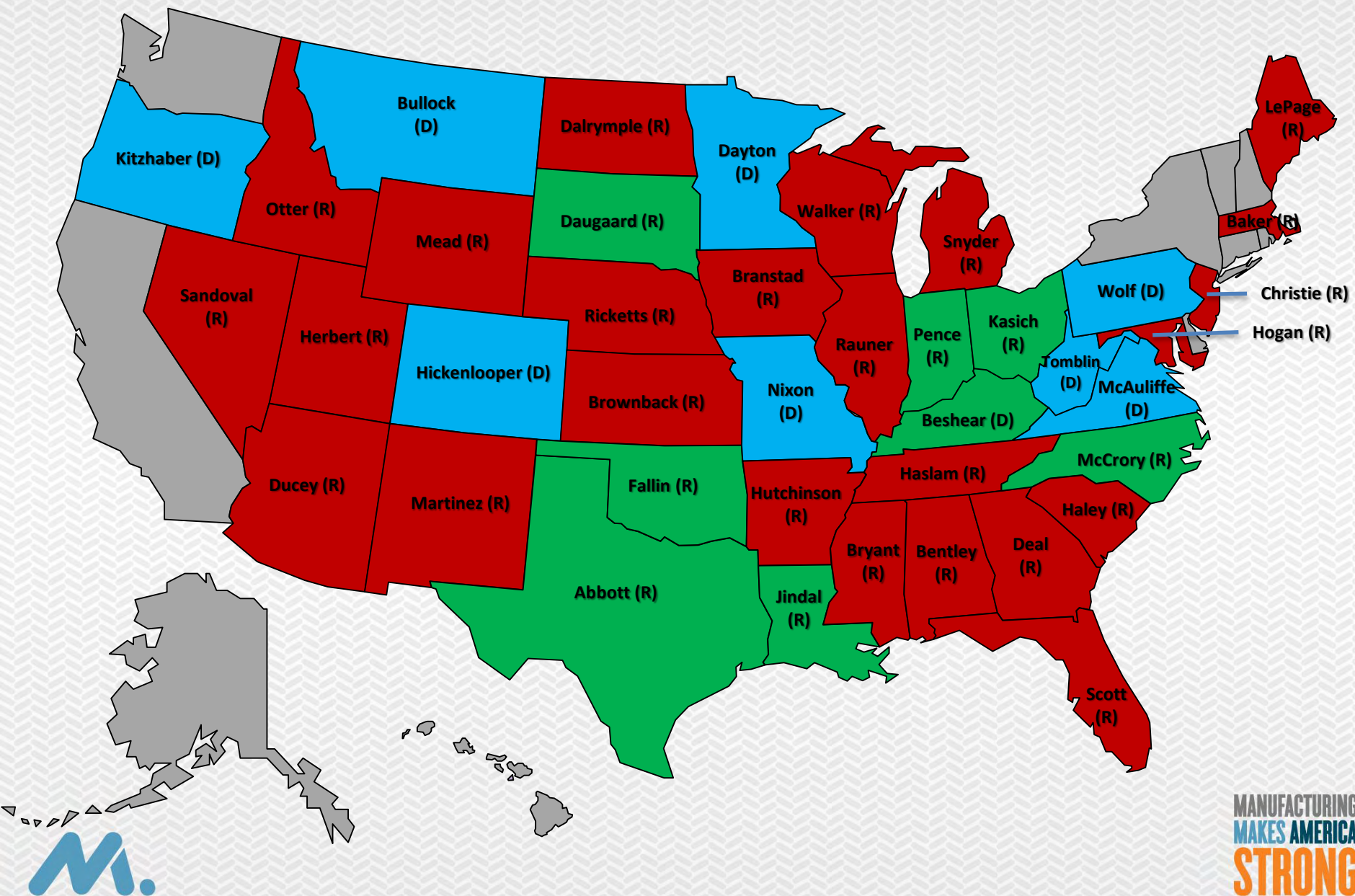
Flawed methodology

- Known Controls
- Unknown Controls



Ozone Rulemaking Schedule





Final Thoughts on Ozone Regulation

- Parts of the country and industries that traditionally have not had ozone issues, will have new and increased compliance burdens
- Costs slope upwards as the ozone standard is lowered – little low hanging fruit
- Congress will get engaged; states will get engaged; end-game is getting Administration to land at a reasonable place



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NATIONAL ASSOCIATION OF
Manufacturers

The NAM Agenda



Goal 1: The United States will be the best place in the world to manufacture and attract foreign direct investment.

Goal 2: Manufacturers in the United States will be the world's leading innovators.

Goal 3: The United States will expand access to global markets to enable manufacturers to reach the 95 percent of consumers who live outside our borders.

Goal 4: Manufacturers in the United States will have access to the workforce that the 21st-century economy demands.

