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December 7, 2009

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By Email and Posting to ARB

Michael Terris, Esq.
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

Re: Offroad Diesel Rule – Economic Impact on Emissions

Dear Mr. Terris:

On behalf of the Associated General Contractors of America ("AGC") and its approximately 33,000 members, I would like to thank you, Mr. Saxe and Ms. Heroy-Rogalski for meeting with AGC's General Counsel, Michael Kennedy, AGC members Tom Brown, Mike Shaw and Tony Grasso, Jim Lyons of Sierra Research and me, on Thursday, December 3rd. Enclosed is a copy of Mr. Kennedy's presentation.

When AGC appeared before the Board in January of 2009, the association made it clear that it does not challenge the environmental objectives that ARB originally intended its off-road rule to achieve. AGC merely explained that the dramatic downturn in California's construction industry had provided an opportunity for ARB to meet those objectives without imposing all of the costly and burdensome requirements found in the current rule. The Board directed staff to work with AGC and others to determine the impact of the recession and to report back in the Fall of 2009.

That analysis is now complete and it clearly shows that the rule is unnecessary to meet ARB's original objectives for NOx emissions at any time in the near future, that the rule is unnecessary to meeting ARB's original objectives for PM emissions until some uncertain time between 2012 and 2014 (depending on whether ARB evaluates the reductions on either an annual or a cumulative basis), and that the rule is unnecessary in its current form to meet ARB's original objectives for PM at any time.

In the four years since the board developed the off-road rule, almost 35% of California's construction workers—some 326,000 people—have lost their jobs. While this catastrophic

downturn has no silver lining, it has significantly reduced diesel exhaust emissions from the construction industry.

In order to quantify the impact of the recession on emissions, AGC retained Sierra Research, a well-respected air modeling consultancy based in Sacramento. AGC directed Sierra to use the same model and assumptions that ARB had originally used, and simply to replace certain values that ARB had derived from various surveys and studies with the new values that ARB has obtained from the actual fleet data it collected earlier this year as various reporting requirements took effect. The results are summarized in the enclosed copy of Mr. Kennedy's presentation.

Sierra's analysis, which was generally praised by your staff, makes it clear that the current recession has reduced the construction industry's emissions of NOx far below anything that ARB originally anticipated, and with only minor exceptions, to levels lower than ARB sought to achieve through 2025. Though some version the rule would yield additional reductions in emissions of PM in the years to come (if the growth rate that ARB assumed and built into its model is accurate), ARB can achieve its original goals for PM with significantly fewer of the expensive retrofits and repowers than the rule currently contemplates.

All of us hope that this recession ends soon and that economic activity, including construction, grows rapidly. There is, however, no basis for believing that such rapid recovery and growth will occur. Indeed, as we pointed out to you in our meeting last week, construction typically recovers more slowly from a recession than other economic sectors. At this time, ARB cannot even assume that the construction sector has bottomed out, or that recovery will be as strong as the growth rates predicted when ARB adopted the rule.

Even though there is little prospect for a strong and rapid recovery, AGC directed Sierra to assume the same growth rate that ARB assumed when it developed the rule. Any suggestion that the future growth rate will justify the rule would run counter to the assumptions ARB made when it developed the rule—during a period of steady and significant economic growth.

In light of these facts, we asked you to relay to the Board that AGC requests it to direct you and the other members of the staff to:

1. Streamline the regulation, eliminating the distinctions between small, medium and large fleets, and regulating all fleets over the same period and to the same extent that ARB originally sought to regulate the small fleets;

2. Genuinely exempt the individual vehicles that the current regulation merely purports to exempt, excluding such vehicles from the calculation of fleet averages

and compliance with target rates, and excluding the horsepower of such vehicles from the calculation of fleet horsepower;

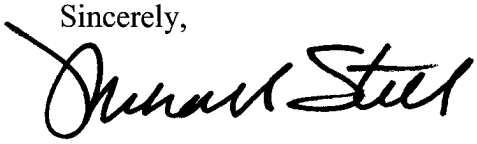
3. Create a "safe harbor" for fleet owners at risk of suffering serious financial harm, limiting the direct expense that any fleet owner would have to incur in any one year to comply with the regulation (perhaps to a percentage of the owner's net revenue in the preceding year);

4. At least two years before the first deadline for compliance with any fleet average requirements, re-evaluate the costs and benefits of those requirements, and modify them at least to the extent that ARB can do so and still meet its original emission reduction targets; and

5. At least two years before the first deadline for compliance with any fleet average requirements, evaluate and report on the technical feasibility of installing VDECs on the broad array of vehicles that an amended regulation would still require fleet owners to retrofit.

If the Board believes that additional information is needed before it can direct staff to make the changes outlined above, AGC is prepared to present such information and to respond to questions at this week's Board meeting, or at a special meeting called for the purpose of examining the economic impact of the rule in detail. As we discussed, however, time is of the essence. As the state's construction contractors struggle to survive, and to provide at least the remainder of the jobs in the construction industry, they have to weigh the very real prospect that they cannot, in any event, survive the crushing blow that the rule still promises to deliver in 2013.

Sincerely,



Michael Jacob Steel

Counsel to AGC of America

Enclosure

cc: Members of the Air Resources Board (w/enc.)

AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.





A Fresh Look

at California's New In-Use Off-Road Diesel-Fueled Fleets Regulation

December 3, 2009

Michael E. Kennedy, Esq.
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California's New In-Use Off-Road Diesel-Fueled Fleets Regulation

- Approved in July 2007
- Established reporting requirements that took effect in April (large fleets), June (medium fleets) and August (small fleets) of 2009
- Established fleet average requirements that will take effect in March of 2010 (large fleets), 2013 (medium fleets) and 2015 (small fleets)
- Applies to four industry categories but just one of the four (Construction and Mining) accounts for at least 80% of the covered pieces of equipment

Scope of Review and this Presentation

- 2000 Emissions Inventory
- 2009 Emissions Inventory
- Similarities and Differences in the Results
- Implications for the Rule
- Final Note

2000 Emissions Inventory

- Baseline values for calendar year 2000 (Surveys and Studies)
  - Total Population of Equipment (Each Type)
  - Age Distribution of Equipment (Each Type)
  - Horsepower Distribution (Each Type)
- OFFROAD model projections for future years
  - Constant rate of annual growth in population, equal to nearly 2% for "Construction and Mining" category

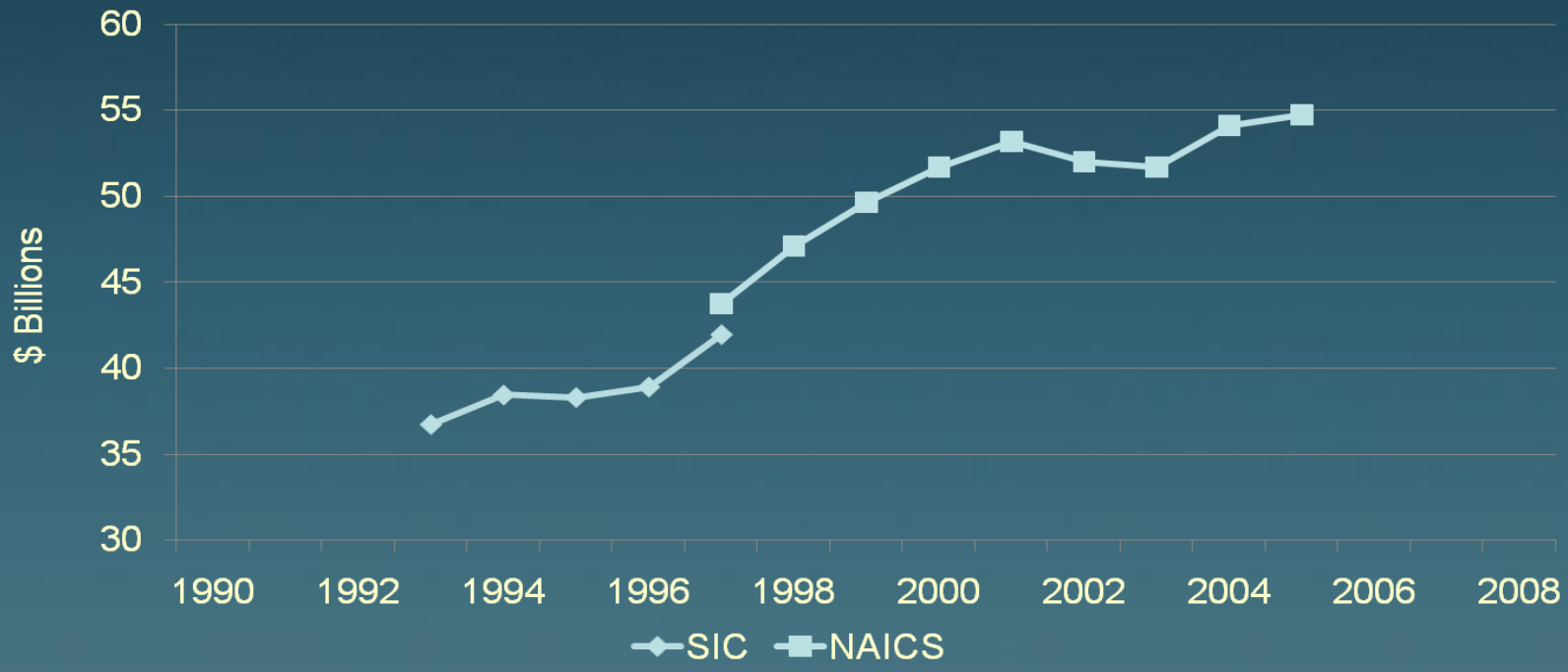
2000 Emissions Inventory

- The Economic Context
  - Period of steady growth in California GDP originating in construction
  - Positive growth in 9 of the 12 years beginning in 1993 and running through 2004
  - Annual rates varied widely, falling as low as -0.6% but climbing as high as 7.8%
  - Cumulative growth of 14.2% ($5.2B) from 1993 to 1997 and another 25.1% ($11B) from 1997 to 2005

Real GDP Originating in California Construction Industry ($ Millions)		
Year	SIC	NAICS
1993	36,704	
1994	38,414	
1995	38,270	
1996	38,880	
1997	41,925	43,751
1998		47,107
1999		49,672
2000		51,716
2001		53,178
2002		52,009
2003		51,695
2004		54,125
2005		54,747

Source: Bureau of Economic Analysis, U.S. Department of Commerce

Real GDP Originating in California Construction Industry 1993-2005



Source: Bureau of Economic Analysis, U.S. Department of Commerce

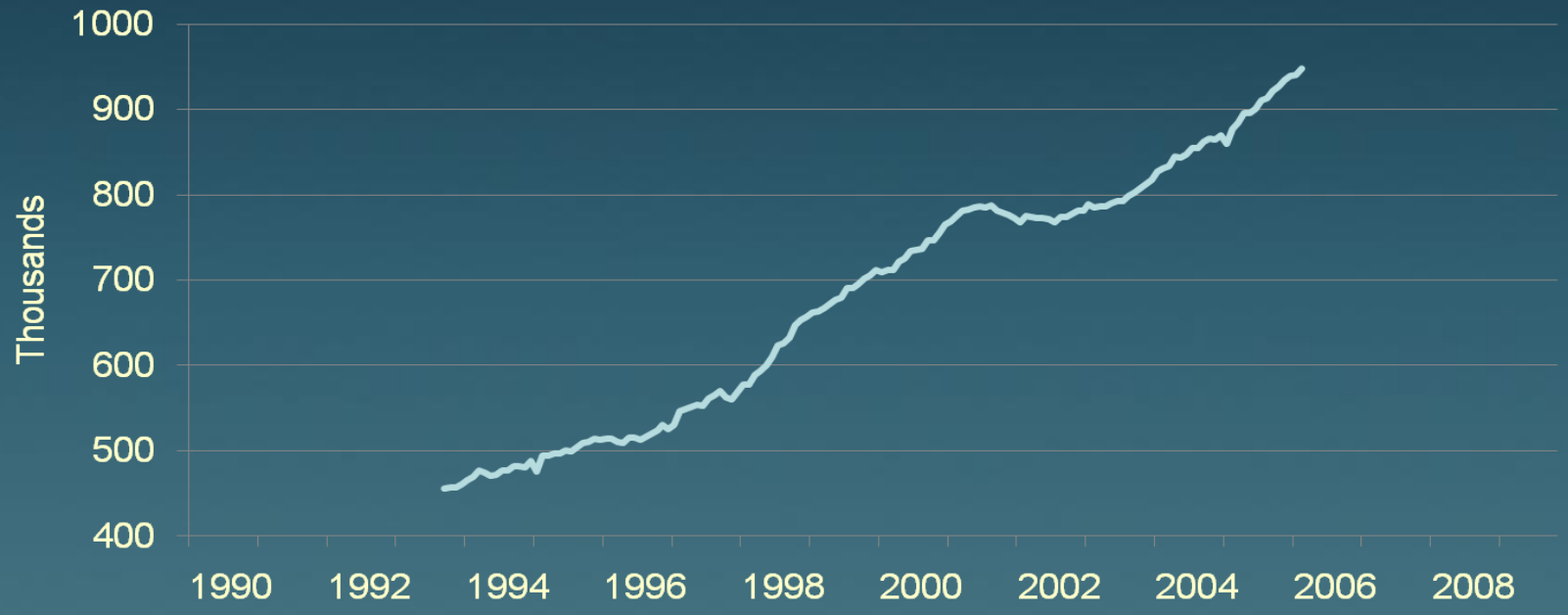
2000 Emissions Inventory

- The Economic Context
  - Also period of steady growth in total employment in California's construction industry
  - Positive growth in all 12 years beginning in 1993 and running through 2004
  - Annual rate reached 15.6% in 1998, but otherwise ranged between 0.9% and 8.4%
  - Cumulative growth of 104% (479,000 jobs)

Seasonally Adjusted Employment In California Construction Industry (Thousands in December)	
Year	**Total**
1993	460.9
1994	488.2
1995	513.1
1996	525.1
1997	569.0
1998	657.6
1999	711.7
2000	765.5
2001	772.6
2002	781.3
2003	818.1
2004	870.1
2005	940.1

Source: Bureau of Labor Statistics, U.S. Department of Labor

Employment in California Construction Industry 1993-2005



Source: Bureau of Labor Statistics, U.S. Department of Labor

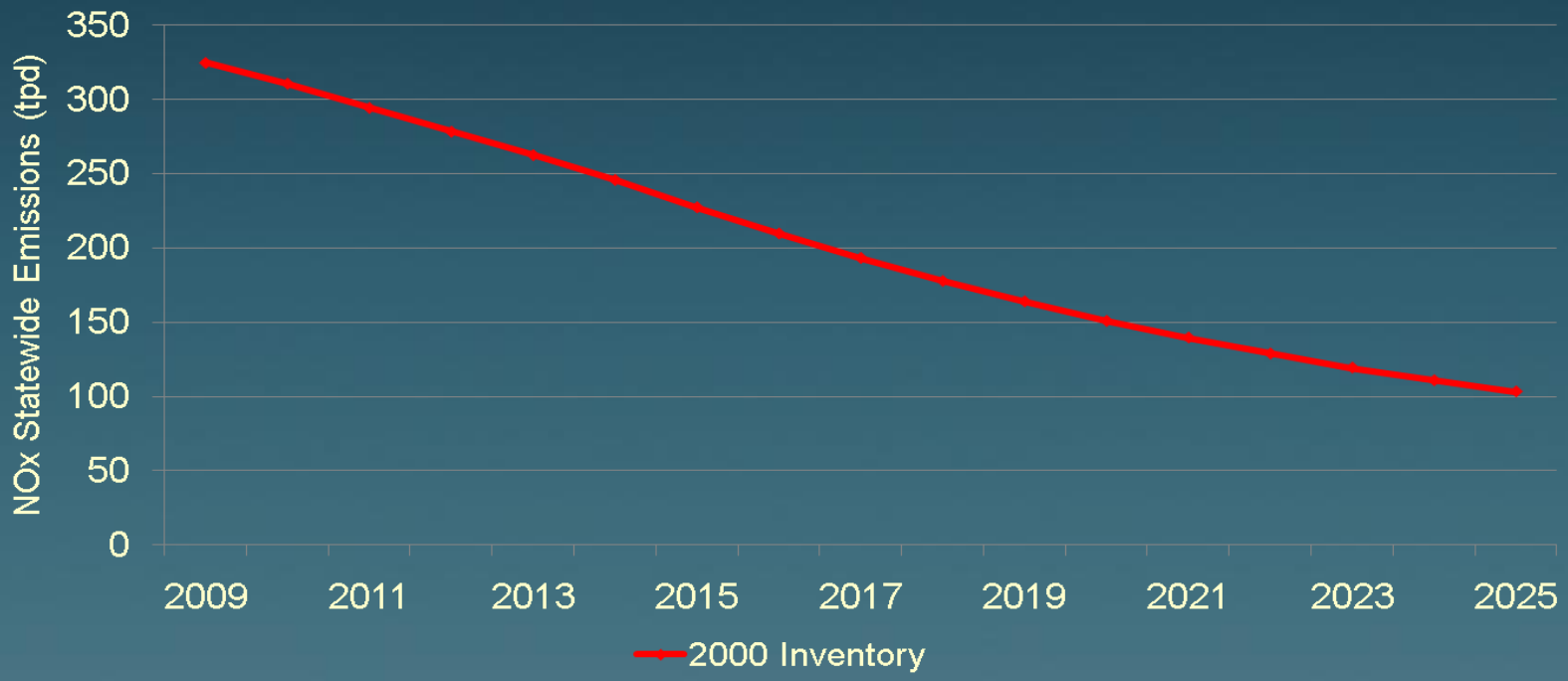
2000 Emissions Inventory for NOx

- Based on available data, OFFROAD model estimated 419 tons per day (tpd) in 2000
- OFFROAD model then projected steadily declining rate of emissions through 2025
  - Down 22.4% (to 325 tpd) by 2009
  - Down anywhere from 4.3% to 8% per year from 2010 to 2025
  - Down a cumulative total of 68.2% (to 103.2 tpd) between 2009 and 2025

NOx Emissions From Regulated Fleets (Tons Per Day)	
Year	2000 Inventory
2009	325.0
2010	311.0
2011	294.6
2012	278.6
2013	262.8
2014	246.0
2015	227.5
2016	209.9
2017	193.3
2018	177.8
2019	164.0
2020	150.8
2021	139.6
2022	128.8
2023	119.3
2024	110.7
2025	103.2

- Technical Support Document, Table VI-11

2000 Emissions Inventory for NOx

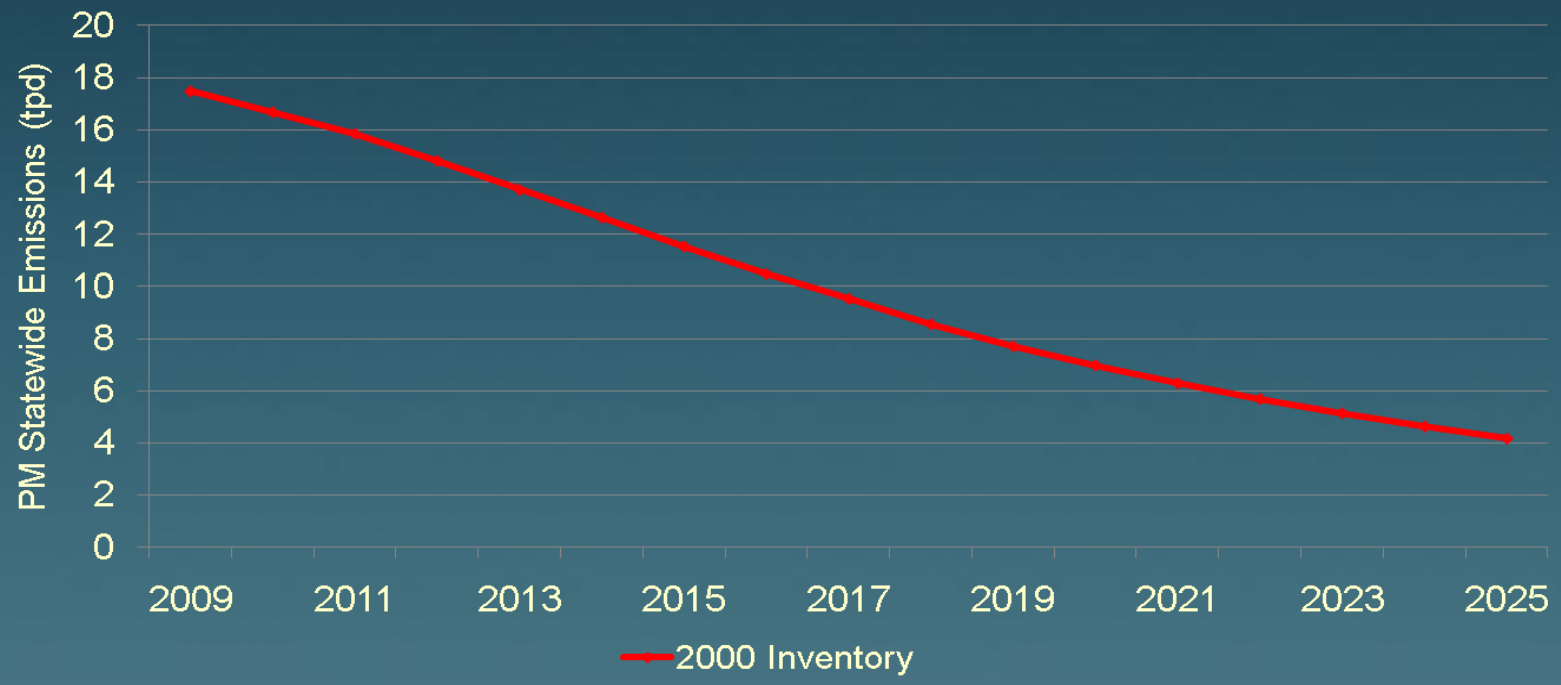


2000 Emissions Inventory for PM

- Based on available data, OFFROAD model estimated 25 tpd in 2000
- OFFROAD model then projected steadily declining rate of emissions through 2025
  - Down 30% (to 17.5 tpd) by 2009
  - Down anywhere from 4.6% to 10.2% per year though 2025
  - Down a cumulative total of 76% (to 4.2 tpd) between 2009 and 2025

PM Emissions From Regulated Fleets (Tons Per Day)	
Year	2000 Inventory
2009	17.49
2010	16.69
2011	15.86
2012	14.82
2013	13.71
2014	12.65
2015	11.54
2016	10.48
2017	9.53
2018	8.56
2019	7.71
2020	6.98
2021	6.29
2022	5.69
2023	5.14
2024	4.64
2025	4.17

2000 Emissions Inventory for PM



2009 Emissions Inventory

- New regulation's reporting requirements took effect between April and August of 2009
- Opportunity to take fresh look at emissions inventory
- Embedded in DOORS data are 2009 values for three key inputs
  - Total Population of Equipment (Each type)
  - Age Distribution of Equipment (Each Type)
  - Horsepower Distribution (Each Type)

2009 Emissions Inventory

- As did CARB, AGC relied on OFFROAD model
  - No modifications or adjustments
- AGC merely substituted DOORS data provided on September 26, 2009
- OFFROAD model estimates for 2009
- OFFROAD model projections for future years

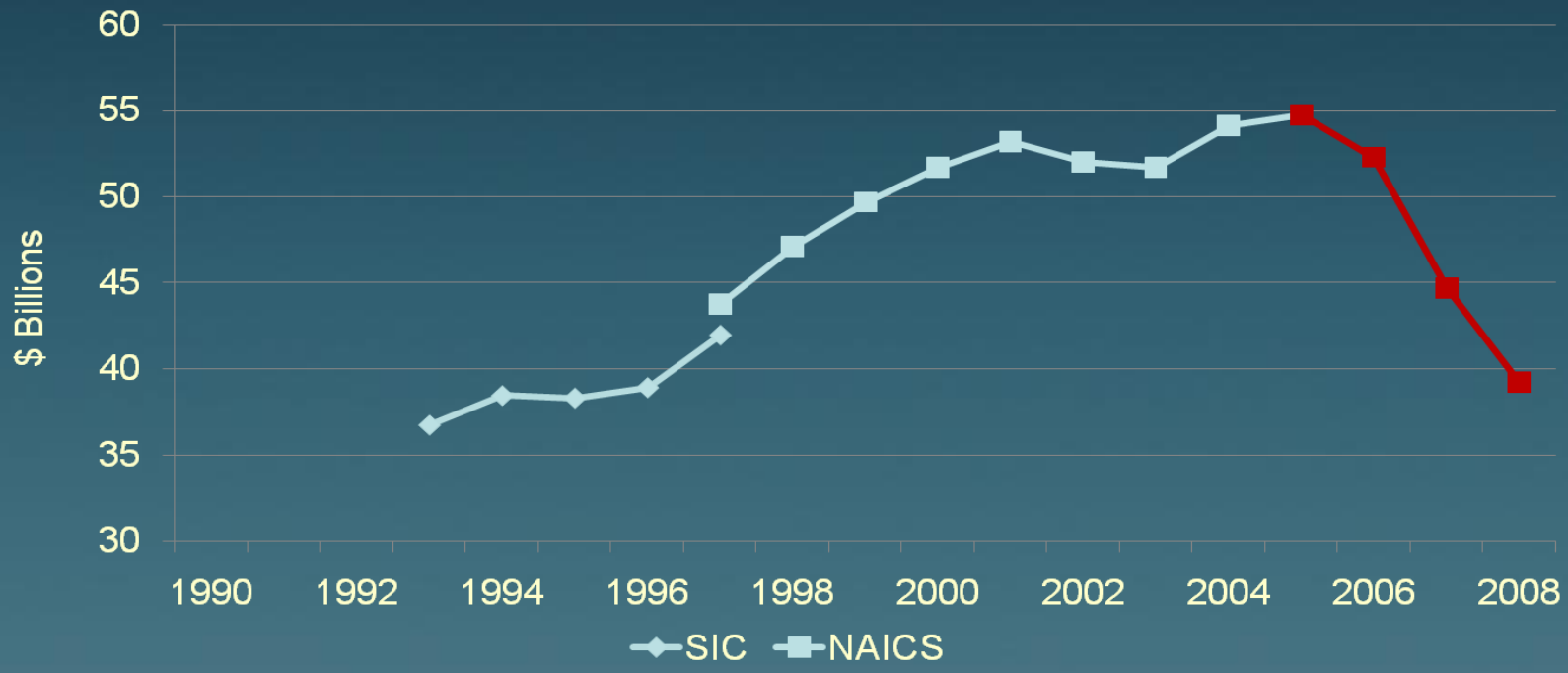
2009 Emissions Inventory

- The Economic Context
  - Three years of sharp decline in real GDP originating in construction
  - Erased all gains made in the preceding 12 years
  - Construction industry contracted 4.5%, 14.5% and 12.2% in 2006, 2007 and 2008, respectively
  - Cumulative drop of 28.4% (15.5B) in real GDP from 2005 to 2008

Real GDP Originating in California Construction Industry ($ Millions)		
Year	SIC	NAICS
1993	36,704	
1994	38,414	
1995	38,270	
1996	38,880	
1997	41,925	43,751
1998		47,107
1999		49,672
2000		51,716
2001		53,178
2002		52,009
2003		51,695
2004		54,125
2005		54,747
2006		52,282
2007		44,668
2008		39,208

Source: Bureau of Economic Analysis, U.S. Department of Commerce

Real GDP Originating in California Construction Industry 1993-2008



Source: Bureau of Economic Analysis, U.S. Department of Commerce

2009 Emissions Inventory

- The Economic Context
  - Four years of sharp decline in employment in construction
  - Erased all gains made in the preceding 12 years
  - Employment dropped 2.8%, 6.3%, 15.6% and 15% in 2006, 2007, 2008 and 2009 respectively
  - Construction industry lost a cumulative total of 34.7% (326,000 jobs) from 2005 to 2009

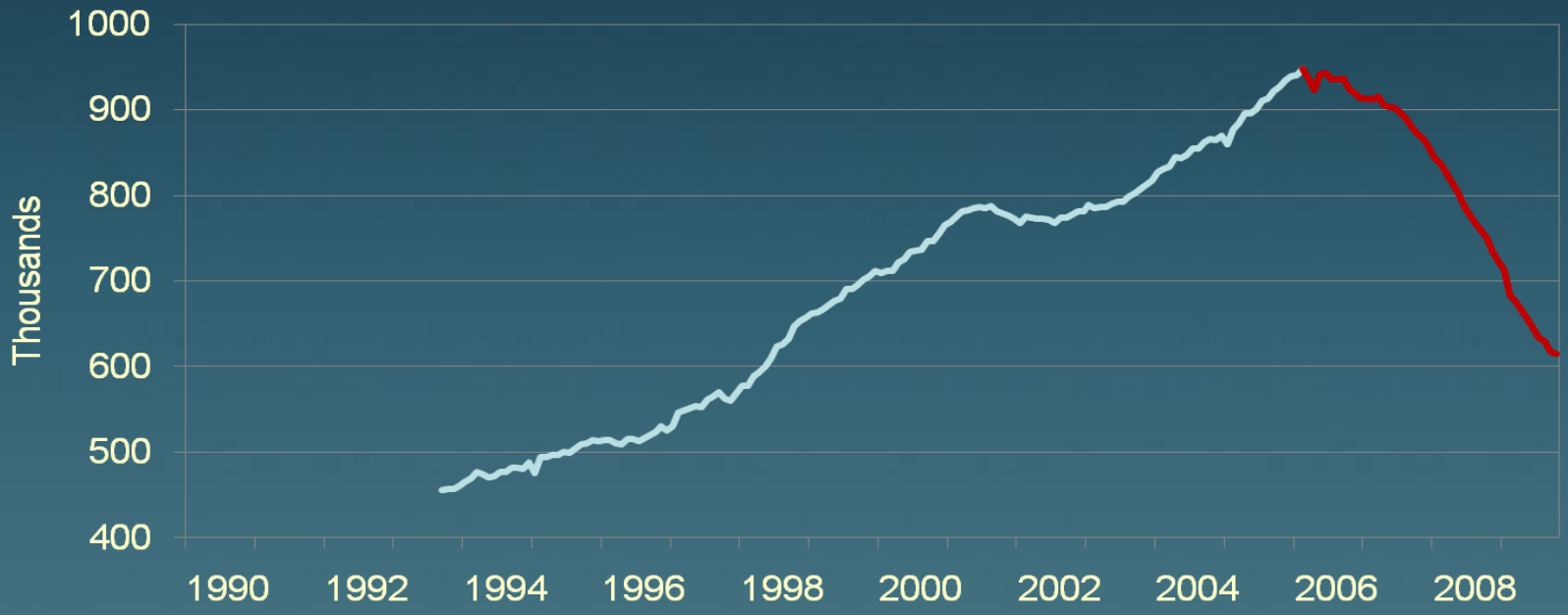
Seasonally Adjusted Employment In California Construction Industry (Thousands in December)

Year	Total
1993	460.9
1994	488.2
1995	513.1
1996	525.1
1997	569.0
1998	657.6
1999	711.7
2000	765.5
2001	772.6
2002	781.3
2003	818.1
2004	870.1
2005	940.1
2006	913.9
2007	856.4
2008	722.6
2009*	614.1

- Preliminary for October 2009

Source: Bureau of Labor Statistics, U.S. Department of Labor

Employment in California Construction Industry 1993-2008



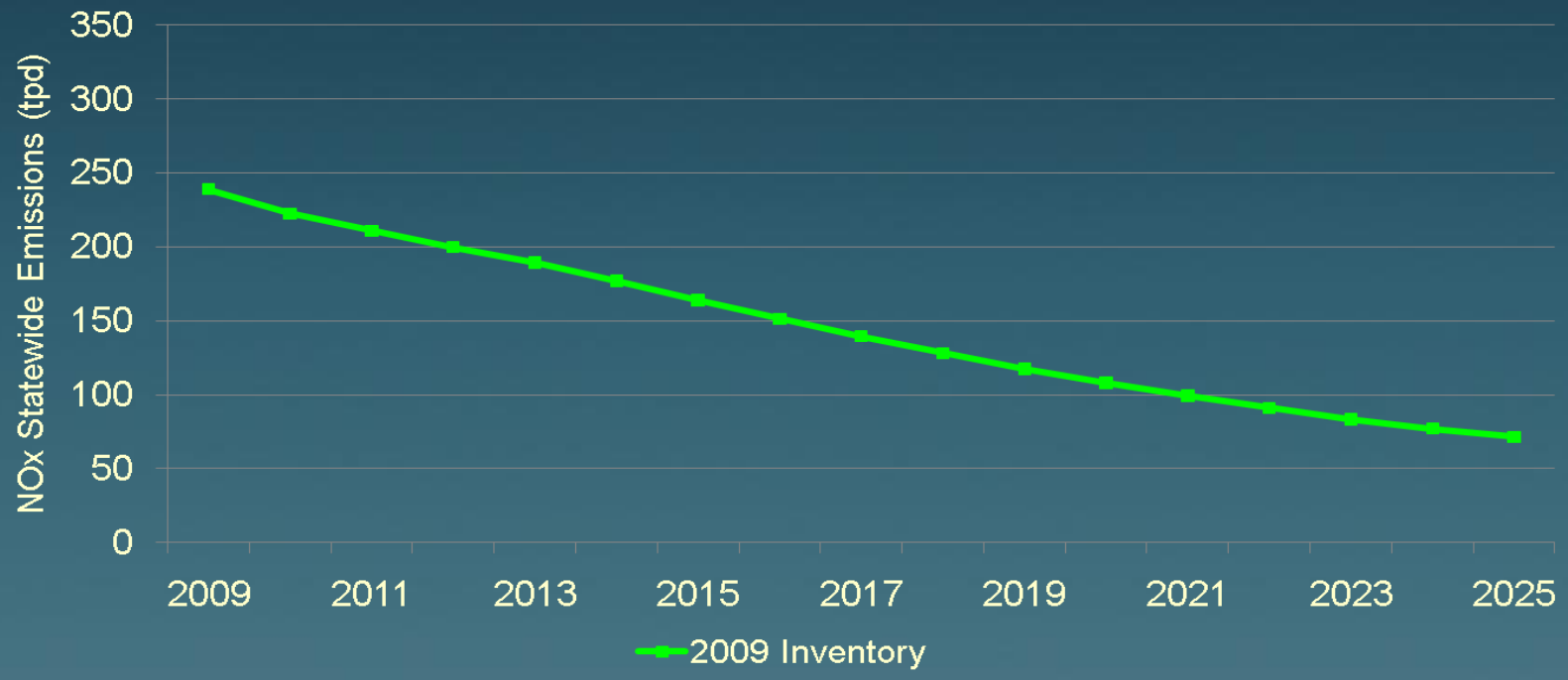
Source: Bureau of Labor Statistics, U.S. Department of Labor

2009 Emissions Inventory for NOx

- Based on DOORS data, OFFROAD model estimates 239.1 tpd in 2009
- OFFROAD model then projects steadily declining rate of emissions through 2025
  - Down anywhere from 5.2% to 8.3% per year through 2025
  - Down a cumulative total of 70% (to 71.6 tpd) between 2009 and 2025

NOx Emissions From Regulated Fleets (Tons Per Day)	
Year	2009 Inventory
2009	239.1
2010	222.5
2011	210.9
2012	199.9
2013	189.3
2014	177.1
2015	163.9
2016	151.5
2017	139.5
2018	128.1
2019	117.6
2020	108.0
2021	99.3
2022	91.1
2023	83.5
2024	77.1
2025	71.6

2009 Emissions Inventory for NOx

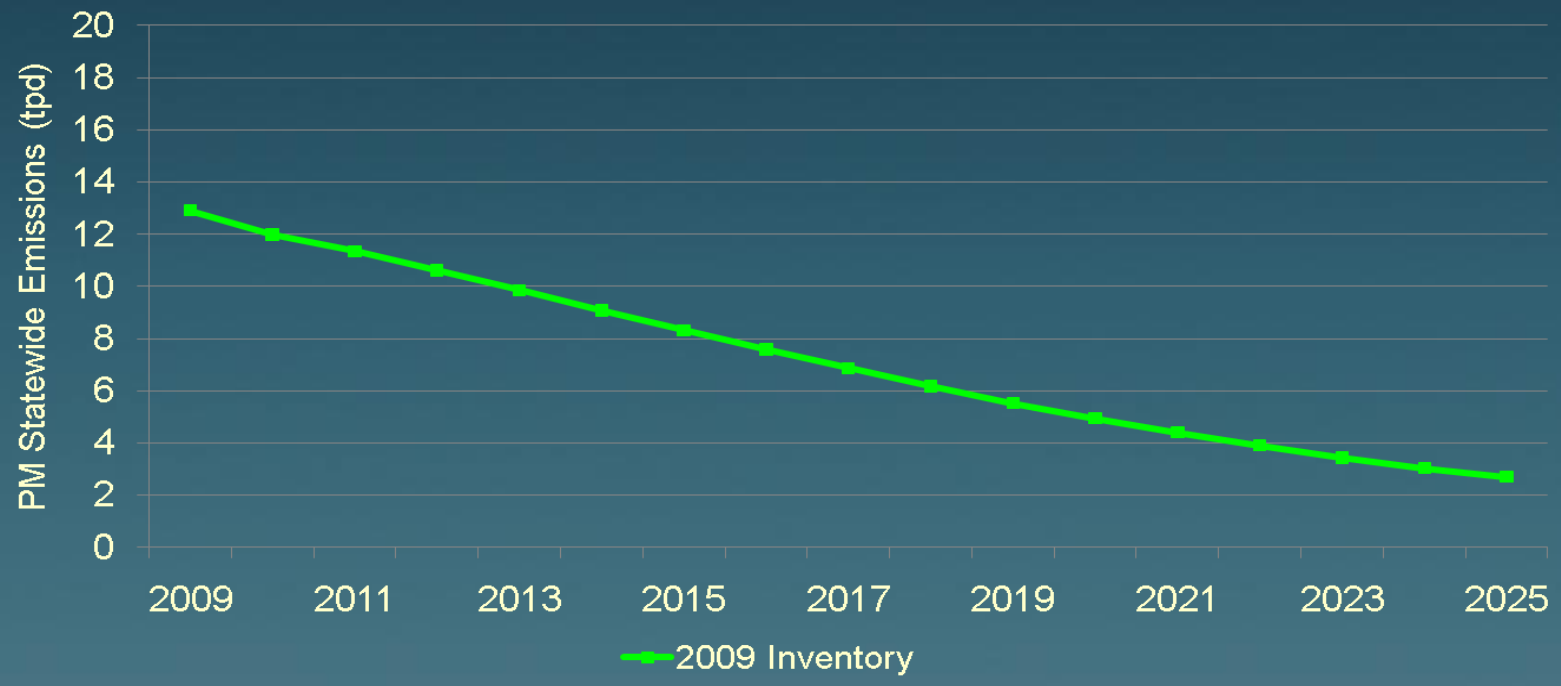


2009 Emissions Inventory for PM

- Based on DOORS data, OFFROAD model estimates 12.9 tpd in 2009
- OFFROAD model then projects steadily declining rate of emissions through 2025
  - Down anywhere from 5.3% to 12% through the year 2025
  - Down a cumulative total of 79% (to 2.7 tpd) between 2009 and 2025

PM Emissions From Regulated Fleets (Tons Per Day)	
Year	2009 Inventory
2009	12.91
2010	11.99
2011	11.35
2012	10.61
2013	9.85
2014	9.08
2015	8.32
2016	7.59
2017	6.87
2018	6.17
2019	5.53
2020	4.94
2021	4.41
2022	3.91
2023	3.44
2024	3.04
2025	2.71

2009 Emissions Inventory for PM



Similarities and Differences In the Results for NOx

- Originally projected decline in rate of emissions in each year between 2009 and 2025 on the low side but not terribly wide of the mark
  - Originally projected to drop 4.3% to 8% in each year from 2009 to 2025
  - Now projected to drop 5.2% to 8.3% drop in each of these years

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Similarities and Differences In the Results for NOx

- Originally projected decline in rate of emissions over entire period on the low side, but again, pretty close to the mark
  - Originally projected to drop cumulative total of 68.3%
  - Now projected to drop cumulative total of 70%

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
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2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Similarities and Differences In the Results for NOx

- Originally projected decline in rate of emissions between 2000 and 2009 quite wide of the mark
  - Originally projected to drop 22.4% (from 419 tpd to 325 tpd) over these nine years
  - Actually dropped 42.9% (from 419 tpd to 239.1 tpd) during this period
  - 2000 inventory overstated rate of emissions in 2009 by 35.9% (85.9 tpd)

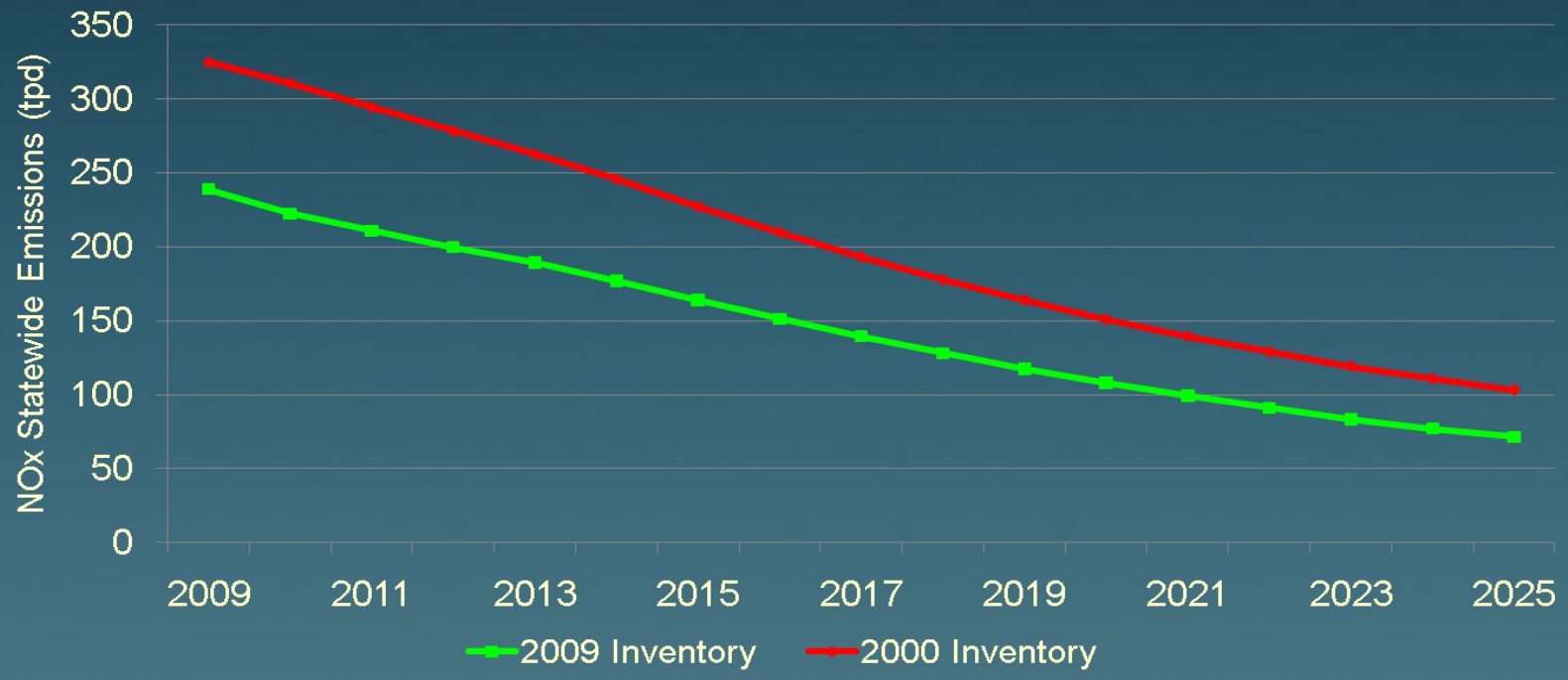
NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Similarities and Differences In the Results for NOx

- 2000 inventory also overstated rate of emissions in each year between 2010 and 2025, and cumulative total of emissions over same period
  - Overstated rate of emissions by 35.9% to 44.1%
  - Overstated cumulative total of emissions by 39.4% (355,000 tons)

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	325.0	239.1	-85.9
2010	311.0	222.5	-88.5
2011	294.6	210.9	-83.7
2012	278.6	199.9	-78.7
2013	262.8	189.3	-73.5
2014	246.0	177.1	-68.9
2015	227.5	163.9	-63.6
2016	209.9	151.5	-58.4
2017	193.3	139.5	-53.8
2018	177.8	128.1	-49.7
2019	164.0	117.6	-46.4
2020	150.8	108.0	-42.9
2021	139.6	99.3	-40.3
2022	128.8	91.1	-37.7
2023	119.3	83.5	-35.8
2024	110.7	77.1	-33.6
2025	103.2	71.6	-31.6

Comparison of Inventories for NOx



Similarities and Differences In the Results for PM

- Originally projected decline in rate of emissions in each year between 2009 and 2025 on the low side but not terribly wide of the mark
  - Originally projected to drop 4.6% to 10.2% in each year from 2009 to 2025
  - Now projected to drop 5.3% to 12% in each of these years

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Similarities and Differences In the Results for PM

- Originally projected decline in rate of emissions over entire period on the low side, but again, pretty close to the mark
  - Originally projected to drop cumulative total of 76%
  - Now projected emissions to drop cumulative total of 79%

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Similarities and Differences In the Results for PM

- Originally projected decline in rate of emissions between 2000 and 2009 quite wide of the mark
  - Originally projected to drop 30% (from 25 tpd to 17.5 tpd) over these nine years
  - Actually dropped 48.3% (from 25 tpd to 12.9 tpd) during this period
  - 2000 inventory overstated rate of emissions in 2009 by 35.7% (4.6 tpd)

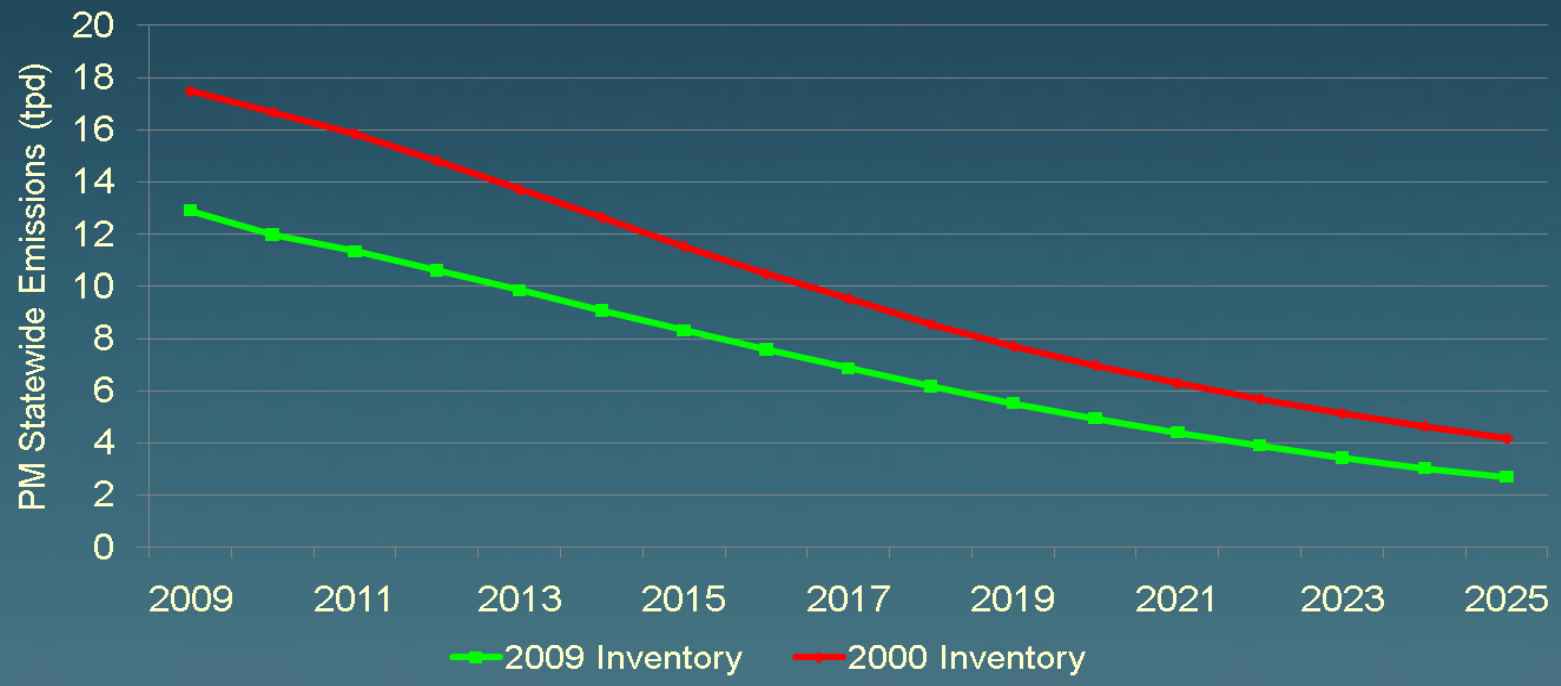
PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Similarities and Differences In the Results for PM

- 2000 inventory overstated rate of emissions in each year between 2010 and 2025, and cumulative total of emissions over same period
  - Overstated rate of emissions by 35.5% to 53.9%
  - Overstated cumulative total of emissions by 40.1% (nearly 18,000 tons).

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	2000 Inventory	2009 Inventory	Delta
2009	17.49	12.91	-4.58
2010	16.69	11.99	-4.71
2011	15.86	11.35	-4.51
2012	14.82	10.61	-4.21
2013	13.71	9.85	-3.86
2014	12.65	9.08	-3.57
2015	11.54	8.32	-3.22
2016	10.48	7.59	-2.89
2017	9.53	6.87	-2.66
2018	8.56	6.17	-2.38
2019	7.71	5.53	-2.19
2020	6.98	4.94	-2.04
2021	6.29	4.41	-1.88
2022	5.69	3.91	-1.78
2023	5.14	3.44	-1.70
2024	4.64	3.04	-1.60
2025	4.17	2.71	-1.46

Comparison of Inventories for PM



Implications for the Rule

- Legal implications
  - Necessary and cost effective?
  - Anticipated future emissions?
  - Potential adverse health effects?
  - Economic feasibility?
  - Less costly alternatives that would achieve the same increments of environmental protection within the same timeframe?

Implications for the Rule

The ISOR (in April of 2007):

"Between 2007 and 2009, construction valuation is expected to increase over 10 billion dollars . . . ."

The best evidence currently available:

By the end of 2008, real GDP originating in California's construction industry had already dropped $13B from its peak in 2006.

Implications for the Rule

The ISOR (in April of 2007):

"[T]he California construction industry is expected to add about 8,000 jobs per year from 2006 to 2014."

The best evidence currently available:

At the end of October of 2009, seasonally adjusted employment in the California construction industry was down to its lowest level since June of 1998. It had dropped for 31 consecutive months. The industry had lost 326,000 jobs, or 34.7 percent of its total workforce.

Implications for the Rule

The ISOR (in April of 2007):

"Staff expects many affected businesses would pass through the regulation's costs to their customers. This could be achieved, for example, through higher bids for construction projects . . . ."

The best evidence currently available:

The cost of construction is down. Competition is fierce, and in most cases, bids are significantly lower than owners expected two years ago. According to the U.S. Bureau of Labor Statistics, the cost of construction across the country dropped 7.4% from August of 2008 to August of 2009.

Implications for the Rule

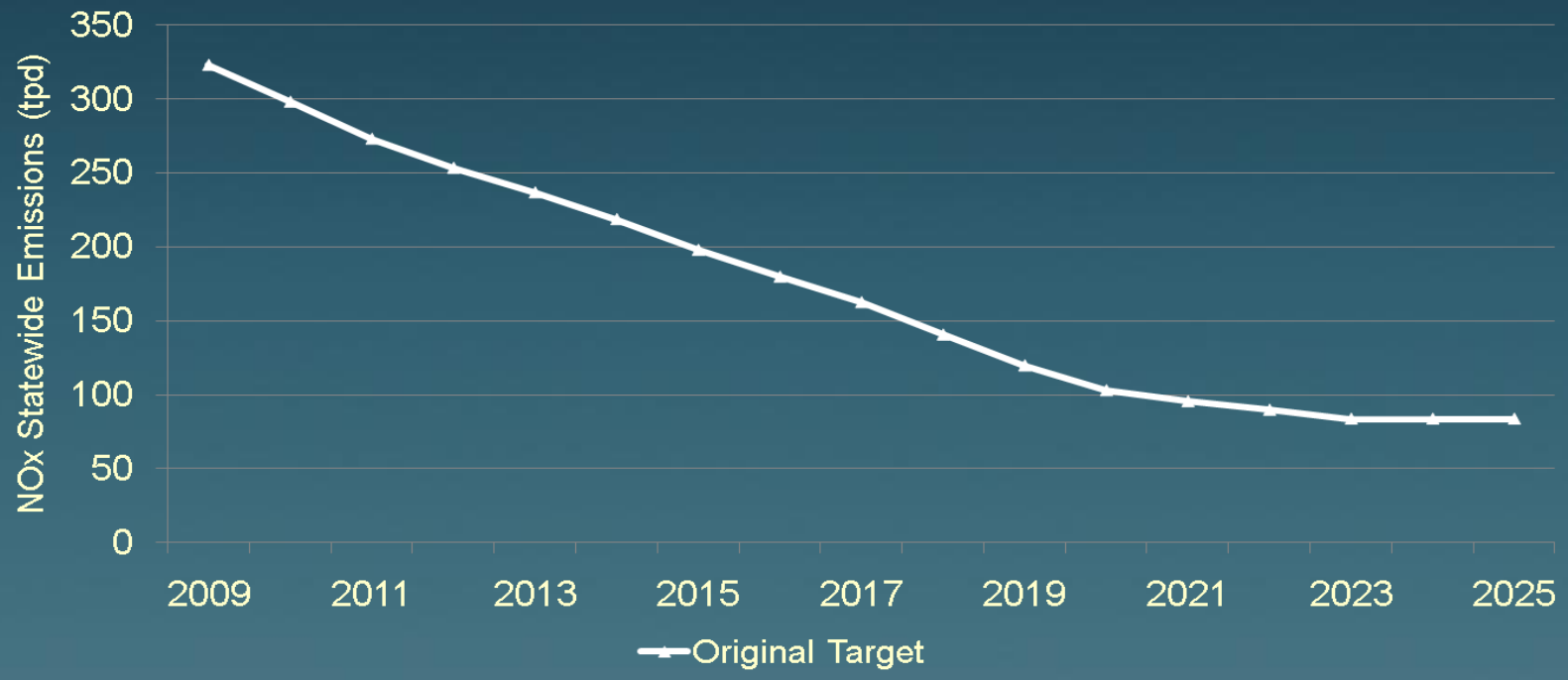
- Core policy questions
  - How driven by the data?
  - Opportunities that it presents?
  - How to stay the course and still reduce the economic burden on a devastated industry?

Original Target for NOx

- Regulation calibrated to drop rate of NOx emissions well below originally expected levels
  - Down to 323.3 tpd in 2009
  - Down anywhere from 6.0% to 14.9% per year in each of next 14 years
  - Down to 83.6 tpd in 2023 and subsequent years
  - Down a cumulative total of 73.2% (to 83.6 tpd) between 2009 and 2025

NOx Emissions From Regulated Fleets (Tons Per Day)	
Year	Original Target
2009	323.3
2010	298.4
2011	273.3
2012	253.6
2013	236.9
2014	218.8
2015	198.0
2016	179.8
2017	162.5
2018	140.7
2019	119.7
2020	102.9
2021	95.5
2022	89.7
2023	83.6
2024	83.6
2025	83.6

Original Target for NOx

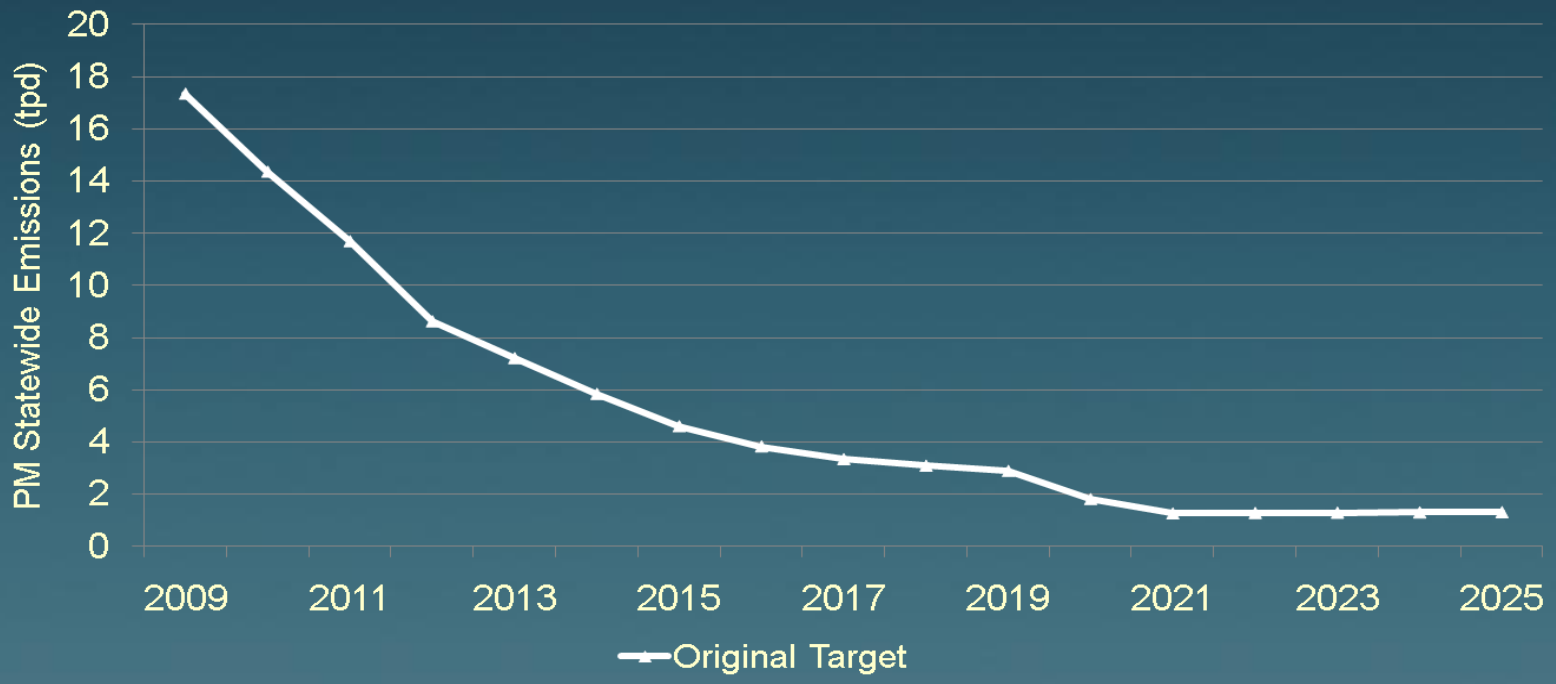


Original Target for PM

- Regulation calibrated to drop rate of PM emissions well below originally expected levels
  - Down to 17.34 tpd in 2009
  - Down anywhere from 6.6% to 37.3% per year in each of next 12 years
  - Down to a low of 1.26 tpd in 2021
  - Down a cumulative total of 92.4% (to 1.3 tpd) between 2009 and 2025

PM Emissions From Regulated Fleets (Tons Per Day)	
Year	Original Target
2009	17.34
2010	14.35
2011	11.69
2012	8.62
2013	7.21
2014	5.84
2015	4.60
2016	3.83
2017	3.34
2018	3.09
2019	2.89
2020	1.81
2021	1.26
2022	1.28
2023	1.29
2024	1.30
2025	1.31

Original Target for PM



How 2009 Inventory for NOx Compares with Original Target

- 2009 projections lower than targeted rates in 14 of 17 years between 2009 and 2025, including first 11 years
  - Rate of emissions anywhere from 0.1% to 26% lower, but at least 14% lower in 10 of those 14 years

NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	323.3	239.1	-84.2
2010	298.4	222.5	-75.9
2011	273.3	210.9	-62.4
2012	253.6	199.9	-53.7
2013	236.9	189.3	-47.6
2014	218.8	177.1	-41.7
2015	198.0	163.9	-34.1
2016	179.8	151.5	-28.3
2017	162.5	139.5	-23.0
2018	140.7	128.1	-12.6
2019	119.7	117.6	-2.1
2020	102.9	108.0	5.1
2021	95.5	99.3	3.8
2022	89.7	91.1	1.4
2023	83.6	83.5	-0.1
2024	83.6	77.1	-6.5
2025	83.6	71.6	-12.0

How 2009 Inventory for NOx Compares with Original Target

- 2009 projections higher than targeted rates in only three years
  - 2020 through 2022

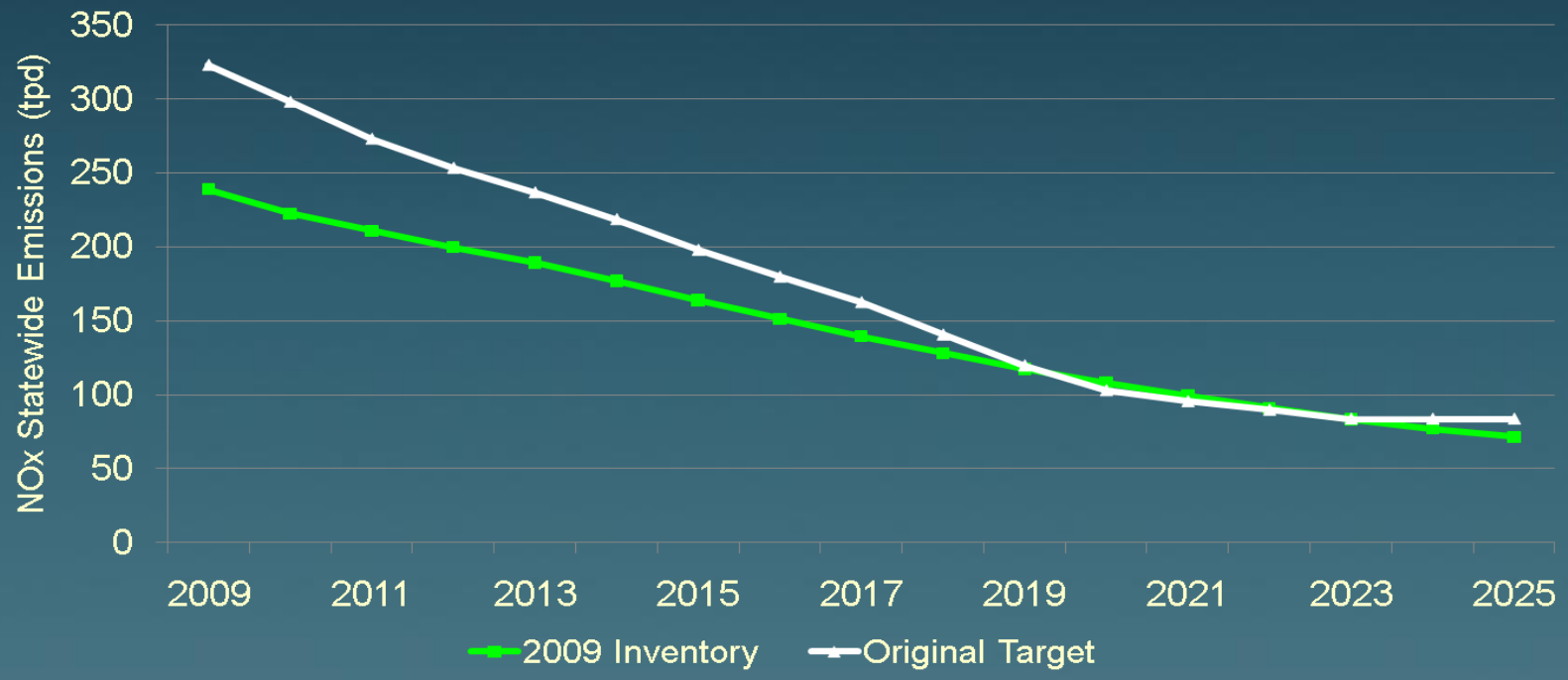
NOx Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	323.3	239.1	-84.2
2010	298.4	222.5	-75.9
2011	273.3	210.9	-62.4
2012	253.6	199.9	-53.7
2013	236.9	189.3	-47.6
2014	218.8	177.1	-41.7
2015	198.0	163.9	-34.1
2016	179.8	151.5	-28.3
2017	162.5	139.5	-23.0
2018	140.7	128.1	-12.6
2019	119.7	117.6	-2.1
2020	102.9	108.0	5.1
2021	95.5	99.3	3.8
2022	89.7	91.1	1.4
2023	83.6	83.5	-0.1
2024	83.6	77.1	-6.5
2025	83.6	71.6	-12.0

How 2009 Inventory for NOx Compares with Original Target

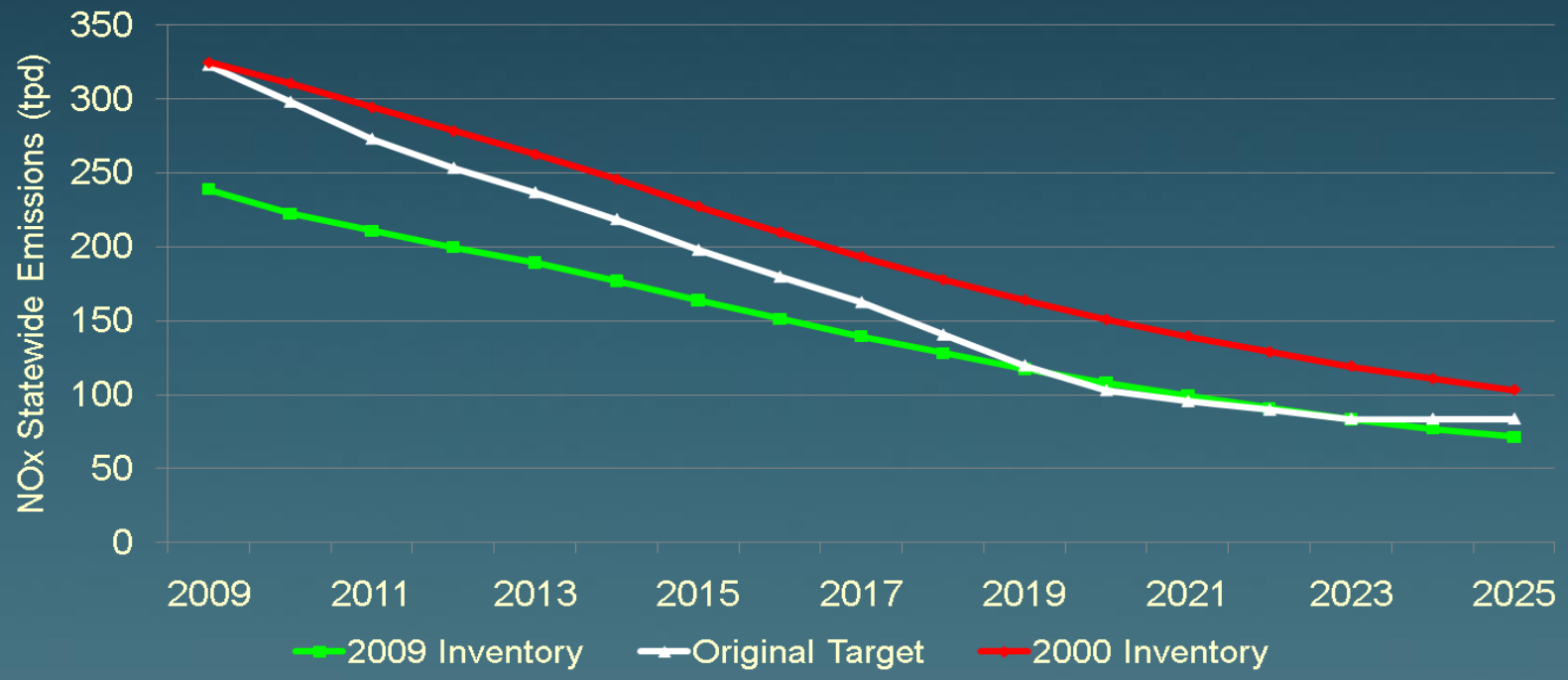
- Reductions still needed to meet targeted rates for those years are small fraction of reductions originally thought necessary
  - Between 3.6% and 10.6%

NOx Emissions from Regulated Fleets (Tons Per Day)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-1.7	0.0
2010	-12.6	0.0
2011	-21.4	0.0
2012	-25.0	0.0
2013	-25.8	0.0
2014	-27.2	0.0
2015	-29.5	0.0
2016	-30.0	0.0
2017	-30.8	0.0
2018	-37.2	0.0
2019	-44.3	0.0
2020	-48.0	-5.1
2021	-44.1	-3.9
2022	-39.1	-1.4
2023	-35.7	0.0
2024	-27.1	0.0
2025	-19.6	0.0

How 2009 Inventory for NOx Compares with Original Target



How 2009 Inventory for NOx Compares with 2000 Inventory and Original Target



How 2009 Inventory for NOx Compares with Original Target For Cumulative Reductions

- 2009 projections lower than targeted total of cumulative emissions in each and every year and in the aggregate
  - 16.1% (173,000 tons) below targeted total by 2025

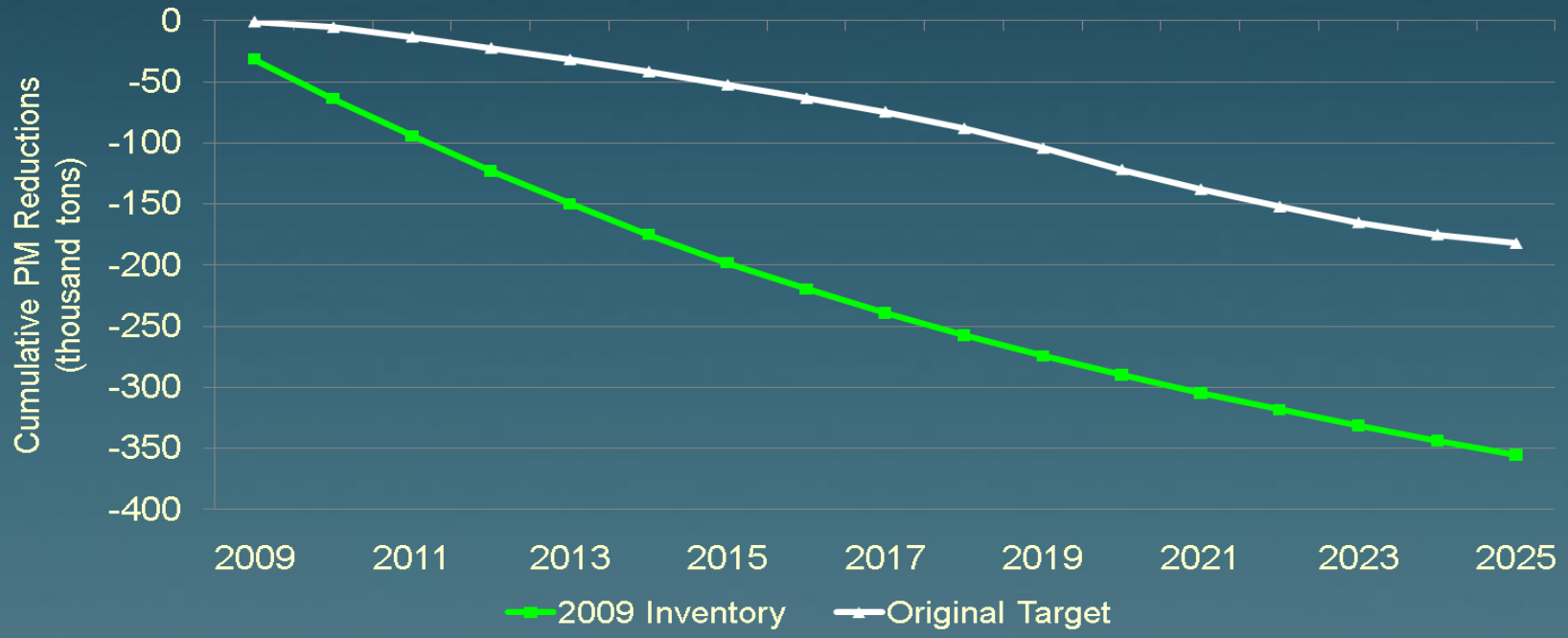
Cumulative NOx Emissions From Regulated Fleets (Thousands of Tons)			
Year	Original Target	2009 Inventory	Delta
2009	118.0	87.3	-30.7
2010	226.9	168.5	-58.4
2011	326.7	245.5	-81.2
2012	419.2	318.4	-100.8
2013	505.7	387.5	-118.2
2014	585.6	452.1	-133.5
2015	657.9	512.0	-145.9
2016	723.5	567.3	-156.2
2017	782.8	618.2	-164.6
2018	834.1	665.0	-169.1
2019	877.9	707.9	-170.0
2020	915.4	747.3	-168.1
2021	950.3	783.6	-166.7
2022	983.0	816.8	-166.2
2023	1,013.5	847.3	-166.2
2024	1,044.0	875.4	-168.6
2025	1,074.6	901.6	-173.0

How 2009 Inventory for NOx Compares with Original Target For Cumulative Reductions

- Literally nothing needed to achieve targeted total of cumulative emissions for NOx

Cumulative NOx Emissions From Regulated Fleets (Cumulative Thousands of Tons)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-0.6	0.0
2010	-5.2	0.0
2011	-13.0	0.0
2012	-22.2	0.0
2013	-31.6	0.0
2014	-41.5	0.0
2015	-52.3	0.0
2016	-63.3	0.0
2017	-74.5	0.0
2018	-88.1	0.0
2019	-104.2	0.0
2020	-121.7	0.0
2021	-137.8	0.0
2022	-152.1	0.0
2023	-165.2	0.0
2024	-175.1	0.0
2025	-182.2	0.0

How 2009 Inventory for NOx Compares with Original Target For Cumulative Reductions



How 2009 Inventory for PM Compares with Original Target

- 2009 projections lower than targeted rate for first three years
  - 25.4% lower in 2009
  - 16.7% lower in 2010
  - 2.9% lower in 2011

PM Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	17.30	12.90	-4.40
2010	14.40	12.00	-2.40
2011	11.69	11.35	-0.34
2012	8.62	10.61	1.99
2013	7.21	9.85	2.64
2014	5.84	9.08	3.24
2015	4.60	8.32	3.72
2016	3.83	7.59	3.75
2017	3.34	6.87	3.53
2018	3.09	6.17	3.09
2019	2.89	5.53	2.64
2020	1.81	4.94	3.13
2021	1.26	4.41	3.15
2022	1.28	3.91	2.63
2023	1.29	3.44	2.15
2024	1.30	3.04	1.74
2025	1.31	2.71	1.40

How 2009 Inventory for PM Compares with Original Target

- 2009 projections still higher than targeted rates for subsequent years

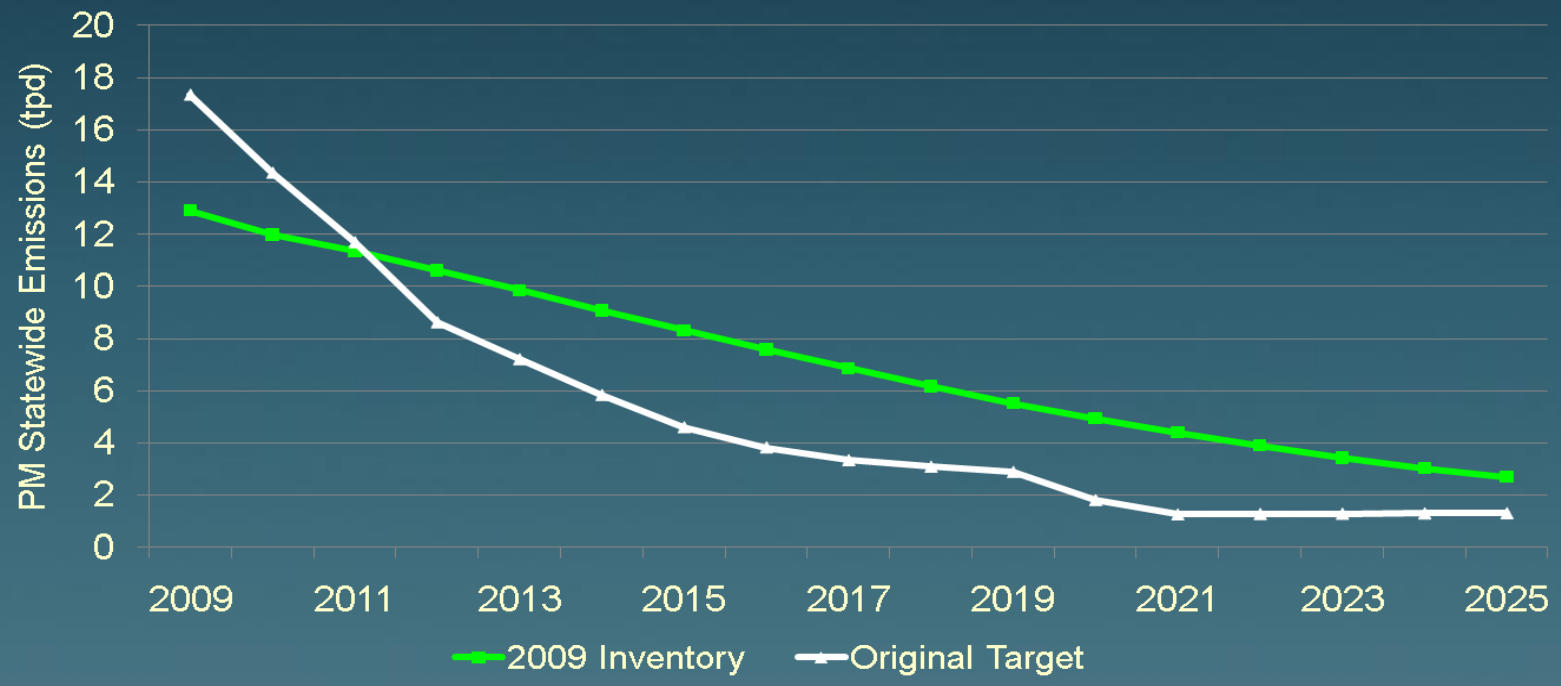
PM Emissions From Regulated Fleets (Tons Per Day)			
Year	Original Target	2009 Inventory	Delta
2009	17.30	12.90	-4.40
2010	14.40	12.00	-2.40
2011	11.69	11.35	-0.34
2012	8.62	10.61	1.99
2013	7.21	9.85	2.64
2014	5.84	9.08	3.24
2015	4.60	8.32	3.72
2016	3.83	7.59	3.75
2017	3.34	6.87	3.53
2018	3.09	6.17	3.09
2019	2.89	5.53	2.64
2020	1.81	4.94	3.13
2021	1.26	4.41	3.15
2022	1.28	3.91	2.63
2023	1.29	3.44	2.15
2024	1.30	3.04	1.74
2025	1.31	2.71	1.40

How 2009 Inventory for PM Compares with Original Target

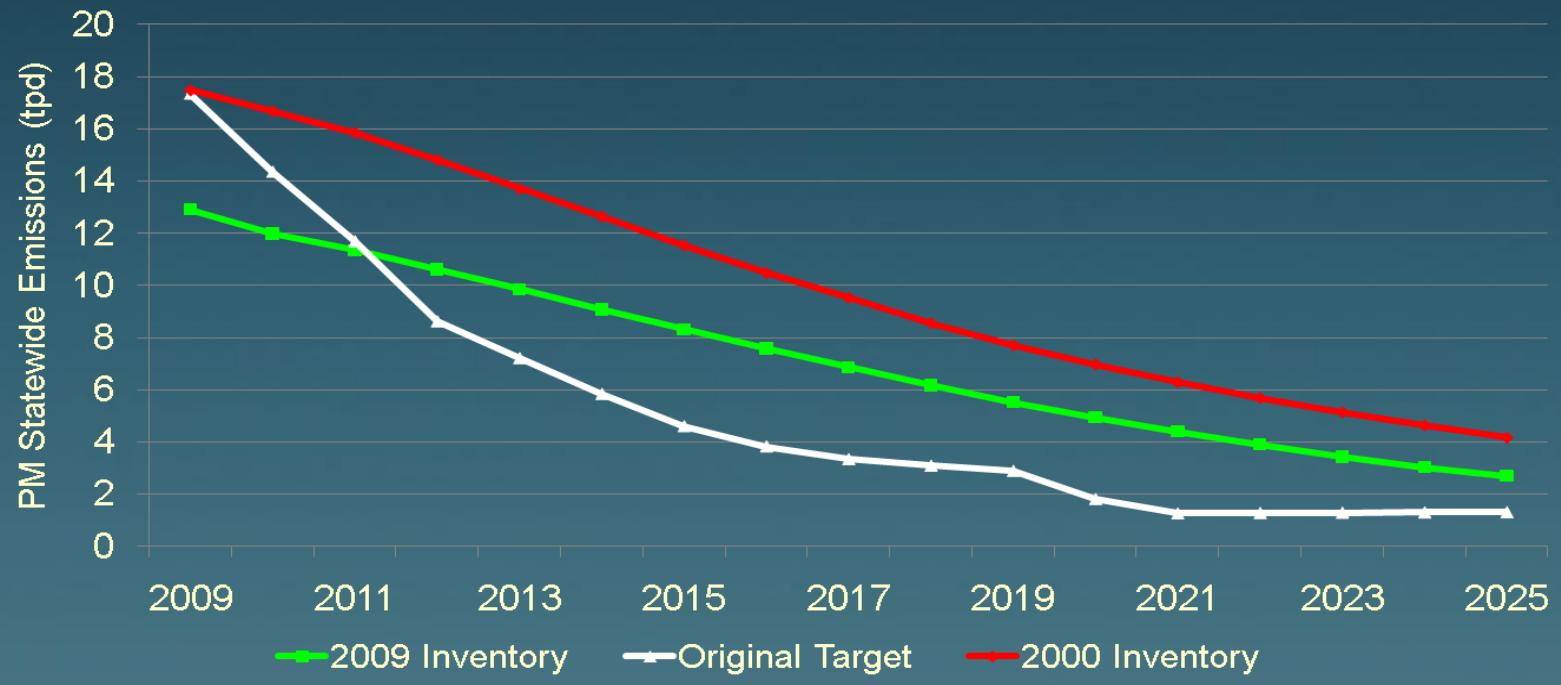
- But again, reductions needed to meet targeted rates are just a fraction of reductions originally thought necessary
  - Less than half in 4 of these years
  - Just over half (between 50% and 60%) in 8 of these years
  - Closer to two-thirds (but never more than 63%) in only 2 of these years

Reductions in PM Emissions From Regulated Fleets (Tons Per Day)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-0.15	0.00
2010	-2.34	0.00
2011	-4.17	0.00
2012	-6.20	-1.99
2013	-6.50	-2.64
2014	-6.81	-3.24
2015	-6.94	-3.72
2016	-6.64	-3.75
2017	-6.20	-3.53
2018	-5.47	-3.09
2019	-4.83	-2.64
2020	-5.22	-3.13
2021	-5.03	-3.15
2022	-4.41	-2.63
2023	-3.85	-2.15
2024	-3.34	-1.74
2025	-2.86	-1.40

How 2009 Inventory for PM Compares with Original Target



How 2009 Inventory for PM Compares with 2000 Inventory and Original Target



How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

- 2009 projections lower than targeted total of cumulative emissions through 2013
  - 25.6% lower in 2009
  - 21.4% lower in 2010
  - 16.5% lower in 2011
  - 9.9% lower in 2012
  - Still 4.2% lower in 2013

PM Emissions from Regulated Fleets (Cumulative Thousands of Tons)			
Year	Original Target	2009 Inventory	Delta
2009	6.33	4.71	-1.62
2010	11.57	9.09	-2.48
2011	15.84	13.23	-2.61
2012	18.98	17.10	-1.88
2013	21.61	20.70	-0.91
2014	23.75	24.01	0.26
2015	25.42	27.05	1.63
2016	26.82	29.82	3.00
2017	28.04	32.33	4.29
2018	29.17	34.58	5.41
2019	30.22	36.60	6.38
2020	30.88	38.40	7.52
2021	31.34	40.01	8.67
2022	31.81	41.43	9.62
2023	32.28	42.70	10.42
2024	32.75	43.80	11.05
2025	33.23	44.79	11.56

How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

- 2009 projections higher than targeted total of cumulative emissions in subsequent years

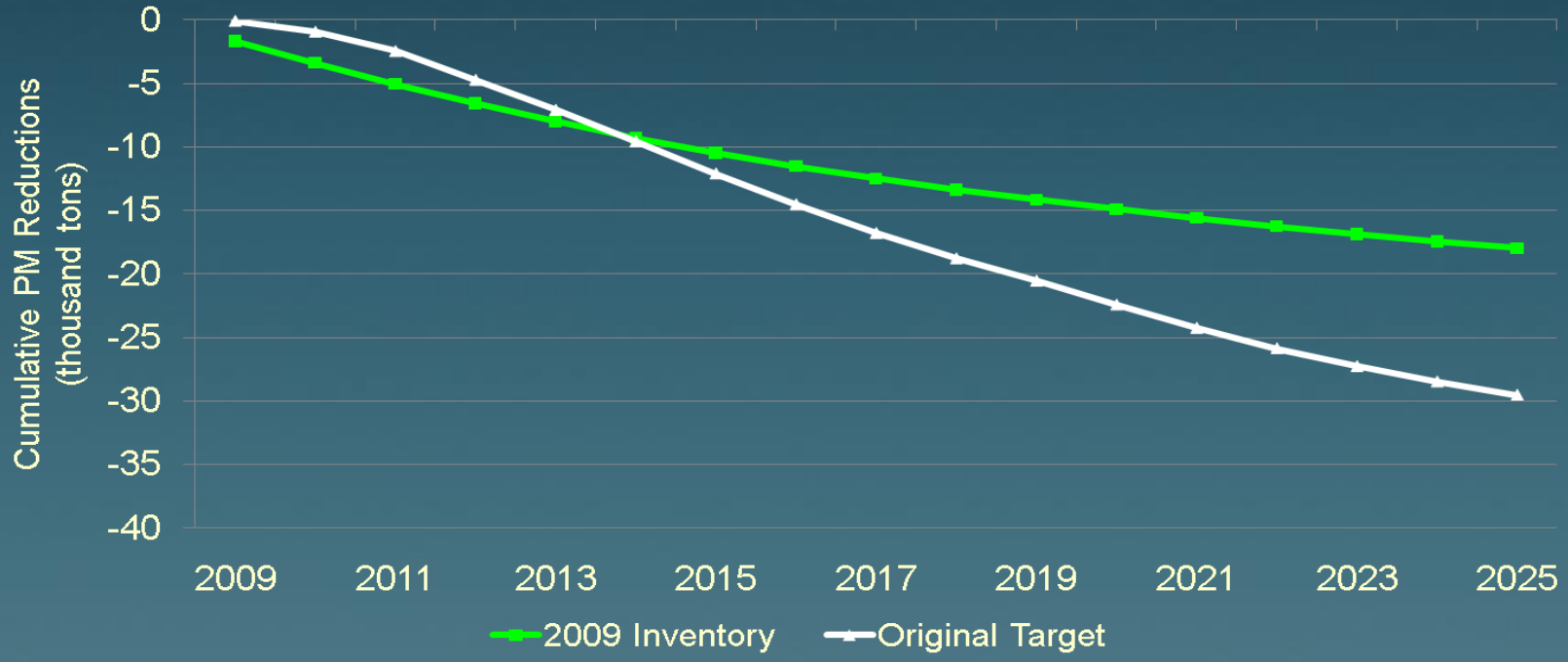
PM Emissions from Regulated Fleets (Cumulative Thousands of Tons)			
Year	Original Target	2009 Inventory	Delta
2009	6.33	4.71	-1.62
2010	11.57	9.09	-2.48
2011	15.84	13.23	-2.61
2012	18.98	17.10	-1.88
2013	21.61	20.70	-0.91
2014	23.75	24.01	0.26
2015	25.42	27.05	1.63
2016	26.82	29.82	3.00
2017	28.04	32.33	4.29
2018	29.17	34.58	5.41
2019	30.22	36.60	6.38
2020	30.88	38.40	7.52
2021	31.34	40.01	8.67
2022	31.81	41.43	9.62
2023	32.28	42.70	10.42
2024	32.75	43.80	11.05
2025	33.23	44.79	11.56

How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions

- But again, reductions still needed to meet original targets are just a fraction of reductions originally thought necessary
  - Less than 3% needed to reach original target in 2014
  - Less than one-third needed in each of next five years (through 2019)
  - Significantly less than half (below 40%) needed in each of the remaining years

PM Emissions From Regulated Fleets (Cumulative Thousands of Tons)		
Year	Reductions Originally Needed	Reductions Still Needed
2009	-0.05	0.00
2010	-0.91	0.00
2011	-2.43	0.00
2012	-4.70	0.00
2013	-7.07	0.00
2014	-9.55	-0.27
2015	-12.09	-1.63
2016	-14.51	-3.00
2017	-16.77	-4.29
2018	-18.77	-5.41
2019	-20.53	-6.38
2020	-22.42	-7.52
2021	-24.26	-8.67
2022	-25.87	-9.63
2023	-27.27	-10.41
2024	-24.49	-11.05
2025	-29.53	-11.57

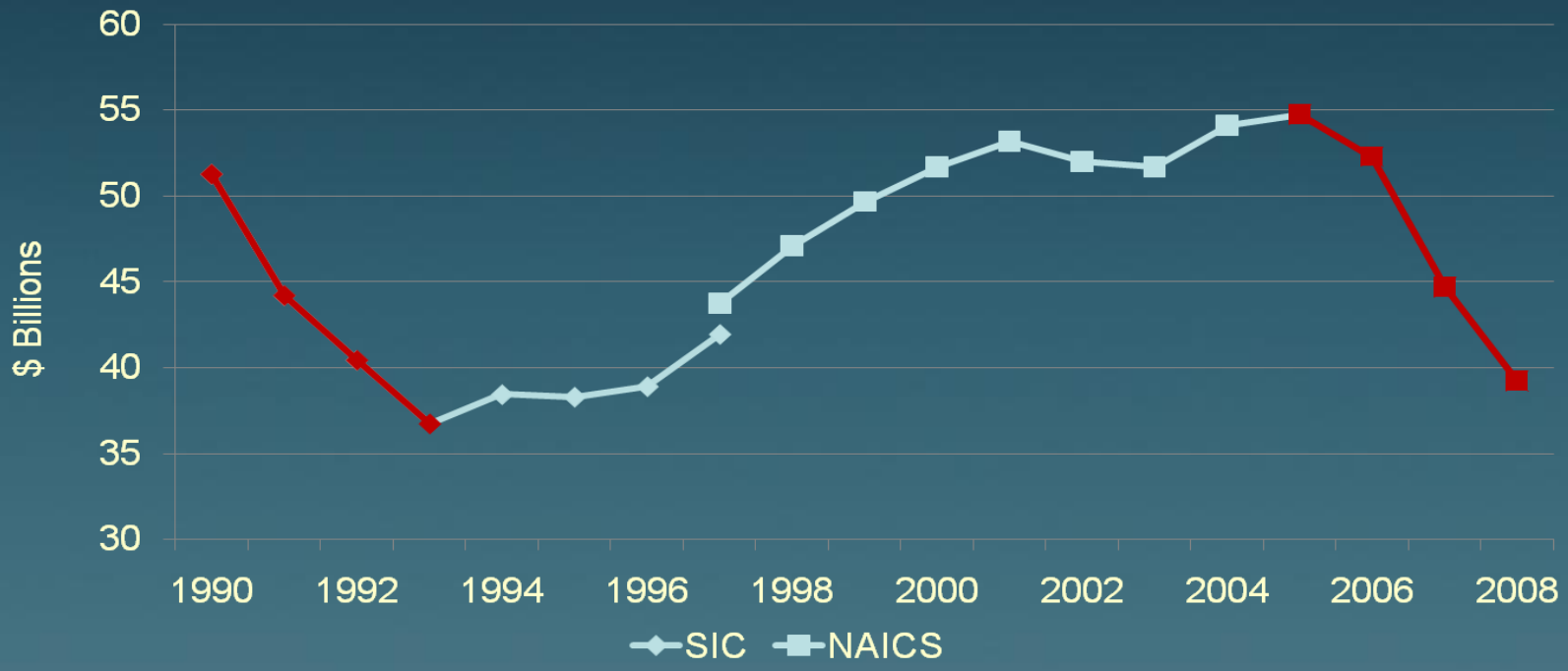
How 2009 Inventory for PM Compares with Original Target For Cumulative Reductions



A Final Note on the Outlook for the Construction Industry . . .

- tends to lag behind the rest of the economy
- typically trails rest of economy both into and out of recession
- can take many years to recover from a serious downturn

Real GDP Originating in California Construction Industry 1990-2008



Source: Bureau of Economic Analysis, U.S. Department of Commerce

A Final Note on the Outlook for the Construction Industry . . .

- Current downturn in the California construction industry already worse than 1990 -1993
  - Real GDP originating in California construction industry expected to fall again in 2009
  - Well into fourth year of declining employment
  - Still looking for the bottom

A Final Note on the Outlook for the Construction Industry . . .

- Significant impediments to recovery
  - huge government deficits
  - risk of a collapse in commercial mortgage market
- Business opportunities difficult to identify

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Thank you.

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