

A photograph of an industrial facility, likely a refinery or chemical plant, at night. The scene is illuminated by various lights, including a prominent bright orange flame from a flare on the right. The sky is a deep purple and blue. The text is overlaid on the top half of the image.

Diesel Fuel 2005 Pre-Compliance Reports

ULSD Workshop
November 10 , 2005

2005 Reports - Overview

- (1) Number of highway diesel refineries
- (2) 15 ppm and 500 ppm production
- (3) Total highway production
- (4) Credit program
- (5) Construction and startup
- (6) Nonroad pre-compliance reports

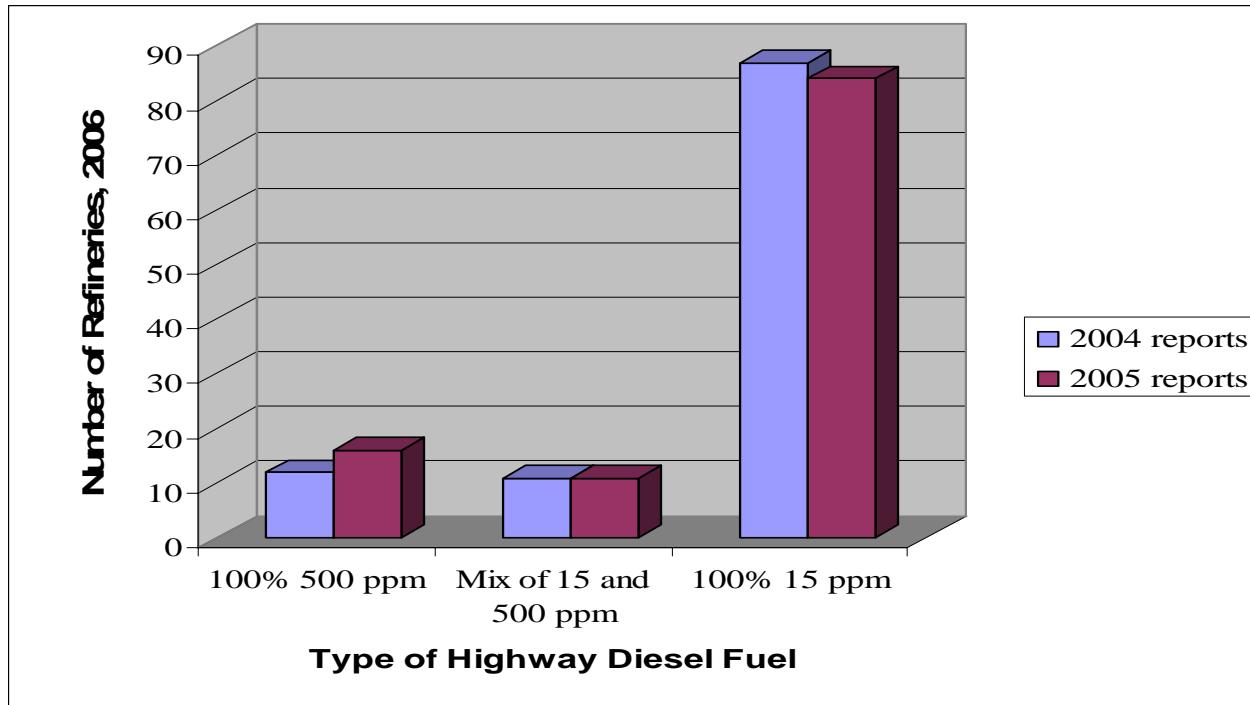
(1) Number of Highway Diesel Refineries

- Using 2003 as base year for comparison with 2005 reports (previously used 2000 for comparison)
- Number of highway diesel refineries have changed slightly
- One refinery that had announced last year they would be shutting down will remain in operation
- A couple other refineries choosing to delay to 2010

	2003	2006	2007	2008	2009	2010
2004 Report	115	110	112	112	113	114
2005 Report	115	111	111	111	111	114

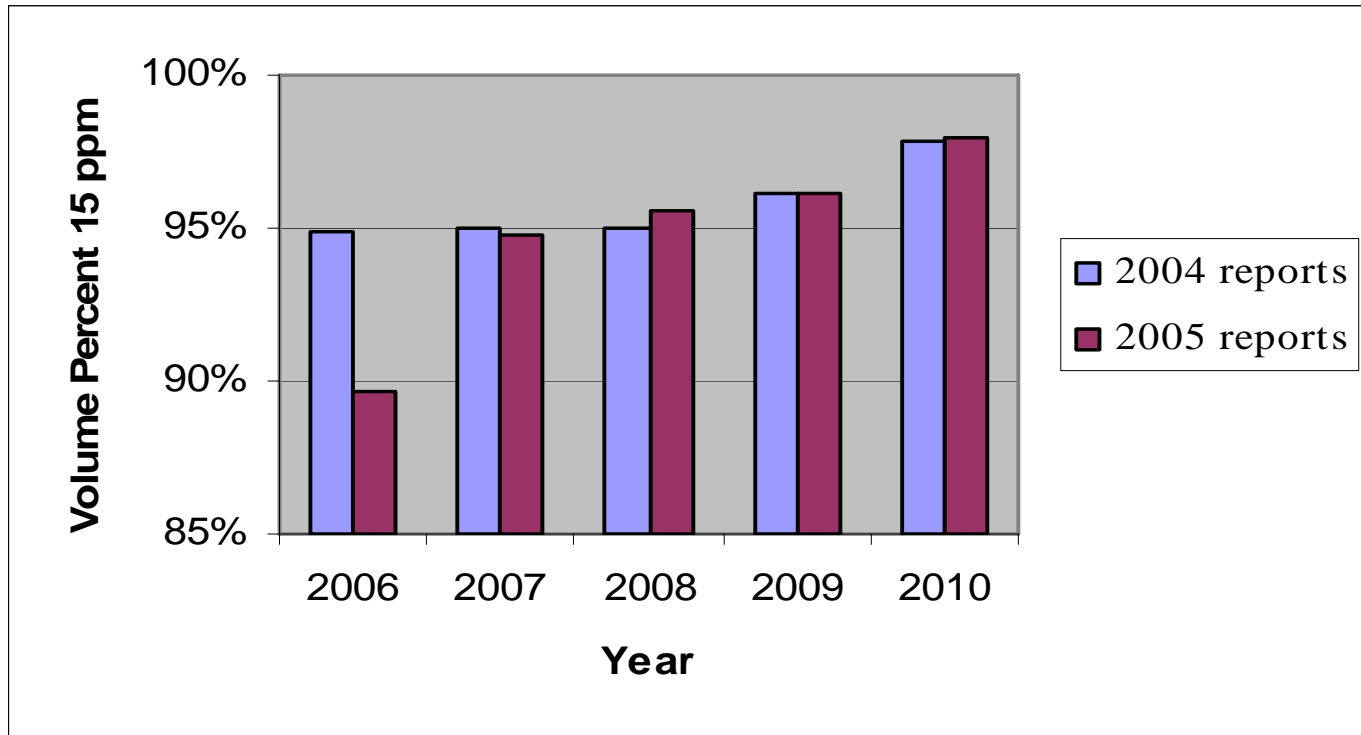
(2) Number of Refineries producing 15 ppm and/or 500 ppm in 2006

- In 2006, 3 fewer refineries are projected to be 100% 15 ppm, and 4 more are expected to be 100% 500 ppm



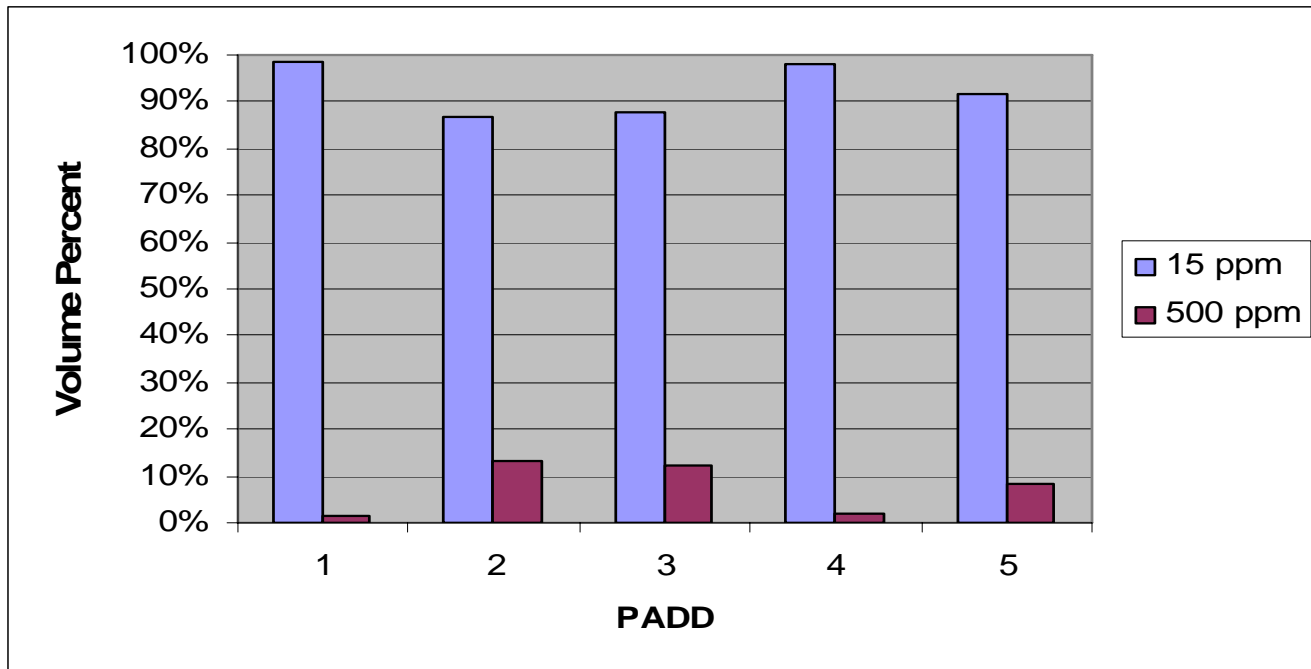
15 ppm as Percentage of Total Production – 2004 Reports vs. 2005 Reports

- 15 ppm percentage of total production in 2006 is now 90%, little change in 15 ppm percentage for 2007-10



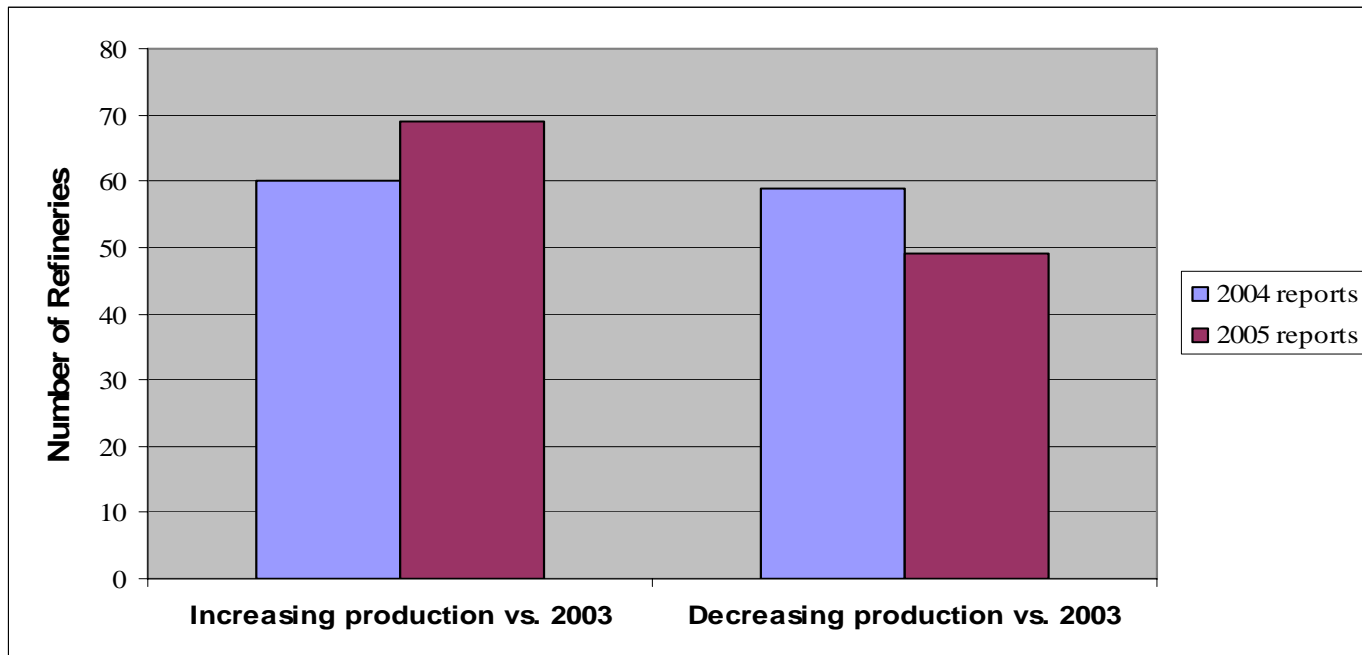
Distribution of 15 ppm and 500 ppm Production in 2006 (2005 Reports)

- 500 ppm production is dispersed so that 15 ppm is still widely available nationwide



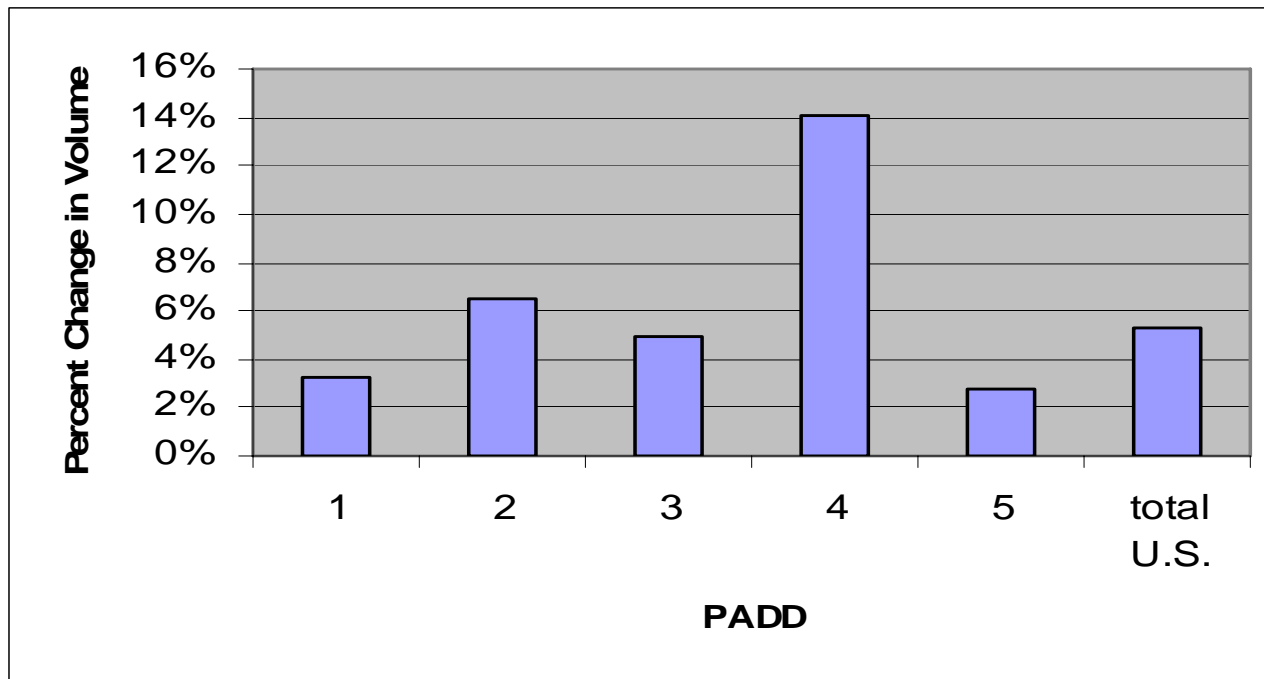
(3) Number of Refineries Increasing or Decreasing Total Highway Production

- Compared to last year's report, 9 more refineries reported their highway diesel production will increase in 2006

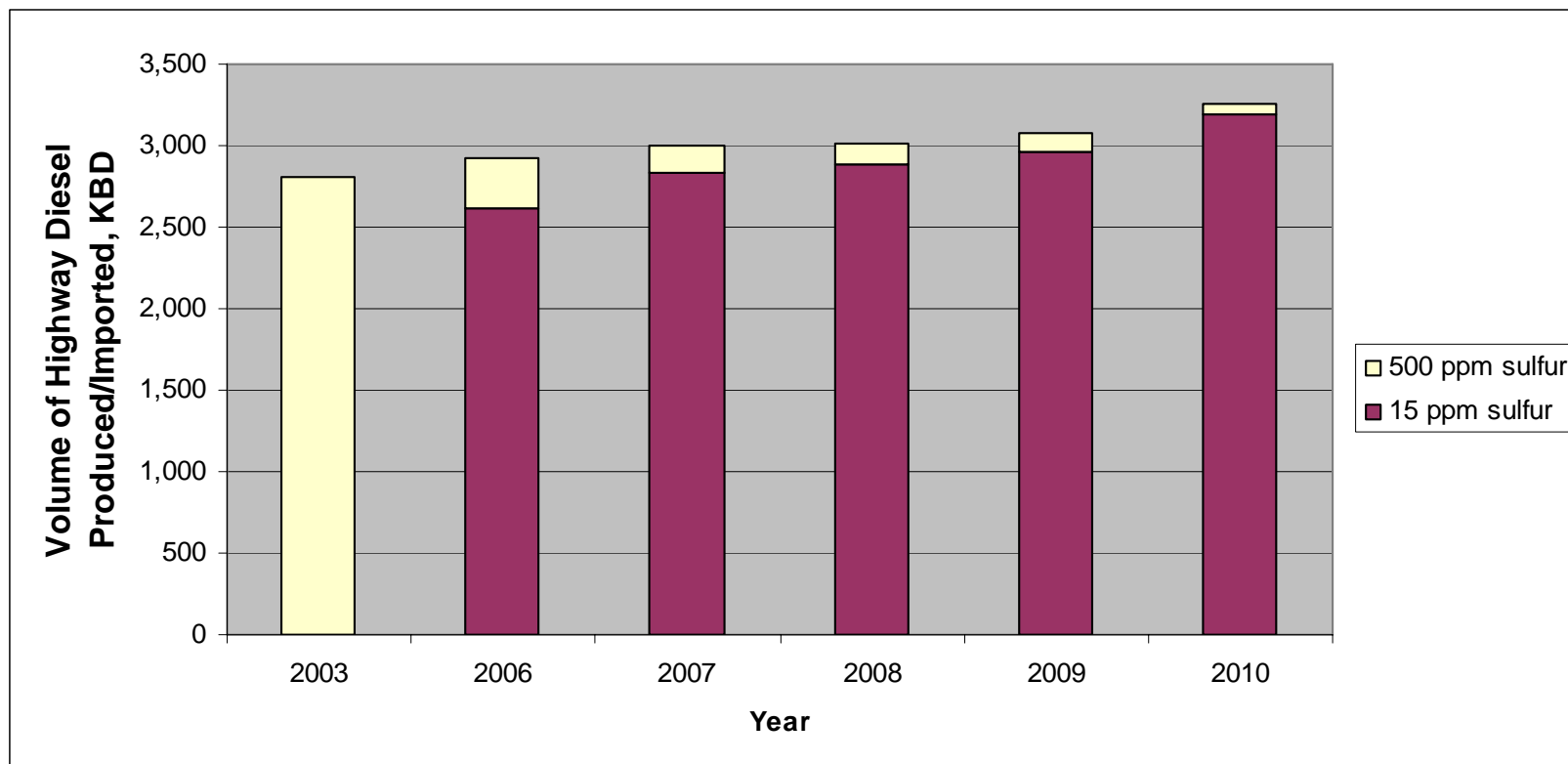


% Change in Total Highway Production from 2004 Reports to 2005 Reports

- Reported diesel production volumes for 2006 have increased across all PADDs

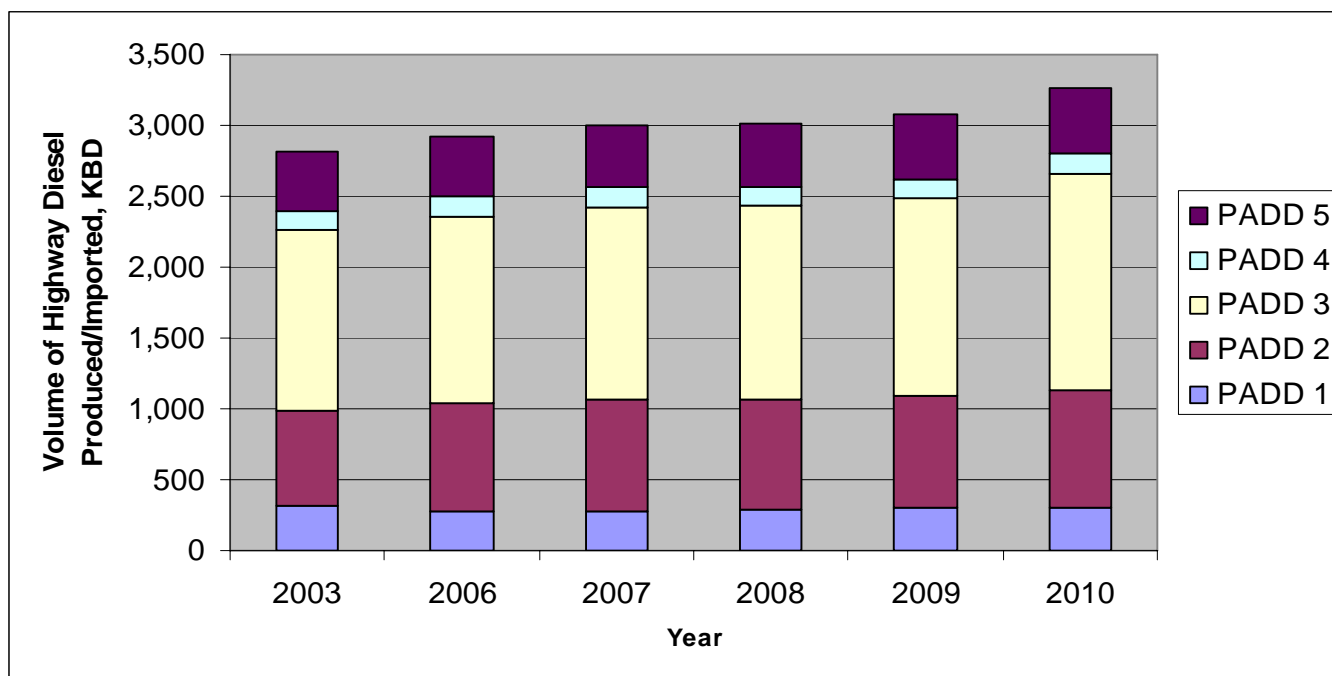


U.S. Highway Diesel Volumes by Type (2005 Reports)



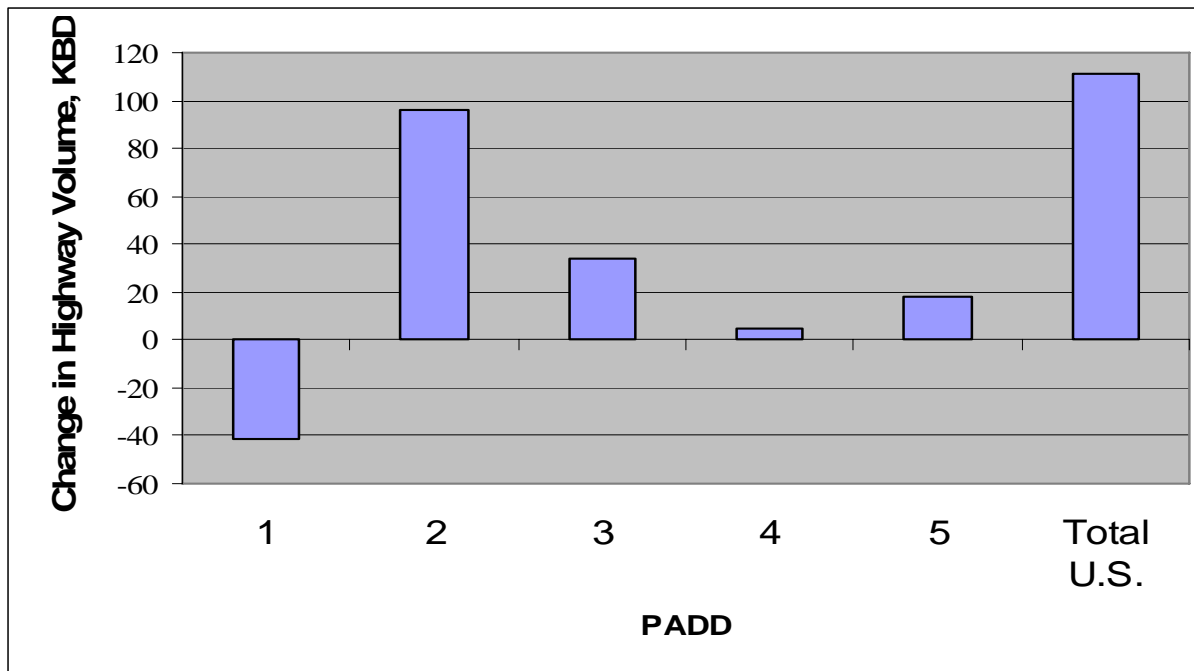
U.S. Highway Volumes by PADD (2005 Reports)

- Reported volumes generally increase across all PADDs from 2006 onward



Change in Highway Production from 2003 to 2006 (2005 Reports)

- Change in highway production from 2003 to 2006 varies across PADDs



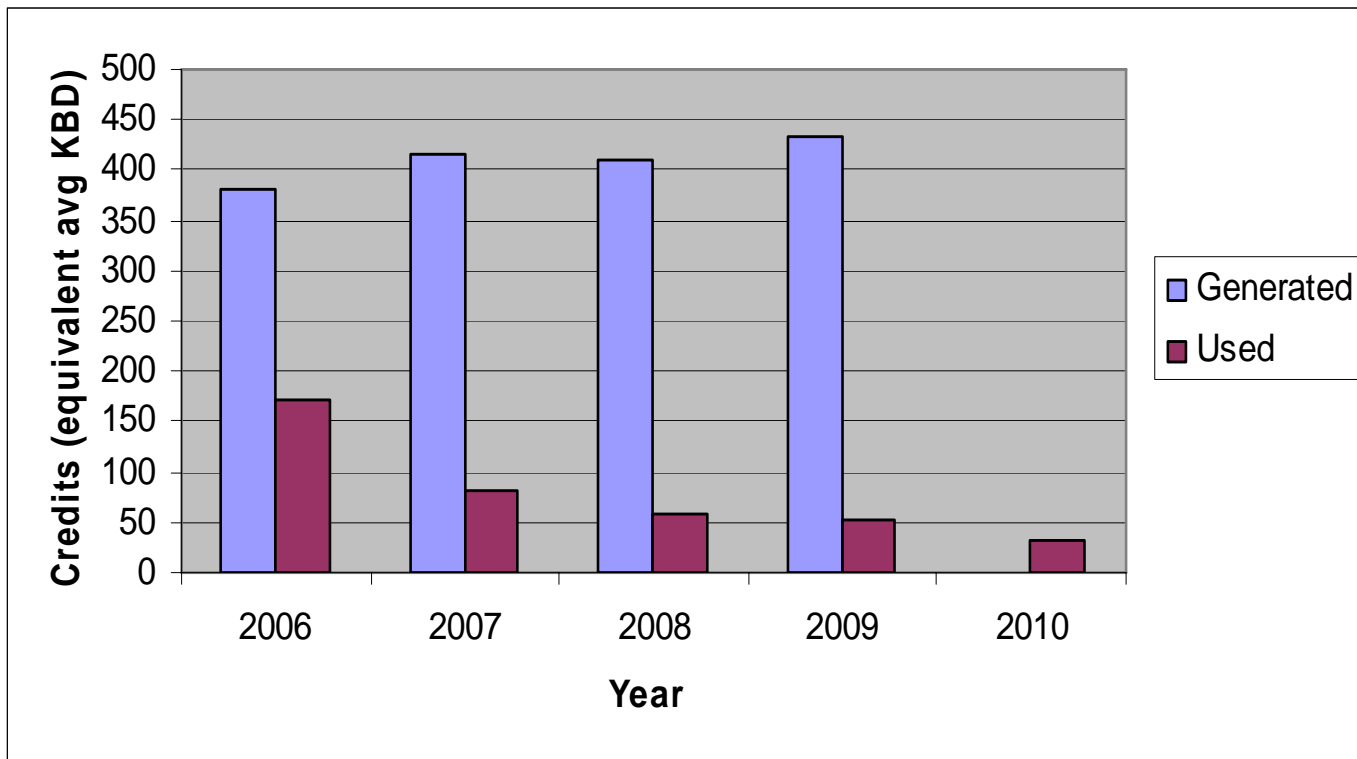
Small & GPA Refiners

- Information was received from 31 refineries on the available small & GPA refiner options:

Option	Description	Number of Refineries (2004 rpts)	Number of Refineries (2005 rpts)	Highway Diesel Fuel Production, 2006 (KBD)
a	500 ppm option	5	4	7
b	Credit option	6	6	19
c	Diesel-gasoline compliance option	9	11	158
GPA	Diesel-gasoline compliance option	12	10	96
	Total	32	31	280

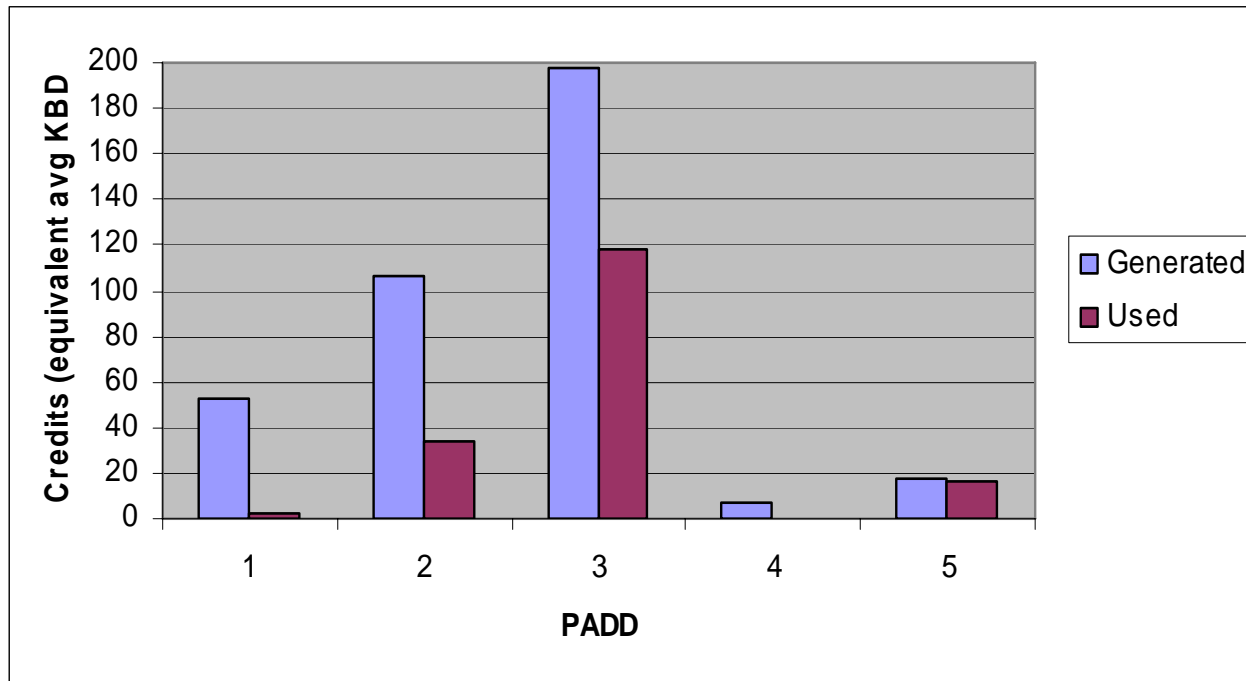
(4) Highway Diesel Credit Program

- Reports indicate that many credits will be generated – provides refiners and importers with additional flexibility, if necessary
- Doesn't include early credits - won't know until reports are sent next year (25 refineries have notified EPA they may generate early credits)



Credit Generation and Usage by PADD in 2006

- Highway diesel credits are generated and used within 7 credit trading areas (CTAs)
- CTAs are same as PADDs, except HI and AK are split out from PADD 5 into their own separate CTAs



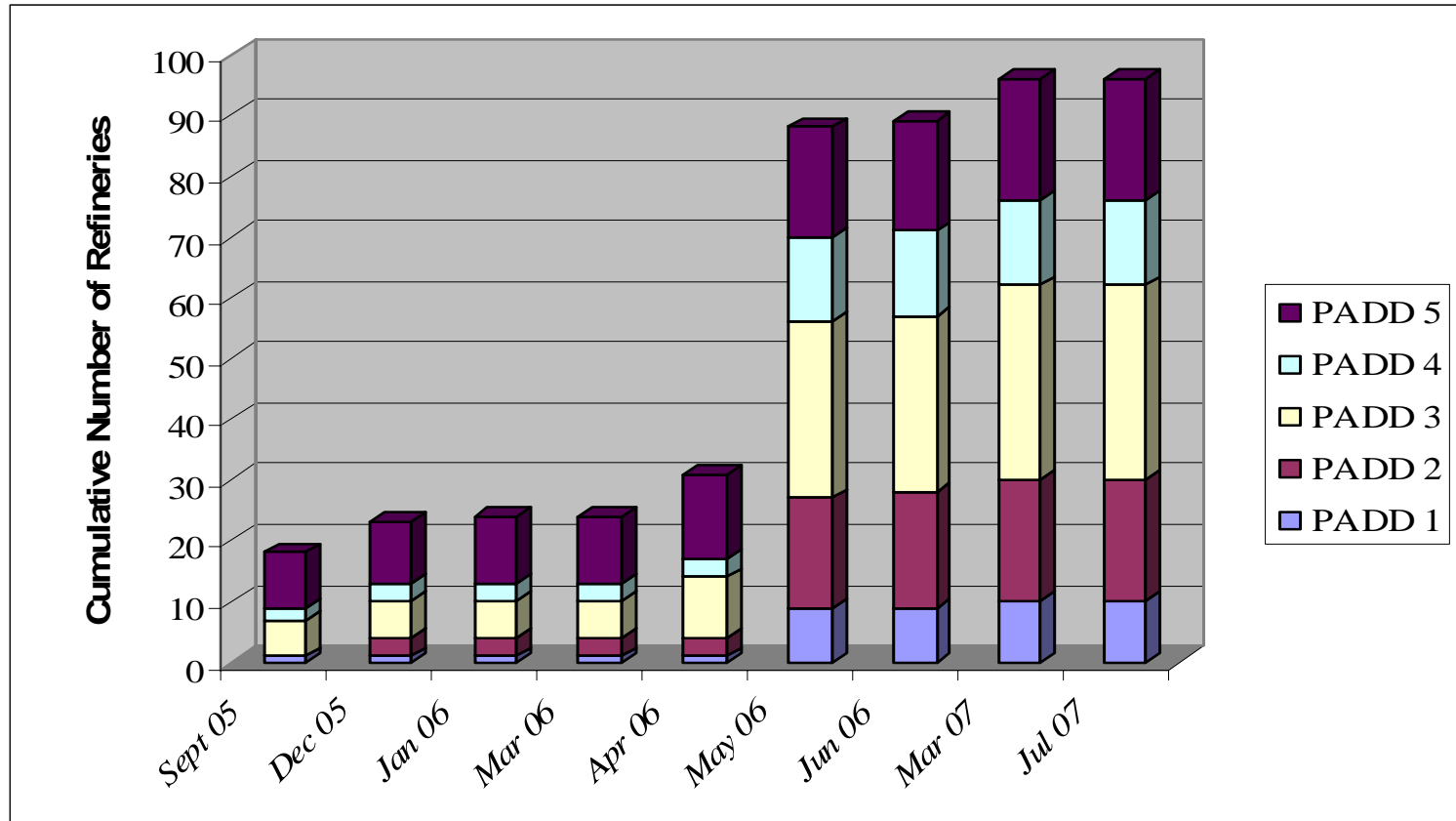
(5) Refinery Desulfurization Plans: Revamp vs. Grassroots Projects

- **82 refineries reported plans for producing 15 ppm diesel**
 - 54 refineries reported revamping one or more existing units
 - 18 refineries reported they would just be installing new units
 - 10 refineries reported a combination of revamps and new units
- **11 refineries reported they did not have to install new facilities to produce 15 ppm highway diesel**
- **22 refineries either did not specifically state their plans to produce 15 ppm highway diesel**
 - Small refiners
 - Others delaying compliance

Refinery Desulfurization Plans: Construction and Engineering

- Most refineries have completed engineering and are constructing new desulfurization capacity
- Engineering and construction summary:
 - 75 refineries have completed engineering, and 83 refineries will be done by the end of the year
 - 18 refineries have desulfurization units operational now, and 23 refineries anticipate having desulfurization units operational by the end of the year
 - 88 refineries anticipate that desulfurization units will be operational by May, 2006

Projected Start-up Dates for 15 ppm Highway Diesel Production



(6) NRLM Pre-Compliance Reports

- This is the first year we also received pre-compliance reports for NRLM production
- NRLM reports asked for production volumes of 15 ppm (highway + NRLM) and 500 ppm NRLM from June, 2010 – Dec, 2014, and NRLM production plans
- Too early to draw any definite conclusions from this year's NRLM reports – many refiners are still trying to define how much NRLM they need to make

For further information ...

www.epa.gov/otaq/diesel.htm