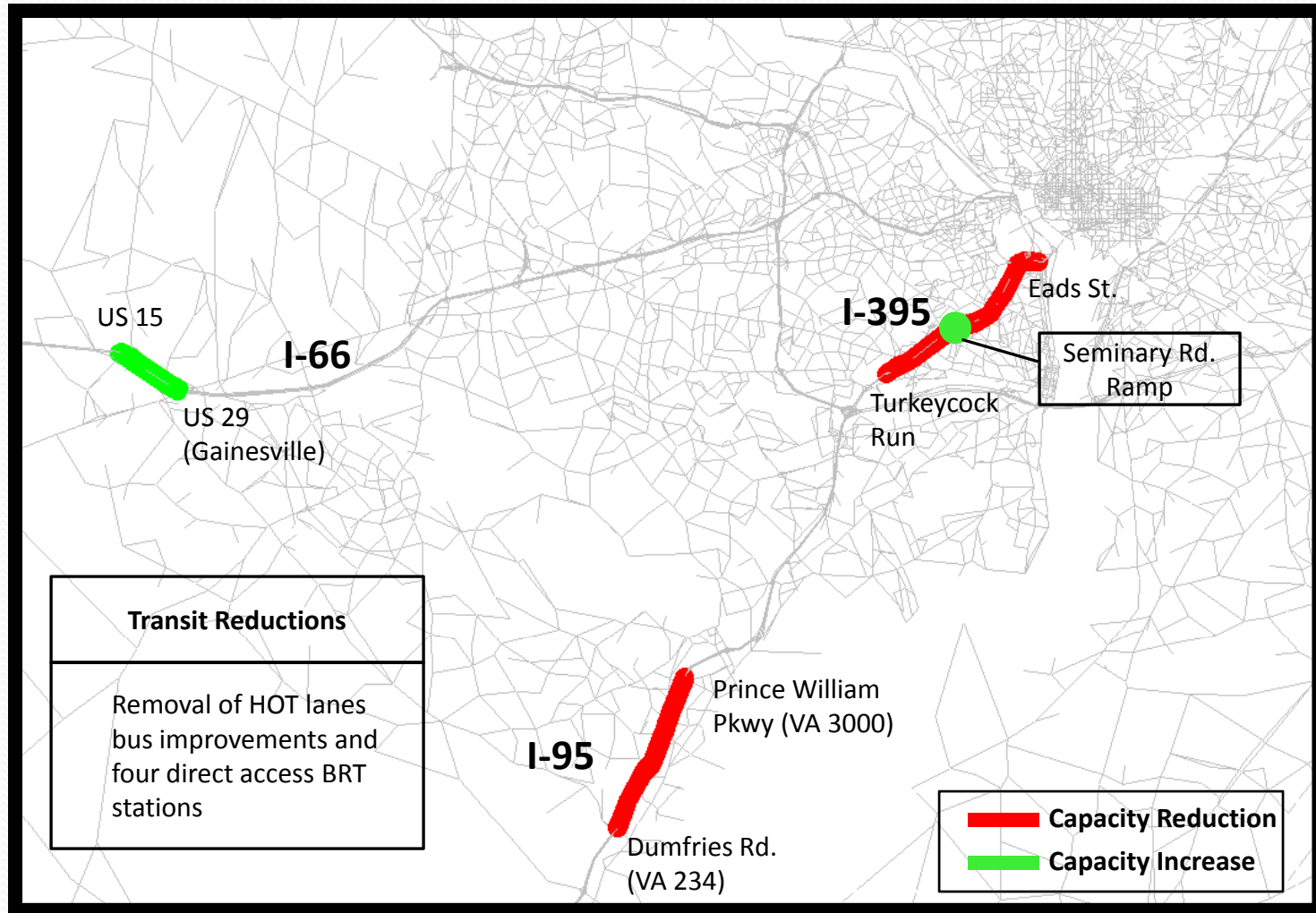


# AIR QUALITY CONFORMITY ASSESSMENT

## VIRGINIA DEPARTMENT OF TRANSPORTATION 2010 CLRP AMENDMENTS

TPB Technical Committee  
June 3, 2011

# MAP OF MAJOR CHANGES





# PROJECTS

## I-66

- ❖ Extension of the existing HOV/LOV lanes for 2.6 miles on I-66 between US 29 in Gainesville and Route 15 in Haymarket to provide 8 lanes including HOV.



# PROJECTS

## I-95/I-395

- ❖ Removal of HOV to HOT lane conversion and construction of 3<sup>rd</sup> lane from Turkeycock Run (n. of Edsall Rd.) to Eads St. (7.5 miles)
- ❖ Removal of construction of 3<sup>rd</sup> HOT lane from VA 234 (Dumfries Rd.) to VA 3000 (Prince William Pkwy.) (6 miles)
- ❖ Removal of I-95/I-395 HOT lanes bus improvements, including 4 direct access BRT stations along the facility
- ❖ Addition of a reversible ramp from the HOV lanes of I-395 to/from Seminary Rd.



# TECHNICAL APPROACH

(same as for original 2010 CLRP)

- ❖ Round 8.0 Cooperative Forecasts
- ❖ 2191 TAZ Area System
- ❖ Version 2.2 Travel Demand Model
- ❖ Mobile 6.2 Emissions Model
- ❖ 2020, 2030, 2040 Analysis Years



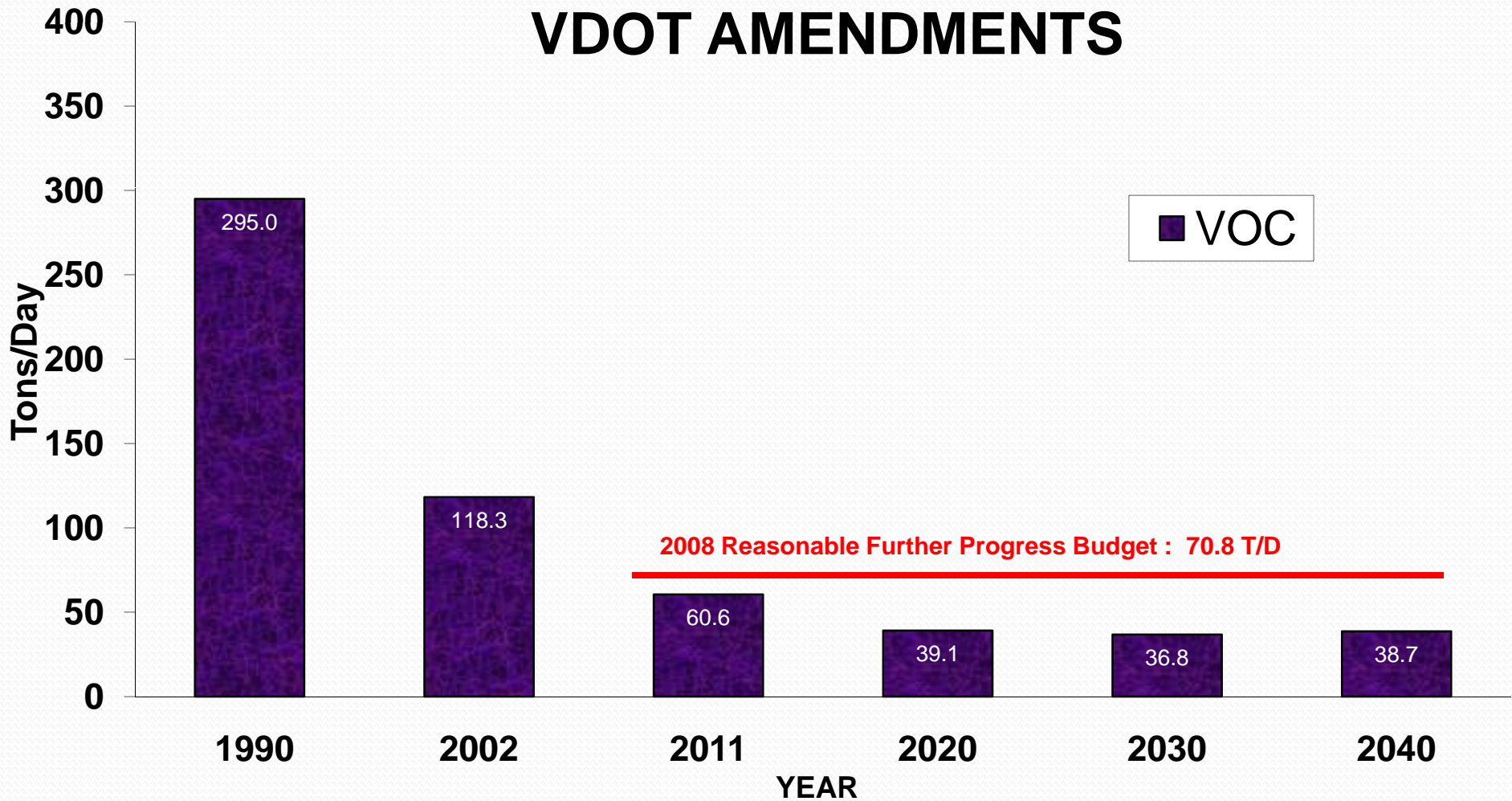
# RESULTS

(Original 2010 CLRP vs. Amended 2010 CLRP)

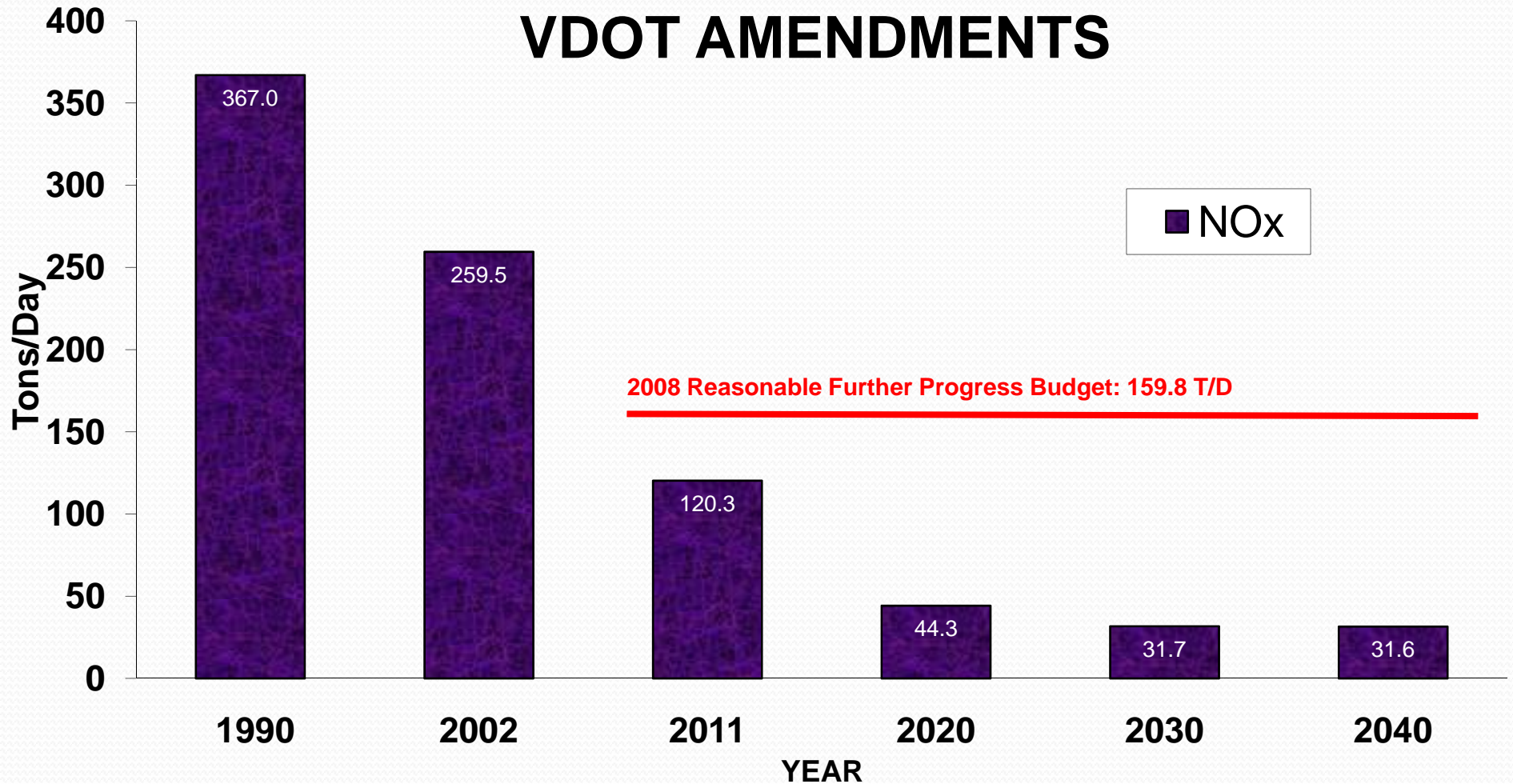
## EMISSIONS

- ❖ Decrease slightly for all pollutants due to VMT reduction

# Mobile Source VOC Emissions for the 8-Hour Ozone Nonattainment Area 2010 CLRP VDOT AMENDMENTS



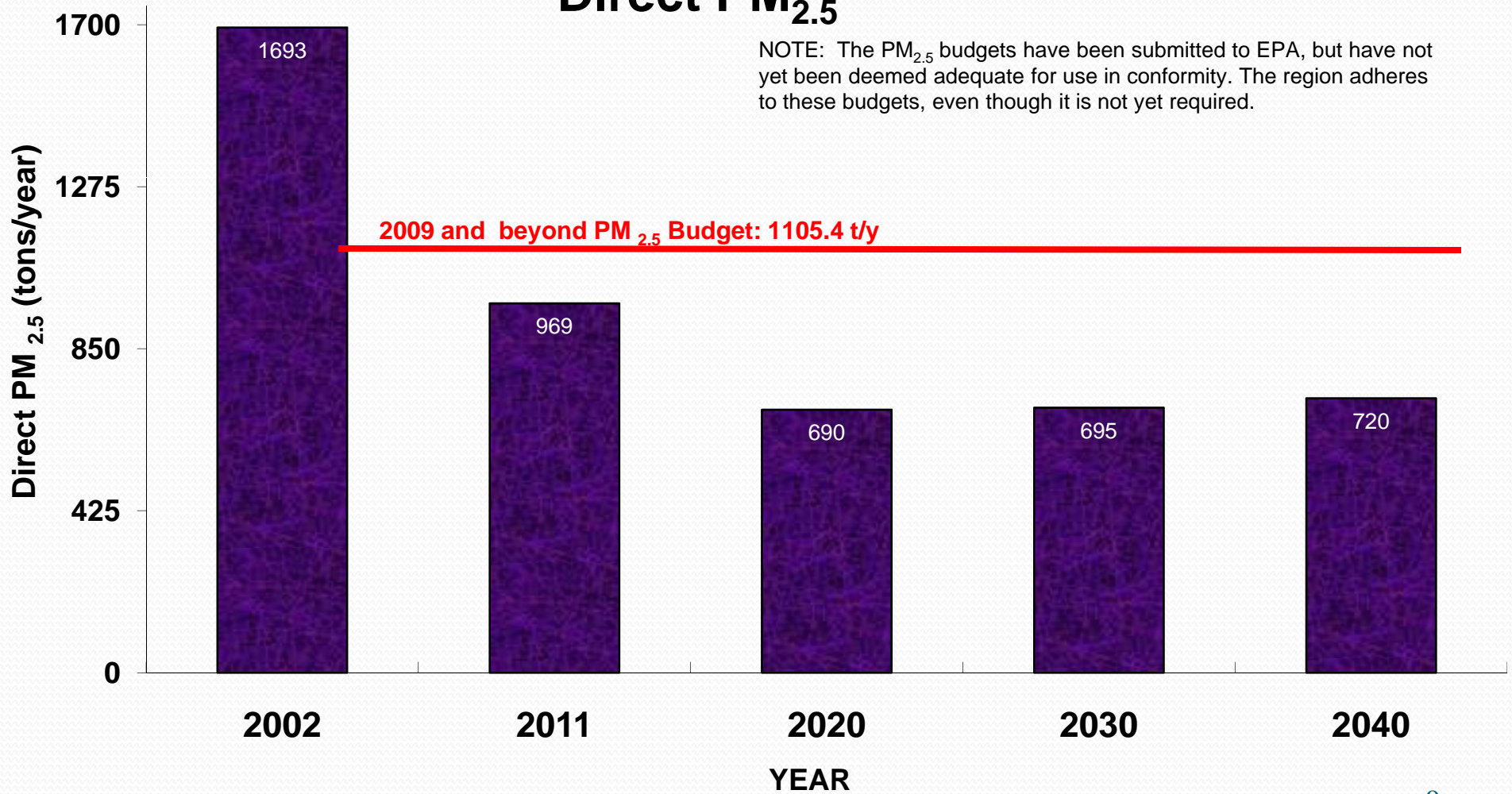
# Mobile Source NOx Emissions for the 8-Hour Ozone Nonattainment Area 2010 CLRP VDOT AMENDMENTS





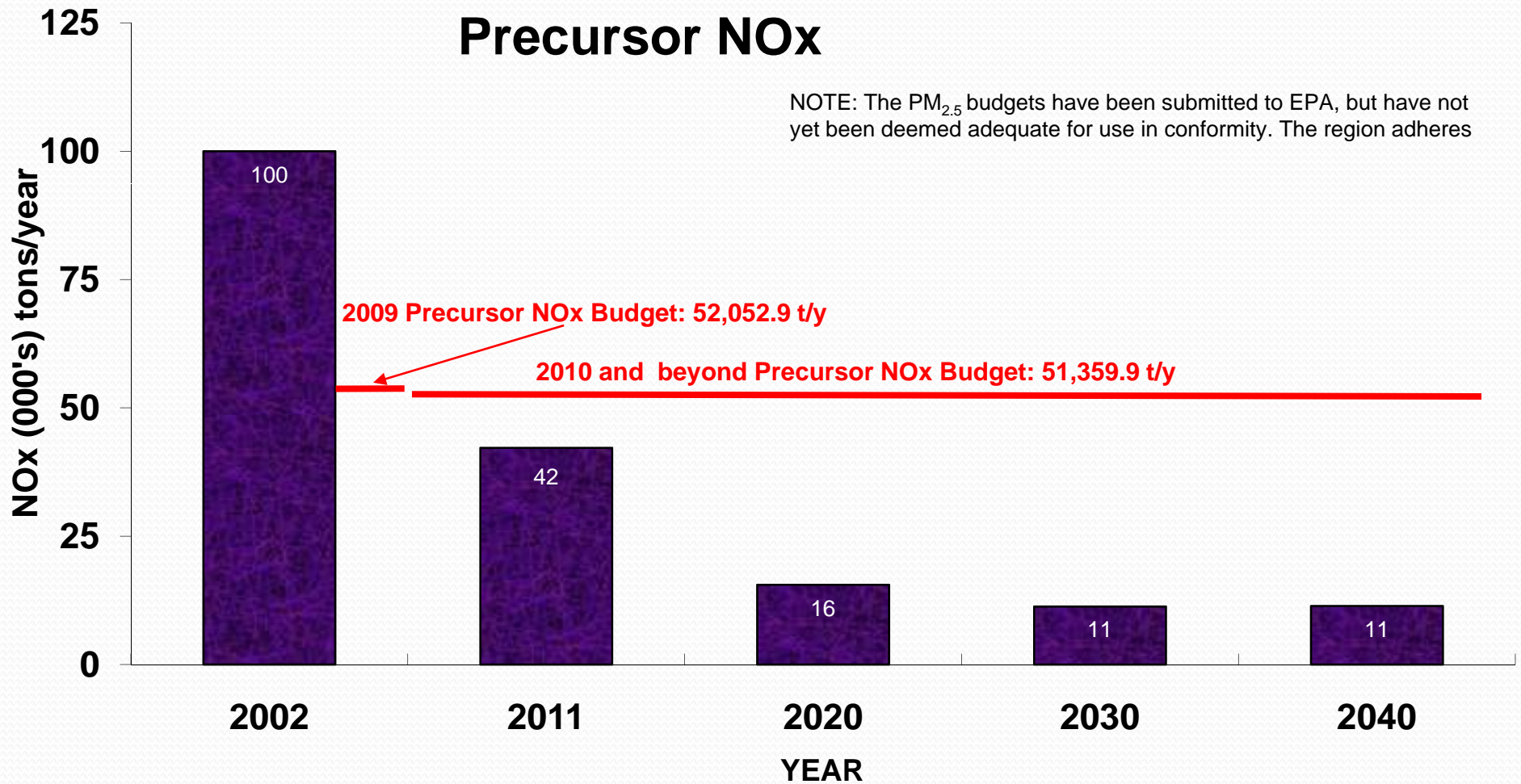
# Mobile Source Emissions 2010 CLRP VDOT AMENDMENTS Direct PM<sub>2.5</sub>

NOTE: The PM<sub>2.5</sub> budgets have been submitted to EPA, but have not yet been deemed adequate for use in conformity. The region adheres to these budgets, even though it is not yet required.



# Mobile Source Emissions 2010 CLRP VDOT AMENDMENTS Precursor NOx

NOTE: The PM<sub>2.5</sub> budgets have been submitted to EPA, but have not yet been deemed adequate for use in conformity. The region adheres



# RESULTS

(Original 2010 CLRP vs. Amended 2010 CLRP)

## Vehicle Miles Traveled (VMT)

YEAR	VMT			
	original	amendment	difference	% difference
<b>2020</b>	177,817,000	177,530,000	-287,000	-0.2%
<b>2030</b>	190,672,000	190,422,000	-250,000	-0.1%
<b>2040</b>	199,814,000	199,464,000	-350,000	-0.2%

- ❖ Some VMT diversion from freeway to non-freeway in Arlington, Alexandria, Fairfax, and Prince William

# RESULTS

(Original 2010 CLRP vs. Amended 2010 CLRP)

## Vehicle Hours of Delay (VHD)

YEAR	VHD			
	original	amendment	difference	% difference
2020	4,215,000	4,257,000	42,000	1.0%
2030	5,088,000	5,113,000	25,000	0.5%
2040	5,960,000	5,974,000	14,000	0.2%

- ❖ More congestion on freeways and non-freeways in Alexandria and Arlington, and less congestion in the District of Columbia

# RESULTS

(Original 2010 CLRP vs. Amended 2010 CLRP)

## Vehicle Trips

YEAR	Total Vehicle Trips			
	original	amendment	difference	% difference
2020	24,560,000	24,574,000	14,000	0.1%
2030	26,887,000	26,906,000	19,000	0.1%
2040	28,777,000	28,793,000	16,000	0.1%

- ❖ Some HOV trips become LOV trips, and some trips shorten in length due to reduced accessibility to Arlington, Alexandria, and the District of Columbia

# RESULTS

(Original 2010 CLRP vs. Amended 2010 CLRP)

## Transit Trips

YEAR	Transit Trips			
	original	amendment	difference	% difference
2020	1,378,000	1,373,000	-5,000	-0.4%
2030	1,517,000	1,509,000	-8,000	-0.5%
2040	1,625,000	1,616,000	-9,000	-0.6%

❖ Decrease slightly due to decrease in transit service and changes in trip distribution



# SCHEDULE

- |         |  |
|---------|--|
| June 15 | Public Comment Begins<br>TPB Briefed on Conformity Results |
| July 15 | Public Comment Ends  |
| July 20 | TPB Reviews Comments, Asked to<br>Adopt Amendments         |