



Financially Constrained
**Long-Range
Transportation Plan**
For the National Capital Region

**CLRP
2014**

AIR QUALITY CONFORMITY ANALYSIS
OF THE 2014 CLRP AND FY 2015–2020 TIP

Presentation to the Transportation Planning Board
September 17, 2014

**Air Quality Conformity
2014 CLRP and FY2015-2020 TIP**

Pollutants

- ❖ Volatile Organic Compounds (VOC)
- ❖ Nitrogen Oxides (NO_x)
- ❖ Direct Fine Particles (PM_{2.5})
- ❖ PM_{2.5} Precursor NO_x
- ❖ Wintertime Carbon Monoxide (CO)

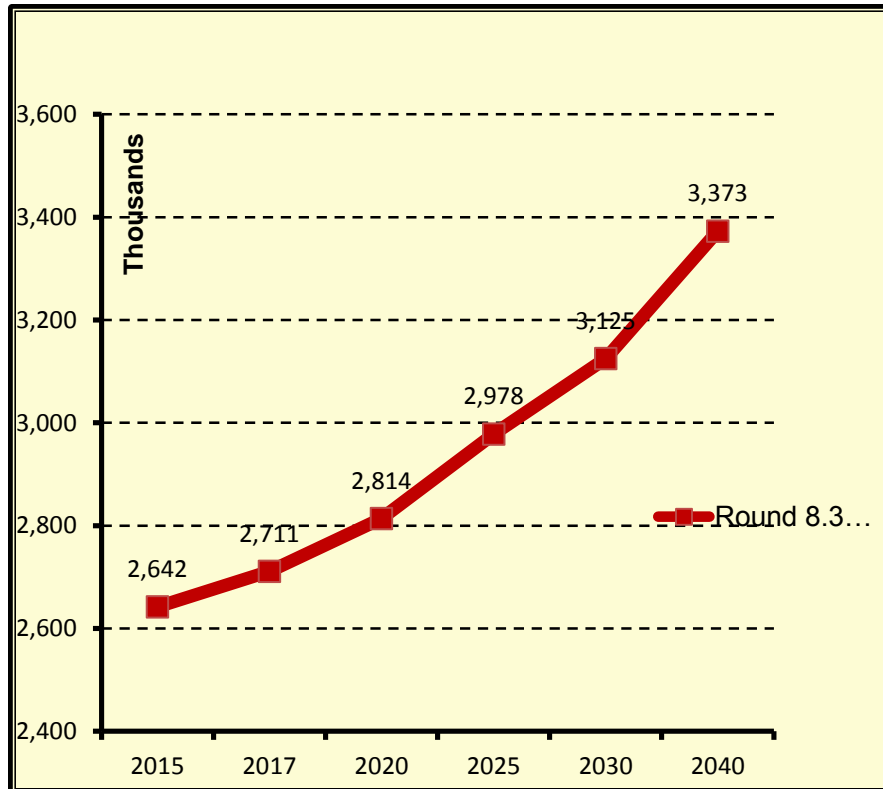
Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Technical Approach

Key Technical Inputs and Tools:

- ❖ Round 8.3 Cooperative Forecasts - ***NEW***
- ❖ “Regionally Significant” Transportation Projects - ***UPDATED***
- ❖ Version 2.3.57 Travel Demand Model - ***UPDATED***
- ❖ 2011 Vehicle Registration Data (VIN)
- ❖ EPA’s MOVES 2010a Emissions Model
- ❖ MOVES Inputs: Fuel Supply and Formulation, Meteorology, and Inspection & Maintenance (I/M) Program Data - ***UPDATED***

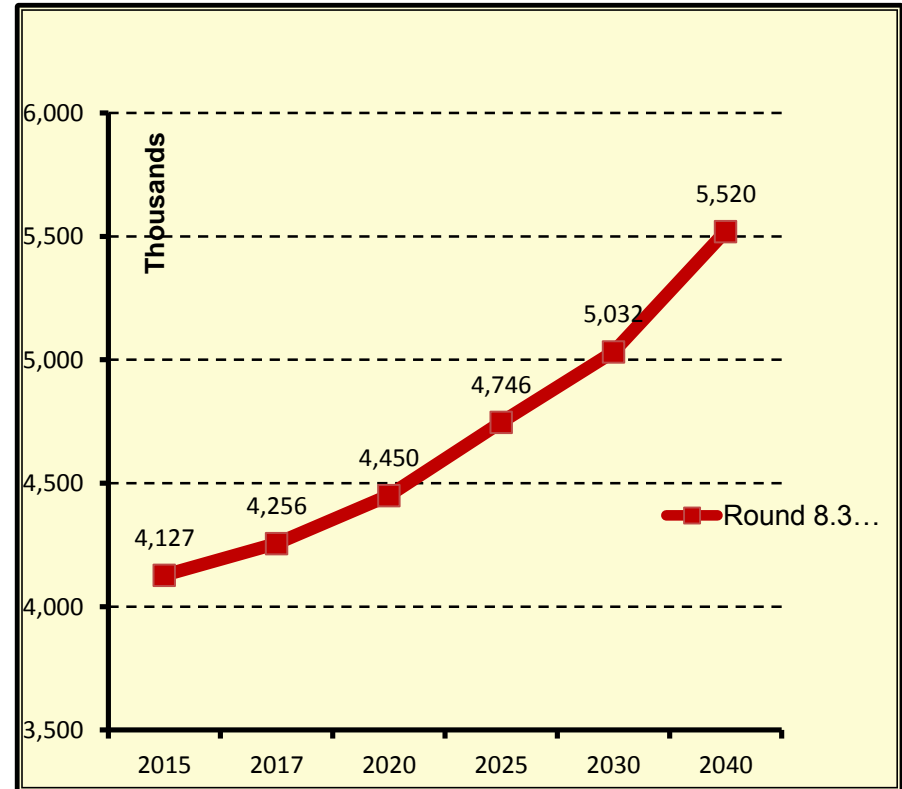
Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Round 8.3 Cooperative Forecasts

Households (in thousands)



NOTE: Values are for the modeled area.

Employment* (in thousands)



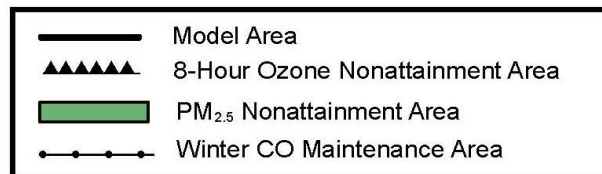
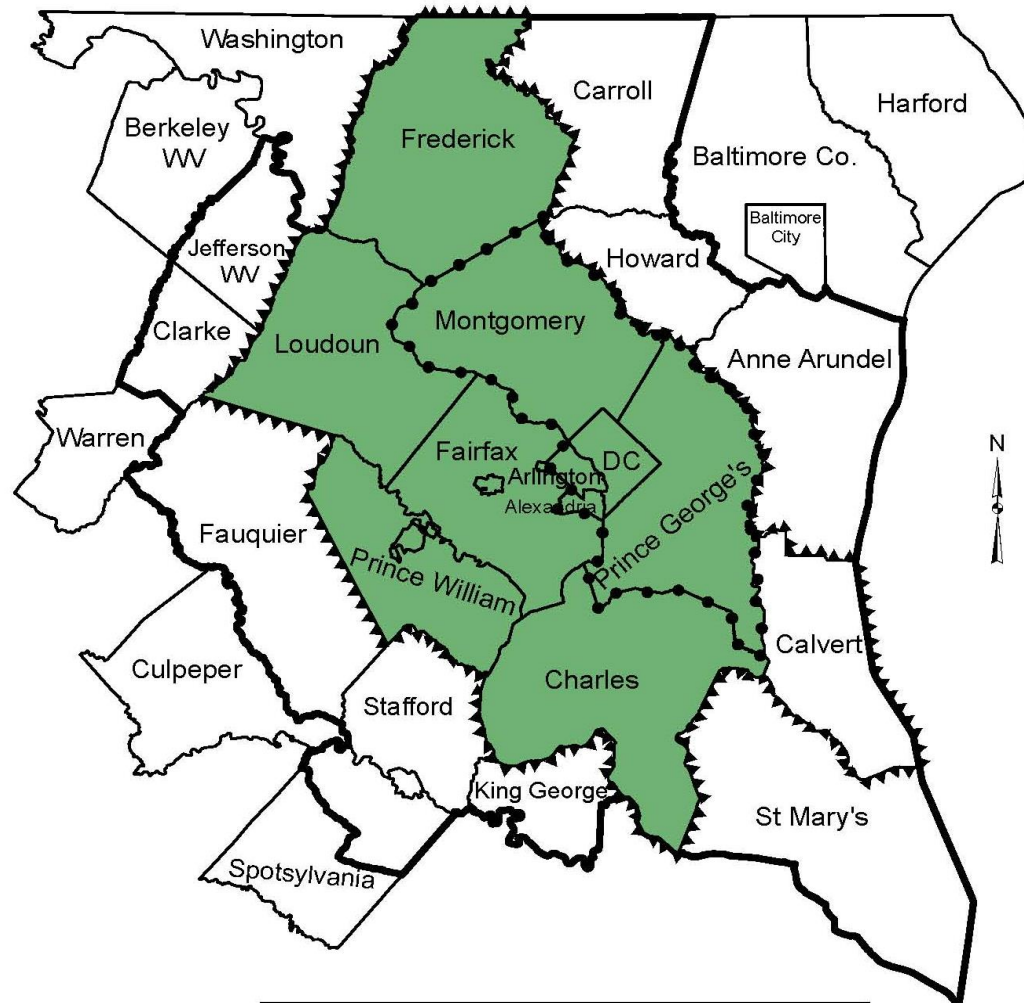
*Includes census adjustment

**Air Quality Conformity
2014 CLRP and FY2015-2020 TIP
Technical Approach**

Analysis Years:

2015, 2017, 2025, 2030, 2040

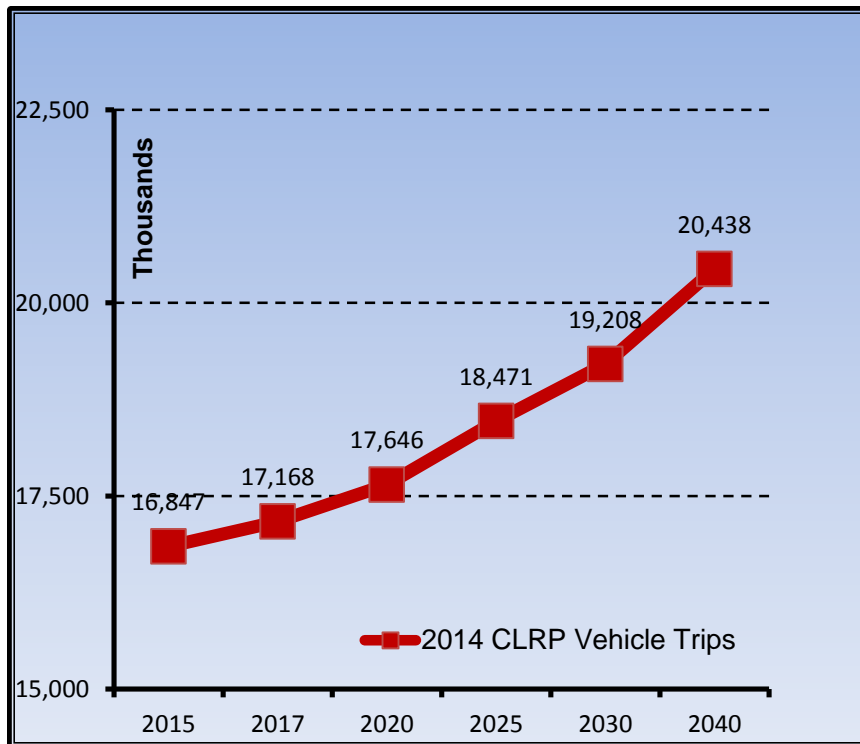
TPB Transportation Planning Area and Washington, DC-MD-VA Nonattainment & Maintenance Areas



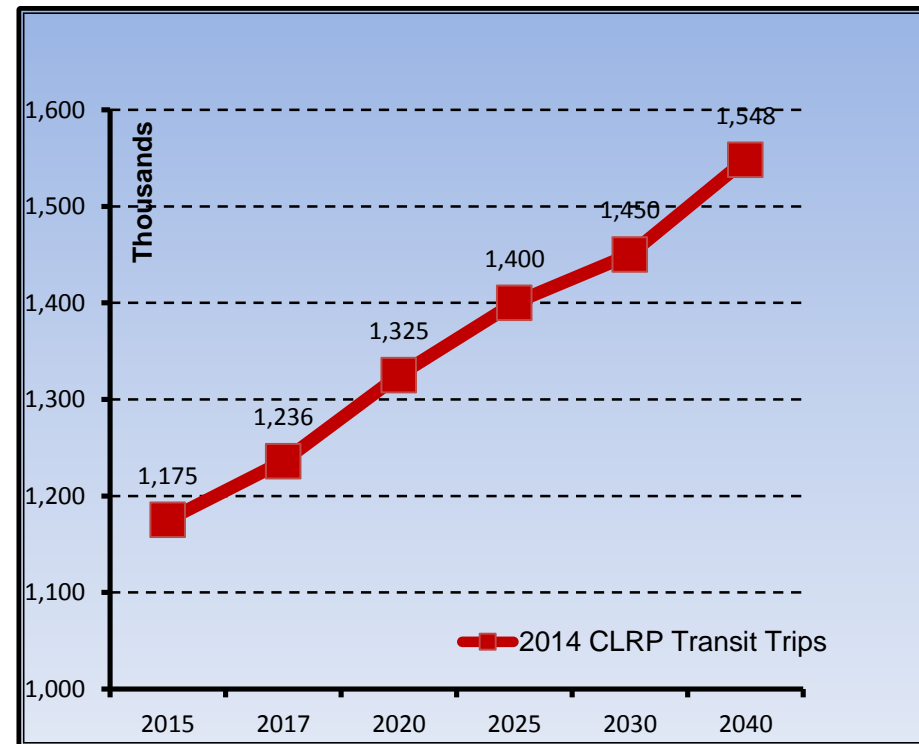
Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Travel Demand Summary

Average Weekday Traffic Modeled Area

Vehicle Trips (in thousands)



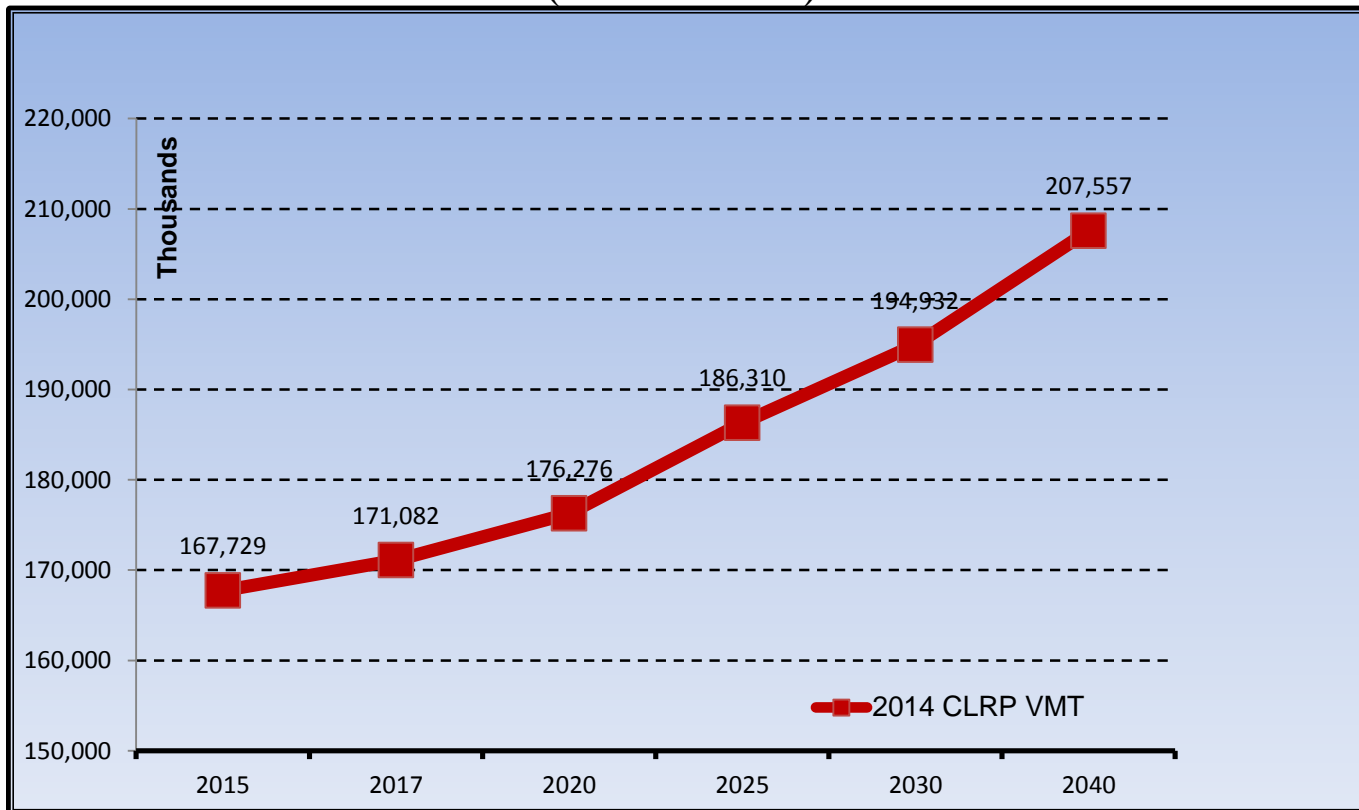
Transit Trips (in thousands)



Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Travel Demand Summary

Average Weekday Traffic Modeled Area

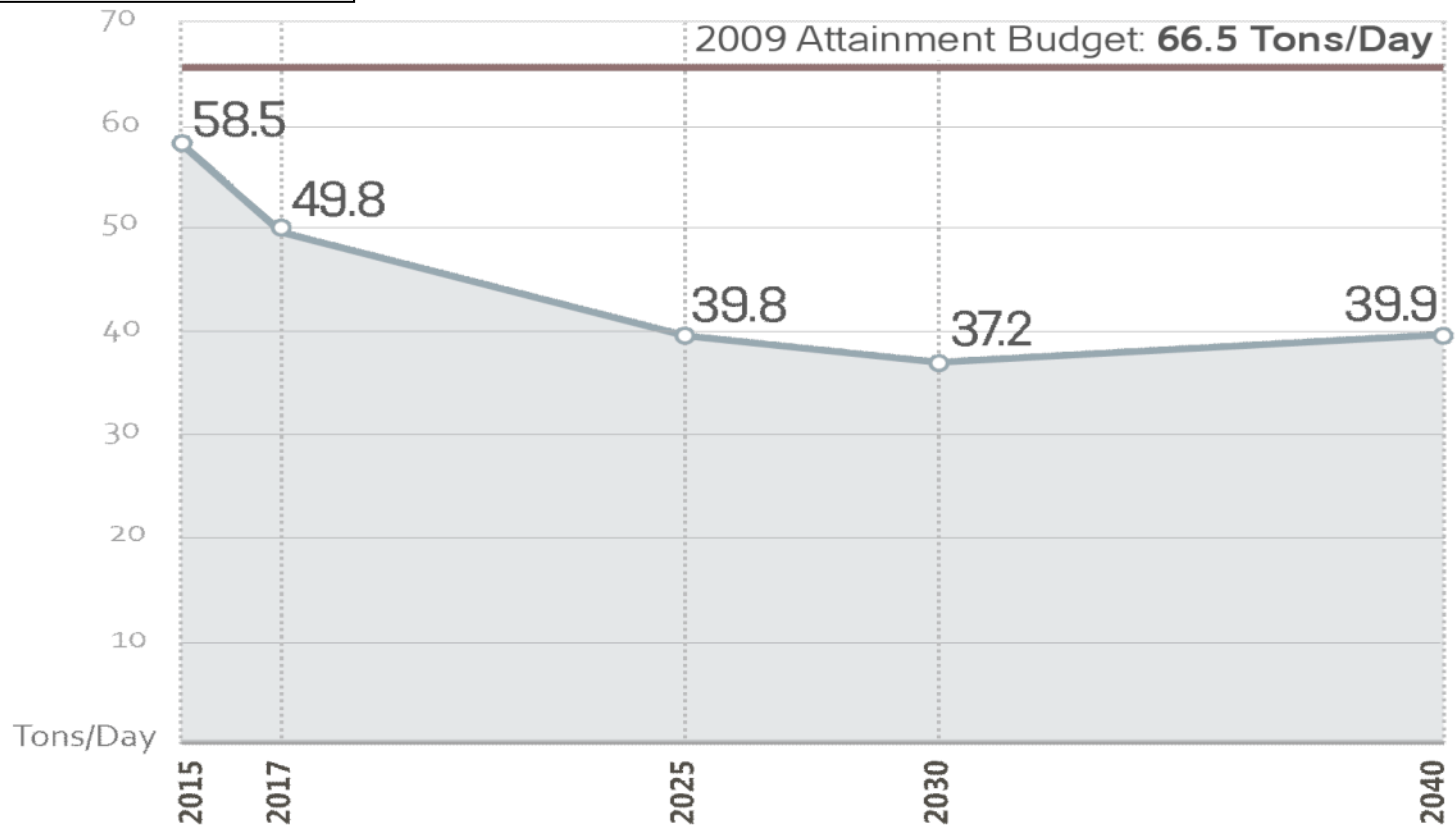
Vehicle Miles Traveled (in thousands)



Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Mobile Source Emissions

NOTE: The Mobile Budgets shown were developed in 2007, as part of the 8-Hour Ozone SIP, in response to the 1997 Ozone Standard. These budgets, as the most current approved by EPA, are required for use in any conformity analysis assessing ozone season pollutants.

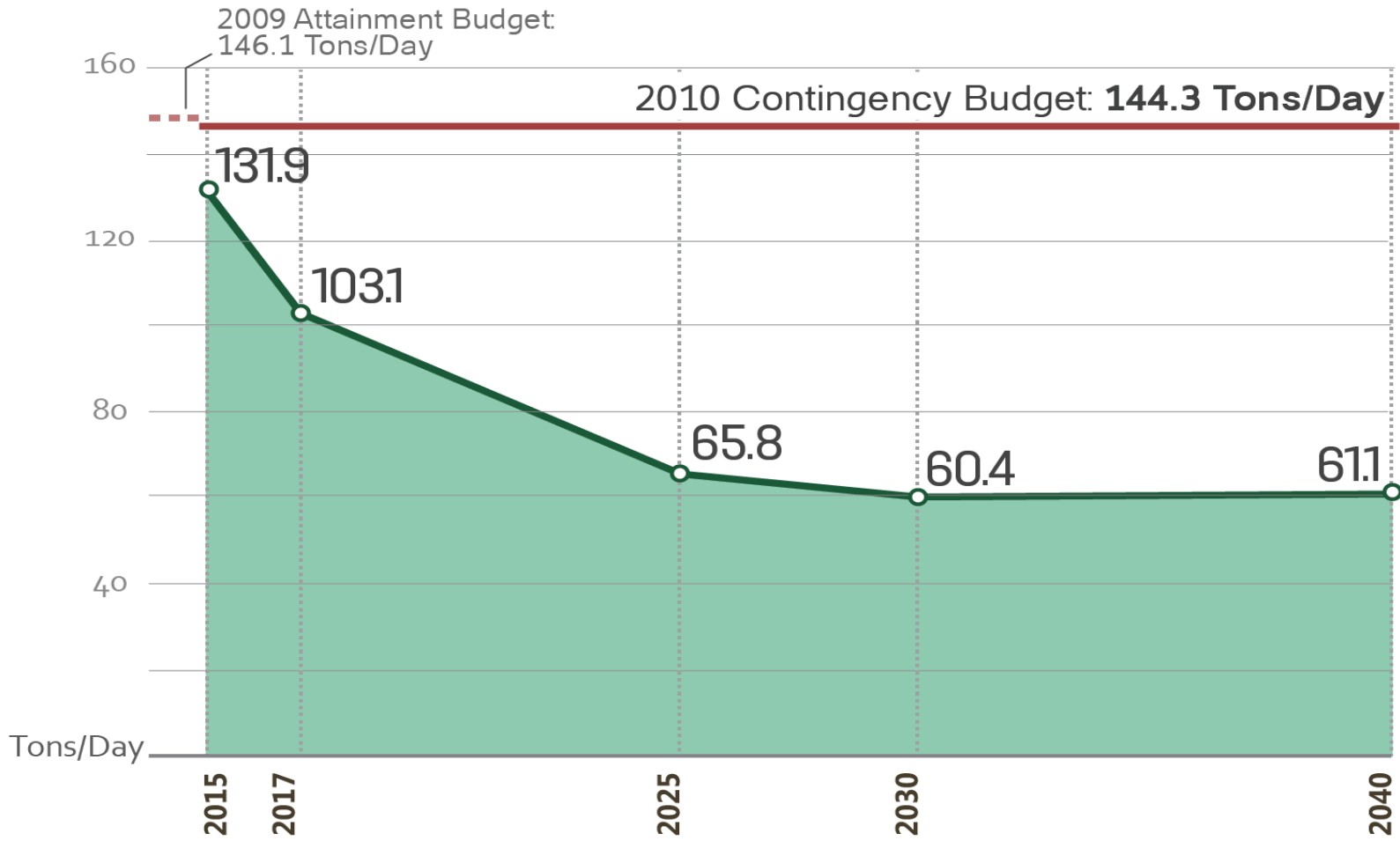
Ozone Season VOC



Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Mobile Source Emissions

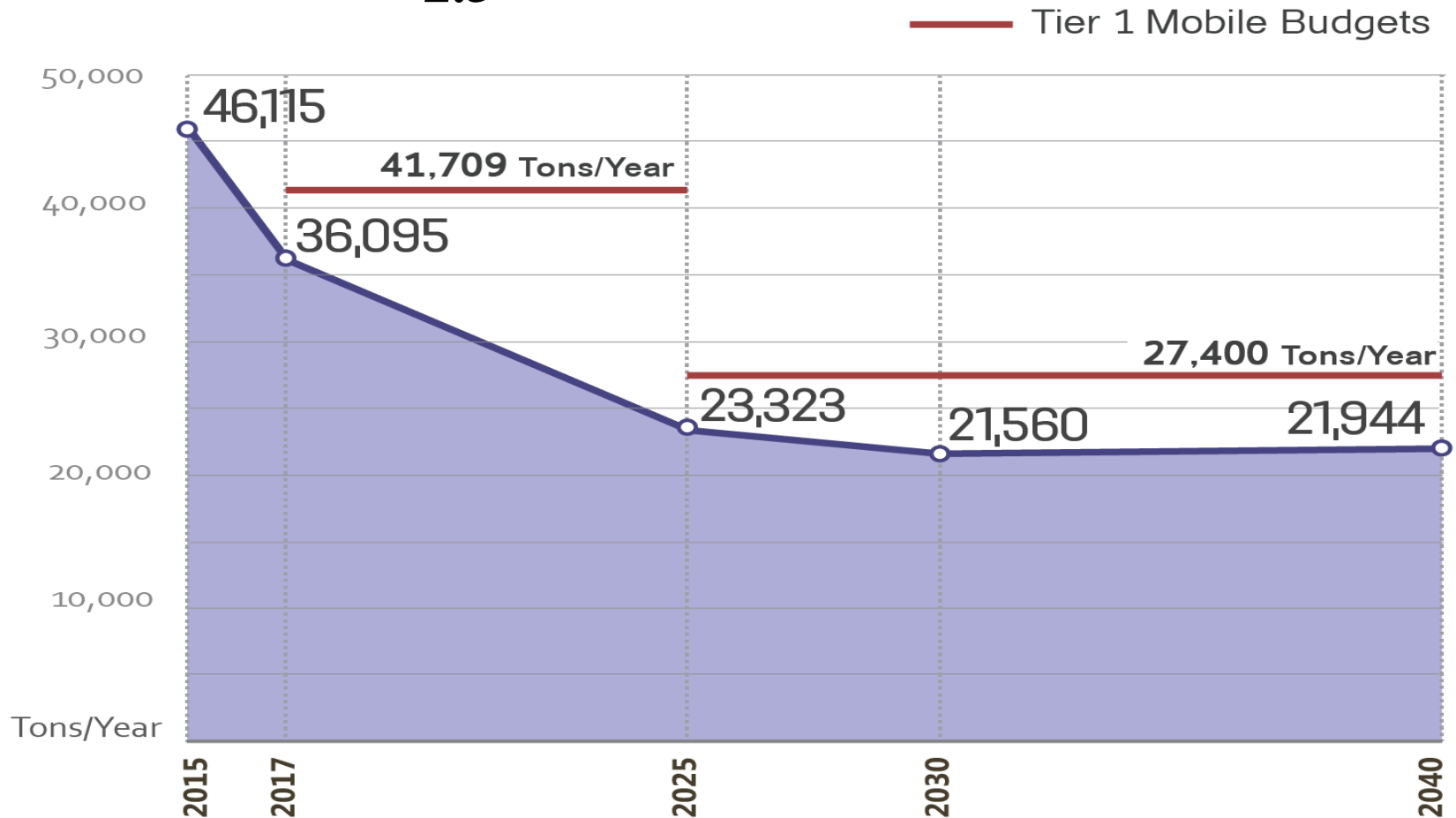
NOTE: The Mobile Budgets shown were developed in 2007, as part of the 8-Hour Ozone SIP, in response to the 1997 Ozone Standard. These budgets, as the most current approved by EPA, are required for use in any conformity analysis assessing ozone season pollutants.

Ozone Season NO_x



Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Mobile Source Emissions

PM_{2.5} Precursor NO_x

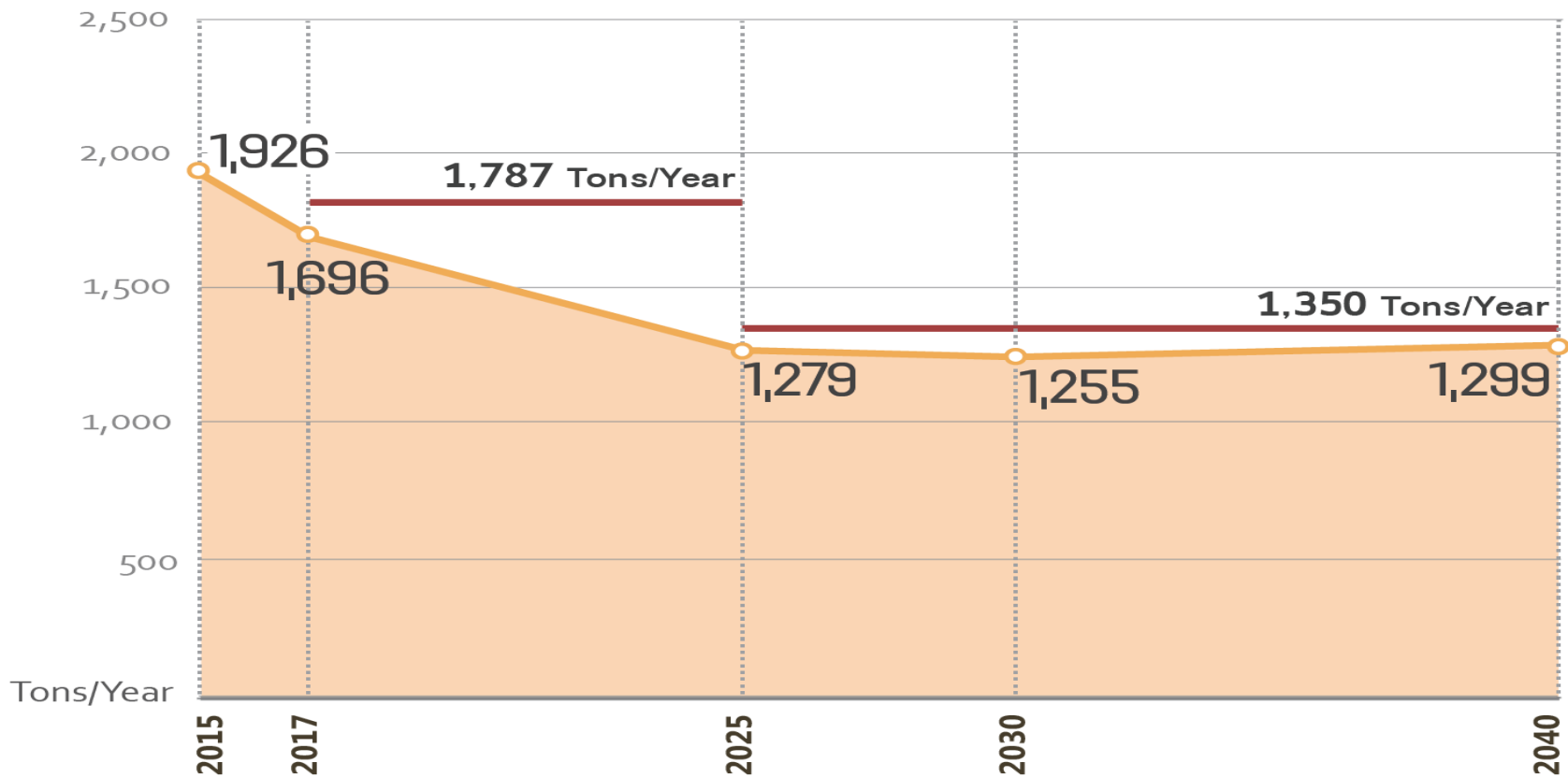


TCMs and TERMS are not included in totals.

Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Mobile Source Emissions

PM_{2.5} Direct

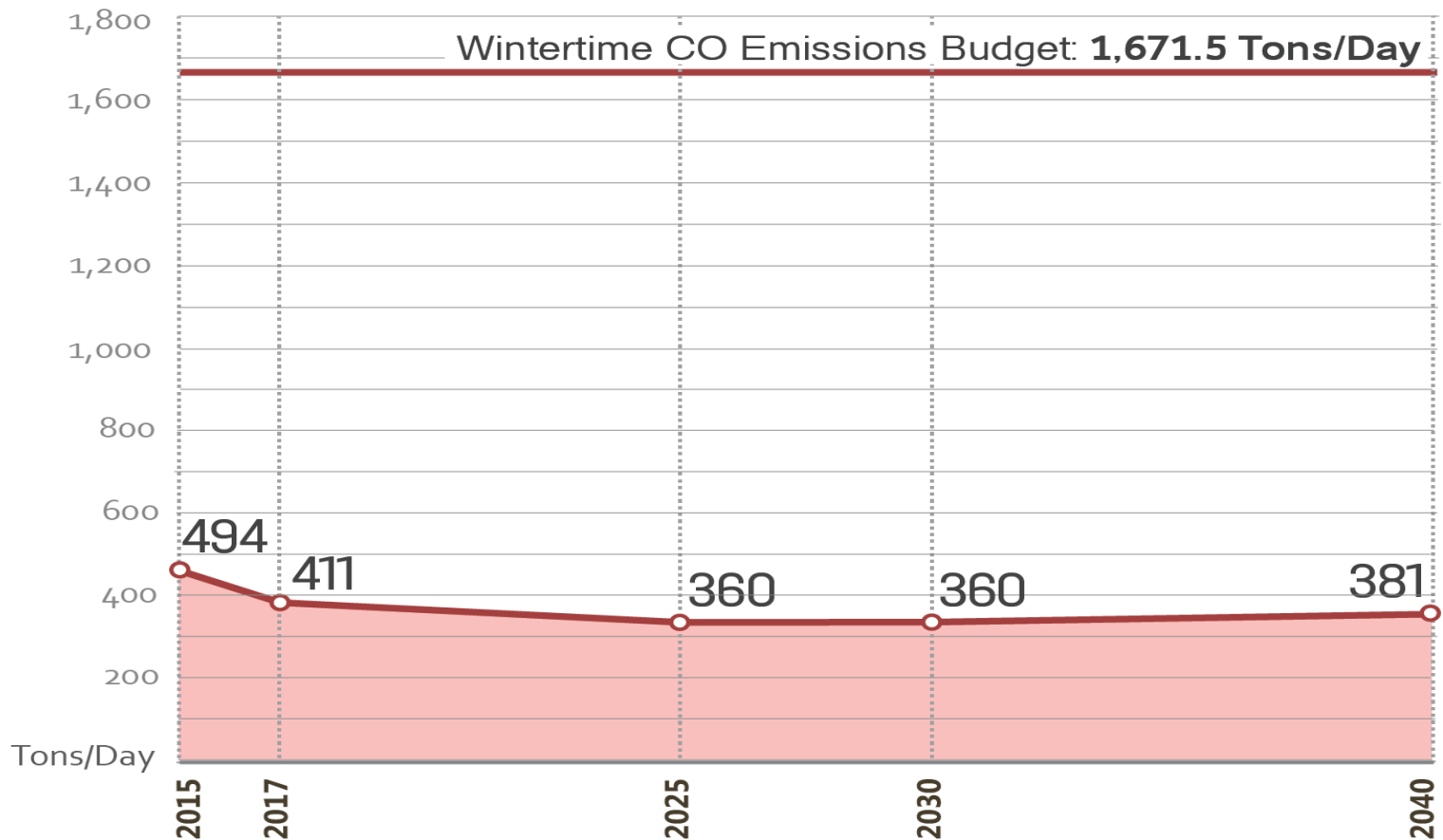
— Tier 1 Mobile Budgets



TCMs and TERMS are not included in totals.

Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Mobile Source Emissions

Wintertime CO



Air Quality Conformity

2014 CLRP and FY2015-2020 TIP

Transportation Emission Reduction Measures (TERMs)

REGIONAL EMISSIONS REDUCTIONS- ALL TERMS COMBINED					
Years/Pollutants	Ozone - VOC	Ozone - NOx	PM2.5 Direct	Precursor NOx	Winter CO
	(tons/day)	(tons/day)	(tons/year)	(tons/year)	(tons/day)
2015	0.06	0.10	1.11	26.72	1.07
2017	0.07	0.10	1.42	27.53	1.30
2025	0.10	0.11	2.32	30.43	2.14
2030	0.12	0.13	2.99	34.63	2.74
2040	0.19	0.19	4.56	49.88	4.23

NOTE: Benefits from these TERMS are not included in the emissions totals in this conformity analysis.

Air Quality Conformity 2014 CLRP and FY2015-2020 TIP Schedule

*October 16, 2013	TPB is Briefed on Draft Call for Projects
*November 20, 2013	TPB Releases Final Call for Projects - Transportation Agencies Begin Submitting Project Information through On-Line Database
December 13, 2013	<u>DEADLINE:</u> Transportation Agencies Complete On-Line Submission of Draft Project Inputs.
March 7, 2014	Technical Committee Reviews Draft CLRP & TIP Project Submissions and Draft Scope of Work for the Air Quality Conformity Analysis
March 13, 2014	CLRP & TIP Project Submissions and Draft Scope of Work Released for Public Comment
*March 19, 2014	TPB is Briefed on Project Submissions and Draft Scope of Work
April 8, 2014	TPB Staff Briefs MWAQC TAC on Project Submissions and Scope of Work
April 12, 2014	Public Comment Period Ends
*April 16, 2014	TPB Reviews Public Comments and is asked to Approve Project Submissions and Draft Scope of Work
June 6, 2014	<u>DEADLINE:</u> Transportation Agencies Finalize Congestion Management Documentation Forms (where needed) and CLRP & TIP Forms. (Submissions must not impact conformity inputs; note that the deadline for changes affecting conformity inputs was April 16, 2014).
September 5, 2014	Technical Committee Reviews Draft CLRP & TIP and Conformity Analysis
September 11, 2014	Draft CLRP & TIP and Conformity Analysis Released for Public Comment at Citizens Advisory Committee (CAC)
*September 17, 2014	TPB Briefed on the Draft CLRP & TIP and Conformity Analysis
September 9, 2014	TPB Staff Briefs MWAQC TAC on the Draft CLRP & TIP and Conformity Analysis
October 11, 2014	Public Comment Period Ends
*October 15, 2014	TPB Reviews Public Comments and Responses to Comments, and is Presented the Draft CLRP & TIP and Conformity Analysis for Adoption
*TPB Meeting	

**Air Quality Conformity
2014 CLRP and FY2015-2020 TIP**

QUESTIONS?