

**AIR QUALITY CONFORMITY ANALYSIS  
OF THE  
2013 CONSTRAINED LONG RANGE PLAN  
&  
FY2013-2018 TRANSPORTATION  
IMPROVEMENT PROGRAM**

**September 20, 2013  
TRAVEL FORECASTING SUBCOMMITTEE**

# Technical Approach

## 2012 CLRP

## 2013 CLRP

**Land Activity:**

Round 8.1 Cooperative Forecasts

Round 8.2 Cooperative Forecasts

**Modeled Area:**

3722 TAZ

3722 TAZ

**Travel Demand  
Model:**

Version 2.3.39

Version 2.3.52

**Mobile Model:**

Mobile6.2

MOVES2010a

**Vehicle Registration  
Data:**

2011 VIN

2011 VIN

**Analysis Years:**

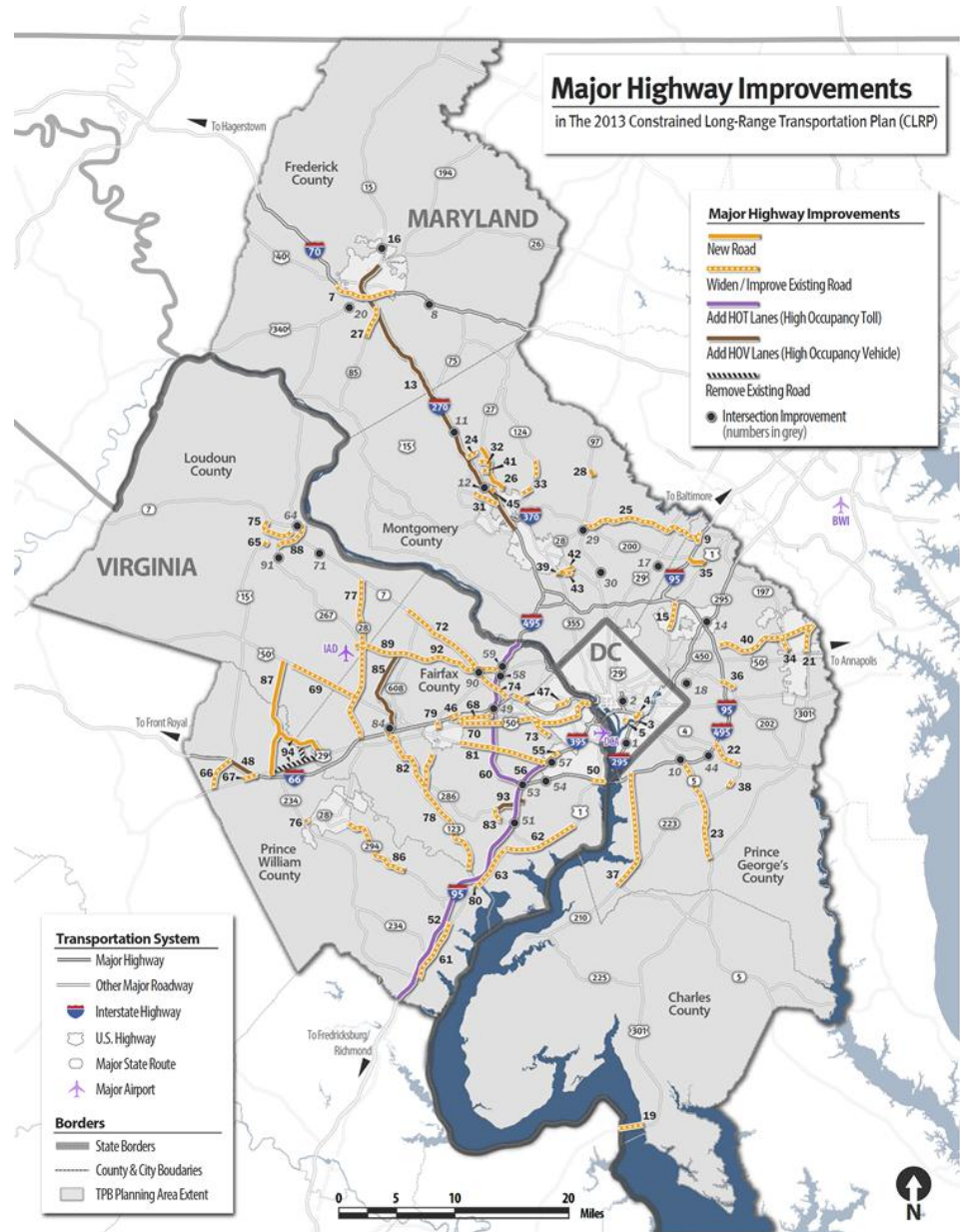
2015, 2017, 2020, 2030, 2040

2015, 2017, 2020, 2025, 2030, 2040

# 2013 CONSTRAINED LONG RANGE PLAN

## Major Highway Improvements

Map and project listing available here:  
<https://www.mwcog.org/clrp/projects/highway.asp>



# 2013 CLRP Major Highway Projects

## District of Columbia

1. I-295, reconstruct interchange at Malcolm X Blvd, 2014
2. I-395, remove 3rd St SB exit ramp, reconfigure 3rd St SB entrance and 2nd St NB exit ramps, reconnect F St bet. 2nd and 3rd St, 2013, 2014
3. 11th Street Bridge reconstruction, 2013
4. Southeast Boulevard, downgrade and construct urban boulevard, 2015
5. South Capitol Str/Bridge Reconstruction, including intersection with Martin Luther King Jr. Blvd, 2015
6. Lane Reductions/Reconfigurations (not mapped):
  - a. New Jersey Ave.NW - reconstruct to 2-way traffic, 2015
  - b. H St. NW and I St. NW - peak period bus-only lanes, 2014
  - c. East Capitol St. - reduce to 4 lanes, 2015
  - d. South Capitol St. - reduce to 4 lanes, 2015
  - e. 17th St. NE/NW - reduce to 1 lane, 2013
  - f. C St. NE - reduce to 2 lanes, 2013
  - g. M St. NW Bike Lane - remove 1 travel lane

## Maryland

7. I-70, widen to 6 lanes, 2020
8. I-70, interchange at Meadow Rd, 2020
9. I-95, interchange and CD lanes at Contee Road, 2016
10. I-95/495; Branch Avenue Metro access improvements, construct 8 lanes, 2020
11. I-270, reconstruct interchange at MD 121, 2016
12. I-270, interchange at Watkins Mill Rd. Ext., 2016
13. I-270/US 15 Corridor, I-70 to Biggs Ford Rd, highway improvements, 2030
14. Baltimore Washington Parkway at MD 193, Intersection Improvement, 2025
15. US 1, widen to 6 lanes, 2010, reconstruct 4 lanes, 2010, 2020
16. US 15, reconstruct at Monocacy Blvd, 2016
17. US 29 at Musgrove/Fairland Rd, 2025
18. US 50, westbound ramp to Columbia Park Road , 2025
19. US 301 From Charles County, MD to King George County, VA, 2030
20. US 340/US 15, interchange at Jefferson Tech Park, 2016
21. MD 3, widen to 6 lanes, 2030
22. MD 4, widen to 6 lanes, upgrade with interchanges at Westphalia Road and Suitland Parkway, 2016, 2020, 2035
23. MD 5, upgrade, widen to 6 lanes, including interchanges, 2016, 2025
24. MD 27, widen to 6 lanes, 2020
25. MD 28/MD 198, widen to 4, 6 lanes, 2025
26. M-83, construct 4, 6 lanes, 2020
27. MD 85, widen to 4, 6 lanes, 2020
28. MD 97, construct 2 lanes, 2020
29. MD 97, upgrade intersection at MD 28, 2030
30. MD 97, upgrade intersection at Randolph Road , 2015
31. MD 117, widen to 4 lanes, 2025
32. MD 118 (Germantown Rd.), widen to 4 lanes, 2020
33. MD 124, widen to 6 lanes, 2020
34. MD 197, widen to 4/5 lanes, 2025
35. MD 200, Intercounty Connector (ICC) Between I95 and Baltimore Ave. (US 1), 2014
36. MD 202, reconstruct 6 lanes, 2020
37. MD 210, upgrade 6 lanes and interchange improvement, 2020, 2030
38. MD 223, widen to 4 lanes, 2020
39. MD 355, construct 6 lanes, interchange at Montrose/Randolph Road, 2015, 2020
40. MD 450, widen to 4 lanes, 2016
41. Middlebrook Road Extended, widen, construct 4 lanes, 2020
42. Montrose Parkway East, construct 4 lanes, 2015
43. Randolph Road, widen to 5 lanes, 2014
44. Suitland Parkway, interchange at Rena/Forestville Road, 2025
45. Watkins Mill Road Extended, construct 6 lanes, 2011

## Virginia

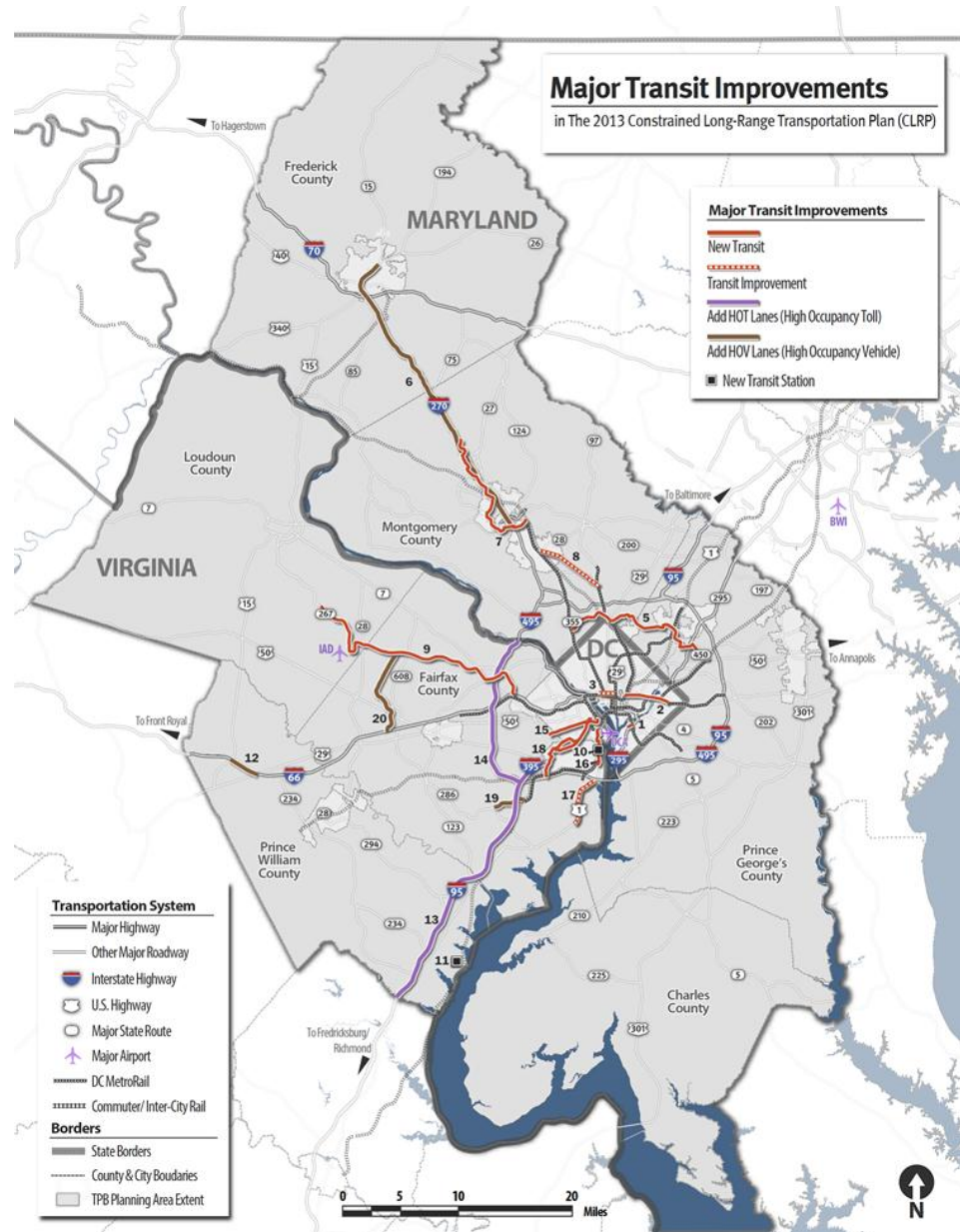
46. I-66, construct HOV ramps to access Vienna Metro Station, 2014
47. I-66, construct 2 lanes, 2020
48. I-66 HOV, includes interchange reconstruction at US 15, 2016
49. I-66/I-495, reconstruct interchange, 2013
50. I-95, construct approaches to Woodrow Wilson Bridge, 2013
51. I-95/Fairfax County Parkway, enhanced interchanges for improved access to Fort Belvoir, 2016, 2020
52. I-95/395 HOT Lanes, widen, construct 1, 2 additional lanes and bus service, 2015
53. I-95/I-395/I-495, interchange access ramps to I-495 HOV, 2013
54. I-95/495, reconstruct interchange at VA 613, 2025
55. I-395 Auxiliary Lanes Northbound Duke St. on ramp to Seminary Rd. off ramp, 2015
- 56. I-395 New Lane SB Duke St to Edsall Rd, 2018**
57. I-395 HOV lanes reversible ramp at Seminary Rd., 2015
58. I-495 HOT lanes interchange - 2 interchanges with VA-267 (Dulles toll Rd.) and 1 at the Dulles Airport Access Rd., 2013
- 59. Construct I-495 Interchange Ramp connecting NB I-495 to westbound Dulles Airport Access Highway, 2030 and Widen I-495 Interchange Ramp connecting EB Dulles Toll Road to Northbound I-495, 2030**
60. I-495 HOT lanes, 2015, 2030
61. US 1, widen to 6 lanes, 2025
62. US 1, widen to 6 lanes, 2020, 2025
- 63. US-1 from Annapolis Way to Lorton Road widening, 2035**
64. US 15 Bypass, interchange at Edwards Ferry Road, 2035
65. US 15, widen to 4 lanes, 2015
66. US 15, widen to 4 lanes, 2040
67. US 29, widen to 5, 6 lanes, 2014
68. US 29, widen to 6 lanes, 2012, 2013
69. US 50, widen to 6 lanes, 2014
70. US 50, widen/reconstruct 6 lanes including interchanges, 2013, 2015, 2025
71. VA-7, intersection improvements at the intersection of VA-7 and Belmont Ridge Rd., 2017
72. VA 7, Leesburg Pike, widen to 6, 8 lanes, 2014, 2015, 2025, 2030
73. VA 7, widen to 6 lanes, 2025
- 74. VA-7 from I-495 to I-66 widening, 2021**
75. VA 7/US 15 Bypass, widen to 6 lanes, 2040
76. VA 28, widen to 6 lanes, 2013, 2015, 2018, 2025
77. VA 28, widen to 8 lanes with interchanges, 2011, 2015, 2025
78. VA 123, widen to 6 lanes, 2025
79. VA 123, widen to 6 lanes, 2013
80. VA 123, widen to 6 lanes, 2017
81. VA 236, widen to 6 lanes, 2025
82. VA 286, widen to 6 lanes, 2020
83. VA 286, construct 4, 6 lanes with interchanges at Franconia Pkwy. And Boudinot Dr., 2011, 2012, 2013
84. VA 286, interchange at Fair Lakes Parkway, 2013
85. VA 286 Fairfax County Parkway HOV, widen and upgrade to 6, 8 lanes, 2013, 2035
86. VA 294, widen to 6 lanes, 2014, 2040
87. VA 411 Tri-County Parkway, construct 4 lanes, 2020
88. Battlefield Parkway, construct 4 lanes, 2012
89. Dulles Access Road, widen to 6 lanes including interchange reconstruct at I-495, 2017
- 90. Construct interchange on Dulles Toll Road at Greensboro Dr./Tyco Rd., 2036 and at New Boone Blvd. Extension, 2037**
- 91. Construct interchange at Dulles Greenway and Hwling Farm Boulevard, 2015**
- 92. DTR Collector-Distributor Roads EB and WB 684 to 828, 2036, 2037**
93. Franconia/Springfield Parkway HOV with interchange at Neuman S, 2025
94. Manassas Battlefield Bypass, 2035

NOTE: Projects in **bold** are new to the 2013 CLRP

# 2013 CONSTRAINED LONG RANGE PLAN

## Major Transit Improvements

Map and project listing available here:  
<https://www.mwcog.org/clrp/projects/highway.asp>



# 2013 CLRP

## Major Transit Projects

### **District of Columbia**

1. Anacostia Street Car Project Phase I, 2014, 2016
2. DC Streetcar - H St/Benning Rd NE, 2014, 2016
3. K Street Transitway, 2015
4. Tiger Grant Bus Priority Improvements (not mapped: DC, MD, VA)

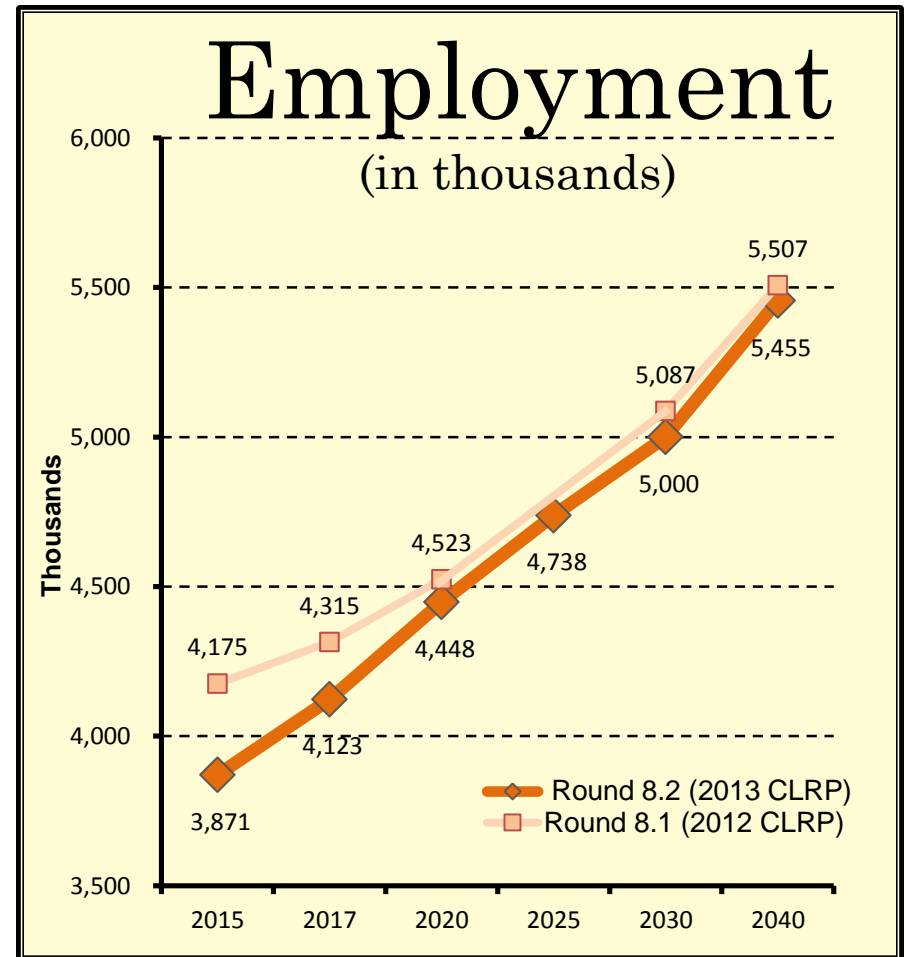
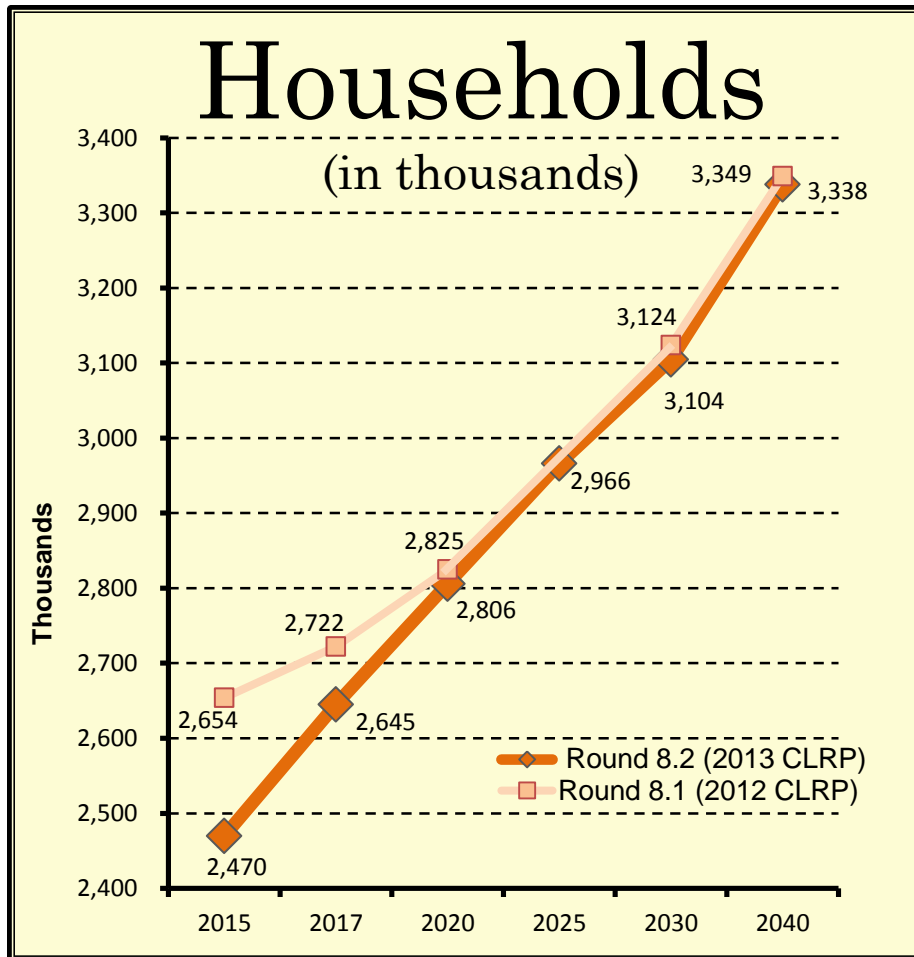
### **Maryland**

5. Purple Line, Bethesda to New Carrollton, 2020
6. I-270/US 15 Corridor, Shady Grove to Biggs Ford Rd., widen and HOV, 2030
7. Corridor Cities BRT, from Shady Grove to COMSAT, 2020
8. MD 586 (Viers Mill Rd.) Busway, from Wheaton Metrorail Station to Rockville Metrorail Station, 2020

### **Virginia**

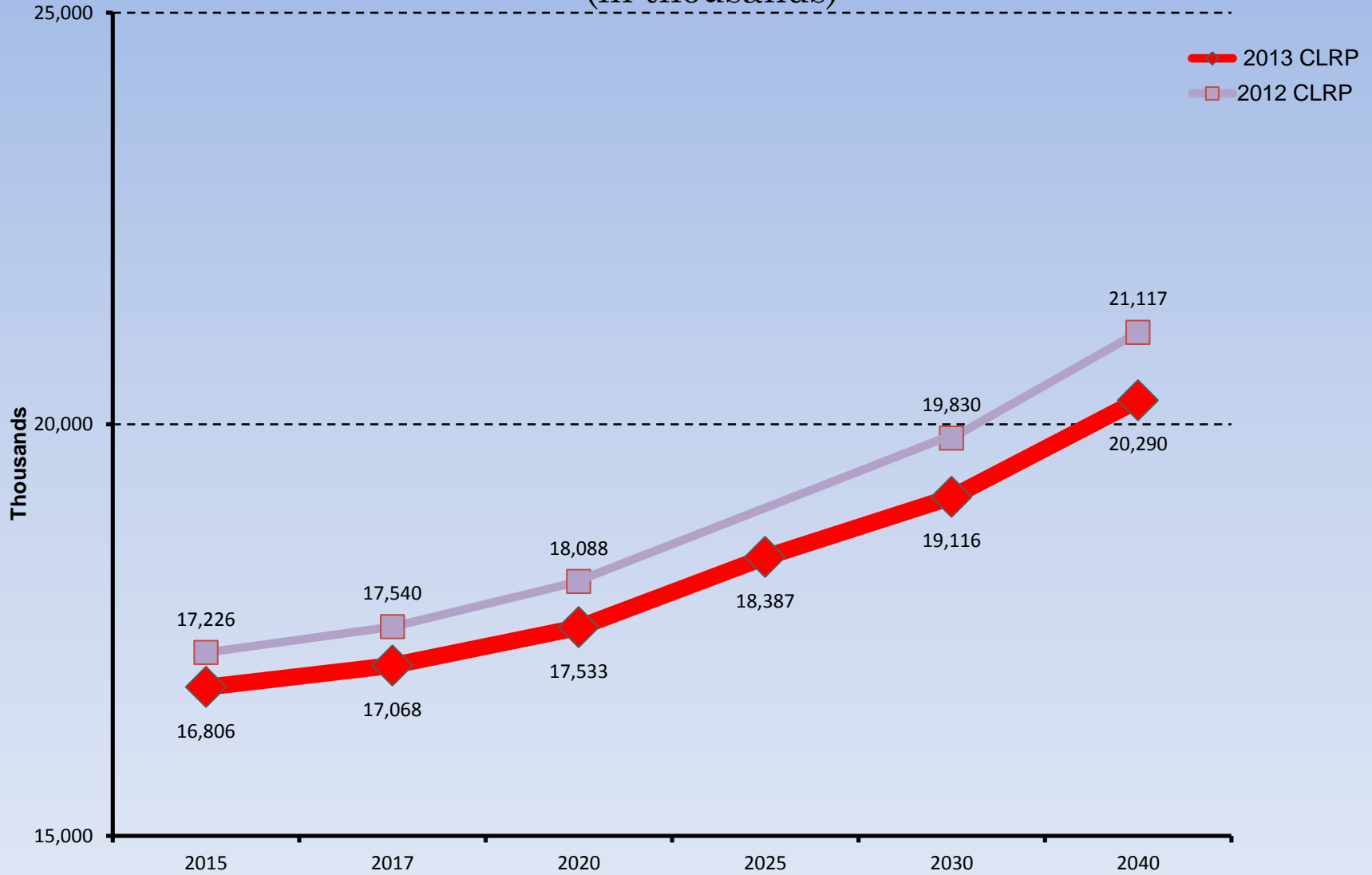
9. Dulles Corridor Metrorail, 2013, 2016
10. Potomac Yard Metro Station, 2017
11. Cherry Hill VRE Station, 2015
12. I-66 HOV, includes interchange reconstruction at US 15, 2016
13. I-95/395 HOT Lanes, widen, construct 1, 2 additional lanes and bus service, 2015
14. I-495 High Occupancy/Toll (HOT) lanes, Transit Service, 2013, 2030
15. VA 244 (Columbia Pike) Streetcar from Pentagon City to Skyline, 2017
16. Crystal City Potomac Yard Bus Way and US 1 Street Car, 2013, 2019
17. US 1 bus right turn lanes, 2035
18. BRT from Van Dorm St. Metrorail station to Pentagon Metrorail station, 2016
19. Franconia/Springfield Parkway HOV with interchange at Neuman St., 2025
20. VA 286 (VA 7100), Fairfax County Parkway HOV, widen and upgrade to 6, 8 lanes, 2013, 2035

# Cooperative Forecasts



# Total Vehicle Trips

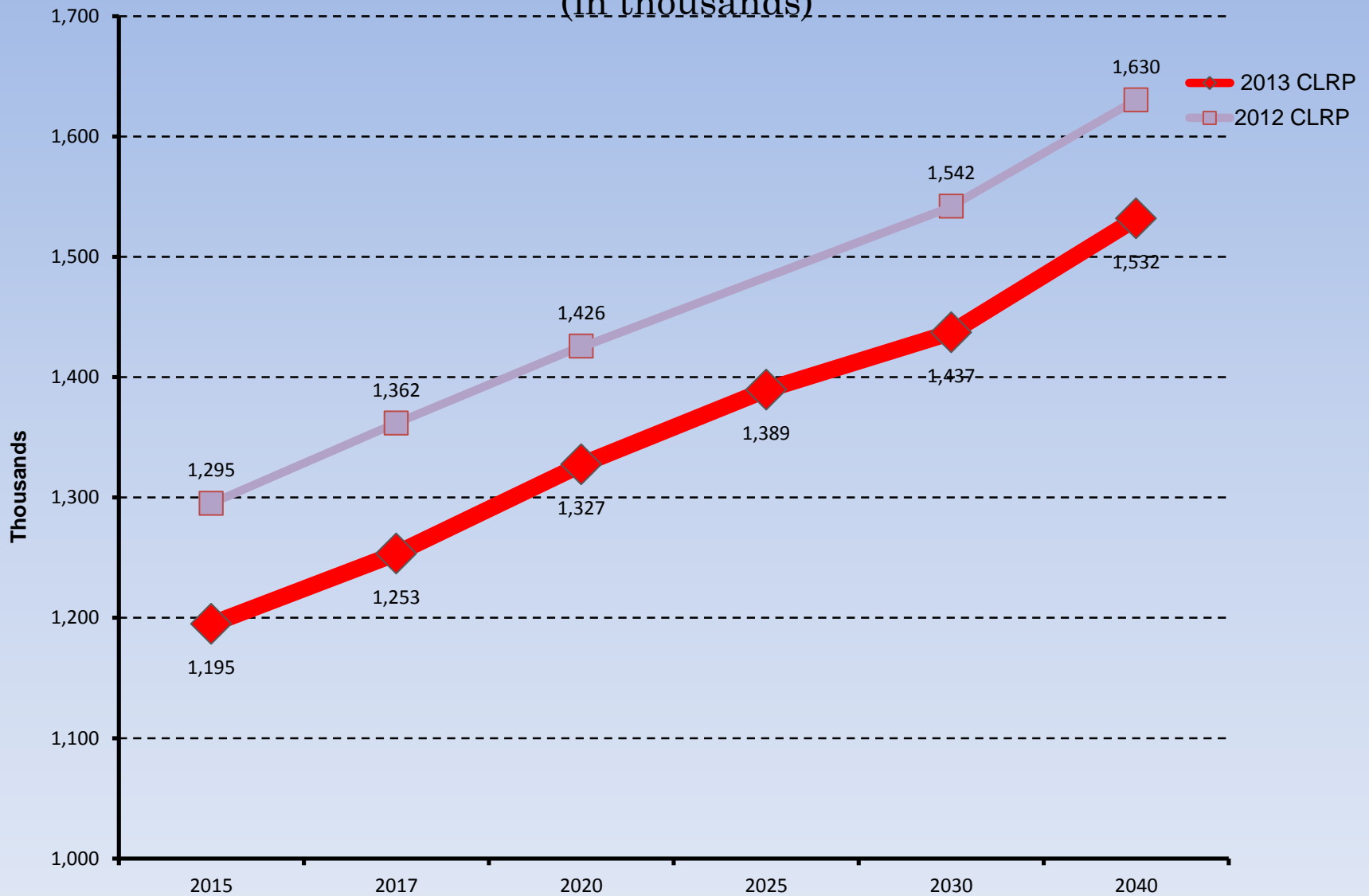
(in thousands)





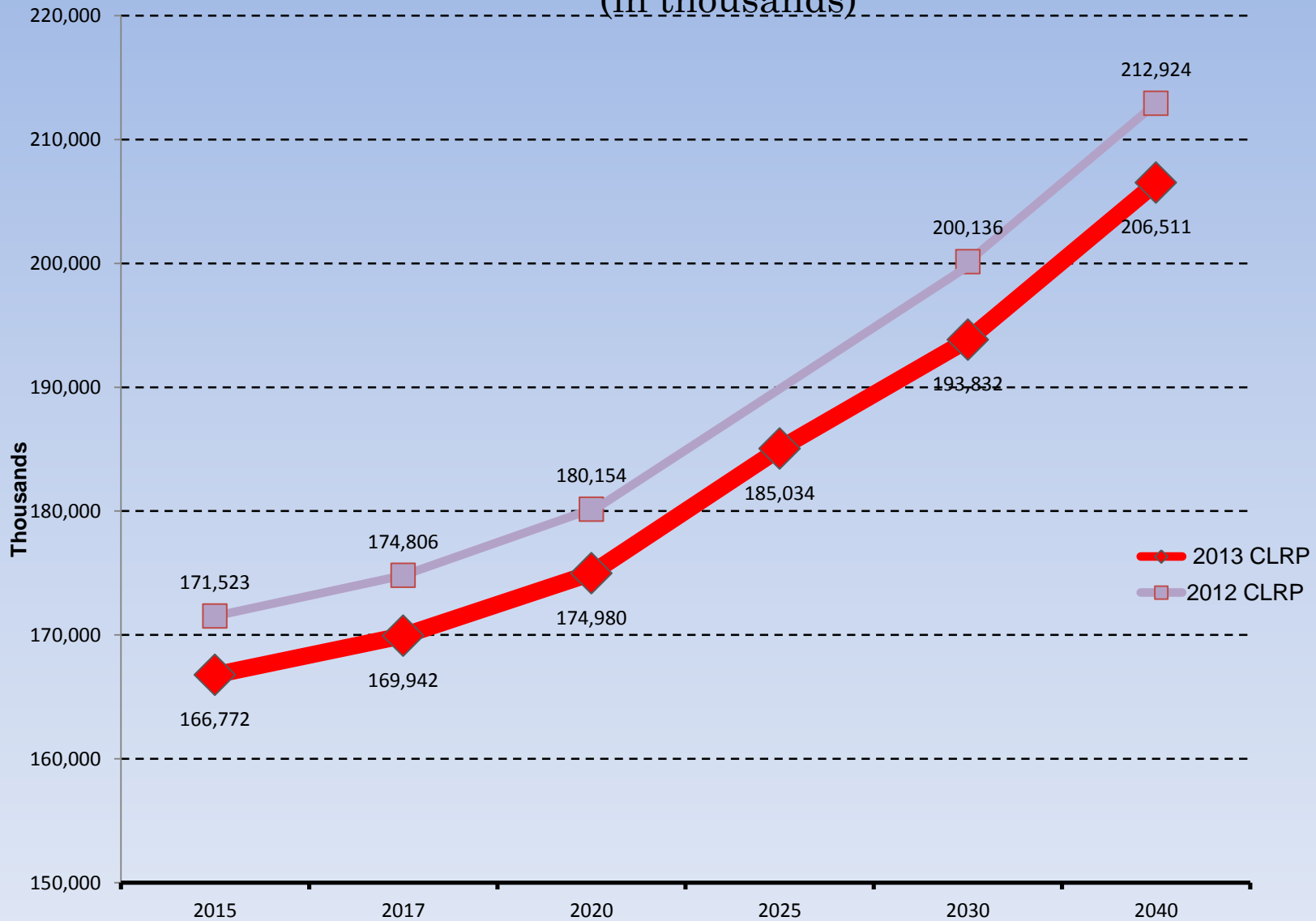
# Total Transit Trips

(in thousands)



# Vehicle Miles Traveled

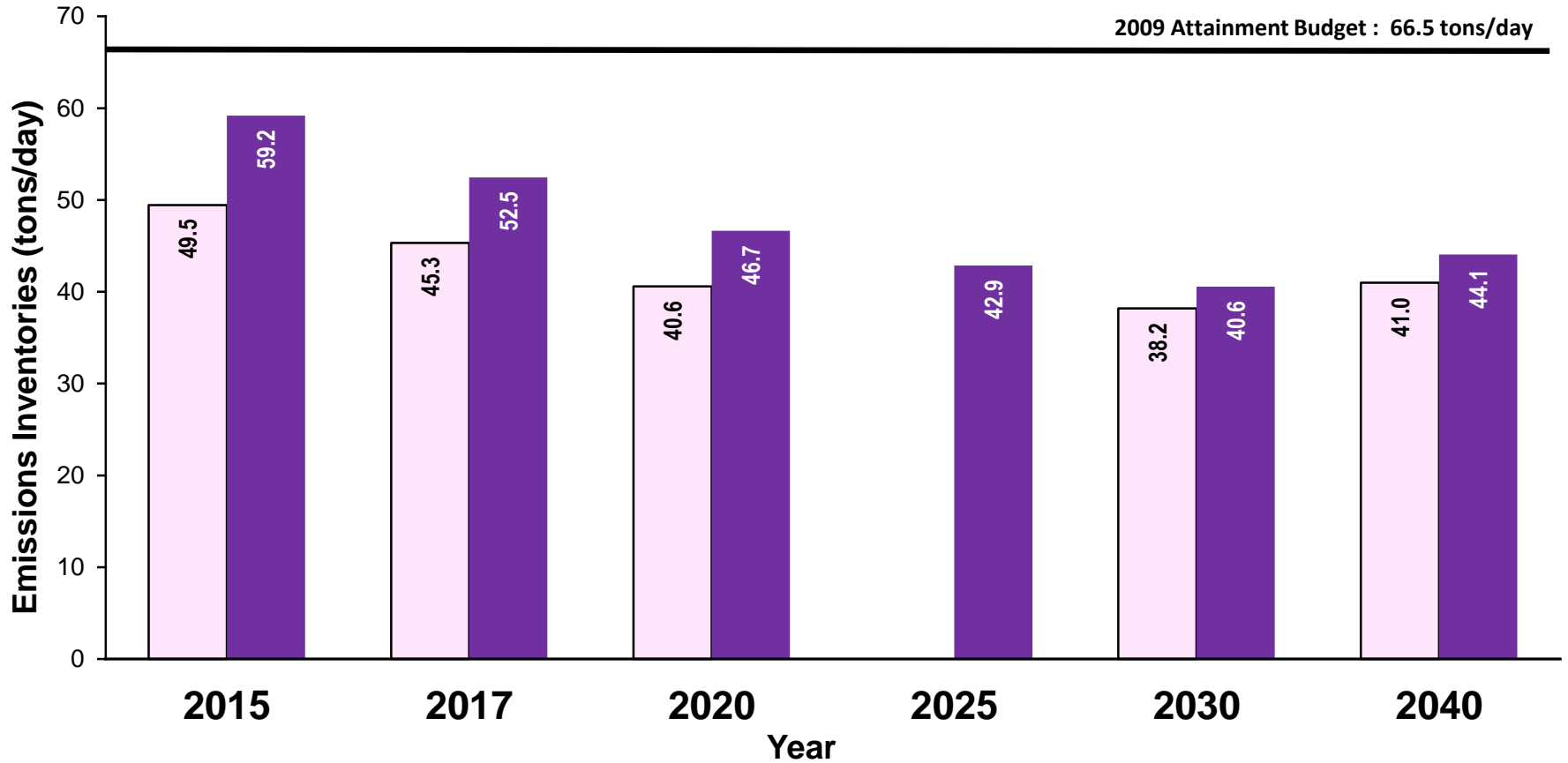
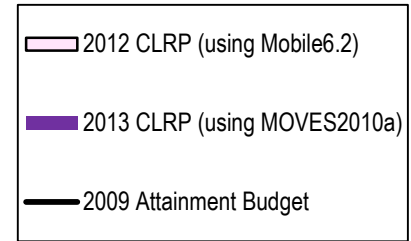
(in thousands)



# AIR QUALITY CONFORMITY

## 2013 CLRP & FY2013-2018 TIP

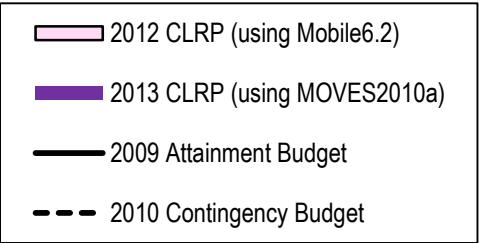
### Ozone Season VOC Emissions



# AIR QUALITY CONFORMITY

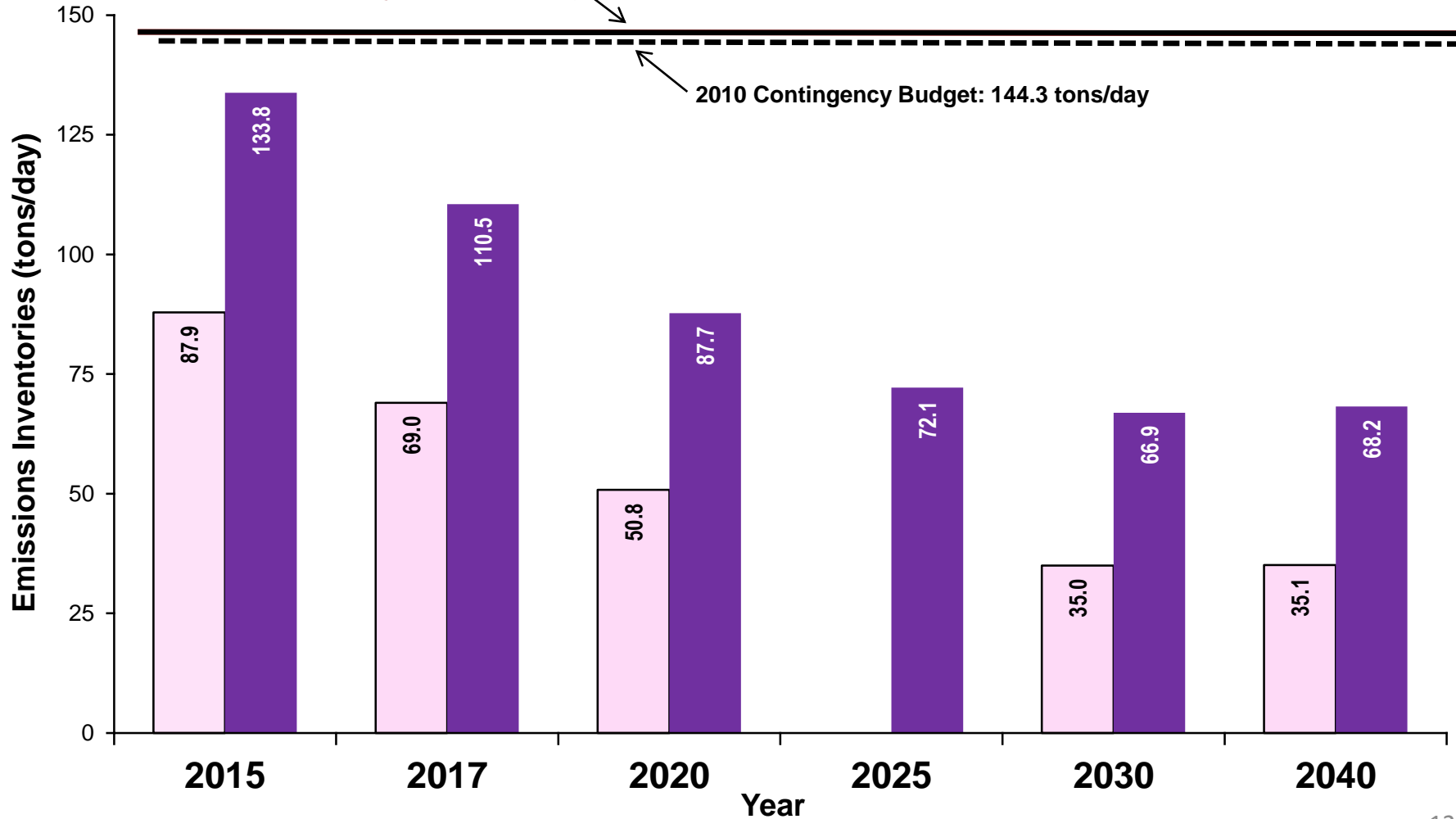
## 2013 CLRP & FY2013-2018 TIP

### Ozone Season NO<sub>x</sub> Emissions



2009 Attainment Budget: 146.1 tons/day

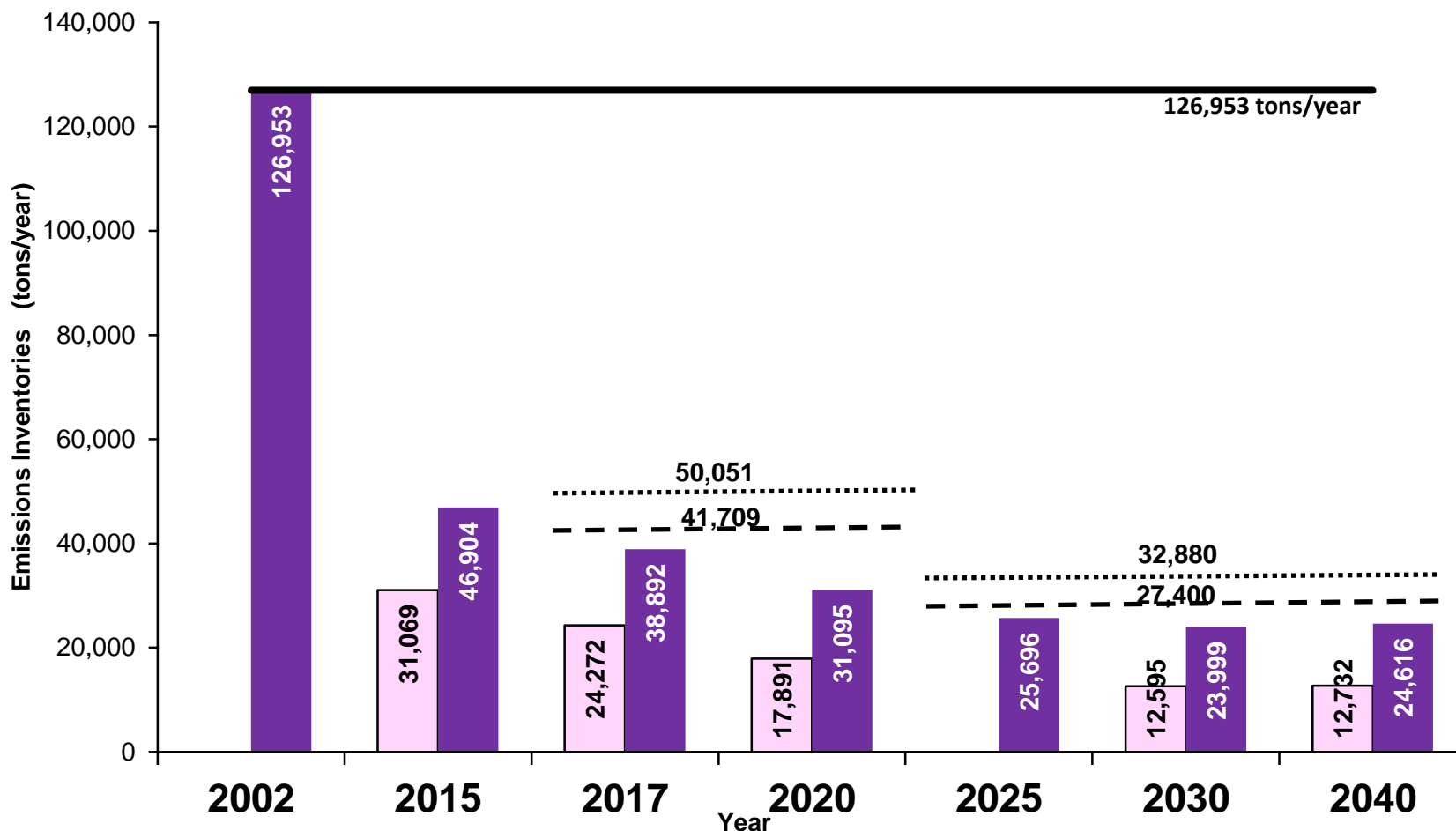
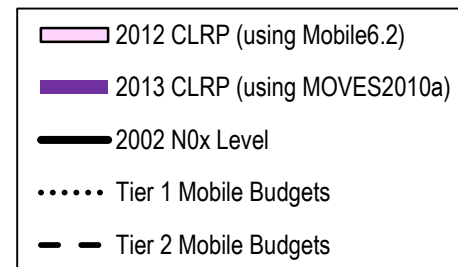
2010 Contingency Budget: 144.3 tons/day



# AIR QUALITY CONFORMITY

## 2013 CLRP & FY2013-2018 TIP

### Mobile Source Emissions PM<sub>2.5</sub> Precursor: NO<sub>x</sub>



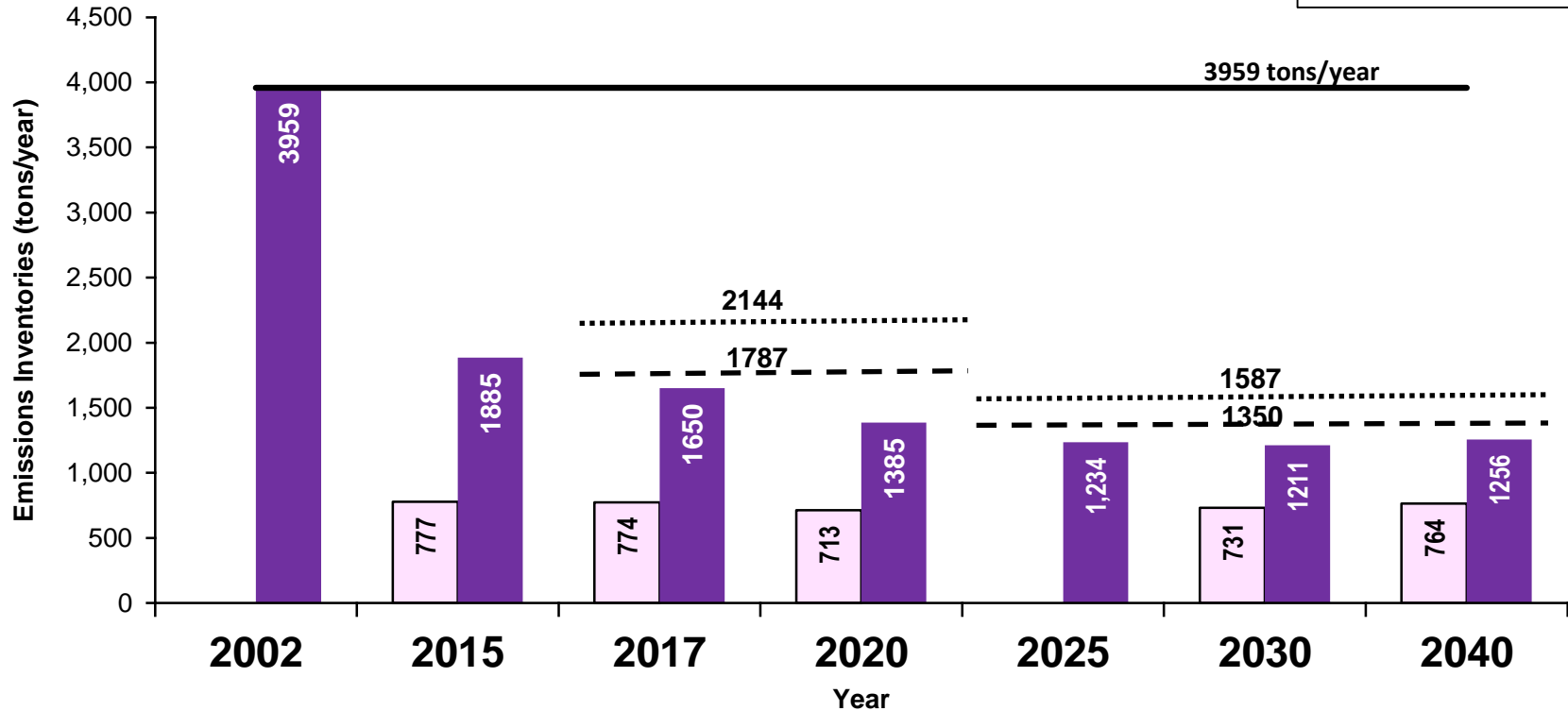
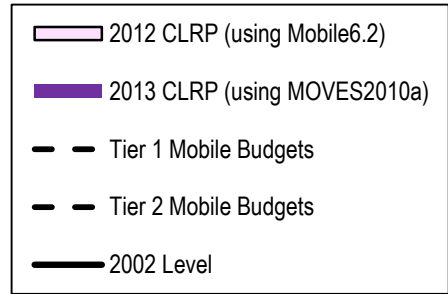
NOTE: MWAQC approved a PM<sub>2.5</sub> Maintenance Plan on 5/22/2013. The Plan contains mobile budgets for years 2017 and 2025, which are shown in this graph for informational purposes only. When they are approved by EPA they will be used for conformity. In the meantime, without approved mobile budgets, it is required that Forecast Year emissions do not exceed Base Year 2002 emissions.

# AIR QUALITY CONFORMITY

## 2013 CLRP & FY2013-2018 TIP

### Mobile Source Emissions

# Direct PM<sub>2.5</sub>



NOTE: MWAQC approved a PM<sub>2.5</sub> Maintenance Plan on 5/22/2013. The Plan contains mobile budgets for years 2017 and 2025, which are shown in this graph for informational purposes only. When they are approved by EPA they will be used for conformity. In the meantime, without approved mobile budgets, it is required that Forecast Year emissions do not exceed Base Year 2002 emissions.



## Schedule for the 2014 Financially Constrained Long-Range Transportation Plan (CLRP) and the FY2015-2020 Transportation Improvement Program (TIP)

*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	DEADLINE: Transportation Agencies Complete On-Line Submission of Draft Project Inputs.
January 10, 2014	Technical Committee Reviews Draft CLRP & TIP Project Submissions and Draft Scope of Work for the Air Quality Conformity Assessment
January 16, 2014	CLRP & TIP Project Submissions and Draft Scope of Work Released for Public Comment
*January 22, 2014	TPB is Briefed on Project Submissions and Draft Scope of Work
February 15, 2014	Public Comment Period Ends
*February 19, 2014	TPB Reviews Public Comments and is asked to Approve Project Submissions and Draft Scope of Work
May 2, 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 February 19, 2014).
June 12, 2014	Draft CLRP & TIP and Conformity Assessment Released for Public Comment at Citizens Advisory Committee (CAC)
*June 18, 2014	TPB Briefed on the Draft CLRP & TIP and Conformity Assessment
July 12, 2014	Public Comment Period Ends
*July 16, 2014	TPB Reviews Public Comments and Responses to Comments, and is Presented the Draft CLRP & TIP and Conformity Assessment for Adoption

\*TPB Meeting