

# Clean Air Act Update

## A&WMA Kentucky Chapter

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Kentucky Division for Air Quality

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*To Protect and Enhance Kentucky's Environment*

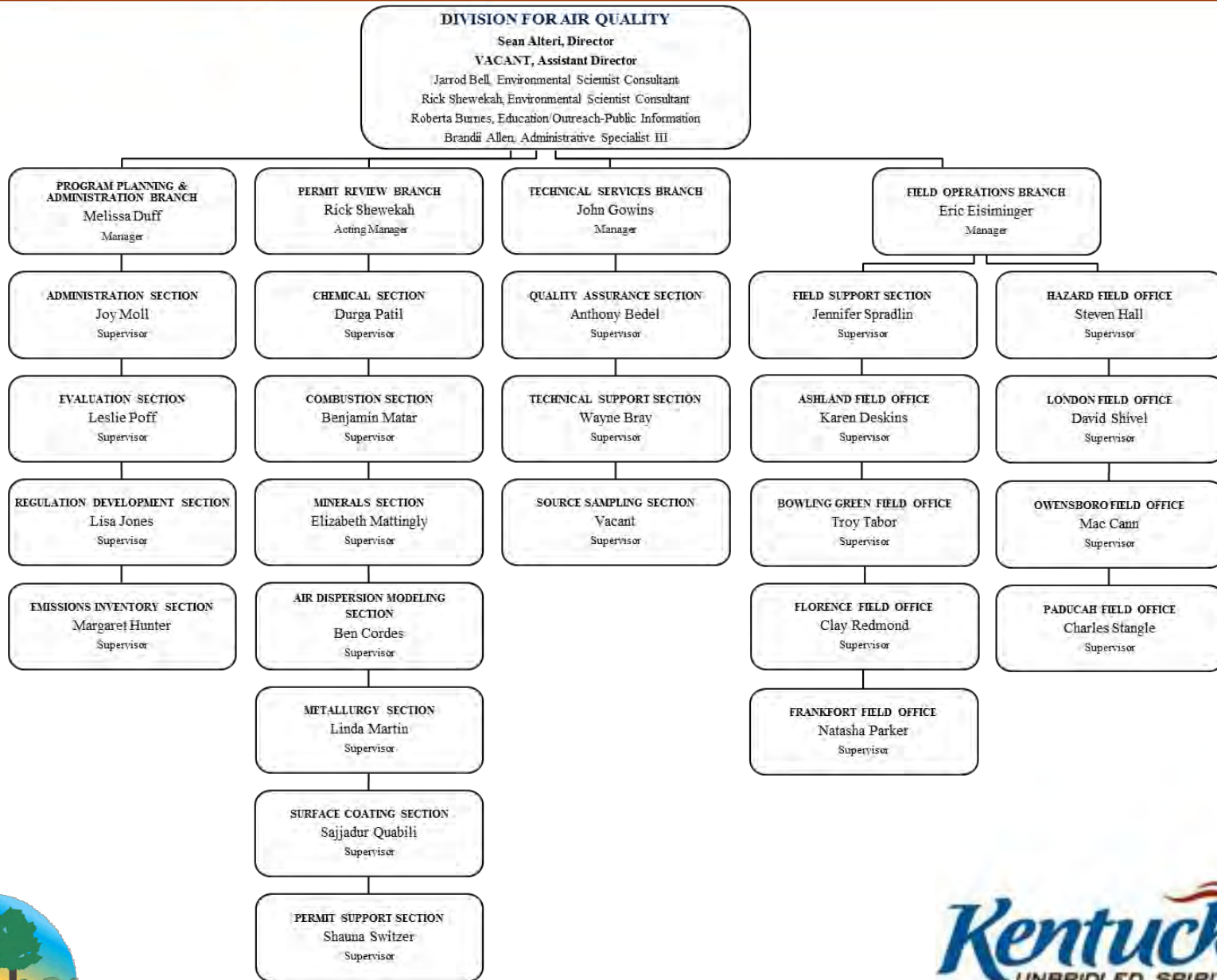


# Kentucky Division for Air Quality

- Organization Changes
- 2015 Ozone NAAQS
- Clean Power Plan Updates
- Ozone Transport Proposed Rules
- Transportation Conformity



# Organizational changes



# Air Quality in Kentucky

## Air Quality Score Card

Kentucky Metropolitan Statistical Areas

	Ozone	Fine Particles	Nitrogen Dioxide	Sulfur Dioxide
Bowling Green, KY	✓	✓	✓	✓
Cincinnati-Middletown, OH-KY-IN	✓ *	✓	✓	✓ *
Clarksville, TN-KY	✓	✓	✓	✓
Elizabethtown, KY	✓	✓	✓	✓
Evansville, IN-KY	✓	✓	✓	✓
Huntington-Ashland, WV-KY-OH	✓	✓	✓	✓
Lexington-Fayette, KY	✓	✓	✓	✓
Louisville-Jefferson	✓	✓	✓	✗
Owensboro, KY	✓	✓	✓	✓

\*Area designated nonattainment; most recent data show area is meeting standards.





# 8-hour Ozone (2008)

- Standard 75 ppb
- May 21, 2012 Northern Kentucky designated as marginal nonattainment
- Area had 3 years to reach attainment, redesignation request due by July 20, 2015.
- August 27, 2015 EPA proposed ruling that the Northern Kentucky area attained the standard by the July 20, 2015 attainment date based on certified ozone monitoring data for 2012-2014.



# 8-hour Ozone (2015)

- On October 1, 2015, EPA strengthened the national ambient air quality standards for ground-level ozone from 75 to 70 ppb for both the primary and secondary standards.
- State recommendations due October 2016.
- Final designations October 2017.
- Depending on the severity of their ozone problem, areas would have until between 2020 and 2037 to meet the standards.



# Ozone Monitoring Data

Ozone: KY & CBSAs		2015 Summary of Preliminary Ozone (O <sub>3</sub> ) Data (ppm)-- KY & Cross-State CBSAs						
Excel Revised: 2/2/16		*** 2015 Data is preliminary and is subject to change. Suitable for internal use only.*** ***Please obtain an AQS report for public release.***						
CBSA/Location	AQS ID	Final DV: Annual 4th Highest Daily Max 8-Hr Avg			Prelim 2015: 4th Highest Daily Max 8-Hr Avg *	2012-2014 Final: 3-Yr Avg of 4th Highest Daily Max 8-Hr Avgs	2013-2015 Prelim: 3-Yr Avg of 4th Highest Daily Max 8-Hr Avgs *	
		2012	2013	2014				
Bowling Green-Glasgow, KY MSA	14540							
Edmonson, Mammoth Cave (NPS)	21-061-0501	0.081	0.063	0.065	0.063	0.069	0.063	
Warren, Oakland Elementary	21-227-0008	0.058 *	x	x	x	x	x	
Warren, Smiths Grove	21-227-0009	0.079 *	0.060	0.063	0.061	0.067*	0.061	
Cincinnati-Middleton, OH-KY-IN MSA	17140							
Campbell, NKU Primary	21-037-3002	0.084	0.072	0.071	0.071	0.075	0.071	
Boone, East Bend	21-015-0003	0.074	0.059	0.062	0.062	0.065	0.061	
Clarksville, TN-KY MSA	17300							
Christian, Hopkinsville POC2	21-047-0006	0.075	0.062	0.065	0.060	0.067	0.062	
Trigg, Cadiz (CASTNET)	21-221-9991	0.078	0.064	0.066	0.060	0.069	0.063	
Elizabethtown-Ft. Knox, KY MSA	21060							
Hardin, E-town	21-093-0006	0.079	0.062	0.062	0.066	0.067*	0.063	
Evansville, IN-KY MSA	21780							
Henderson, Baskett	21-101-0014	0.087	0.066	0.069	0.067	0.074	0.067	
Huntington-Ashland, WV-KY-OH	26580							
Boyd, FIVCO	21-019-0017	0.074	0.065	0.065	0.069	0.068	0.066	
Greenup, Worthington	21-089-0007	0.076	0.060	0.061	0.066	0.065	0.062	
Lexington-Fayette, KY MSA	30460							
Fayette, Newtown	21-067-0012	0.078	0.060	0.065	0.071	0.067	0.065	
Jessamine, Nicholasville	21-113-0001	0.077	0.061	0.064	0.066	0.067	0.063	
Louisville-Jefferson Cnty, KY-IN MSA	31140							
Bullitt, Shepherdsville	21-029-0006	0.080	0.064	0.065	0.067	0.069	0.065	
Oldham, Buckner	21-185-0004	0.092	0.064	0.068	0.073	0.074	0.068	
Middlesboro, KY MicroSA	33180							
Bell, Middlesboro Airport	21-013-0002	0.066	0.058	0.062	0.059	0.062	0.059	
Owensboro, KY MSA	36980							
Daviess, Owensboro	21-059-0005	0.087	0.066	0.064	0.065	0.072	0.065	
Hancock, Lewisport	21-091-0012	0.081	0.063	0.066	0.071	0.070	0.066	
Paducah-Mayfield, KY-IN MicroSA	37140							
Livingston, Smithland	21-139-0003	0.087	0.065	0.065	0.063	0.072	0.064	
McCracken, JPRECC	21-145-1024	0.087	0.064	0.065	0.063	0.072	0.064	
Somerset, KY MicroSA	43700							
Pulaski, Somerset Gas Storage	21-199-0003	0.075	0.061	0.063	0.062	0.066	0.062	
Not in a CBSA								
Carter, Grayson Lake	21-043-0500	0.071	0.062	0.060	0.061	0.064	0.061	
Morgan, W. Liberty (CASTNET)	21-175-9991	0.070	0.058	0.064	0.064	0.064	0.062	
Perry, Hazard	21-193-0003	0.070	0.058	0.061	0.057	0.063	0.058	
Pike, Pikeville	21-195-0002	0.068	0.055	0.063	0.058	0.062	0.058	
Simpson, Franklin	21-213-0004	0.071	0.059	0.063	0.067	0.064	0.063	
Washington, Harrodsburg (CASTNET)	21-229-9991	0.076	0.064	0.065	0.064	0.068	0.064	

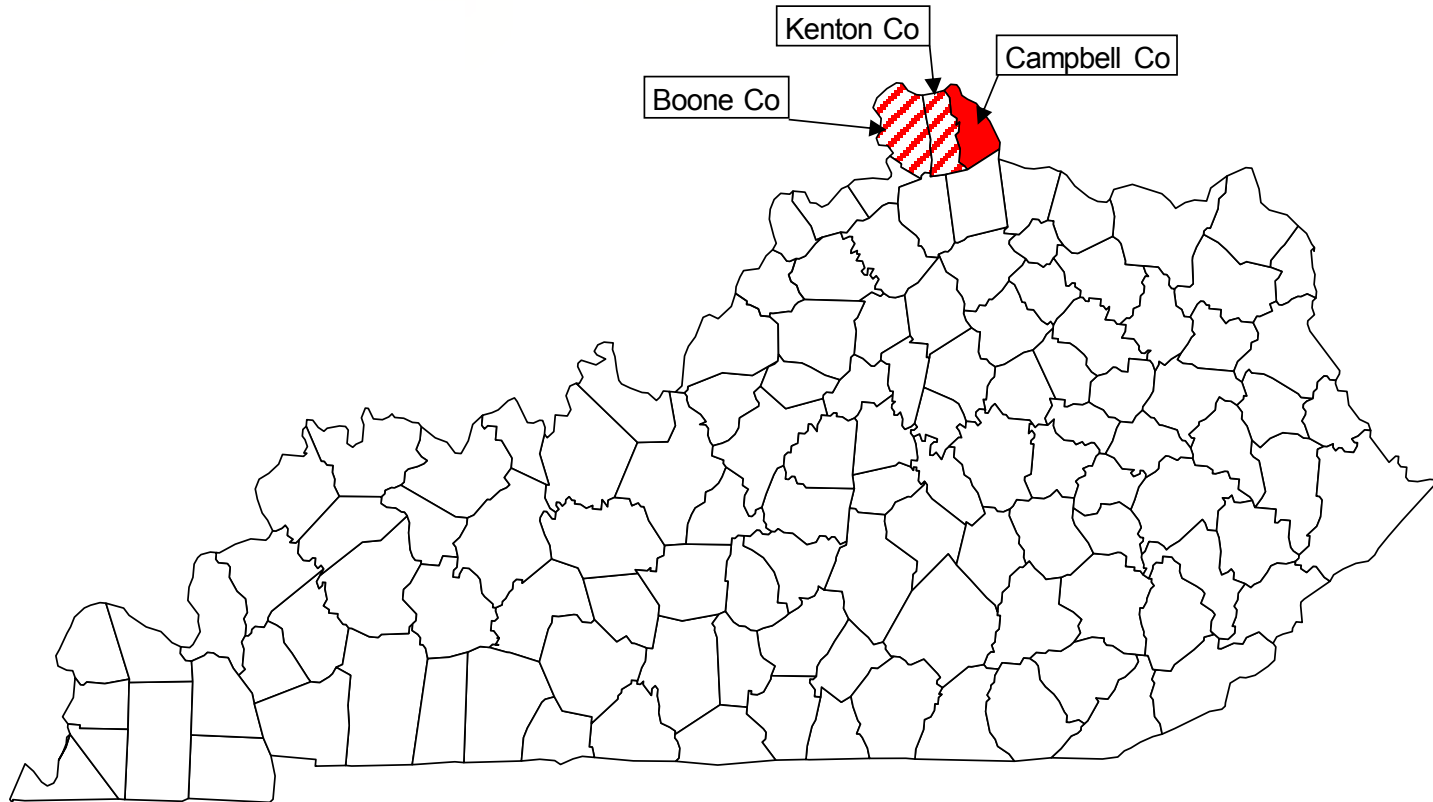
x= no data exists

xx= collected data not yet available

\*= incomplete dataset



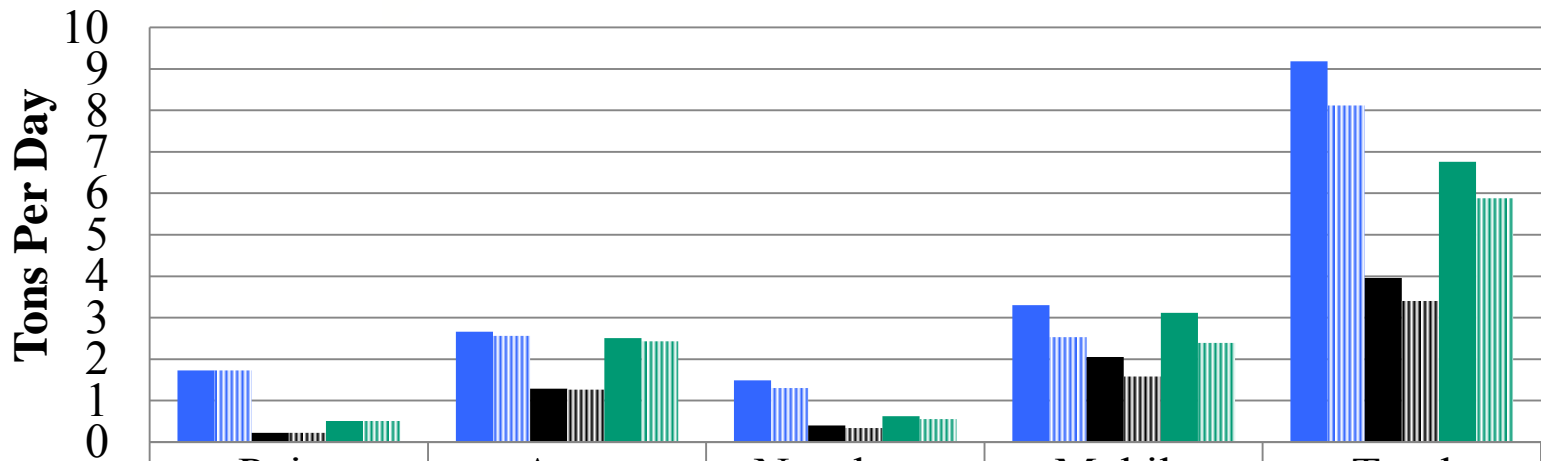
# Potential Nonattainment Areas 2015 Ozone





# Northern Kentucky VOC

## 2008 8-Hour Ozone Nonattainment Area Projected VOC Emissions

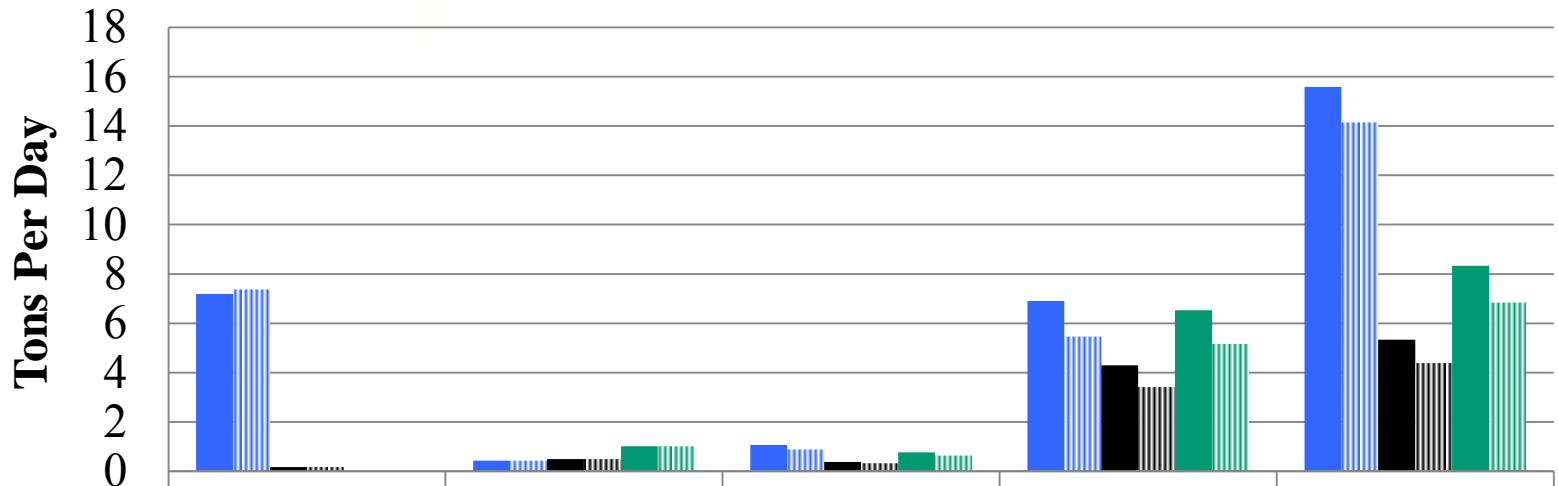


	Point	Area	Non-hwy	Mobile	Total
■ Boone-2011	1.73	2.66	1.49	3.3	9.18
▨ Boone-2014	1.73	2.56	1.3	2.53	8.12
■ Campbell-2011	0.22	1.29	0.4	2.05	3.96
▨ Campbell-2014	0.22	1.26	0.34	1.58	3.4
■ Kenton-2011	0.51	2.51	0.62	3.12	6.76
▨ Kenton-2014	0.51	2.43	0.55	2.39	5.88



# Northern Kentucky NOx

## 2008 8-Hour Ozone Nonattainment Area Projected NOx Emissions



	Point	Area	Non-hwy	Mobile	Total
■ Boone - 2011	7.19	0.43	1.06	6.9	15.58
▨ Boone - 2014	7.37	0.43	0.88	5.46	14.14
■ Campbell - 2011	0.17	0.49	0.38	4.3	5.34
▨ Campbell - 2014	0.17	0.49	0.32	3.41	4.39
■ Kenton - 2011	0.01	1.02	0.77	6.53	8.33
▨ Kenton - 2014	0.01	1.02	0.64	5.17	6.84



# Clean Power Plan Update

- Governor's press release
- Cabinet comments
  - 111(b) comments (4/22/14)
  - Modified/Reconstructed (10/16/14)
  - 111(d) comments (11/26/14)
  - Federal plan and model rule comments (1/21/16)
- Legal actions



# Clean Power Plan Update

- Governor's press release
- 111(d) Initial Submittal due 9/6/16
  - Must contain:
    - Identification of final plan approach or approaches under consideration and a description of progress made to date on the final plan components;
    - Explanation as to why more time is needed; and
    - Demonstration or description of opportunity for public comment and meaningful engagement with stakeholders, including vulnerable communities



# Clean Power Plan Update

- Cabinet comments on Proposed Federal Plan
  - Serious Economic Impacts
  - Lack of ability for meaningful comment and adequate public participation
  - Missing information critical to the rulemaking
  - Improperly expands statutory authority through regulatory action
  - Creates regulatory uncertainty





# Clean Power Plan Update

- Legal actions
  - Application for Administrative Stay filed on 8/5/15
    - 1/21/16-Petition for Stay denied by the D.C. Circuit Court
    - 1/27/16 - Both sets of Petitioners have applied to the Supreme Court for discretionary review of denial of the stay
    - 2/4/16 – EPA deadline to respond to state's stay application
  - Petition for Reconsideration filed on 12/21/15
    - EPA's final 111(d) rule



# Ozone Transport Proposed Rule

- Cross State Air Pollution Rule (CSAPR)
- Originally designed for the 1997 PM<sub>2.5</sub> and 1997 Ozone NAAQS
- Proposed update to address transport for the 2008 Ozone NAAQS
- Determine upwind states and their contributions to nonattainment areas or interference with maintenance areas
- Proposal only controls emissions from EGUs



# Ozone Transport Proposed Rule

- Kentucky comments submitted on the Proposed CSAPR Updated for the 2008 Ozone NAAQS on February 1, 2016:
  - Seriously flawed due to EPA use of inaccurate data and modeling assumptions
  - Fails to account for significant emission reductions and improvements that have already occurred



# Transportation Conformity

- Required by the Clean Air Act Section 176(c)
- Serves as a bridge to connect air quality and transportation planning activities.
- Ensures that federal funding and approval are given to highway and transit projects that conform to the air quality goals established by the State Implementation Plan (SIP).



# Transportation Conformity

- Encourages cooperation among various governmental entities and can lead to implementation of new and innovative transportation projects and air pollution control measures.
- 401 KAR 50:066. Conformity of Transportation Plans, Programs, and Project.
  - All transportation plans, transportation improvement plans, and projects subject to 40 CFR 93, Subpart A, must conform to KY's SIP prior to implementation.





# Transportation Conformity

- Transportation Conformity Reviews are sent to Interagency Consultation (IAC) members for review and comment.
  - PM<sub>2.5</sub> Hotspot Analyses
  - Transportation Improvement Program (TIP)/Transportation Plan (TP) Amendment Reviews

Year	PM <sub>2.5</sub> Hotspot Reviews	TIP/TP Amendment Reviews
2011	86	11
2012	39	7
2013	48	7
2014	84	6
2015	286	12
<b>Totals</b>	<b>543</b>	<b>43</b>



# CMAQ Program

- Congestion Mitigation and Air Quality Improvement Program
  - Provides flexible funding to State and local governments for transportation projects or programs to help meet CAA obligations
  - Applies to ozone, carbon monoxide (CO), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) nonattainment and maintenance areas
  - Increased focus on addressing PM<sub>2.5</sub>



# Contact Information

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