

# **ADVANCE**

A U.S. Environmental Protection Agency Program

CAAAC Permits, NSR and Toxics Subcommittee  
October 28, 2014

# Overview

- What is the Advance Program?
- Who is currently participating?
- What does participation entail?
- What support is EPA providing?
- What has been achieved so far?
- What are the next steps?

# Advance Program

A collaborative effort by EPA, states, tribes, and local governments to encourage emission reductions in **attainment** areas, to help them continue to meet the National Ambient Air Quality Standards for ozone and PM<sub>2.5</sub>.

- Does not affect requirements that would otherwise apply.
- No guarantees!

# Ozone Advance

- Began April 2012
- Focuses on maintaining the ozone standards
- Final designations for 2008 standard were effective July 2012; Marginal areas have until 2015 to attain.
- 35 areas (as of Oct. 2014)

# PM Advance

- Began January 2013 (new piece of broader Advance Program)
- Focuses on maintaining the the PM<sub>2.5</sub> standards
- Final designations for 2012 annual PM<sub>2.5</sub> NAAQS would occur in Dec. 2014 (effective Feb/Mar 2015); projected nonattainment areas CAN participate in Advance Program until then.
- 15 areas (as of Oct. 2014)

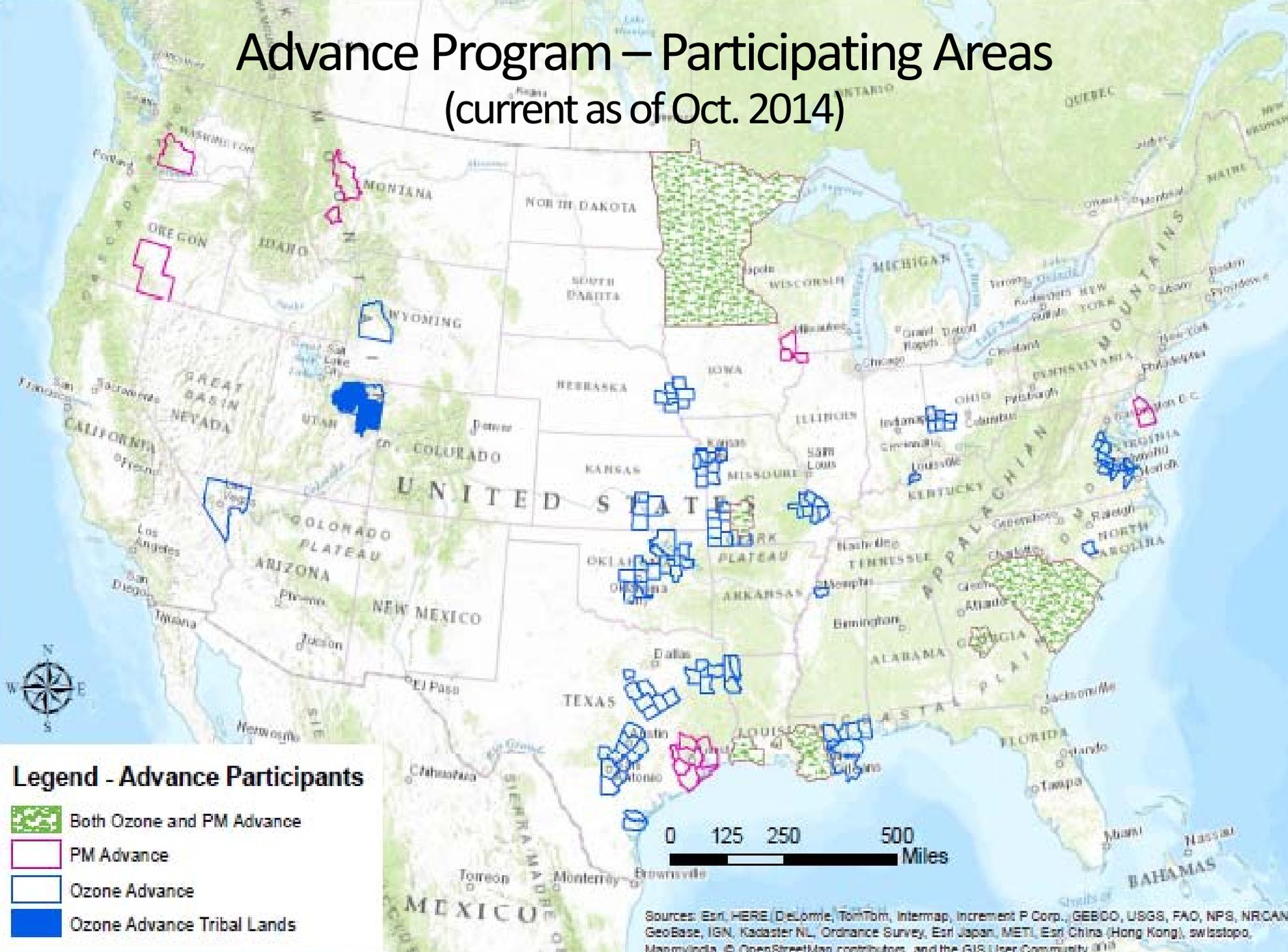
Areas that join both Ozone and PM Advance can develop one multi-pollutant plan or “path forward.”

# Goals/Benefits

- Help ensure continued **health** protection
- **Proactive**
  - Could better position some areas to stay in attainment.
  - If eventually designated nonattainment, could either (1) provide needed reductions that could result in a lower classification and/or (2) feed into a future SIP
- Multi-pollutant **co-benefits**
- **Lower cost/burden** when implement measures early rather than wait for a nonattainment designation
- More **flexibility** to choose measures that make sense to the area



# Advance Program – Participating Areas (current as of Oct. 2014)



## Legend - Advance Participants

-  Both Ozone and PM Advance
-  PM Advance
-  Ozone Advance
-  Ozone Advance Tribal Lands



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

# Advance Program Participants (Oct. 2014)

DE	Entire State	Delaware Dept. of Natural Resources and Environmental Control
GA	Macon (except Bibb County, part of Monroe County for PMA)	Middle Georgia Clean Air Coalition
KS	Wichita	City of Wichita
KY	Louisville	Louisville Metro Air Pollution Control District
IA/IL/WI	Dubuque	Dubuque Metro. Area Transportation Study; City of Dubuque; Greater Dubuque Development Corp.
LA	Baton Rouge Houma-Thibodaux Lafayette Lake Charles New Orleans Shreveport	Capital Region Planning Commission; Baton Rouge Clean Air Coalition; Louisiana Clean Fuels South Central Planning & Development Commission Lafayette Consolidated Government Imperial Calcasieu Regional Planning & Development Commission New Orleans Regional Planning Commission Cities of Shreveport and Bossier City; Caddo Parish Commission; Bossier and DeSoto Parish Police Juries
MN	Entire State	Minnesota Pollution Control Agency
MO/KS	Kansas City	Mid-America Regional Council Air Quality Forum

## KEY

Green = both Ozone and PM Advance

Blue = Ozone Advance

Red = PM Advance

# Advance Program Participants (continued)

MO	Southeast MO Springfield	Southeast Missouri Regional Planning & Economic Development Commission City of Springfield; Ozarks Transportation Organization; Ozarks Clean Air Alliance
MS	DeSoto County Gulf Coast	Mississippi Dept. of Environmental Quality; DeSoto County Mississippi Dept. of Environmental Quality; Gulf Regional Planning Commission
MT	Butte-Silver Bow Helena	Montana Dept. of Environmental Quality; City County of Butte-Silver Bow Montana Dept. of Environmental Quality; Lewis and Clark County
NC	Cumberland County	Cumberland County Board of Commissioners
NE/IA	Omaha	City of Omaha Public Works, Air Quality Control; Douglas County Health Dept.; Omaha Council Bluffs Metropolitan Area Planning Agency
NV	Clark County	Clark County Dept. of Air Quality
OH	Dayton-Springfield	Regional Air Pollution Control Agency
OK	Oklahoma City Tulsa	Oklahoma Dept. of Environmental Quality Oklahoma Dept. of Environmental Quality
OR	Lakeview	Oregon Dept. of Environmental Quality; Lake County; Town of Lakeview
SC	Entire State (except part of York County for OA)	South Carolina Dept. of Health and Environmental Control

## KEY

**Green** = both Ozone and PM  
Advance

**Blue** = Ozone Advance

**Red** = PM Advance

# Advance Program Participants (continued)

TX	<p>Austin Corpus Christi Hood County Houston San Antonio</p> <p>Tyler-Longview Waco</p>	<p>Central Texas Clean Air Coalition Corpus Christi Air Quality Group Hood County Clean Air Coalition Houston-Galveston Area Council Alamo Area Council of Governments, Air Improvement Resources Committee Northeast Texas Air Care Heart of Texas Council of Governments</p>
UT	<p>Uinta Basin Uintah and Ouray Res.</p>	<p>State of Utah Ute Indian Tribe Reservation</p>
VA	<p>Caroline County Fredericksburg Hampton Roads Richmond-Petersburg</p>	<p>Virginia Dept. of Environmental Quality Virginia Dept. of Environmental Quality Virginia Dept. of Environmental Quality Virginia Dept. of Environmental Quality</p>
WA	<p>Yakima</p>	<p>Yakima Regional Clean Air Agency</p>
WY	<p>Upper Green River Basin</p>	<p>Wyoming Dept. of Environmental Quality</p>

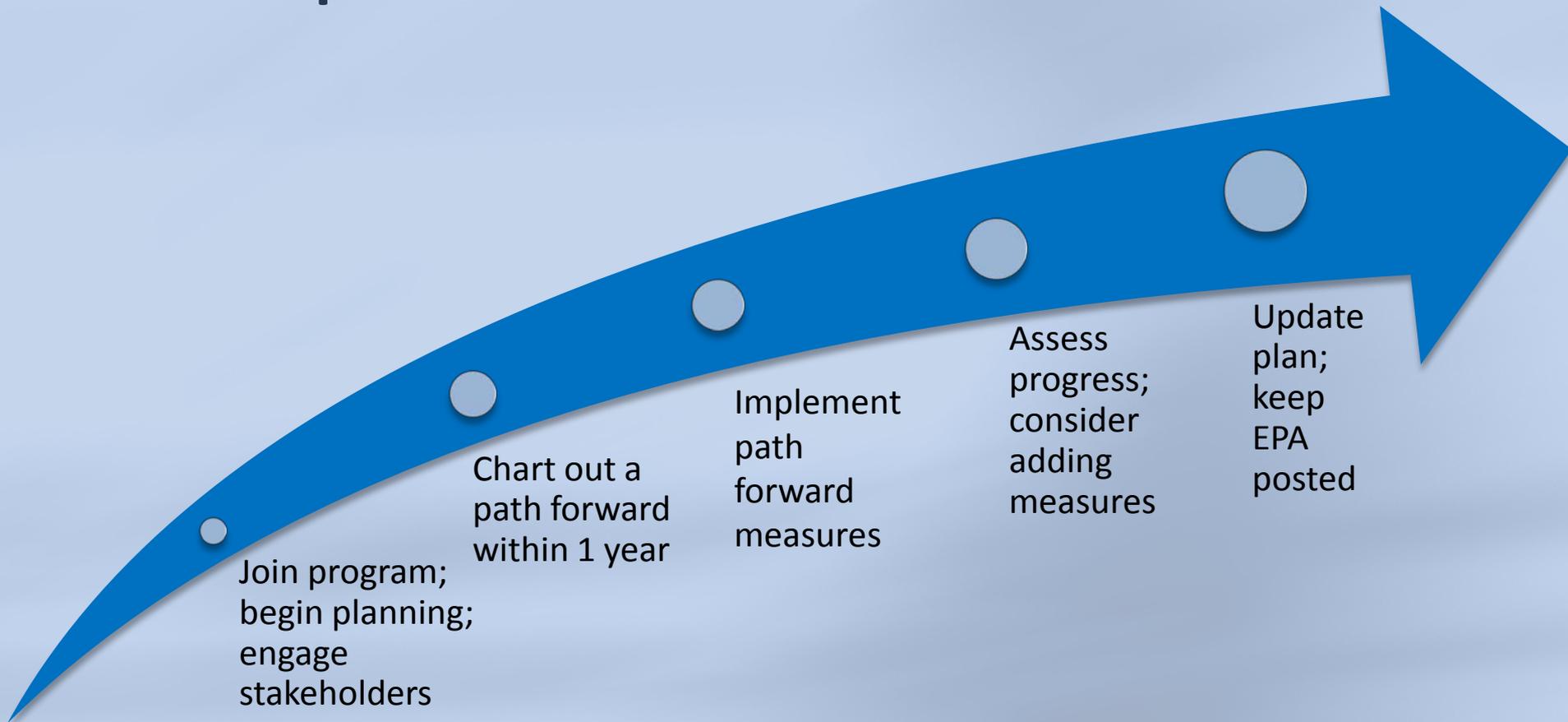
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Blue = Ozone Advance

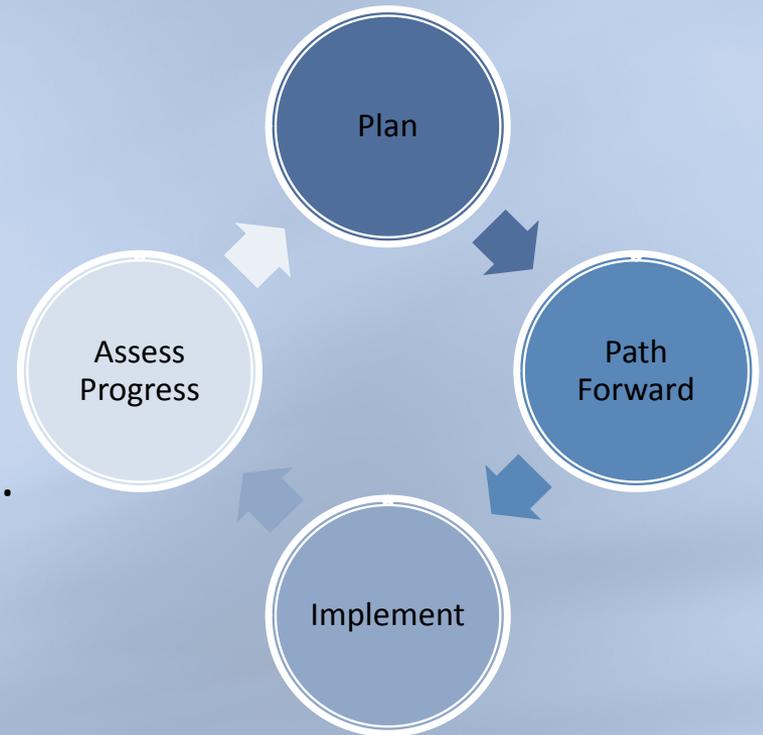
Red = PM Advance

# Participation



# Iterative Process

- Initiate planning; involve stakeholders
- Document decisions in path forward; list measures/programs, anticipated schedule, supporting information
- Implement plan
- Assess progress; are you on track to meet your goals?
- Initiate planning; involve stakeholders. Consider adding measures or broadening existing measures.
- Update path forward
- [Continue]



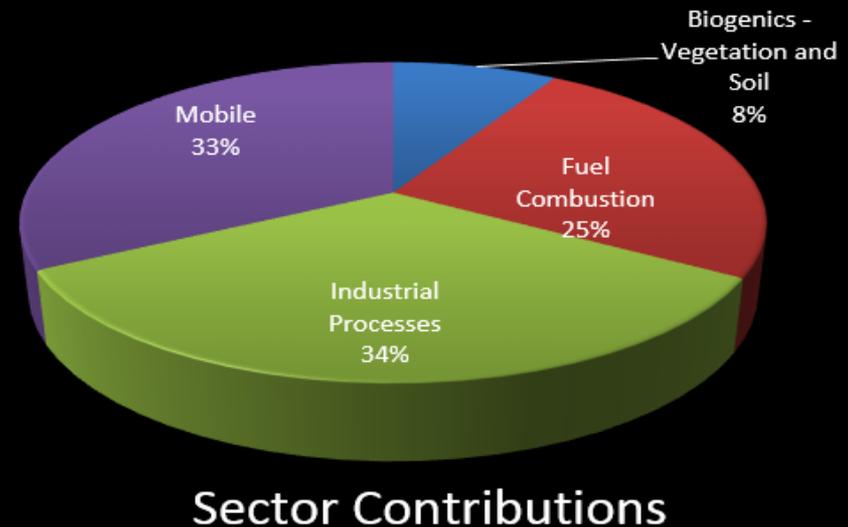
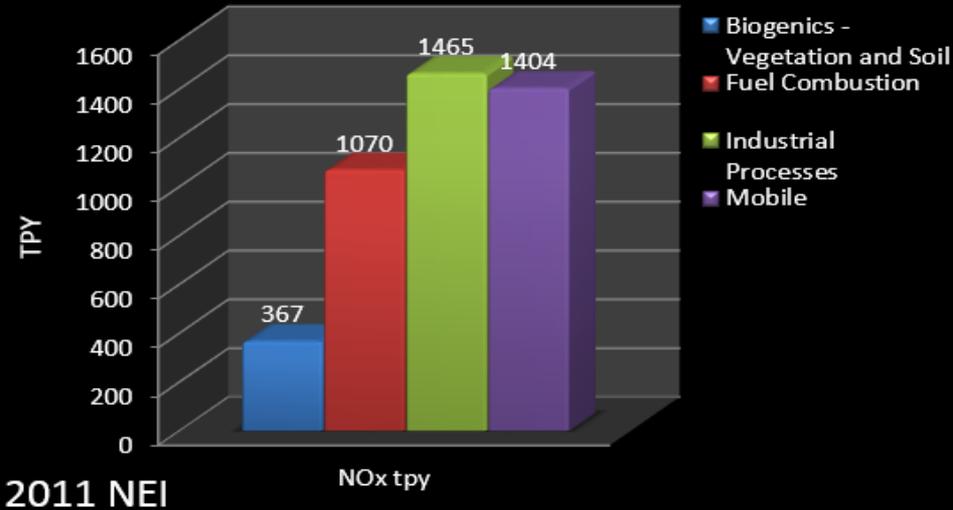
# EPA Support

- Fostering communication
- Webinars
- Development of resources/tools
- Website – [www.epa.gov/ozonepmadvance](http://www.epa.gov/ozonepmadvance)
- Grants information
- Connecting participants with each other

# Emission Profiles

State	County	Sector	NOx tpy
TX	Hood	Biogenics - Vegetation and Soil	367
TX	Hood	Fuel Comb - Comm/Institutional - Biomass	0
TX	Hood	Fuel Comb - Industrial Boilers, ICEs - Biomass	0
TX	Hood	Fuel Comb - Residential - Oil	0
TX	Hood	Fuel Comb - Comm/Institutional - Other	0
TX	Hood	Fuel Comb - Comm/Institutional - Oil	0
TX	Hood	Fuel Comb - Industrial Boilers, ICEs - Oil	1
TX	Hood	Fuel Comb - Residential - Wood	2
TX	Hood	Fuel Comb - Industrial Boilers, ICEs - Oil	2
TX	Hood	Fuel Comb - Comm/Institutional - Natural Gas	3
TX	Hood	Fuel Comb - Residential - Natural Gas	4
TX	Hood	Fuel Comb - Industrial Boilers, ICEs - Natural Gas	7
TX	Hood	Fuel Comb - Comm/Institutional - Natural Gas	8
TX	Hood	Fuel Comb - Residential - Other	10
TX	Hood	Fuel Comb - Industrial Boilers, ICEs - Natural Gas	514
TX	Hood	Fuel Comb - Electric Generation - Natural Gas	519
		<b>Fuel Combustion</b>	<b>1070</b>
TX	Hood	Industrial Processes - Petroleum Refineries	1
TX	Hood	Industrial Processes - Oil & Gas Production	29
TX	Hood	Industrial Processes - Oil & Gas Production	1435
		<b>Industrial Processes</b>	<b>1465</b>
TX	Hood	Miscellaneous Non-Industrial NEC	0
TX	Hood	Mobile - Non-Road Equipment - Other	0
TX	Hood	Mobile - Non-Road Equipment - Gasoline	0
TX	Hood	Mobile - Non-Road Equipment - Diesel	1
TX	Hood	Mobile - Aircraft	1
TX	Hood	Mobile - Non-Road Equipment - Other	5
TX	Hood	Mobile - On-Road Gasoline Heavy Duty Vehicles	18
TX	Hood	Mobile - Non-Road Equipment - Gasoline	19
TX	Hood	Mobile - Locomotives	29

## Hood County, TX



Website: [www.epa.gov/ozonepmadvance](http://www.epa.gov/ozonepmadvance)

 United States Environmental Protection Agency

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## Advance Program

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**Advance Program Home**

**Basic Information**

**Eligibility**

**Participation**

**Program Participants**

**Measures and Programs**

**Resources**

**Frequent Questions**

**The Advance Program** is a collaborative effort between EPA, states, tribes, and local governments. The program encourages expeditious emission reductions in ozone and fine particle (PM<sub>2.5</sub>) attainment areas to help these areas continue to meet the National Ambient Air Quality Standards (NAAQS). The steps taken by program participants could:

1. Help attainment areas reduce emissions in order to ensure continued health protection,
2. Better position areas to remain in attainment, and
3. Efficiently direct available resources toward actions to address ozone and fine particle problems quickly.

**Basic Information** – More information about the Advance Program

**Eligibility** – Who is eligible to participate

**Participation** – How to participate

**Participants** – Areas that have agreed to take proactive steps towards improving air quality

- [Ozone Advance Participants](#)
- [PM Advance Participants](#)

**Measures and Programs** – Actions participants can take

**Resources** – Useful information for participants

### Announcements

**Oct. 16 Advance Program Webinar** This webinar will highlight the extensive experience of the Austin, Texas area with early air quality planning, including the area's current participation in Ozone Advance. You will hear about how Austin set goals, engaged stakeholders, developed an outreach plan, and established an approach for tracking/quantifying local commitments. You will also learn about the types of local measures that are currently being pursued. [Register now](#)

**Oct. 7 California Air Resources Board Webcast** This seminar, entitled "The Science Behind Sustainable Communities Strategies," will review how effective various transportation and land use strategies are at reducing vehicle miles traveled. In a multi-year project, a team of UC Davis, UC Irvine, and University of Southern

## Kansas (see also Missouri)

### • Wichita

- [Wichita sign-up letter \(PDF\)](#) (2pp, 561k) – August 8, 2012
- [Presentation Materials, Visioning Wichita](#) – Feb. 4, 2013 [EXIT Disclaimer](#)
- ["City Council to Discuss Air Quality Plan for Wichita," The Wichita Eagle](#) – April 21, 2014. [EXIT Disclaimer](#)
- [Wichita path forward letter \(PDF\)](#) (1p, 154k) and [path forward \(PDF\)](#) (35pp, 2.6MB) – April 24, 2014

## Kentucky

### • Louisville

- [Louisville sign-up letter \(PDF\)](#) (2pp, 42k) – July 16, 2012
- [Louisville path forward \(PDF\)](#) (103pp, 5.5 MB) – July 11, 2013
- [Ground-level Ozone Reduction Links, Louisville Air Pollution Control](#) [EXIT Disclaimer](#)
- ["Ozone Season Arrives; Open Burning Restricted in Some Counties," KY Dept. for Environmental Protection](#) – May 6, 2013 [EXIT Disclaimer](#)

## Louisiana

### • All areas

- [LA DEQ Ozone Advance Website](#) – Contains presentation materials and contact information for the participating areas in Louisiana [EXIT Disclaimer](#)
- ["Louisiana Ozone Pollution Levels Could Surpass National Limits: DEQ," Times-Picayune](#) – Jan. 30, 2013 [EXIT Disclaimer](#)
- ["State Metro Areas Work to Meet Ozone Standards," The Advocate](#) – Feb. 27, 2013 [EXIT Disclaimer](#)

### • Baton Rouge

- [Baton Rouge area sign-up letter \(CRPC and BRCAC\) \(PDF\)](#) (2pp, 142k) – June 22, 2012
- ["BRCAC and CRPC Enter Into EPA's Ozone Advance Program on Behalf of the Baton Rouge Metro Area," Baton Rouge Clean Air Coalition](#) – Nov. 27, 2012 [EXIT Disclaimer](#)
- [Baton Rouge area sign-up letter \(GBRCCC\) \(PDF\)](#) (1pg, 57k) – April 2, 2013
- ["GBRCCC Partners With LDEQ for EPA Advance Program," Greater Baton Rouge Clean Cities Coalition](#) – April 25, 2013 [EXIT Disclaimer](#)
- ["DEQ Urges Steps to Reduce Ozone Air Pollution," The Advocate](#) – April 30, 2013 [EXIT Disclaimer](#)
- [Press Release, "DEQ Places Second in EPA National EnviroFlash Challenge"](#) – June 11, 2013 [EXIT Disclaimer](#)
- ["Port Allen Truck Stop Plans Project to Reduce Pollution," The Advocate](#) – July 10, 2013 [EXIT Disclaimer](#)
- [Baton Rouge area path forward \(PDF\)](#) (55pg, 2.6 MB) – Dec. 20, 2013
- ["BR's Tree Canopy Providing Environmental Benefits," The Advocate](#) – Jan. 17, 2014 [EXIT Disclaimer](#)
- ["Ozone Standards Not Enough," The Advocate](#) – July 20, 2014 [EXIT Disclaimer](#)

# EPA Support

- Direct support via discussions with participants and comments on all submissions
- Webinars
- Development of resources/tools
- Website – [www.epa.gov/ozonepmadvance](http://www.epa.gov/ozonepmadvance)
- Grants information
- Connecting participants with each other

# Achievements to Date

- Developing new/expanded programs
  - Education/awareness
  - Voluntary
  - Mandatory
- Establishing new/reinvigorating existing stakeholder groups
- Improving coordination between partners
- Renewing prior local air quality planning efforts and consolidating information about past programs
- Platform for achieving related goals (sustainability, EJ)
- Building closer relationships with EPA

# Participants' Measures/Programs

Mobile Source  
Programs

Energy  
Efficiency

Awareness,  
Education

Green  
Infrastructure

Wood Smoke  
Reduction

Point, Area  
Source Efforts

# Participants' Measures/Programs

- Reduce vehicle miles traveled (VMT)
  - Public transit improvements, rideshare programs, employer subsidies, bike lanes/racks
- Minimize congestion
  - Traffic signal synchronization, weigh station technologies
- Fleet management
  - SmartWay participation, vehicle maintenance
- Diesel reduction
  - Programs relating to ports, railways, onroad, nonroad; anti-idling policies, truckstop electrification

# Participants' Measures/Programs

- Alternative fuel vehicles/infrastructure
  - Compressed natural gas, electric charging stations
- Point and area sources
  - Programs that trigger on high ozone days (oil and gas production, cement plant)
  - Autobody shops, infrared cameras to spot fugitive emissions, storage tank VOC rules
- Wood smoke reduction
  - New ordinances restricting open burning, development of model hydronic heater ordinance

# Participants' Measures/Programs

- Energy efficiency
  - New building code provisions, programs at military installations, policies for municipal buildings
- Green infrastructure
  - Wastewater treatment, urban heat island measures (tree planting, green rooftops)
- Awareness/education
  - AQ lesson plans for schools, school flag programs, Enviroflash alerts, presentations to community groups, air quality awareness weeks, AQ websites

# What's Next

- Complete initial round of planning, implement measures, provide updates
- PM Advance and final designations for the 2012 PM<sub>2.5</sub> NAAQS?
  - Violating areas can participate in Advance until designations are effective (spring 2015).
- Ozone Advance and a potentially revised ozone NAAQS in 2015?
  - Violating areas could participate in Advance until designations would be effective (fall 2017?), and even then Marginal areas could continue to participate in Advance.
- Enroll new areas?



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