MID-AMERICA REGIONAL COUNCIL
AIR QUALITY PROGRAM

WELCOME

Clean Air Action Plan public meeting

Sept. 22, 2010

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Clean Air Action Plan:
Overview and Strategic Directions

Tom Jacobs
Mid-America Regional Council

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Today's agenda

- Introductions
- Small-group discussions and prioritization
- Wrap-up

What is the Clean Air Action Plan?

- Developed in 2004
- Comprehensive voluntary plan for reducing emissions before EPA requires it
- Targets both stationary and mobile sources
- Short-, intermediate- and long-term measures
- Supplements state regulatory air quality plans

Clean Air Action Plan

- Voluntary
- Proactive
- Flexible
- Multi-sector, multi-pollutant, multimedia
- Frames local action to reduce regulatory costs, guide local investments

Clean Air Action Plan 2004 focus areas

- Utilities
- Diesel engines
- Public education
- Sustainability

Clean Air Action Plan successes

- Power plant emissions reduction
  - KCP&L's La Cygne, Iatan and Sibley plants all received SCRs and/or low NO_x burners
  - Emissions reductions of more than 71 tons/day

Clean Air Action Plan successes

- Diesel emissions reduction
  - On-road retrofits and replacements
    - 621 buses retrofitted with diesel oxidation catalysts
    - 224 fuel-operated heaters to reduce idling on school buses
  - Policies and programs to reduce idling
    - 614 Idle-Free Zone signs for schools
    - KCMO designated as an “Idle-Free Zone”
  - Construction equipment replacements
  - Locomotive retrofits

Clean Air Action Plan successes

- Education and outreach
  - Academy for Sustainable Communities
    - Over 100 workshops on diverse issues, including air quality
    - More than 2,000 workshop participants
  - Air Quality Program
    - 128 Workforce Partnership members that reach 53,331 metro-area employees
    - Six emissions clinics in 2010 that tested 150 vehicles

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MARC sustainability initiatives

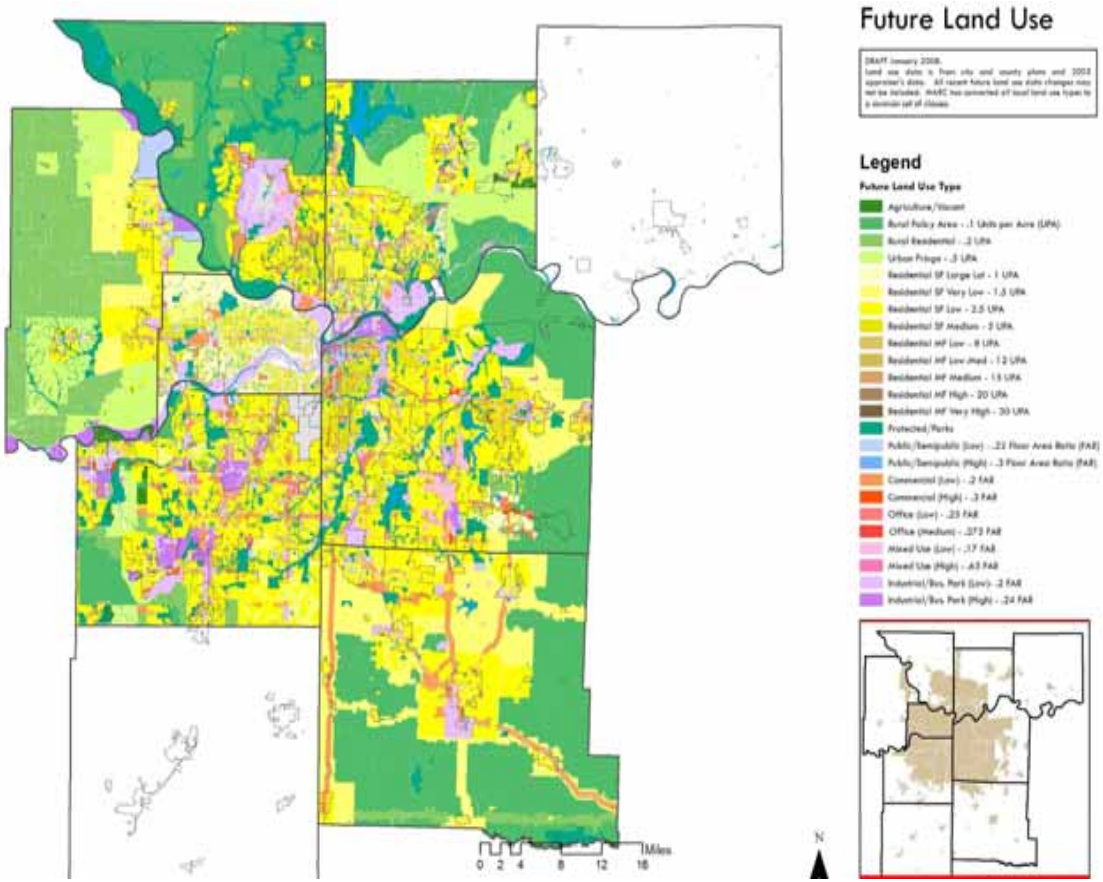
- Sustainable Skylines
- *Transportation Outlook 2040*
- MetroGreen and green infrastructure plans
- Eco-Logical: Linking Conservation and Transportation Planning
- Regional Energy Efficiency and Conservation Strategy
- Sustainable solid waste management plan

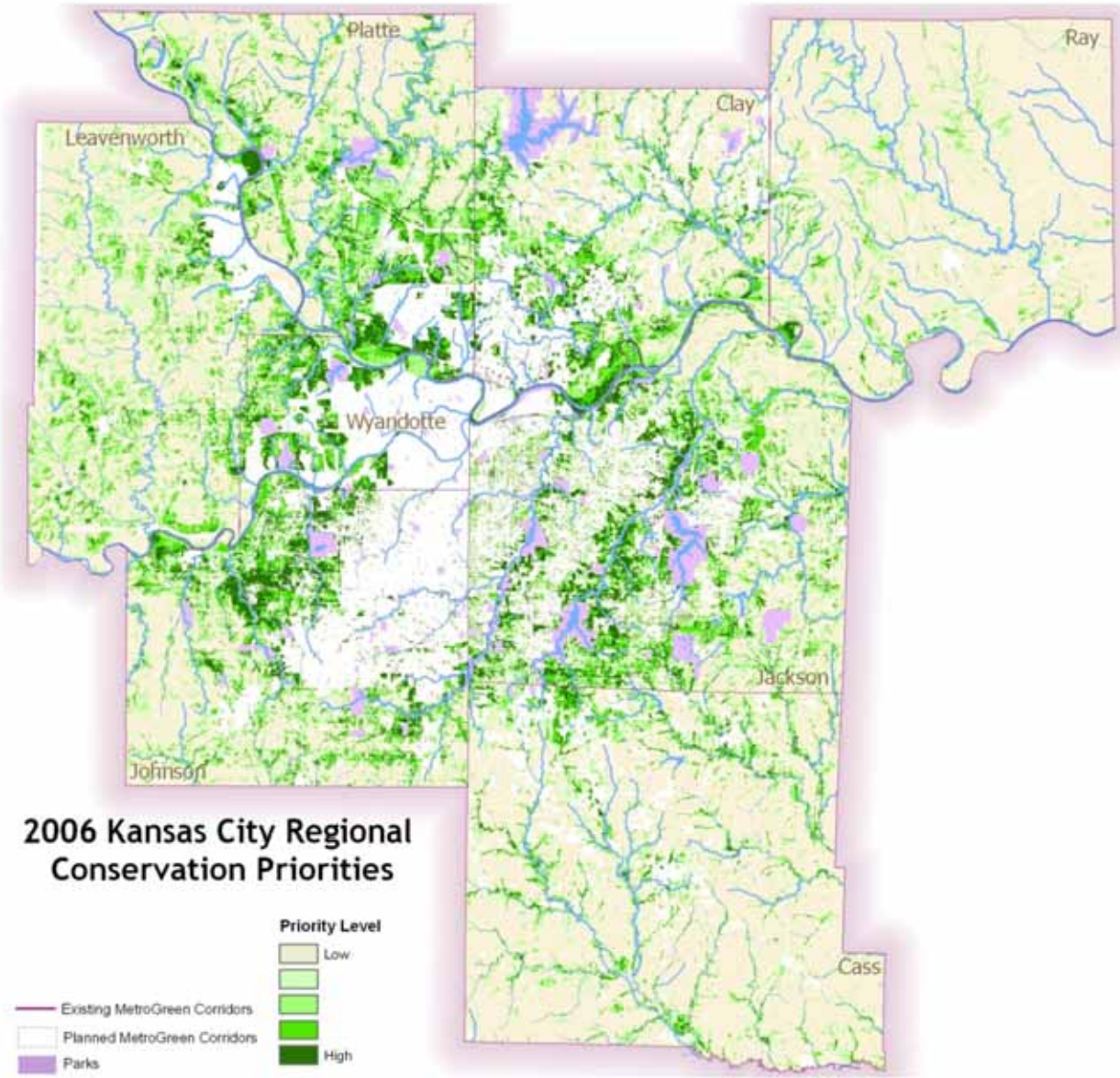
Adopted regional sustainability goals

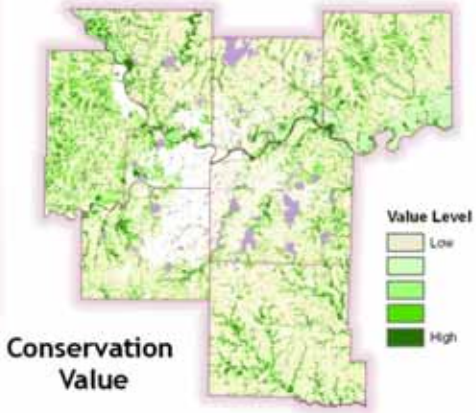
- 60–70 ppb ground-level ozone (EPA)
- 30% reduction in GHG by 2020 (KCMO)
- 80% waste diversion by 2023 (MARC)
- 300 MW Energy Efficiency (KCPL)
- 88% capture sewer overflows (KCMO)
- 1,144 greenway miles (MARC)
- Regional transit system (MARC)

Transportation Outlook 2040: Relevant policy goals

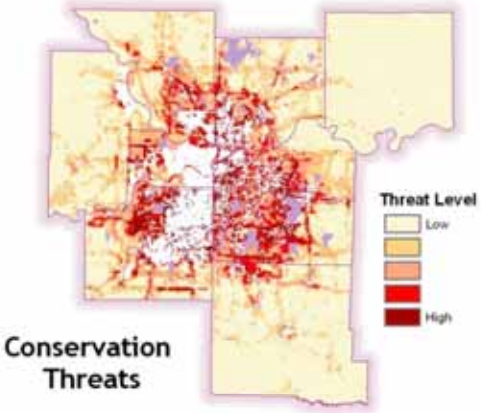
- Energy and natural resource conservation
- Economic vitality
- Climate protection
- Place-making
- Walkability







Conservation Value

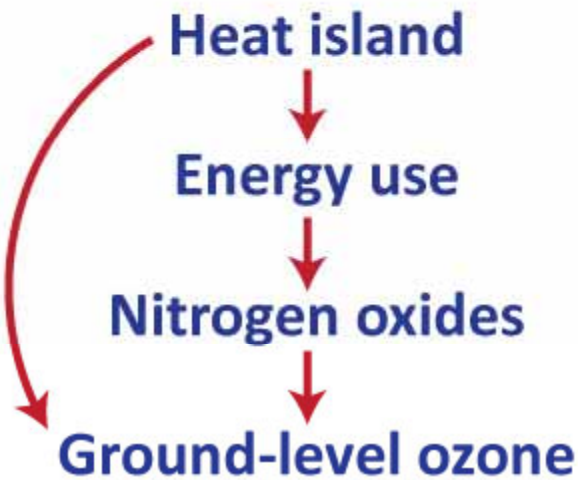


Conservation Threats

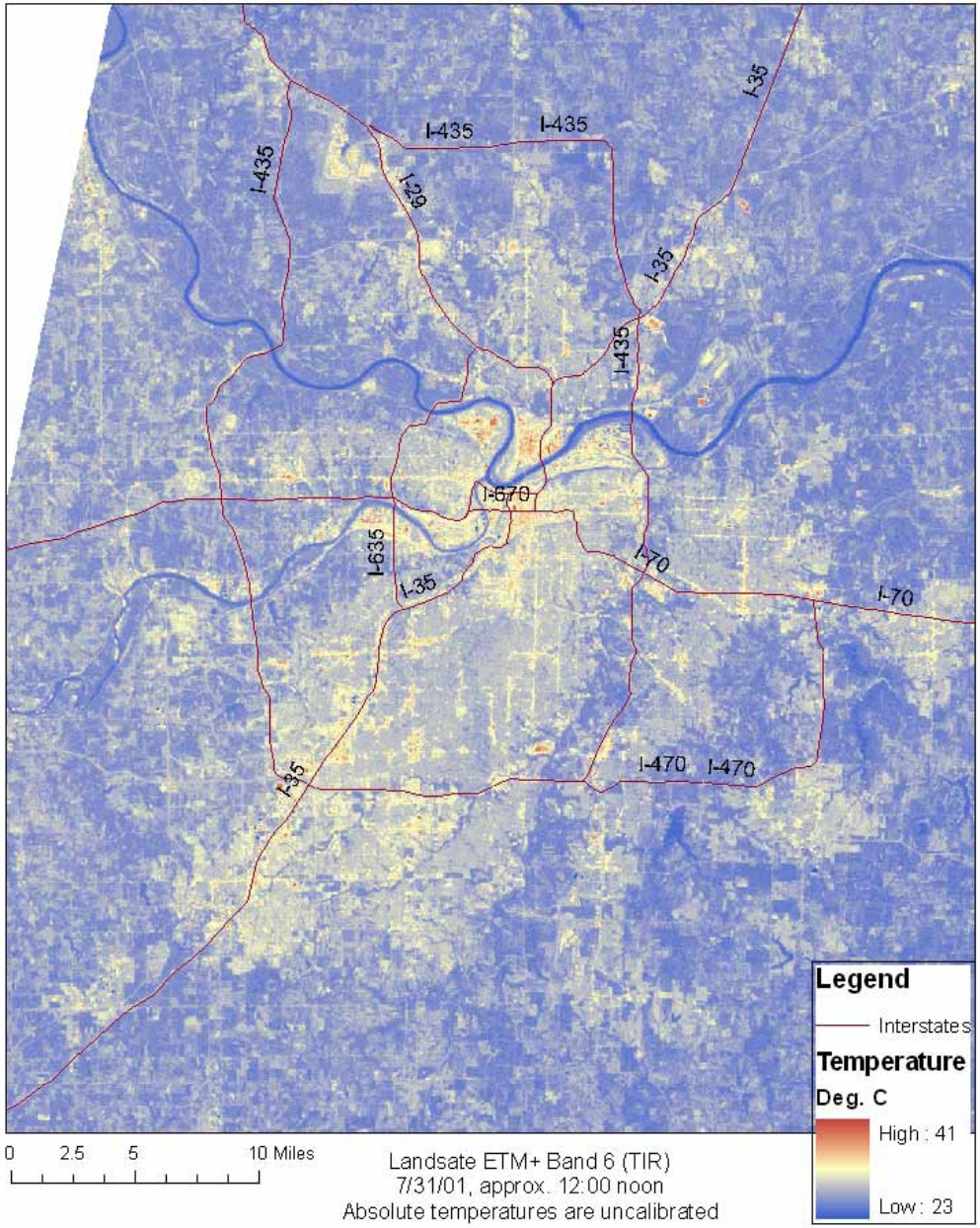
metrogreen

CAAP focus: Sustainability

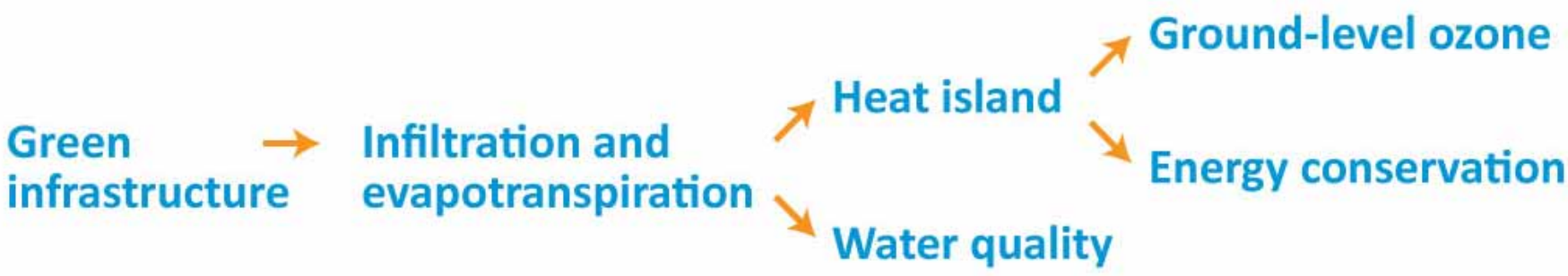
- Growth and development patterns
- Transit, walking, biking, carpooling
- Urban forestry and green infrastructure
- Social marketing and behavior change
- Focused education for targeted area sources
- Green building and energy conservation
- Recycling and industrial ecology
- Heat island abatement



Land Surface Temperature for Kansas City Metro Area



Green infrastructure and ozone reduction



Regional vision

Greater Kansas City is a sustainable region that increases the vitality of our society, economy and environment for current residents and future generations.

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Air Quality Trends and National Context

Jim Wilson
E.H. Pechan & Associates, Inc.

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Ozone is:

Good up high, bad nearby

National Ambient Air Quality Standard components

- 2008 final rule set O_3 NAAQS level at 75 ppb
- Jan. 19, 2010, proposed rule to lower level to within 60–70 ppb range
- **Reason**: provide increased protection for children and other at-risk populations

National Ambient Air Quality Standard components

- **Level** (75 ppb)
- **Averaging time** (eight hours)
- **Form** (fourth highest daily maximum eight-hour average, averaged over three years)

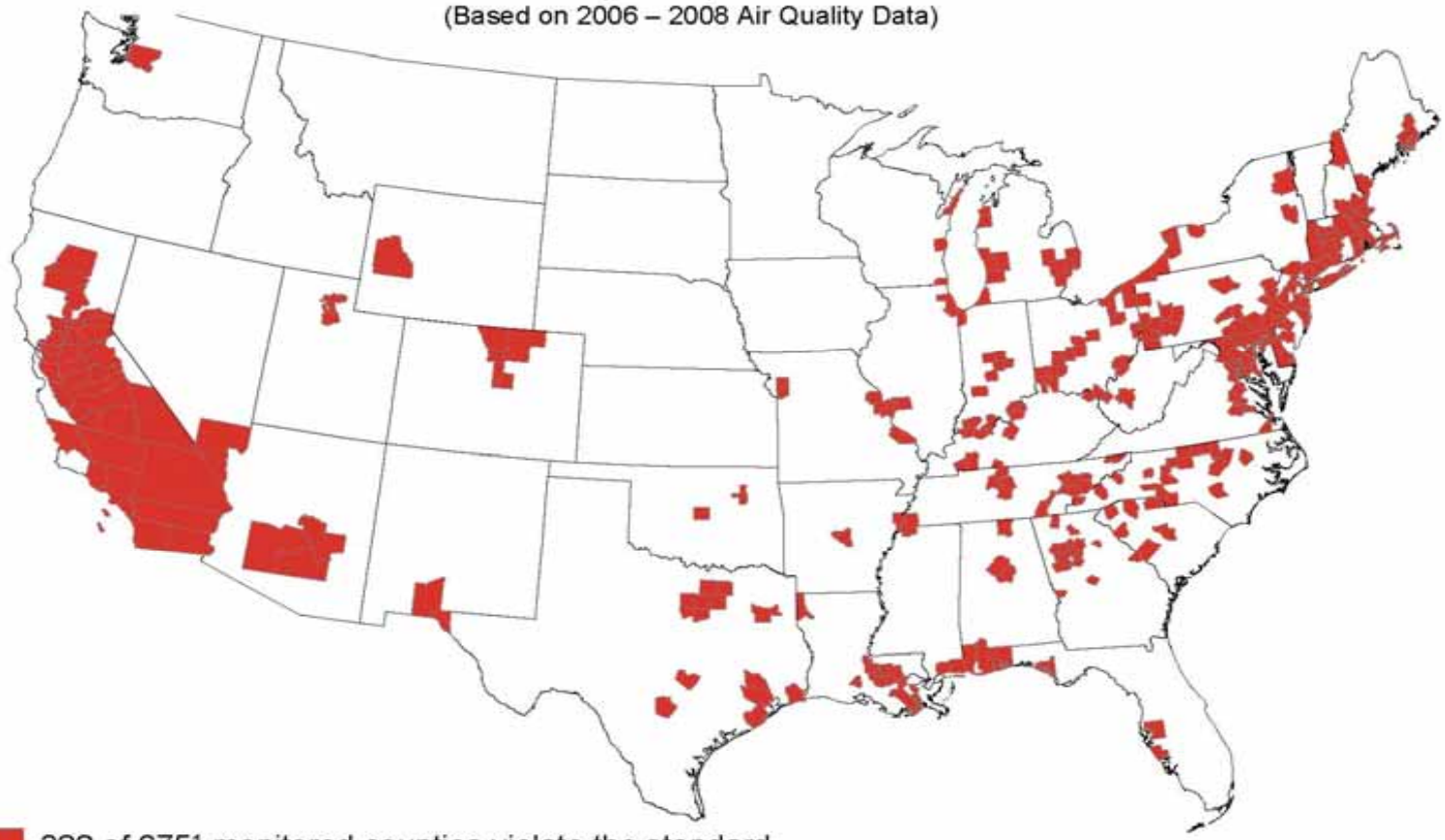
Implications for this region

- Ozone nonattainment expected
- Official designations expected to be based on 2008–2010 ozone measurements
- Nonattainment area boundary expected to expand

Counties With Monitors Violating the March 2008 Ground-Level Ozone Standards

0.075 parts per million

(Based on 2006 – 2008 Air Quality Data)



322 of 675[1] monitored counties violate the standard

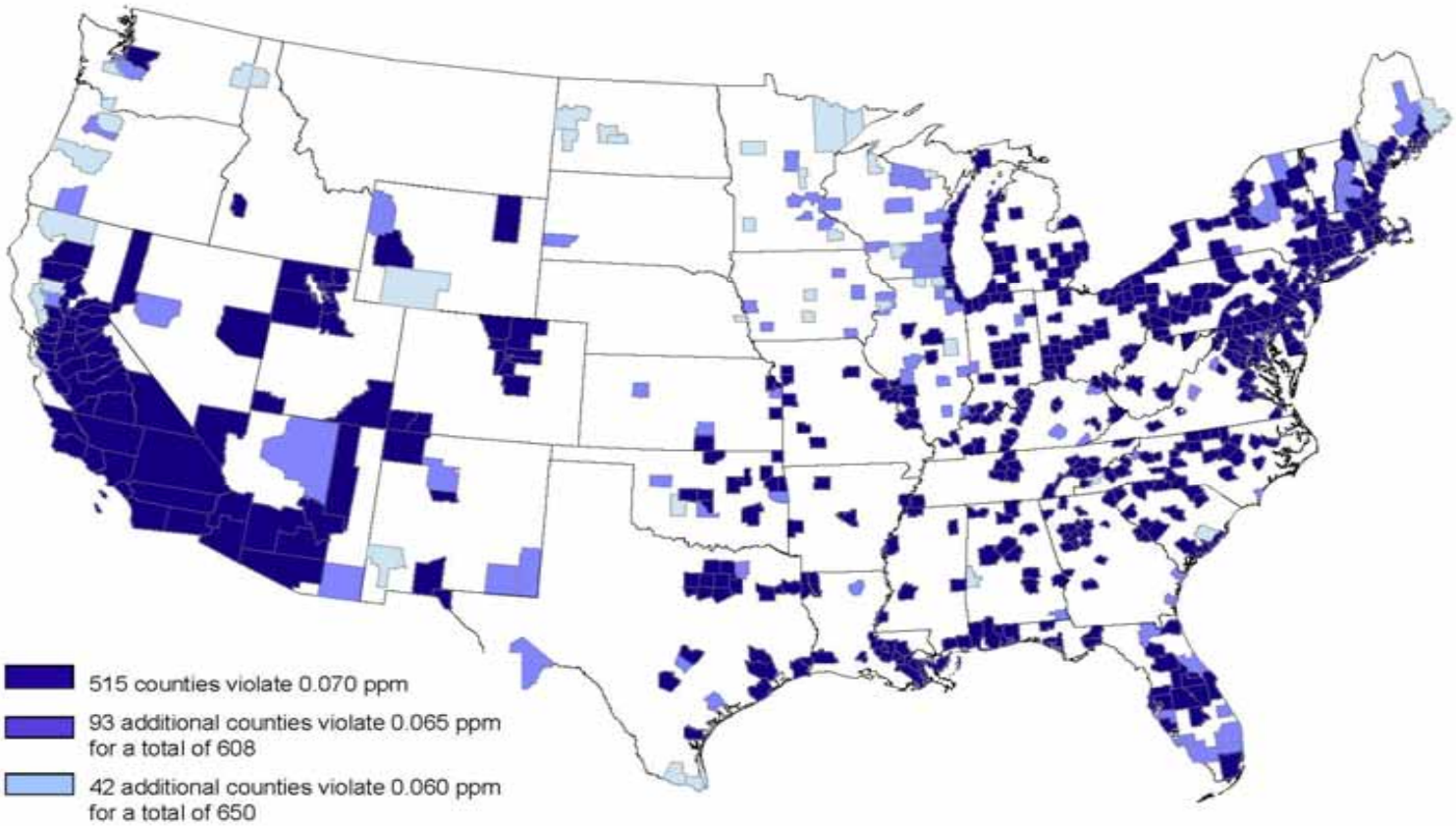
Notes:

1. Counties with at least one monitor with complete data for 2006 – 2008
2. To determine compliance with the March 2008 ozone standards, the 3-year average is truncated to three decimal places.

Counties With Monitors Violating Primary 8-hour Ground-level Ozone Standards
0.060 - 0.070 parts per million

(Based on 2006 – 2008 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



Notes:

1. No monitored counties outside the continental U.S. violate.
2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

Update on the final rule

- EPA announced a delay in issuing final rule
- Final rule due by end of October 2010
- This pushes the schedule back and includes 2010 data in computing design values

2008 emissions (tons/year)

	NO_x	VOC
Area	8,749	42,587
Non-road	25,238	11,938
On-road	40,316	27,101
Point	35,954	4,962
Total	**110,257**	**86,587**

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Point and area sources

Point Sources	**Total NO_x**
Fuel combustion (electric utilities)	85%
Other point sources	15%
Area Sources	
Industrial fuel combustion	49%
Residential fuel combustion	30%
Other area sources	21%

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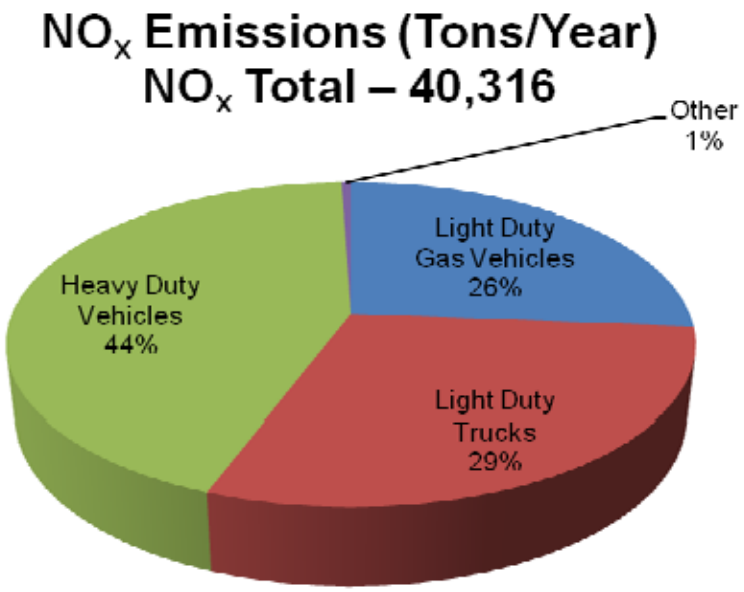
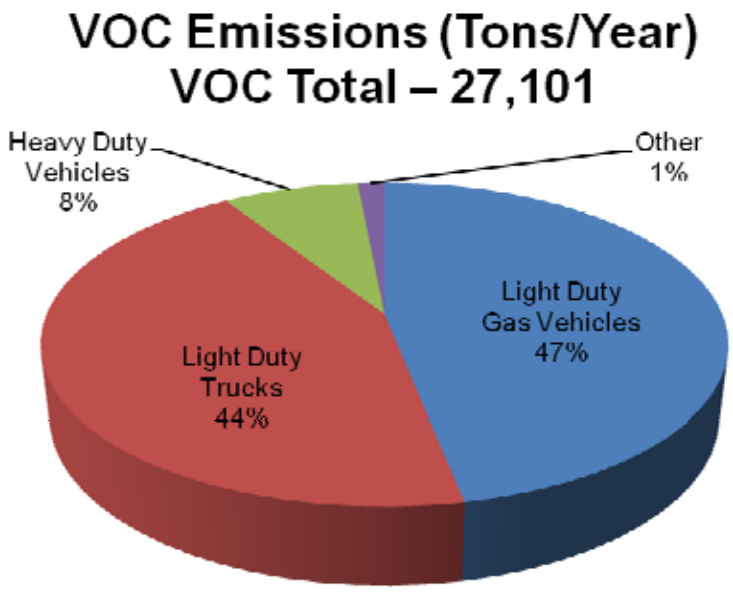
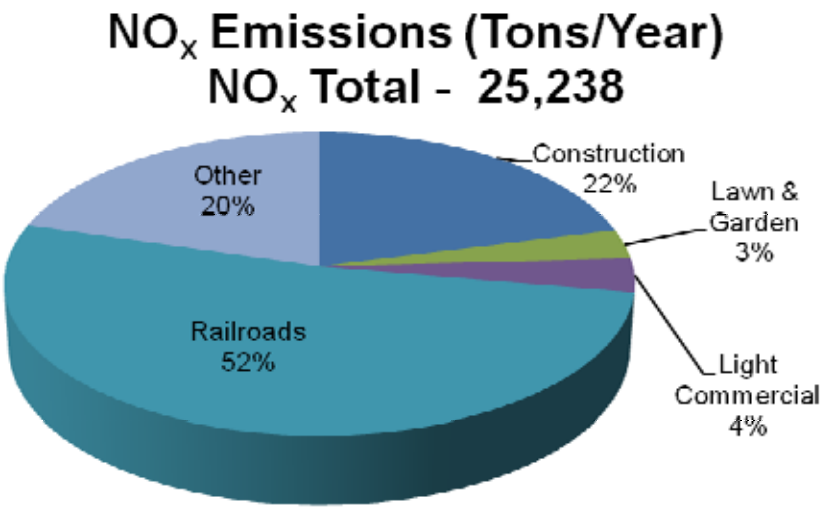
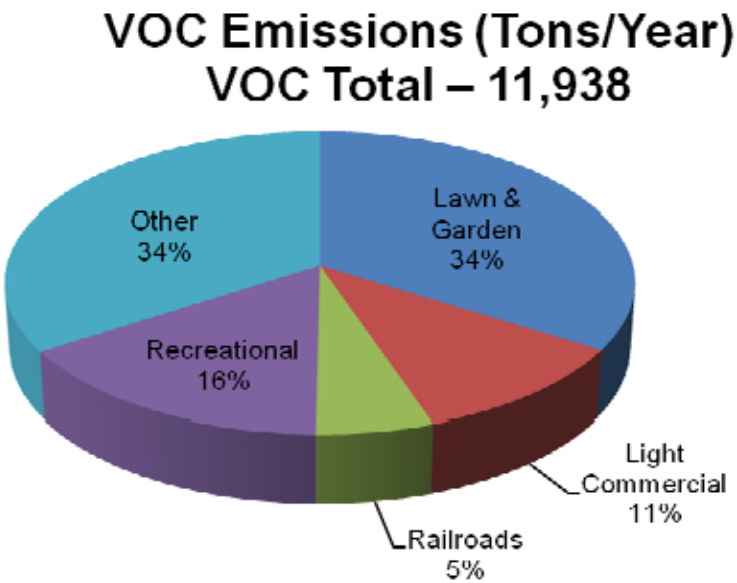
On-road emissions





Non-road emissions





How the voluntary actions are organized

- Alternative land use and transportation
- Technology and industrial processes
- Green infrastructure and built environment
- Resource conservation

Breakout sessions

TODAY'S GOAL: Select actions that reflect regional stakeholder priorities to include in the Clean Air Action Plan update.

- Check your nametag
- Proceed to your breakout room
- Meet your facilitator and group
- Provide your feedback
- Reconvene