

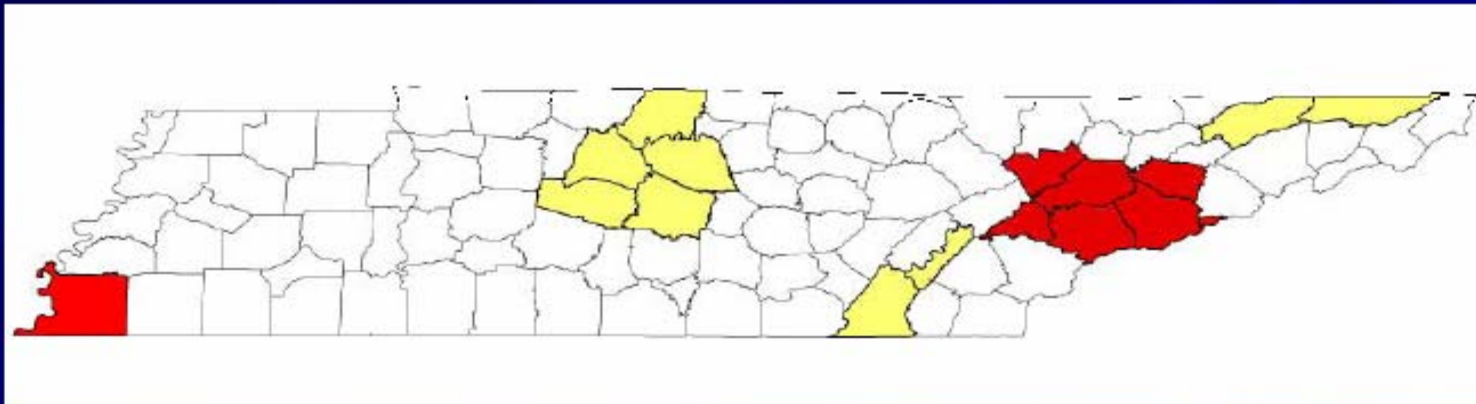
# Emission Reductions from Existing Vehicles & Equipment in Memphis & Shelby County

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# Ozone Nonattainment Areas

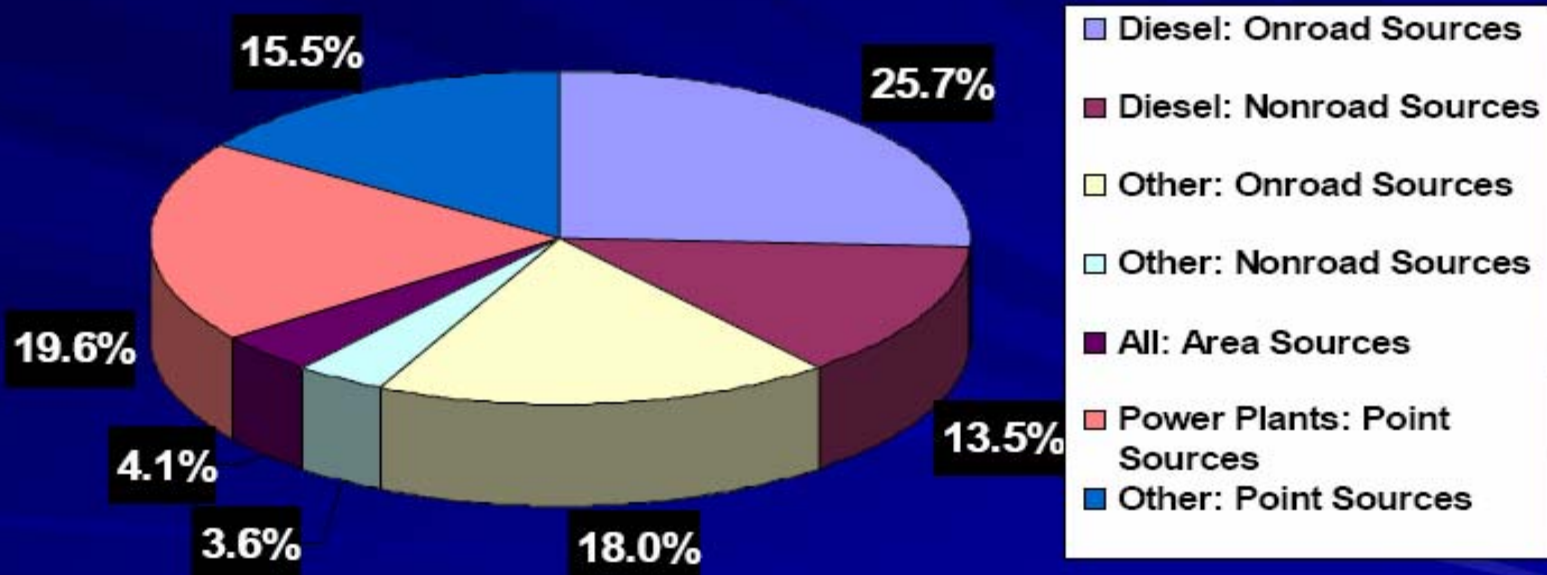


- nonattainment but with deferred effective date – Yellow (EAC areas)
- nonattainment with no deferral – Red
- attainment - White

Source: Tennessee Department of Environment and Conservation

## 2005 NOx Emissions Percent by Category

(Emissions Total 518,000 tons/year)



Source: Tennessee 2005 Draft Emissions Inventory

# Diesel Emissions in Tennessee

Pollutant	Tons/Year	% of Statewide Emissions
NO <sub>x</sub>	203,000	39%
PM 2.5	6,600	7.5%
SO <sub>2</sub>	8,700	2.2%

Source: Tennessee 2005 Draft Emissions Inventory

# Memphis & Shelby County Clean Air Initiatives

- Comprehensive effort to reduce on road & off road mobile source emissions.
  - Transportation Alternatives
  - Reduce VMT growth rate
  - Improve traffic flow
  - Cleaner fuels and vehicles (biofuels, retrofits, hybrids, etc.)
- Partnerships
  - State/Local Governments (TN, MS, AR)
  - MPOs (TN, MS, AR)
  - West Tennessee Clean Cities Coalition
  - Mid-South Clean Air Coalition

# Clean Air Projects

- Lowered speed limit to 55mph
- Burning ban on Ozone Action Days and Forecasts
- On-going review of local rules
- Idle Reduction in school buses
  - EPA Clean School Bus USA
- Biodiesel (B20 Blend)
- Memphis Area RideShare Program
- Diesel Retrofits
- Public Education and Outreach

# Biodiesel

- Production
  - 2 companies producing, additional 2 in near future
- B20 in all public transit buses
  - Began with pilot project with B20 in 25 buses
  - Very successful and resulted in widespread use of biodiesel
  - NOx additive (BEWARE)
- Shelby County Government fleet
  - Converting fleet, starting with heavy duty diesel engines
- Retail
  - 1<sup>st</sup> retail station grand opening this Thursday, June 28th
- Promotion of fuel

# Memphis Area RideShare Program

- Very Successful
- Funded by Congestion Mitigation and Air Quality (CMAQ)
- Partnered with Enterprise Rent-A-Car
- 100% subsidized
  - Insurance
  - Oil changes and maintenance
  - Commuters pay for gas
- Guaranteed Ride Home (GRH) Program

# Diesel Retrofits

- Shelby County School System School Buses
  - 298 school buses will be retrofitted with DOCs and closed crankcase ventilation systems
  - CMAQ funded
  - Issues:
    - Local Match
    - Ensure CMAQ project meets qualifications and is put into TIP
    - Air Quality Conformity Determination
- City of Memphis Garbage trucks
  - 85 garbage trucks will be retrofitted with DOCs
  - Supplemental Environmental Project (SEP)

# Public Education & Outreach

- Partnership with local news media
  - Issue alerts and provide tips on ways citizens can reduce ozone emissions
- Public Service Announcements
  - Cool 5
    - 1) Stop at the Click, 2) Share the Ride, 3) Link the Trips, 4) Mow when the Sun is Low, 5) Don't be an American Idle
- TDOT Smartway Message Boards
- Events
  - News meteorologists media day
  - Earth Day
  - Clean Air Month (MAY)
    - Clean Air Month Press Conference
    - Presentations to elementary and middle schools
    - Display booths at various community events

# Future Plans

- Biodiesel in 100% of Shelby County fleet
- More diesel retrofits through CMAQ
  - High priority targets: School buses, garbage trucks, marine and locomotive
- Bicycle and pedestrian lanes
- Increase biodiesel in retail stations
- Enhance public education and outreach through CMAQ funds

# For More Information

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