

# Idle Reduction and Future Grant Opportunities

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# Overview

- Idling of Diesel Engines
  - Idling Policies
  - No Idling Signs
- Missouri School Bus Diesel Inventory Grant
- 2009 DERA Funding
- Department Application Submissions

# Impacts of Idling

- Contributes to negative impacts
  - Health
  - Air Quality
- Usually unnecessary and wastes fuel
  - Wasted fuel = wasted money and wasted resources
  - Idling in School Buses uses an average of 0.5 gallons of fuel per hour
- Excessive engine wear
  - Increased maintenance



# Current Regulations

- Affect heavy duty diesel vehicles
  - Over 10,000 Gross Vehicle Weight Rating
  - Powered by a diesel engine
  - Intended for on-road use
- Idle for 5 minutes in any 60 minute period
- Idle for 5 minutes at a passenger load/unload location

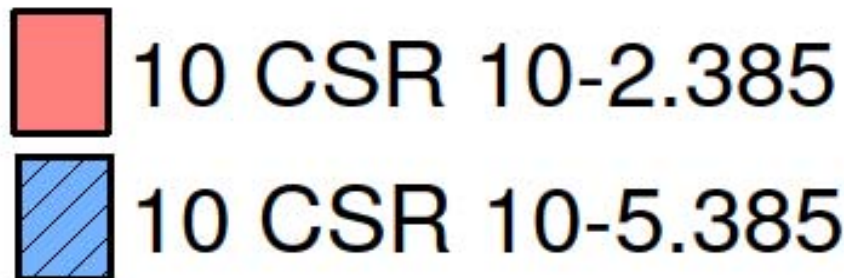
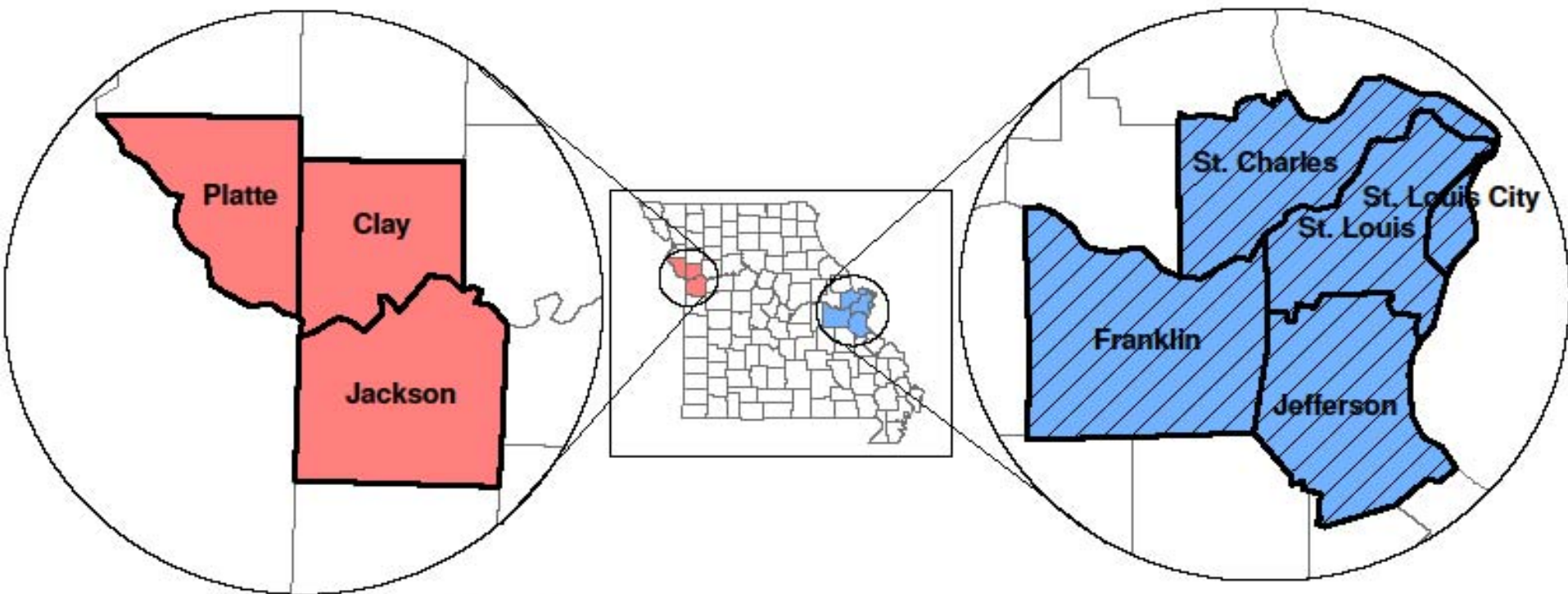


# Current Regulation Exemptions

- Traffic congestion
- Emergencies, health and safety
- 15 min. allowed for passenger buses if needed for passenger comfort
- Other specific exemptions included in rule text
- More information located in your brochure



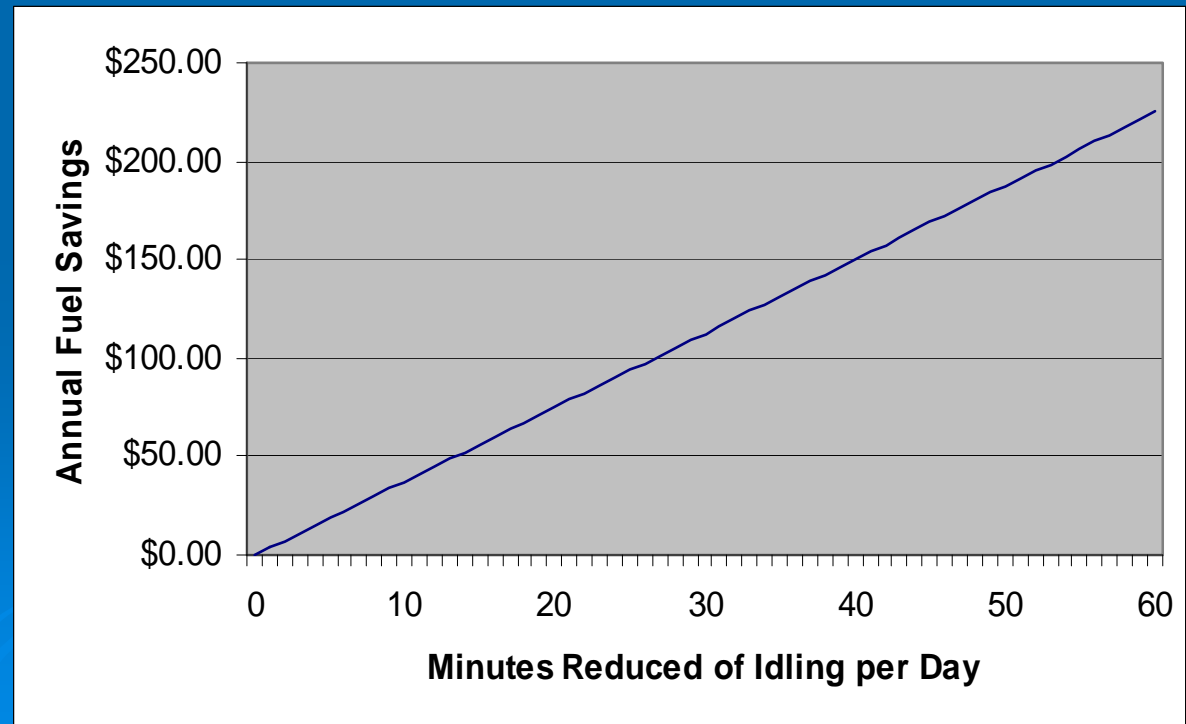
# Areas Impacted by Anti-Idling Regulations



# Fuel Savings from Reduced Idling

- Assumptions:
  - School year is 180 Days
  - 0.5 gallons of fuel are consumed per hour of idling
  - Diesel Fuel costs \$2.50/gallon

- 30 min. of Idling reduced per day yields **\$112.50** in annual fuel savings per bus
- 1 Hour of Idling reduced per day yields **\$225** in annual fuel savings per bus



# Idle Reduction Policies

- Many school districts adopt idle reduction policies to reduce fuel costs and decrease unnecessary emissions that are harmful to student health.
- Policies range from very simple to detailed
- Many policies require that idling to increase the cabin temperature be done outside of school property



# Idle Reduction Policies continued....

- Bottom line is that idling wastes fuel and exposes students to harmful diesel emissions.
- Any policy is better than none at all.
- Student safety remains the #1 concern, and idling during inclement weather conditions when needed for student safety should be permitted.
- Important to inform drivers of the policies so that the policy is followed.



# MO School Bus Diesel Inventory

- Project started in August 2008 and is scheduled to finish in January 2010
- The project developed a thorough equipment and emission inventory including every diesel powered school bus in the state.
- The compiled information is on the web at <http://dnr.mo.gov/env/apcp/schoolbusinventory.htm>



# MO School Bus Diesel Inventory

- Information is being used to spread awareness and target school districts with future clean diesel funding
- Three workshops are being held. One in St. Louis, Kansas City and Springfield.
- “No Idling” signs will be offered to school districts that adopt anti-idling policies



# “No Idling” Signs

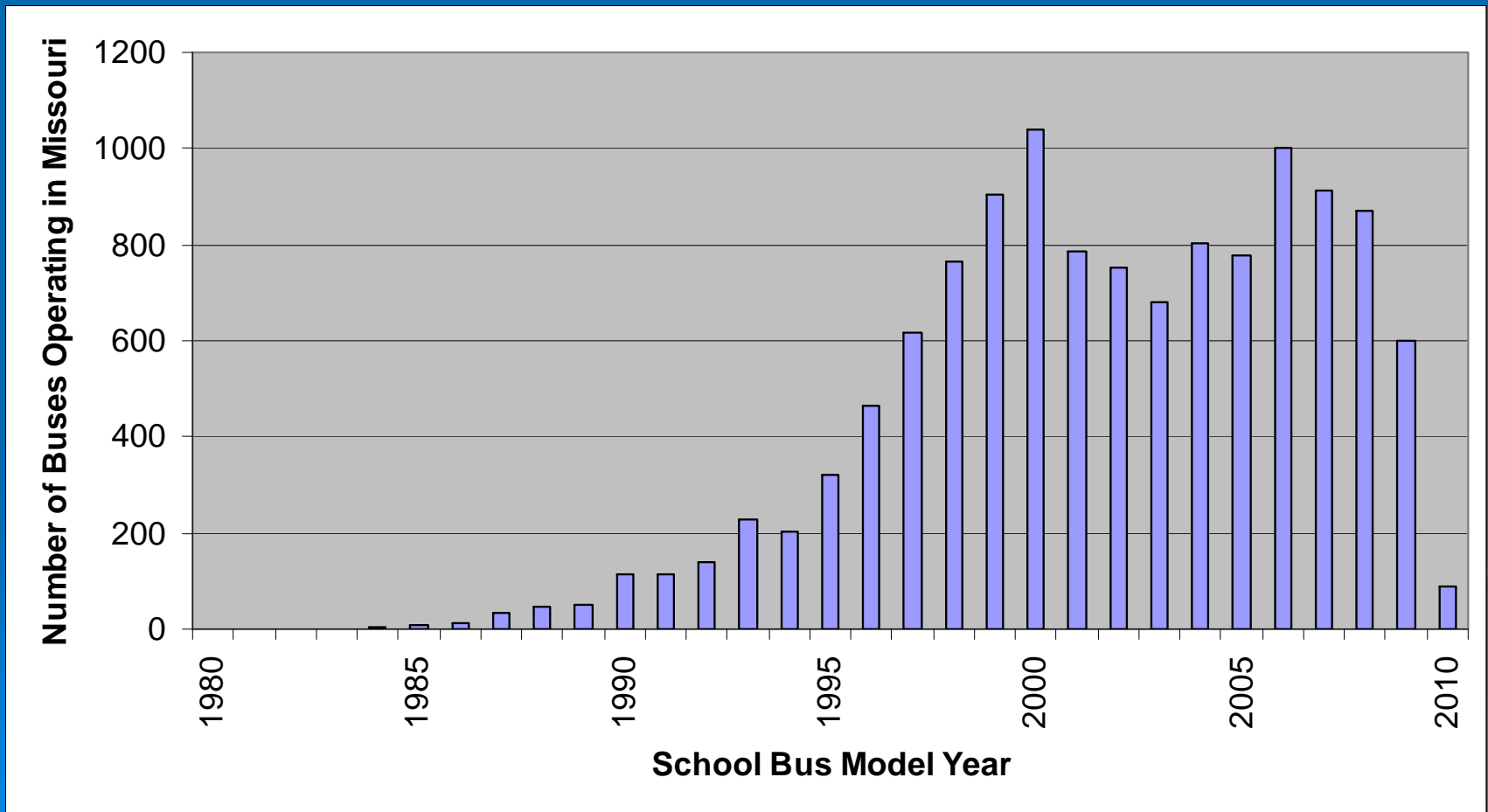
- The Department is offering “No Idling” signs to school districts that adopt anti-idling policies.
- They are free!
- To find out more visit our website at:  
<http://dnr.mo.gov/env/apcp/schoolbusinventory.htm>



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# MO School Bus Model Years

- Total of 12,330 Buses



# Upcoming Grant Opportunities

- National Clean Diesel Funding Assistance Program funding for 2009/2010
  - Applications due to EPA December 8, 2009
- State Allocated DERA funding for 2009
  - Missouri's program expects to release a Request for Proposals in Early Spring 2010



# National Clean Diesel Funding Assistance Program

- EPA released the Request for Applications on October 6.
- School districts are eligible to apply directly
- The minimum amount that may be applied for in EPA Region VII is \$200,000 and the max is \$1.5 million.
- ~\$5 million is available to vehicles located in EPA Regions VI and VII
- The Department expects to submit three applications



# National Clean Diesel Funding Assistance Program

- Emission control and idle reduction technology may be funded at 100%
  - More points are awarded to applications that provide voluntary match
- Engine Repowers are funded at 75%
- Early School Bus Replacements
  - Funded at 25% if the new school bus meets 2007 EPA emission levels
  - Funded at 50% if the new school bus meets 2010 EPA emission levels



# 2010 School Bus Emission Standards

- For 50% funding the following requirements must be met:
  - School bus must not be due for replacement during the grant project period
  - May not be used to increase the size of a fleet
  - Bus must not exceed the following emission levels:
    - Particulate Matter 0.01 grams per brake horsepower- hour (g/bhp-hr)
    - Nonmethane hydrocarbons 0.14 g/bhp-hr
    - Oxides of Nitrogen 0.2 g/bhp-hr
  - At this point there are no diesel school bus engines that are meeting these standards
  - It is expected that these engines will become available in late 2010 or early 2011.



# National Clean Diesel Funding Assistance Program How to Apply

- School districts can apply directly. The RFA is located at: [http://www.epa.gov/air/grants/2009\\_10\\_6\\_final-dera.pdf](http://www.epa.gov/air/grants/2009_10_6_final-dera.pdf)
- The Department typically invites school districts to partner with us, and the Department can submit the application on behalf of many school districts. The following is required from school districts wishing to partner on future projects:
  - Applicant fleet description sheet
  - A letter of commitment from the school district, which must include the school district's commitment to match any required or voluntary match included in the application.



# Applicant Fleet Description Sheet

- Required Information
  - Vehicle Type (On-Road, or Off-Road)
  - Target Fleet (School Bus, Long Haul Truck, etc.)
  - Gross Vehicle Weight Rating
  - Vehicle Identification Number
  - Engine Make, Model and Model Year
  - Emission Control Technology (DOC, Replacement, etc.)
  - Current Fuel Type
  - Amount of Fuel Used (Gallons/Year)
  - Most Recent Annual Mileage
  - Annual Idling Hours
  - Horsepower
  - Annual Usage Rate Hours (Off-Road Only)

# National Clean Diesel Funding Assistance Program Department Applications

- The Department plans to submit three applications
- All three applications request approximately \$1.5 million
- Three projects are titled:
  - Statewide Missouri Department of Transportation Clean Diesel Grant
  - Missouri Green Fleet Project
  - Kansas City Clean Diesel Grant



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# Missouri Green Fleet Project

- This combines several projects in St. Louis and Southwest Missouri.
- In Southwest Missouri, the application includes 13 early school bus replacements, and approximately 100 school bus retrofits. It also includes retrofits for approximately 60 concrete mixers and trash trucks.
- The school districts included in the application are:
  - Springfield Public Schools, Ash Grove, Chadwick, Marionville, Logan-Rogersville, Hollister, Greenfield, Dallas County, Fair Grove, Cassville and Aurora.



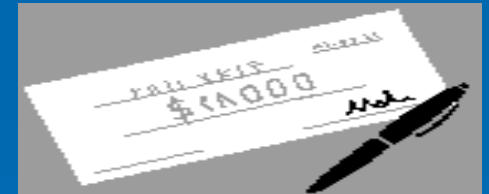
# 2009 DERA State Allocated Funds

- Total budget ~\$587,000 (includes match)
- Work Plan due to EPA December 11
- Project areas include St. Louis, Kansas City and Springfield (partners in each area)
- There will be a RFP with a lottery process to select awards
- Two RFPs will be released
  - Cost Share (open to public and private fleets)
    - 40% Reimbursement
  - Public Fleet Fund



# 2009 DERA State Allocated Funds

- The Department is currently revising its Work Plan for the 2009 State Allocated Funds
- The funding will be divided evenly among the St. Louis, Kansas City and Springfield areas
- Application will be very similar to the American Recovery and Reinvestment Act State Allocated DERA Funds
- RFPs are expected to be released in Early Spring 2010
- Department plans to partner with The Ozark Center for Sustainable Solutions at Drury University to implement the project in the Springfield/Southwest Missouri area



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# Questions?

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