

## Health Hazards of School Bus Diesel Exhaust

- Whereas, The health of Missouri's children is of foremost importance and concern to Missouri Congress of Parents and Teachers; and
- Whereas, Children all across Missouri ride buses to and from school each school day, with 92 percent of the 12,082 (as of 2001) buses they ride powered by diesel-fueled engines; and
- Whereas, Diesel exhaust is known to be responsible for significant levels of air contaminants, specifically, nitrogen oxides, sulphur oxides, acid aerosols and toxic soot particulates, or particulate matter, the latter being of such small size (2.5 to 10 microns) as to remain suspended in the air for long periods of time and once inhaled, to bypass the filtration of the nose, throat and upper trachea and enter deep into the lungs; and
- Whereas, The air contaminants/pollutants in school bus diesel exhaust have been linked with potential cancer risk, chronic bronchitis, irritation and inflammation of the delicate membranes and air sacs of the lung, decreased lung capacity and lung function, coughing, difficulty in breathing and lowered resistance to infection, and are known to cause or exacerbate asthma, a chronic condition which is the leading single cause of childhood hospitalization, long-term illness and school absenteeism, accounting for more than 14 million missed schools days nationally each year; and
- Whereas, Children are more susceptible than adults to adverse health effects from diesel exhaust in that their lungs are less able to defend themselves from pollutants and they breathe faster and actually breathe 50 percent more air per pound of body weight than do adults; and
- Whereas, Missouri's fleet of 12,082 diesel-powered school buses in 2001 spewed in the form of tailpipe exhaust an estimated (Union of Concerned Scientists) 287 tons of nonmethane hydrocarbons, 2,003 tons of nitrogen oxides, 66 tons of particulate matter, 2,879 tons of carbon monoxide and 275,991 tons of green-house gases, or from the average Missouri school bus, 48 pounds of nonmethane hydrocarbons, 352 pounds of nitrogen oxides, 11 pounds of particulate matter, 477 pounds of carbon monoxide, and 45,686 pounds of green-house gases; and
- Whereas, Tailpipe exhaust dirties/pollutes not only air outside the buses - a factor that can negatively affect air quality inside school buildings when buses are allowed to idle near building air intakes or open windows - but dirties the air inside the buses, sometimes in quantities that are greater than are found outside the bus, especially at the back of the bus and especially, also, when the windows are closed; and
- Whereas, School buses built prior to 1991 to outmoded health and safety standards are allowed to emit at least six times more toxic soot and double the smog-

forming nitrogen oxides compared to a model year 2004 school bus, without any law restricting their use in transporting children or requiring their replacement/retirement; and

- Whereas, Many cost-effective or cost-neutral measures can be taken to reduce or totally eliminate the health risks to children of school bus diesel exhaust; now, therefore be it
- Resolved, That Missouri Congress of Parents and Teachers encourage its units and councils to make their local boards of education aware of the dangers of diesel exhaust to children and encourage the boards to minimize students' exposure to toxic diesel emissions by adopting no idling policies that include the posting of no-idling signs near their bus loading zones, examining the location of air intake vents in relation to bus loading zones and relocating the air intake vents away from the zones, if necessary, redesigning bus loading zones to provide for diagonal placement of buses, rather than long yellow serpentine chains of end-to-end buses, if necessary, and requiring that bus windows be kept open, weather permitting; and be it further
- Resolved, That Missouri Congress of Parents and Teachers encourage its units and councils to encourage their local boards of education to retrofit filters or oxidation catalysts to their existing bus fleets to reduce harmful bus emissions and use cleaner fuels such as biodiesel, ultra-low sulfur diesel or compressed natural gas, and to accelerate the replacement of aging diesel vehicles, replacing those vehicles with alternative-fuel buses that run on compressed natural gas or zero-emission fuel cells; and be it still further
- Resolved, That Missouri Congress of Parents and Teachers support legislation that would require boards of education to adopt no idling policies and other policies to minimize or eliminate the exposure of children to the hazards of diesel exhaust; and be it further
- Resolved, That Missouri Congress of Parents and Teachers, its units and councils, support legislation that would require buses to be retired after a certain age to remove the oldest and dirtiest buses from the road and require all new buses to meet specific pollution criteria; and be it further
- Resolved, That Missouri Congress of Parents and Teachers, its units and councils, support legislation that would offer financial assistance to school districts for use in replacing older, heavily polluting diesel-powered school buses, and retrofitting other existing buses with filters or other devices to reduce harmful emissions; and be it further
- Resolved, That Missouri Congress of Parents and Teachers encourage its units and councils to provide education on diesel emissions to parents and students, and develop educational programs to assist units and councils in providing such educational programs.