



Legislation Text

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Resolution to Recommend an Idling Reduction Ordinance to City Council

The below resolution refers the draft Idling Reduction Ordinance to City Council and recommends that City Council take appropriate steps to adopt the ordinance.

The proposed draft Idling Ordinance is based on an Idling Ordinance previously proposed in 2012. Based on feedback from City Council and the Ann Arbor community, that ordinance was modified and narrowed in scope to focus on commercial vehicles and vehicles in designated no-idling zones.

The intended goal of this Ordinance is to reduce unnecessary idling from internal combustion engines when not “doing work.” Many exemptions are allowed that recognize the need for some idling. The ordinance is based on recommendations from the Environmental Protection Agency (EPA), the U.S. Department of Energy and other model ordinances. Idling Ordinances have been adopted by many states and cities across the U.S.

Adopting this ordinance will further six goals of the Sustainability Framework including Energy Conservation, Engaged Community, Safe Community, Clean Air and Water, Healthy Ecosystems, and Responsible Resource Use.

Unnecessary idling is an avoidable practice that occurs mostly out of habit. Situations in which unnecessary idling may occur include warming up a vehicle, loading or unloading cargo or passengers, or while waiting in a queue. Unnecessary idling produces little or no discernible benefits, and releases harmful pollutants into the air, wastes fuel, and causes added wear and tear on vehicle components.

Idling can strongly influence outdoor air quality at the local and community level. Unnecessary idling impacts human health, contributes to environmental degradation, and consumes natural and economic resources. The U.S. EPA reports that, “if everyone in the U.S. stopped idling for five minutes a day it would be equivalent to taking five hundred thousand cars off the road and saving 1.6 Million tons of CO₂.” Specific health, environmental, and economic impacts are described below.

Health Impacts:

- Vehicle exhaust contains many pollutants classified as hazardous air pollutants by the Clean Air Act, which are a growing concern especially at schools. The U.S. EPA reports that, “monitoring at schools has shown elevated levels of benzene, formaldehyde, acetaldehyde and other air toxics during the afternoon hour coinciding with parents picking up their children.”
- Vehicle exhaust contains carbon monoxide, nitrogen oxides, sulfur dioxide, hydrocarbons, and particulates. These airborne pollutants cause or aggravate pulmonary diseases, including asthma, lung cancer, bronchitis, acute respiratory infections, and emphysema.
- Nitrogen oxides and volatile organic compounds react in the presence of sunlight to form ground-level ozone. High levels of ground-level ozone can cause respiratory illness and distress, and can trigger asthma attacks.
- Children are especially vulnerable to vehicle exhaust because their lungs are still in the development stage, they breathe on average 50% more air per pound of body weight than adults, they have a higher breathing rate than adults relative to their body weight and lung surface area, and they have narrower airways than adults. Numerous studies have shown that children’s asthma symptoms increase as a result of exposure to car exhaust.
- Given the vulnerability of children to vehicle exhaust, idling by school buses and vehicles outside

schools is a serious concern. A study in Connecticut determined levels of fine particulate matter around a school during school days was close to three times higher than the average daily levels for outdoor air in the surrounding community.

Environmental Impacts:

- Unnecessary idling contributes to general environmental degradation by emitting greenhouse gases, hydrocarbons, nitrogen oxides, volatile organic compounds and particulate matter.
- Unnecessary idling contributes to the production of carbon dioxide and nitrogen oxides, greenhouse gases that contribute to global climate change.
- Ground-level ozone, formed by nitrogen oxides and volatile organic compounds in the presence of sunlight, impacts plants and ecosystems. It makes sensitive plants more susceptible to disease, insects, and other stresses, and damages the leaves of trees and other urban plants, adversely impacting their appearance and function.
- Nitrogen oxides and other pollutants emitted in vehicle exhaust contribute to acid rain formation.

Economic Impacts:

- Idling wastes fuel. An idling vehicle gets the worst fuel economy: zero miles per gallon. An idling car wastes up to .5 gallons of fuel per hour while an idling medium-duty truck wastes 0.4-0.6 gallons of fuel per hour. According to the U.S. Department of Energy it is more fuel efficient to turn off the engine and restart it if the vehicle will be idling for more than 10 seconds.³
- Idling to warm up a vehicle in cold weather wastes fuel, causes excessive wear on engine components, and emits pollutants. According to the U.S. EPA, current vehicles need to warm up for no more than 30 seconds on a winter day. ⁴ Vehicles warm up faster when driven gently for the first few minutes rather than when left idling.
- Idling increases wear and tear on vehicle components, often resulting in costly repairs. Common vehicle problems include oil contamination due to residue build-up on the cylinders, corrosion caused by excessive condensation collected in the exhaust system, and decreased peak engine operating temperature due to spark plug residue.

Prepared by Commissioner Hollins

Whereas, the City of Ann Arbor is committed to providing city services in a sustainable fashion;

Whereas, in 2013, City Council adopted the Sustainability Framework as part of the City's Master Plan;

Whereas, adopting this ordinance will further six goals of the Sustainability Framework including Energy Conservation, Engaged Community, Safe Community, Clean Air and Water, Healthy Ecosystems, and Responsible Resource Use;

Whereas, since 2010, the Ann Arbor area monitoring stations have recorded ground-level ozone or fine particulate matter levels considered "Unhealthy for Sensitive Groups" on an average of over 7 days each year.

Whereas, motor vehicles and internal combustion engines are an important contributor to various types of air pollution, hazardous air pollutants, carbon monoxide, ground-level ozone precursors, and fine particles;

Whereas, exposure to internal combustion engine exhaust is known to contribute to pulmonary diseases, including asthma, lung cancer, bronchitis, acute respiratory infections, and emphysema, particularly for sensitive populations.

Whereas, Other government bodies have effectively implemented engine idling reduction ordinances including the states of California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Indiana, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New York, New Jersey, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont, Virginia, Washington, West Virginia, and Wyoming and the Cities of Washington DC, Philadelphia, Houston, St. Louis, Chicago, Cincinnati, Cleveland, Madison, and others;

Whereas, The Ann Arbor Public Schools already have an anti-idling policy in place for school busses; and

Whereas, unnecessary idling of internal combustion engines wastes a significant amount of non-renewable energy resources;

Whereas, The City of Ann Arbor has recognized the need to reduce the negative impacts of fuel use on air quality and public health in the Ann Arbor area, as evidenced by the Clean Cities program commitment to alternative fuel vehicles and alternative fuel use in the region and the Green Fleets Policy to reduce gasoline and diesel fuel use;

Whereas, members of the Environmental Commission and others undertook a city-wide idling-education campaign beginning in 2012, and including presentations to school and community groups and the development of the resource website: <http://motor-smart.org/>

Whereas, City Council recommended that an ordinance be developed to address idling;

RESOLVED, the Environmental Commission recommends that City Council adopt the draft Idling Reduction Ordinance, take appropriate steps to educate the public about the negative effects of unnecessary idling on public health and non-renewable energy use, and take appropriate actions to measure the effectiveness of this ordinance.