

Case Study — Minneapolis Anti-Idling Vehicle Ordinance

In Brief

Location: City of Minneapolis, Minnesota
Policy type: Vehicles, Government Lead by Example, Vehicle Fleets
Sector: Transportation
Start Date: 2008
Summary: This low-cost policy restricts idling time for all vehicles within the city limits. Although the ordinance is mandatory for public and private vehicles, it has mostly been implemented through education of the public and city employees and citizen reporting.
Impact: Reduced idling has been a cost effective way for Minneapolis to increase fuel efficiency, reduce air pollution, and save money. For the Police Department alone the policy has saved approximately 60,000 gallons of gasoline in 2010, resulting in a savings of \$158,000, or 15% of total fuel spending by the department.

Overview

On June 6, 2008 the Minneapolis City Council adopted the Anti-Idling Vehicle Ordinance (City Code [Title 3, Chapter 58](#)). This policy is intended to minimize the time that public and private vehicles are left running without being in use.

To the city of Minneapolis, this policy is seen as an opportunity to save money and energy; as their Web site states, “If cleaner air isn’t incentive enough, consider that your idling car is getting zero miles to the gallon. Turning off your engine in these situations will save you money. On average, a car will burn more than half a gallon of fuel for every hour spent idling. In general, 10 seconds of idling uses more fuel than restarting the car.” Saving energy is only one of the considerations and objectives of the law. Minimizing idling also decreases air pollution and global warming, protects human health, improves engine performance, and decreases maintenance needs.

The ordinance restricts idling by all gasoline or diesel powered motor vehicles to three consecutive minutes in a one hour period. Commercial diesel powered vehicles are allowed five consecutive minutes under normal operations and no more than thirty consecutive minutes at a load/unload location. A vehicle operator can be fined up to \$200 if found to be in violation of the law.

IDLING IS ILLEGAL

YOU CAN BE ISSUED A TICKET

In Minneapolis, it is against the law for any vehicle to idle more than three minutes* except in traffic.

Warning drivers: \$200 fine for violation

* Five minute limit for diesel trucks and buses.

Save money.
 Idling uses more gas every 10 seconds than restarting your car. An average car burns almost a gallon of gas for every hour of idling. Today’s engines warm up in less than 30 seconds. Excessive idling can damage your engine components, including cylinders, spark plugs and exhaust systems.



Breathe easier.
 Exhaust is hazardous to human health, especially children’s; studies have linked air pollution to increased rates of cancer, heart and lung disease, asthma and allergies. Exhaust is also a major source of carbon dioxide contributing to global warming.



Attention: If you want help translating this information, call 311



Spanish: Atención. Si desea recibir asistencia gratuita para traducir esta información, llame al 612-673-2700

Somali: Ogow. Haddii aad doonayso in laga kaalmeyo tarjamaada macluumaadka ee la'agal ta' aah wac 612-673-2700

Hmong: Ceab toom. Yog koj xaw tau kev pab dawb tshais cov xov no, hu 612-673-2800

If you need this material in an alternative format, please call 311



For more information and a list of exemptions

An educational flyer distributed by the City of Minneapolis and partner organizations to inform the public about the Anti-Idling Ordinance.

Additionally, there are a number of exemptions mostly made in consideration of health and safety and the operating requirements of various public and private fleets in the city. These include allowing idling in traffic, in extreme temperatures, and by emergency and law enforcement vehicles.

The bill was introduced by Council Member Sandra Colvin Roy. She came up with the idea after learning about a policy in Cleveland from a colleague on the Energy and Environment Committee of the National League of Cities. The Cleveland anti-idling policy was originally targeted only at city vehicles. Council Member Colvin Roy thought that a similar policy could be adopted in Minneapolis, but be expanded to cover not just city vehicle fleets but also private vehicles. She saw the law as providing an opportunity for the city and citizens to save money while cleaning up the air. The city was undergoing a sustainability planning process that she felt that such a policy would complement.

Also, the city had previously had a heavy vehicle anti-idling ordinance related to minimizing noise that had been struck down by local courts on the grounds that it inhibited interstate commerce by targeting long-haul trucks. After being rejected by the court this policy had to be redesigned. The council member and staff from the Division of Environmental Management and Safety sought guidance from EPA on policies to reduce idling among large vehicles plus looked for examples of other local governments implementing the policies with smaller vehicles, including private cars.

As the ordinance was being written and introduced in council, input was sought from city departments and businesses with fleets to ensure their operating needs would not be affected. Additionally the proposed ordinance was the subject of a public hearing.

Management and Budget

Enforcement of the ordinance is the responsibility of Environmental Services, within the Department of Regulatory Services. However, enforcement initiated by the agency has not been a major focus of the implementation of the law. Instead, education of citizens and city staff about the ordinance and the resulting self-policing through citizen reports via a “311” hotline have been the most prominent implementation methods.

Three messages were emphasized in the education campaign: the practical benefits of saving money on fuel for individuals, businesses, and the city; the health benefits of decreasing air pollution, particularly for children; and the opportunity to decrease dependence on imported fuel and the resulting geopolitical consequences.

Flyers, an educational “warning ticket,” and a Web page were created. Information on the ordinance was included on the city’s cable stations. Flyers were distributed by dozens of partner organizations including the Metro Transit agency; Xcel Energy, the local power utility; and numerous environmental groups and neighborhood associations. Flyers were sent to nearly 6,000 relevant businesses. The state Pollution Control Agency has created and posted *No Idling* signs in targeted areas.

The City’s Communications Department assisted in getting the ordinance covered as a story in dozens of local and national media outlets, including *Men’s Health* and *Utne Reader*. The ordinance was adopted at the peak of the summer 2008 gasoline price spike at around \$4 per gallon, helping to attract additional attention to it, including talk radio and television. It caused some debate including grassroots interest from citizens on both sides of the issue: those who felt it was government overreach and those who saw the benefits for saving money and improving health. The media picked up the story again six months later to report on how it was implemented in the winter months.

The ordinance requires each applicable city department to have a plan for its implementation among the agency’s fleet and operations and regularly report progress to the City Council. Flyers were posted by the Park and Recreation Board in city park buildings and the Department of Health and Family Support distributed flyers to every school principal and Safe Routes to Schools representative. Public Works distributed flyers to all drivers and implemented no idling requirements for city street and sidewalk projects.

Development Review handed out flyers at the City's permit counter. Traffic Enforcement and Regulatory Services have been giving "warning tickets" to drivers violating the ordinance.

The variety of methods by which information about the ordinance is distributed in an ongoing fashion has had the effect of creating broad knowledge about the ordinance and its benefits among citizens, including interest in citizen enforcement. The implementation of the ordinance required little additional funds from the city budget. Staff time was made available through existing department budgets. The only new time needed was from communications department staff to develop messaging and informational flyers. Printing of the flyers was the only major direct cost of the ordinance, estimated by the Division of Environmental Management at less than \$2,000.

According to the report submitted to the City Council on implementation of the ordinance after one year, 38 idling complaints had been received from citizens in the first 12 months of the ordinance. In all cases where the license plate number or address was available, a "warning ticket" and "Notice of Violation" letter was mailed to the offender. Only two citations of \$200 had been distributed—to two Metro Transit bus drivers after education within the department and repeated warnings. Compliance among Metro Transit drivers has since improved considerably. Complaints related to city vehicles were small and consisted of four complaints related to Public Works and one complaint related to Police.

Performance

The economic case for reducing idling (in terms of fuel use, fuel efficiency, and wear and tear on the vehicle) is very clear. Minneapolis cites EPA calculations stating that the average car burns nearly a gallon of gas for each hour spent idling. Calculations from the Hinkle Charitable Foundation conclude that, depending on the engine size, a car that reduces five minutes of unnecessary idling daily will save 10-20 gallons of gasoline annually. Assuming \$3 per gallon of gas, this translates to \$30–60 dollars. When the reduced fuel efficiency (the burned gas not moving the vehicle) and wear and tear on the car (idling reduces the engine life of modern vehicles) are accounted for, the annual cost of five minutes of idling each day is \$63–134 per car per year. For many fleets with larger numbers of vehicles and much larger vehicles, the costs can be many magnitudes larger.

Some data on fuel and budget savings over the years since the ordinance was put in place is now available for many of Minneapolis's city departments. The best available data comes from the Police Department. Police Commanders have made an effort to be sure the anti-idling policy was obeyed by their officers. Meeting resistance at first, commanders eventually found that an effective message with officers was that the money they saved on gasoline would prevent budget cuts elsewhere and save the jobs of their fellow officers.

From 2009 to 2010, total fuel consumption in the Police Department decreased by over 80,000 gallons, a nearly 16% drop, representing a savings of nearly \$280,000. While this drop was influenced by a number of factors including the number of vehicles and miles driven, there is evidence showing that a portion of this savings is from decreased idling. Some of the department's newer vehicles automatically collect data on idle hours (perhaps an additional incentive for behavior change for officers who know that their idling time is being tracked). Of the vehicles that track it, idle hours per vehicle declined by 286 hours, more than 25%, from 2009 to 2010. This contributed to a nearly 3% total decrease in gallons of fuel per vehicle even as mileage per vehicle increased by 2%. Although this idle time data is only available for around 45% of the fleet, a quick calculation using the Hinkle numbers shows that if similar idling improvements are happening across the Police Department fleet it could mean 60,000 gallons or more of reduced consumption for the year and a savings of \$158,000 at 2010 prices, nearly 15% of actual spending, from reduced idling alone.

For Metro Transit, the regional transportation agency, the Minneapolis policy had an even greater impact—both directly on its operations within the city limits and also in encouraging the adoption of its own anti-idling policy that was applied agency-wide, not only to its operations within Minneapolis. In Minneapolis alone the agency's operations include 2,640 hours of bus layovers in an average week. Prior to the

implementation of the anti-idling policy, these layovers hours—time in which the bus is parked in order to keep with its schedule, change drivers, etc.—would most often be idling time. Now the only time when buses are allowed to idle during these layovers are when temperatures are below 32°F or above 85°F. Even under an extreme weather year, if mild temperature conditions only occurred for 25 out of 52 weeks in the year, the policy would still result in eliminating 66,000 idle hours over the course of the year. The experience at Metro Transit is that its fleet on average uses one gallon of diesel for each hour of idle time. The reduced idling would result in saving 66,000 gallons of diesel over the course of the year. At \$3 per gallon, the fuel savings result in avoiding \$198,000 in fuel costs over the course of the year.

Lessons Learned

This ordinance provides one example of how a policy can be implemented in both the public and private sectors to significantly alter behavior through education and self-enforcement, if the economic benefits are made tangible.

- All the major fleet owners—public and private—operating in the city are important stakeholders. They need to see the savings in fuel money as a major benefit to them. In Minneapolis, the city departments were consulted while the policy was being developed, but the regional transit agency was involved only after the ordinance was passed.
- Department heads need to understand why the policy is in place, and have a say when it is being developed on how to make it feasible for their operations. In writing the policy, the council member and staff made sure to get input from city departments on what was needed for the policy to be workable in the operation of the city fleets. Department heads are important in implementing the ordinance and communicating the importance of effective implementation to their departments.
- It is important to have an effective municipal fleet manager. These experts are needed to communicate the myths and technical realities of modern cars. In Minneapolis, the fleet manager helped to include consideration of vehicle technology in crafting the policy—idling not being an effective method of warming up a car, fuel use and pollution creation from idling, etc. The fleet manager was also an essential witness to help communicate these facts at the public hearing for the ordinance.
- Economic benefits were a big driver for making this policy feasible, especially with the high gasoline prices at the time. Public fleet managers saw it as an opportunity to decrease fuel costs for the city and the transit agency. It got support from many private fleet managers because the ordinance made it easier for them to reduce their reduce costs.

Related Resources

Minneapolis Web site describing the anti-idling policy:

http://www.ci.minneapolis.mn.us/airquality/antiidling_home.asp

Hinkle Charitable Foundation, “Anti-Idling Primer: Every Minute Counts”—Includes information on myths of vehicle technology related to idling and descriptions of the personal and environmental benefits of reductions:

<http://www.thehcf.org/antiidlingprimer.html>

Information on idling from the EPA and Clean School Bus USA’s National Idle-Reduction Campaign:

<http://epa.gov/cleanschoolbus/antiidling.htm>

Contact

Dan Huff, City of Minneapolis, 612-673-5863, daniel.huff@ci.minneapolis.mn.us