



How Idling Harms Your Fleet Beyond Fuel Costs

Why businesses are investing in fleet management software to extend vehicle lifecycles



IDLE TIME AND YOUR BUSINESS

It can, and does, happen anywhere and can have serious implications. Idling used to be a necessary evil of driving – older engines often needed a few minutes of idling before they could properly run¹. Today's engines are a different story. The United States Department of Energy recommends no more than thirty seconds of idling before driving, particularly in cold climates². Many times, extended idling increases emissions and inefficiencies throughout an engine, leading to costly maintenance repairs that can seriously affect business.

For an operation with a fleet of vehicles, keeping each unit in top shape can be a challenge. On average, a vehicle will naturally depreciate in value up to 37% within the first five years of ownership³. Adding extended idling wear and tear can increase the depreciation number significantly.

But what if you could track each vehicle's idle time in order to prolong the value of the unit?

Progressions in technology have opened the door to this opportunity, allowing businesses to track the most microscopic vehicle activity, including stops and mileage, fuel waste and customized idle reports. With the right fleet management software provider, idle time can be properly tracked, and vehicles and drivers can stay healthy.

Your wallet on idle

Fleet administrators usually view idling in terms of gallons of fuel consumed – there is a very real monetary cost behind this statistic. Idling, across the trucking industry, uses more than 6 billion gallons of fuel a year. Even a conservative estimate would put this at \$20 billion dollars spent nationwide⁴ – an expense that can easily be reduced or eliminated with data-backed anti-idling policies in place.

One hour of idling uses one gallon of diesel. If every truck in a 50-vehicle fleet idled one hour per day, the yearly fuel cost would be \$148,125 or more, depending on fuel prices. Idling can and does happen anywhere – at a stop sign, in traffic, while waiting at a job site⁶.



50
TRUCKS
IDLING 1HR/DAY

\$148_k
YEARLY FUEL COST

THE EFFECT OF IDLING ON VEHICLES

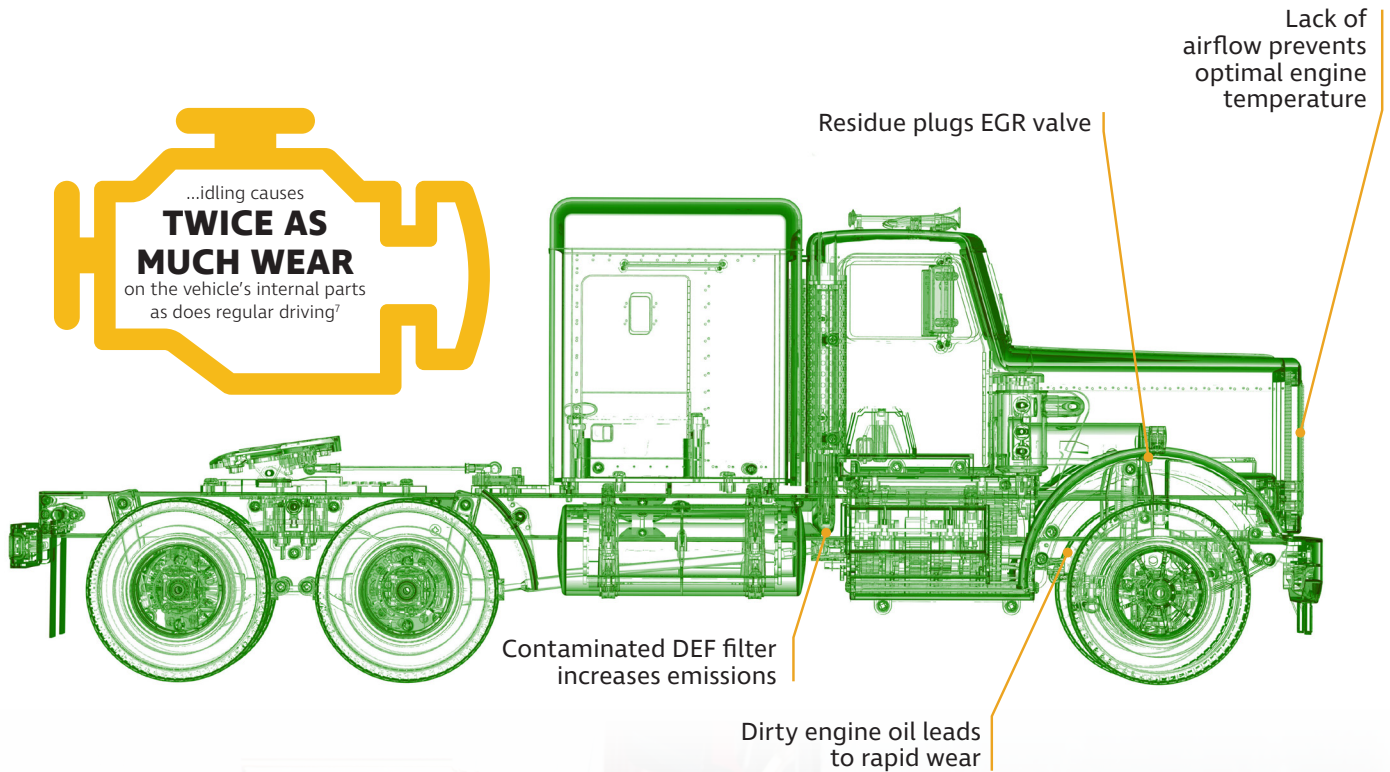
Modern engines do not take well to idling. Idling runs the engine while only partially combusting diesel – this leads to residue buildup on engine components, inefficient fuel consumption, and costly mechanical degradation⁶. In fact, idling causes twice as much wear on the vehicle's internal parts as does regular driving⁷. The components affected can be critical to the vehicle's operation, including the engine gas recirculation (EGR) valve and diesel exhaust fluid (DEF) filter. The damage caused by idling can result in costly repairs and grounded drivers. This leads to lost revenue and frustrated workers in an industry already faced with high turnover rates.

Idling has effects throughout the engine, accelerating replacement schedules and quickening vehicle depreciation. These are only a few of the ways idling can damage an engine.

- Lack of airflow prevents optimal engine temperature⁸
- Contaminated DEF filter increases emissions¹⁰
- Dirty engine oil⁹
- Residue plugs EGR valve

Idling is much more than simply "running the engine." It is a source of accumulating damage that affects multiple parts of the vehicle and is costly to repair. Luckily, idling can be easily avoided. With the right data, administrators can greatly reduce idling across their fleet.

A look inside an idling truck



THE GLOBAL IMPACT OF IDLING: HOW IDLING CAN IMPACT OUR HEALTH AND PLANET

Engine idling has effects that go far beyond individual businesses. Studies have shown that pollutants from diesel exhausts damage both human health and the environment as a whole.

Health

In San Francisco, studies revealed that air toxins from diesel emissions were responsible for 2,600 cases of cancer for every one million people¹¹. The fine particles in an idling vehicle's exhaust are also associated with an increased frequency of childhood illnesses and can reduce lung function in children¹².

Environmental

An idling engine has effects that reach far beyond the individual fleet or business. In New York City each year, idling cars and trucks produce 130,000 tons of carbon dioxide, a gas that is the primary contributor to global warming. If anti-idling policies are not put in place, dangerous pollutants will continue to be added to the atmosphere, putting the general public at risk of respiratory illnesses and cancer¹³.

Heavy Duty Vehicles
Comprise Only

5%

of the Vehicles
on the Road

Yet they Emit

23%

of all Greenhouse Gases.



Customer Success Highlight

HOW A TELETRAC NAVMAN CUSTOMER USES FLEET MANAGEMENT SOFTWARE TO TRACK IDLING

Idling engines can cause problems down the road for vehicles and, eventually, entire fleets. For Illinois-based A.N. Webber, a logistics, warehousing, and transportation firm, the impact of idling has become clear on their vehicles. "The newer engines do not like idling. It wreaks havoc on the emissions system, causing premature plugging and other issues," said Warren Schultz, Vice President of A.N. Webber.

With approximately 225 units, A.N. Webber has to consider not only vehicle maintenance but driver productivity. "The vast majority of problems we have with our trucks are emissions system related, and the engine manufacturers claim idle is a key element in those problems," adds Schultz. When a truck is down in their fleet, their driver is not producing, and often they can be left stranded for a day or more. With driver turnover a major issue, this doesn't help.

Schultz estimates that on average A.N. Webber drivers will idle between a minimum of 10% to 15% to a maximum of almost 70%. Depending on the season, "our entire fleet average varies from high 20% to high 30%."

"We get weekly and monthly reports generated that show us, by driver, the idle performance for the fleet. We then isolate the drivers who are not meeting standards and work with them to improve. For drivers doing well with MPG and idle performance, we reward them. We have monetary awards for those who do very well."

Schultz adds that the effect of these idle periods can take a toll on vehicles. "Besides the actual fuel used, the newer engines, with their complicated emissions controls, can demonstrate significant reliability problems at higher levels of idle. The engine manufacturers tell us that their engines are not designed for high idle." In addition to reliability problems, emissions filters need cleaning more frequently as idle numbers rise, thus increasing maintenance repairs.

In an effort to reduce average idling across their fleet, A.N. Webber implemented Teletrac Navman's GPS fleet management software. The system's many features and vehicle reports have proved to be the most beneficial. Schultz says, "We get weekly and monthly reports generated that show us, by driver, the idle performance for the fleet. We then isolate the drivers who are not meeting standards and work with them to improve. For drivers doing well with MPG and idle performance, we reward them. We have monetary awards for those who do very well."

In conjunction with vehicle reporting and improved driver behavior, Schultz reports an added savings in fuel consumption and overall low operational costs. By using Teletrac Navman's fleet management software, A.N. Webber has been able to track idle time and monitor their fleet's maintenance, helping improve the health of their vehicles across their entire fleet.



A.N. Webber Inc.
Since 1947



A.N. Webber Inc. reduced the amount of average idling across their entire fleet with Teletrac Navman's vehicle reports.

THE FIX IS SIMPLE

The most common reason drivers idle their vehicles is to keep their cabs comfortable overnight. Driver quality of life is one of the most important factors companies need to keep in mind. A lower quality of life will lead to greater driver turnover – the Center for Disease Control and Prevention has determined that 69% of long-haul drivers are likely to develop health conditions that can eventually make them unfit to drive¹³. Many of these conditions can be tied to irregular sleep patterns and high blood pressure. To combat this, drivers often let their vehicles idle during breaks and overnight so that they can comfortably rest. That said, idling can be a severe detriment to a fleet’s operations – idling can lead to premature wear-and-tear and can have a significant impact on a company’s finances.

Alternatives to idling

While it’s impossible to completely eliminate idling, companies can implement programs that greatly reduce it. These are especially helpful for long-haul drivers, who currently spend a great deal of off-duty time in their cabs. Long-haul drivers let their engines idle to run the vehicle’s auxiliary systems, keeping the interior comfortable while the driver rests. It is essential that driver safety is not compromised as idling is reduced – companies with overly strict policies risk endangering drivers traveling in extreme weather conditions. The programs listed below help promote both driver and vehicle health, ensuring that neither is overlooked.



Generators

Diesel-powered generators maintain a truck’s auxiliary systems overnight while using a fraction of the fuel used by idling and incurring no damage to the vehicle’s mechanical systems. Be sure to account for the fuel costs in running this generator with a fuel card integration.



Hotel Policy

Many businesses have strict policies surrounding overnight idling. Drivers for these companies are required to spend nights in hotels or other accommodations, negating the need for overnight idling and greatly reducing fuel expenditure. Some GPS fleet management systems can allow the driver to upload receipts for accurate expense tracking and reporting.

How to track idling

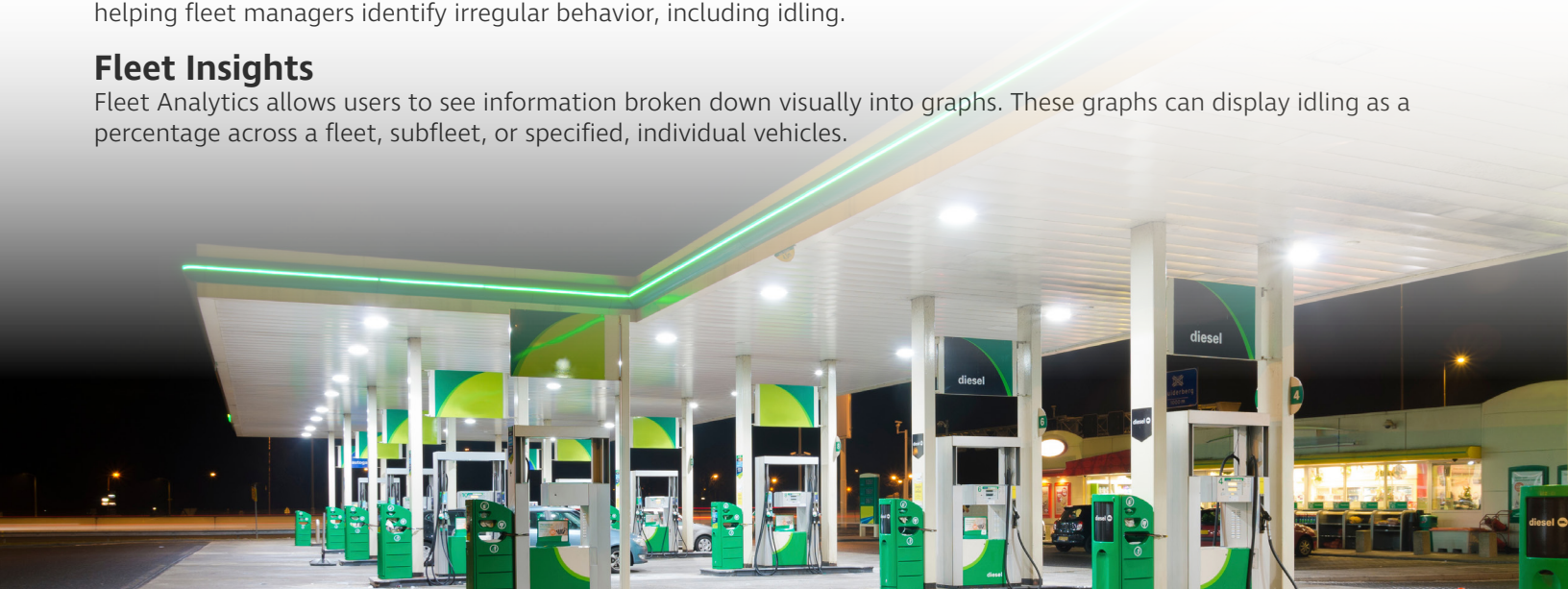
Numerous fleet management companies are trying to combat idling. There are multiple ways companies can achieve this. Teletac Navman is an [award-winning](#) fleet management software provider that is committed to helping businesses reduce idling and other unnecessary fuel expenses. Teletac Navman’s fleet management software gives businesses the tools they need to track and reduce idling. The reports suite allows managers to pinpoint specific instances of idling and examine the causes that led to each instance. This information can inspire changes in driver education and company vehicle policies, dramatically reducing annual maintenance expenses. Below are just some of Teletac Navman’s reports and features that identify specific idling behaviors and conditions. Fleet managers can use this information to help reduce idle time across their business.

Geofences

Geofences are mapping boundaries drawn around places of interest. Vehicles within geofences can be closely monitored, helping fleet managers identify irregular behavior, including idling.

Fleet Insights

Fleet Analytics allows users to see information broken down visually into graphs. These graphs can display idling as a percentage across a fleet, subfleet, or specified, individual vehicles.



HOW TO TRACK IDLING – REPORTING FEATURES

Adopting GPS Software

Excessive engine idling poses a profound impact on a fleet's operations and bottom line. Businesses in the transportation industry are proactively combating idle time by investing in fleet management software that provides measurable data about vehicle activity, driver behavior and environmental impact. With precise tracking and reporting features in real-time, fleet owners can save money, reduce their carbon footprint, and keep their vehicles going for the long-haul.

Idling Report

The Idling Report displays idle time for the vehicles specified, listed in minutes. The report shows start and end times, total length, and location.

Fuel Usage Report

The Fuel Usage Report provides a breakdown of fuel used per vehicle during idle and travel time. Fleet administrators can use this report to help monitor shifts, territories, regions, and vehicle types.

Detailed Stops and Mileage Report

The Detailed Stops and Mileage report provides a summary of stops, distances traveled, idle time and travel time. This report puts idling into context, helping determine whether intervention is necessary.

Activity Report

The Activity Report details total duration for stationary times per vehicle and location for better asset management

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WE'RE HERE TO HELP

If you're interested in discussing how IoT can benefit your business please visit our website or give us a call. Our team of experts are here to listen to your needs and create solutions that will help you meet your objectives



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