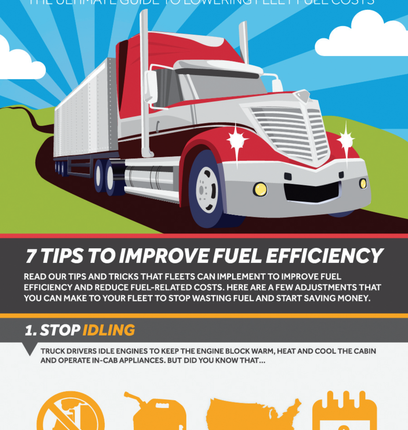
DON'T BE FUELISH!

THE ULTIMATE GUIDE TO LOWERING FLEET FUEL COSTS



7 TIPS TO IMPROVE FUEL EFFICIENCY

READ OUR TIPS AND TRICKS THAT FLEETS CAN IMPLEMENT TO IMPROVE FUEL EFFICIENCY AND REDUCE FUEL-RELATED COSTS. HERE ARE A FEW ADJUSTMENTS THAT YOU CAN MAKE TO YOUR FLEET TO STOP WASTING FUEL AND START SAVING MONEY.

1. STOP IDLING

TRUCK DRIVERS IDLE ENGINES TO KEEP THE ENGINE BLOCK WARM, HEAT AND COOL THE CABIN AND OPERATE IN-CAB APPLIANCES. BUT DID YOU KNOW THAT...

ANY MORE THAN 10 SECONDS OF IDLING USES MORE FUEL THAN RESTARTING THE ENGINE.[1]

IDLING CONSUMES ALMOST A GALLON OF DIESEL FUEL/HOUR AND CONSTITUTES NEARLY 8% OF TOTAL FUEL USE.[2]

1.1 BILLION GALLONS OF DIESEL FUEL ARE CONSUMED BY IDLING IN THE UNITED STATES EACH YEAR.[3]

FOR A TRUCK THAT CONSUMES $10,000 OF DIESEL FUEL IN A YEAR, $5,600 IS SPENT ON IDLING.

2. USE ANTI-IDLE DEVICES

DIRECT FIRE HEATERS AND AUXILIARY POWER UNITS (APUS) ARE INSTALLED IN AROUND 36% OF SLEEPER CABS TODAY AND HELP REDUCE IDLING-RELATED FUEL CONSUMPTION.[4]

DIRECT FIRE HEATER: WARMS THE ENGINE BLOCK AND PROVIDES HEAT TO THE CABIN, REDUCING THE FUEL USED FOR IDLING BY 75%.[5]

APU: GENERATOR THAT REPLACES THE NEED FOR CABIN HEATING AND COOLING AND POWERS CABIN APPLIANCES. POWERED BY EITHER DIESEL FUEL OR BATTERIES. A BATTERY-POWERED APU EFFECTIVELY REMOVES ALL NEED FOR DIESEL FUEL CONSUMPTION WHEN THE TRUCK IS STOPPED.[5]

3. STOP HARD BRAKING AND SPEEDING

USE YOUR MOMENTUM TO MAXIMIZE FUEL EFFICIENCY.[6]

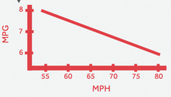
USE GAINED MOMENTUM TO CLIMB HILLS MORE EFFICIENTLY. IN SOME INSTANCES, YOU CAN USE MOMENTUM TO SLOWLY ROLL TO A TRAFFIC LIGHT STOP.

RIDING THE BRAKES WASTES MOMENTUM. KEEP AN EYE ON UPCOMING TRAFFIC CONDITIONS AND RED LIGHTS TO CONSERVE ROLLING MOMENTUM AND AVOID BRAKING HEAVILY.

DOES YOUR TRUCK HAVE AN EXHAUST BRAKE? USING IT CAN HELP YOU SAVE FUEL. GET MORE MILEAGE OUT OF YOUR BRAKES AND COME TO A SMOOTHER STOP.

RULE OF THUMB: EVERY TIME YOU CHANGE UP A GEAR, YOU IMPROVE FUEL EFFICIENCY BY BETWEEN 10% AND 30%.[7]

4. MAINTAIN OPTIMAL SPEED EFFICIENCY



FUEL ECONOMY DECREASES BY 0.5 MPG FOR EVERY 5 MPH A TRUCK DRIVES OVER 55 MPH.

AS TRUCKS MOVE FASTER, AERODYNAMIC DRAG INCREASES BY A POWER OF THREE, SIGNIFICANTLY IMPACTING SPEED AND FUEL EFFICIENCY.

TRUCKS ACHIEVE THE GREATEST FUEL EFFICIENCY WHEN TRAVELING AT AROUND 55 MPH, THOUGH THIS SPEED IS TOO SLOW FOR SAFE TRAVEL ON MANY HIGHWAYS IN THE UNITED STATES.

65MPG

TO BALANCE SPEED EFFICIENCY AND SAFE TRAVEL WITH THE FLOW OF TRAFFIC, 65 MPH IS RECOGNIZED AS THE IDEAL SPEED FOR HIGHWAY TRUCK TRAVEL.

$$

BY MODESTLY DECREASING SPEED TO 65 MPH, THE AVERAGE VEHICLE CAN ACHIEVE A FUEL SAVINGS OF $7,200 ANNUALLY.

THE MOST EFFICIENT DRIVERS CAN GET APPROXIMATELY 30 PERCENT BETTER MPG THAN THE LEAST EFFICIENT DRIVERS.

5. USE ADAPTIVE AND PREDICTIVE CRUISE CONTROL

ADAPTIVE AND PREDICTIVE CRUISE CONTROL CAN IMPROVE FUEL EFFICIENCY AND SAFTEY FOR ANY FLEET.[8]

ACCELERATES OR BRAKES AS NEEDED IN A SMOOTH PROFILE (RAPID ACCELERATION REQUIRES MORE POWER AND MORE FUEL).

REDUCES COLLISIONS BY ALLOWING TRUCKS TO MAINTAIN A SAFE CRUISING DISTANCE FROM THE VEHICLES AHEAD OF THEM AND ENSURING ADEQUATE BRAKING DISTANCE AT VARIOUS SPEEDS.

PROVIDES LANE DEPARTURE WARNINGS AND BLIND SPOT MONITORING.

6. MAP OUT ROUTES

GETTING STUCK IN UNNECESSARY TRAFFIC OR TAKING A WRONG TURN CAN END UP COSTING A LOT IN FUEL. AVOID SOME OF THESE GAS-GUZZLING SITUATIONS BY MAPPING OUT YOUR BEST ROUTE AHEAD OF TIME.[9]

SOME INTERSECTIONS AND TURNS ARE FUNDAMENTALLY UNSAFE. RESEARCHING AND COMPILING INFORMATION ON THE LOCATIONS OF CRASHES CAN HIGHLIGHT WHICH ROUTES SHOULD BE AVOIDED WHEN DESIGNING ROUTES.

TRUCK-APPROVED NAVIGATION SYSTEMS HELP PLAN ROUTES THAT AVOID ONE-WAY STREETS, LOW BRIDGES, UNNECESSARY TURNS AND TRAFFIC AND HELP FIND APPROVED FUELING LOCATIONS. TO PLAN THE MOST APPROPRIATE TRIP, INPUT THE FOLLOWING INFO TO YOUR GPS:

- VEHICLE LENGTH, WIDTH AND HEIGHT
- AXLE WEIGHTS
- HAZARDOUS MATERIALS YOU MAY BE TRANSPORTING

7. USE GPS TRACKING

GPS TRACKING AND MOBILE FLEET MANAGEMENT SYSTEMS CAN PROVIDE DRASTIC IMPROVEMENTS IN FUEL EFFICIENCY AND PROFITABILITY. THE FOLLOWING IMPROVEMENTS WERE MADE WHEN GPS TRACKING WAS IMPLEMENTED IN A SAMPLE SET OF 97 TRUCKS :[10]

SLOW DOWN

AVERAGE OF 117 SPEEDING VIOLATIONS PER WEEK DOWN TO AN AVERAGE OF 3 SPEEDING EVENTS PER WEEK.

= $124,000 ANNUAL SAVINGS

THE IDLE TIMES WENT FROM AN AVERAGE OF 468 HOURS PER WEEK TO AN AVERAGE OF 72 HOURS PER WEEK.

= $74,500 ANNUAL SAVINGS

TOTAL ANNUAL SAVINGS = $200,000

SOURCES

1. http://www.edf.org/transportation/reports/idling
2. http://www.transportation.anl.gov/pdfs/TA/373.pdf
3. http://www.epa.gov/reg3artd/diesel/truck_idling_fs.pdf
4. http://www.atri-online.org/research/results/Idle%20Reduction%20Technology%20Fleet%20Preferences%20Survey.pdf
5. http://www.carbonwarroom.com/sites/default/files/reports/Unlocking%20Fuel%20Saving%20Technologies%20in%20Trucking%20and%20Fleets%20(Carbon%20War%20Room).pdf
6. http://www.ecodrive.org/en/what_is_ecodriving-/the_golden_rules_of_ecodriving/
7. http://cumminsengines.com/uploads/docs/cummins_secrets_of_better_fuel_economy.pdf
8. http://www.ecomove-project.eu/assets/Documents/Presentations/ITS-Dublin-2013/ITSDublin-paper54Themann-energyefficient.pdf
9. http://www.fmcsa.dot.gov/about/outreach/education/GPS_Visor_Card_508.pdf
10. http://www.lucidlogistics.com/tag/fleet-monitoring/

omnitracs
innovation. driven.