



Telematics

Go Green Save Green

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Fleet Issues Faced Today

- **Rapidly rising fuel costs**
- Security and liability concerns
- Ability to raise customer service levels
- Reduce costs and grow revenue
- Vehicle downtime
- **Growing compliance issues with federal, state and local mandates increase pressure to provide environmentally friendly services**





Local Green Initiatives

U.S. Conference of Mayors Climate Protection Agreement	Meet or beat 7% GHG reduction below 1990 levels by 2012
Colorado Executive Order: Greening of State Government	State vehicle petroleum usage reduction of 25% by June 30, 2012
Idling restrictions now in hundreds of states, counties, cities, and towns	5, 10, and 15 minute idle restrictions
King County Washington	Reduce GHG emissions 80% below 1990 levels by 2050
City of Toronto	Lower GHG emissions 6% below 1990 levels by 2012
City of Nashville Green Ribbon Committee on Environmental Sustainability	Tasked with finding ways to make Nashville the cleanest city in the country

AB32 – The Global Warming Solutions Act

- **Goal: Reduce GHG reductions to 1990 levels by 2020**
 - The equivalent of cutting GHG emissions by 10% from today's levels
- **Of the sources of GHG emissions in California, transportation is by far the largest**
- **ARB has a list of recommended GHG reduction measures for transportation that include:**
 - New vehicle standards
 - New fuel standards
 - Goods movement efficiency
- **There is a significant line item for “Local Government Action” where local governments will have to come up with plans for GHG reductions outside of ARB recommended measures**
- **Municipal fleets will begin to feel the pressure in early 2009, if you aren't already**



Reducing Fleet Emissions

- **There are a number of ways fleets are reducing their emissions footprint:**
 - Reduce miles driven
 - Increase MPG
 - Increase emissions compliance
 - Alternative fuels/hybrids
- **Most municipal/state fleets are focusing on alternative fuel vehicles**
- **Telematics can positively affect miles driven, MPG, and emissions compliance on existing and future fleets**





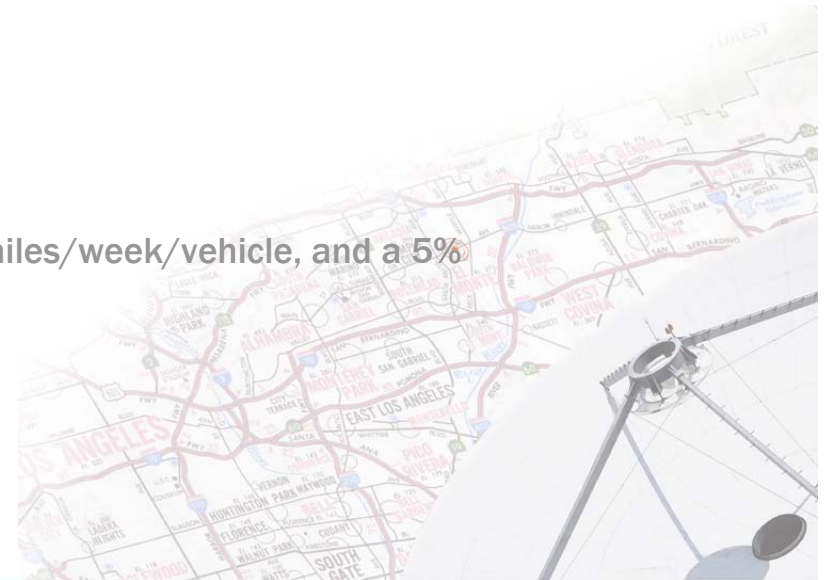
How Telematics Can Help

- The ability to improve efficiency/reduce mileage through more efficient routing
- Improved staging of vehicles to avoid traffic and pollution hot spots
- Monitor vehicle health and maintenance wirelessly
- Monitor vehicle locations to assure they are being used correctly during and after business hours
- Increase MPG through reduced idle and speed
- Decrease fleet size
- Improve emissions footprint through increased MPG, decreased miles traveled and remote emissions monitoring
- Reduce vehicle loss



Reducing Miles Driven

- **Optimizing routing/dispatching/staging**
 - The simple fact is that if you know where your vehicles are, you can send the closest vehicle to the next location
 - Further, if you know vehicle patterns, work patterns, etc. you can stage your vehicles more effectively
 - After using Networkfleet you will likely determine that you can provide the same service with less vehicles
- **Unauthorized Usage**
 - Some drivers utilize vehicles for unauthorized usage either during or after business hours
 - This costs you time, money, and adds miles/fuel
- **Emissions Benefit**
 - Assumes fleet size 1,000, initially averaging 250 miles/week/vehicle, and a 5% reduction in miles traveled
 - Reduction of more than 800,000 pounds annually!





Increasing MPG

- **Idling**

- Idle time has gotten attention in the last few years as a method for reducing fuel usage and emissions
- While heavy duty vehicles burn approx. .75 gallons per idle hour, light duty vehicles are also a problem, burning between .3 and .5 gallons per idle hour
- Idle minute maximums are effective, but only go part way – if you can't measure it you can't manage it
- Reducing idle time increases your MPG, and lowers emissions

- **Speed**

- High average fleet vehicle speed is not only a safety issue, it's an emissions issue
- You can increase MPG by 10-15% by reigning in vehicle speed

- **Engine Health**

- A vehicle operating suboptimally may get 2-6 MPG less than a vehicle in good health

- **Emissions Benefit**

- Assumes fleet size 1,000, averaging 250 miles/week/vehicle, with an average idle time reduction/day of 15 minutes and an average fleet speed reduction of 1 mile per hour
- Reduction of more than 940,000 pounds annually!





Improving Emissions Compliance

- **Smog Check**

- Networkcar is licensed in the State of California to perform continuous, wireless smog checks on light and medium duty vehicles
- Our customers in CA with light/medium duty vehicles are exempt from smog checks
- If you remedy the problem in short order, there is a significant benefit as opposed to waiting until your next smog check is upcoming

- **Emissions Benefit**

- Assumes fleet size 1,000, and will repair smog problems within a short period of time after they occur
- Reduction of more than 650,000 pounds annually!





Case Study – State of Delaware

- 2,400 fleet vehicles installed with Networkcar
- Net reduction in fuel consumption of 5% in the first year
 - \$190,000 in fuel savings
 - Over 1,000,000 pounds of reduced emissions annually
 - Change in driver behavior
 - Reduced idle time
 - Reduced speeding
 - Less unnecessary driving
- Net payroll reduction of \$55,000 because of automated odometer readings
- Fleet size reduction of 30+ vehicles because of identification of underutilized vehicles



Other Customer's Benefits

- **City of Napa**

- 150 vehicles with Networkcar
- Used by fleet operations
 - Takes advantage of smog checks
 - Keep vehicles running optimally with diagnostic alerts/trouble codes
 - Idle time management
 - Take home vehicle management
 - Uses geofences to make sure vehicles are used efficiently during working hours

- **Polk County Florida**

- Reduced fleet size 12%
- Introduced a speed and idle training program

- **East Bay Municipal Utility District**

- Used Networkfleet to stage vehicles closer to normal job sites and away from congestion

- **United States Marines**

- Reduced speeding 30%

- **The perfect storm has arrived**
 - Accelerating gas prices
 - Heavy clean air regulation
- **Telematics can help you deal with both issues simultaneously**
 - Reduce fuel usage
 - Decrease fleet emissions

Go Green, Save Green

