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Case Study

Fleet Size: 20 trucks
Time Period for Benefits: 6 months
Nature Of Business: Building Trades

In the autumn of 2010, our customer recognized that there were several issues with respect to the manner in which company vehicles were being used. The following report summarizes the problems, the actions taken, and the results.

Engine Idling:

In a study done over the months of September and October, 2010 for the trial vehicles, the engines in the fleet idled for 27% of the hours that they were on, wasting both time and fuel.

Steps taken:

- PinPoint GPS devices were installed in all fleet vehicles;
- Idling alerts were set up so that emails were sent to the drivers when their vehicle had idled for more than 15 minutes.
- Managers received either the alerts or a report that provided statistical information on the drivers' idling habits.
- Drivers with chronic problems were sensitized to the need for improvement.

Results:

For the month of July, 2011, idling had fallen to less than 15% of engine on hours. As much of the driving is done on congested city streets in Toronto, this is getting close to the expected minimum.

Impact:

- 242 hours of engine idling were eliminated by reducing the idling percentage from 27% to 14.8%. ***This represented an estimated fuel cost savings of just over $1500 per month, assuming that an idling vehicle burns 5 liters of fuel per hour, and that the price of fuel is $1.25 per liter. This savings exceeds the cost of operation of the GPS systems.***
- ***Assuming a loaded cost of labour of $50 per hour, this represented savings or efficiency improvements of $12.1K in one month.***

After Hours Use of Vehicles:

31% of the kilometres driven in the pilot study were incurred outside of normal working and commuting hours. Although some of these kilometres are inevitable due to early starts and late departures from job sites, there were also a number of flagrant instances where company vehicles were taken without permission on weekends or in the evenings and used for purposes that had no business impact, other than to incur cost.

Steps taken:

- PinPoint GPS devices were installed in all fleet vehicles;
- Alerts were set up to notify management of vehicles that were moving outside of working hours. Drivers of vehicles that moved and who were not working overtime, or who did not have the company's permission to use the vehicle for non-work purposes were sensitized to the need to secure such permission.

Ask us about the rewards available from our referral program.

Results:
For the most recent full month, driving outside of working hours fell from 31% of total km driven, to 23% of total km driven.

Impact:
- An estimated 5625 fewer kilometers were driven due to the reduction in the incidence of after hours driving. ***This is the equivalent of eliminating 2 vehicles out of the 20 in the fleet.***
- ***Assuming a cost per kilometre of $0.35, this represents a vehicular cost savings of just under $2,000 in a month, again, significantly more than the cost of operating the GPS system.***

Speeding
The trial showed that a position fix was taken when the vehicle was being driven at speeds in excess of 120 kmph once every 183 kilometers. The actual number of instances of speeding would be significantly higher as a position fix was taken once every 2 minutes. The concerns arising from this are both cost (fuel & repairs) and safety (accident risk) related.

Steps taken:
- PinPoint GPS devices were installed in all fleet vehicles;
- Speeding alerts were set up so that emails were sent to the drivers when their vehicle exceeded 120 kmph, or 20 km over the speed limit;
- Managers received either the alerts or a report that provided statistical information on the drivers' speeding habits.
- Drivers with chronic problems were sensitized to the need for improvement.

Results:
For the most recent full month, the frequency of position fixes in which the vehicles were traveling at speeds in excess of 120 kmph fell from once every 183 km to once every 277 km, an improvement of over 50%.