Driver Monitoring Technology Question

Dear NETS Members,

Kevin Wright of Union Gas asked about the use of driver monitoring technology. His question, pasted below, was emailed to NETS members on January 8th.

Responses are provided below. Please note I have not included company names.

Let me know if you would like to speak to any of the respondents and I will put you in contact with the respondent.

And please contact me If you have any questions or suggestions.

Jack Hanley

NETS

Executive Director

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QUESTION

What are the general technology advancements that folks are using to monitor driving and give driver feedback?

At Union Gas we currently utilize a GPS monitoring system that allows us to track -idling time, speed, direction and location - back up cameras and sonar.

Understanding what others may be using would be great as we are currently looking to move to the next level.
Right now we are looking at:
-DriveCam
-Davis CarChip, vehicle data recorder
-speed governors
-GPS with accelerator monitoring

Any further assistance you could provide would be great!

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Driver Monitoring Technology Question

RESPONSES

1) …only our large vehicles are monitored. Our class 8 tractor/trailers use PeopleNet which gives us location / route / speed / acceleration / braking and more. It is an on-line system and uploads about 3 times per day.

2) We've seen a definite safety impact from use of DriveCam technology in our North America heavy vehicle fleet. An additional benefit as perceived by drivers is that when there is an incident, that the camera captures the "facts" which generally are beneficial to demonstrating that their performance was not contributing to the incident.

   The drive cam technology has been used in addition to vehicle data monitoring chip which also delivered a large impact when first introduced.

3) We use IVMS (In Vehicle Monitoring Systems) that track the following:

   - Speed
   - Harsh Acceleration, Harsh Deceleration, Harsh Steering
   - Driving Hours
   - Fuel Efficiency
   - Seat Belt usage
   - Crash buffering
   - Idling
   - For some locations we also use geomapping/geofencing which tracks vehicles journeys. Also speed governors, in cab cameras, etc.
   - Most important aspects of the programme is driver feedback and recognition. We place a lot of emphasis on this and it has proven to be the key to improved performance. Don't just throw hardware in vehicles, but put in processes to deal with the data (e.g. recognition, additional training, or consequence management).

4) What is the objective of mounting more technology in the vehicles? Is it to identify at risk drivers or driving behaviors?

   1. As a user of newer technology such as Drive Cam the organization must be ready to receive, view and analyze 100's or 1000's of events per month. One user of such technology found that for 400 vehicles over 55,000 event triggers occurred in 1 year which had to be reviewed.
   2. When considering high risk driver issues many organizations install technologies in all vehicles which is very costly hoping to 'catch a few' of the really problematic drivers. This approach exhausts considerable resources across all drivers as opposed to focusing maximum resources on problem drivers.

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5) … we are not using any telematics tools but very interested in the Predictive Analytics tool. We want to understand the associated interventions and their efficacy, both short and long term.

   … Drivecam is used in the context of BTW training – it's not a standalone unit installed in vehicles.

6) … we currently use GPS with speed, location and tracking functionality. We also have more than 3000 DriveCam units. We began using DriveCam in 2004 and have significant experience with this technology. Maximum speed is part of our design specification for all or nearly all of our production vehicles. I hope this helps.

7) …there are some technologies that we considering to address at risk behaviors and these would be - telematics for high risk drivers and block texting while driving. These are not being used by us yet but we are in the process of making determinations.

8) …we do not have any devices at this time to monitor driving or give driver feedback. We are in the process of building the business case to pull MV driving records which will allow us to ID our high risk drivers and move forward with the driver feedback/monitoring piece.

9) We too are interested in experience with some of the advanced technologies, e.g. drive cam

   We currently do govern our OTR fleet Tractor/trailers (70 mph) Our Company is limit 65, we currently have GPS systems & On-Board computers and monitor/feedback on speed & speeding, rapid decelerations, speeding, idling, etc.

10) **…** has been looking at some driver feedback systems as well. DriveCam, GreenRoads, IVOX, RoadScan, Drive Diagnostics, etc. We haven't been able to find one that would make a ROI palatable in today's environment.

    One of our business units uses GPS for dispatch. It is also used to track speed and confirm 1-800 calls from the public. We have it on about 500 vehicles.

11) **…**we do not use any advanced technology to track or provide feedback. We do use commentary drive, as a manager interface 2 times a year, but we do not track compliance.

    I am interested to know if anyone is using "Green Road" and how it is working for them.