Transport Research Laboratory

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CLIENT PROJECT REPORT CPR1779

Survey of vehicle roadworthiness of HCVs and driver compliance with EU rules on driving times, breaks and rest periods

Summary of HGV and bus survey results

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1 Introduction

The aim of the survey was to determine the roadworthiness of vehicles and compliance of drivers of HGVs and buses in Ireland¹ with operator licencing and EU drivers' hours' regulations. This report summarises the results from the HGV and bus surveys in 2012².

The survey was designed by the Transport Research Laboratory (TRL) and carried out by the Vehicle Inspectors and Transport Officers at the Road Safety Authority (RSA). Heavy Goods Vehicles (HGVs) were randomly stopped and inspected between 14th May 2012 and 31st December 2012. Buses were inspected during this same period but data collection was also extended to 31st May 2013 to increase the sample size available for analysis.

Background

Unroadworthy vehicles are a major road safety concern in Ireland. Defective vehicles are not only dangerous to drive, but pose a significant risk to other road-users. The Gardaí are responsible for enforcing the roadworthiness of commercial vehicles on the roadside. They are supported by the Road Safety Authority in this function. The RSA employ a total of 14 vehicle inspectors who assist AGS in this regard. All vehicle inspectors have served an approved apprenticeship to the motor industry and hold at least the Senior Trade Certificate, or minimum City and Guilds Motor Vehicle Craft studies or equivalent in car or Heavy Goods Vehicle (HGV) or FÁS apprenticeship course, or FETAC National Craft Certificate in relevant discipline and are qualified Vehicle Testers. The Road Safety Authority is also responsible for the enforcement of tachographs and EU drivers hours, including driving times, breaks and rest periods and the enforcement of operator licensing at the roadside with An Garda Siochana. A total of 12 Transport Officers are certified to City and Guilds standard for the analysis of both digital and analogue tachographs. Vehicle inspectors and transport officers are regularly supervised to ensure consistency of standards throughout the country. The RSA is constantly evaluating the roadside enforcement strategy to maximise effectiveness.

2 Terminology

In this report the term 'defect' refers to a motor vehicle or trailer roadworthiness defect. The term 'infringement' refers to a breach of the licensing, tachograph or drivers' hours' requirements. The term 'roadworthiness inspection' refers to the roadside inspection carried out by the Vehicle Inspectors as part of the survey. The term 'driver compliance check' refers to the roadside check of the compliance of drivers with EU rules on driving times, breaks and rest periods and also operator licensing compliance carried out by the Transport Officers as part of the survey.

¹ The vast majority of vehicles inspected as part of this survey were registered in Ireland; however a small number of non-Irish vehicles were also inspected. The results for the two groups are not disaggregated within this report.

² The data for the bus survey was supplemented with a small amount of data collected from January to May 2013.



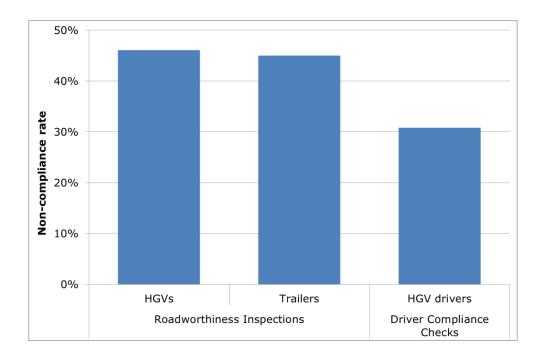
3 Notes about the bus survey

The results from the bus survey are based on much smaller sample sizes than the results from the HGV survey. Care should be taken when interpreting the figures from the bus survey, as small changes in the number of vehicles in each group mean that larger changes in the proportions may be due to chance alone.

Vehicles were selected at random to participate in the survey; however inspection site selection may introduce some bias into the results. For example, many of the bus inspections were carried out at schools or at other locations on school routes; as such school buses may be over-represented in the survey and the results are not necessarily representative of the national bus fleet as a whole.

4 HGV survey

The figure below shows the non-compliance rate of vehicles in the two roadworthiness surveys (HGVs and trailers) and the non-compliance rate of HGV drivers to the EU drivers' hours' regulations and operator licensing requirements.



Overall 46% of HGVs and 45% of trailers inspected by the Vehicle Inspectors as part of this survey recorded one or more defects. 31% of the HGV drivers inspected by the Transport Officers were found to have one or more infringements.



4.1 Key findings – roadworthiness inspections

Between 11th June and 31st December 2012 the RSA Vehicle Inspectors carried out 2,096 roadworthiness inspections (2,085 HGVs and 1,387 trailers³) as part of this survey.

HGVs

The results from the analysis of the 2,085 HGVs showed:

- 46% of HGVs surveyed were recorded as having one or more defects (4% had a maximum defect severity of dangerous, 23% were major and 19% were minor). 54% of HGVs had no defect recorded.
- In total, 1,983 defects were detected across the 2,085 HGVs; an average of 0.95 defects per inspection.
- The most common category of defect in which HGVs failed the inspection was
 the 'lighting equipment' category (19% of inspections). However, each category
 contains a number of defects and when defects are considered individually, faults
 with the tyres were the most common defect recorded (reported in 7% of
 inspections).
- Of the defects listed within the top 10, 'brake drums, brake discs' was the defect most commonly recorded as major or dangerous (86%).

³ Please note: the number of HGVs and trailers inspected does not sum to the total number of roadworthiness inspections as some HGVs were not pulling a trailer and thus only the HGV was inspected; some inspections examined both the HGV and the trailer and some inspections consisted of a trailer on its own (i.e. the HGV tractor unit associated with the trailer was not inspected).



Trailers

The results from the analysis of the 1,387 trailers showed:

- 45% of trailers surveyed were recorded as having one or more defects (3% had a maximum defect severity of dangerous, 26% were major and 16% were minor). 55% of trailers had no defect recorded.
- In total, 1,081 defects were detected across the 1,387 trailers; an average of 0.77 defects per inspection.
- The most common category of defect in which trailers failed the inspection was the 'braking equipment' category (20% of inspections).
- Absence of a Certificate of Roadworthiness (CRW) at the roadside (captured as 'absence of technical inspection') was the most common issue (reported in 11% of inspections); however legally the driver/operator has 10 days in which to produce this document after the inspection.
- Of the defects listed within the top 10, 'Braking Equipment mechanical condition and operation' was the defect most commonly recorded as major or dangerous (90%).

4.2 Key findings – driver compliance check

Between 14th May and 31st December 2012 the RSA Transport Officers checked 2,287 HGV drivers as part of this survey.

HGV drivers

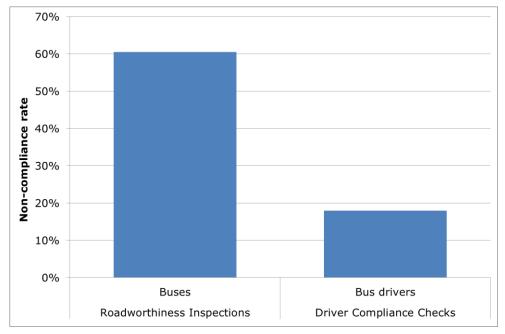
The results showed:

- 31% of inspections recorded at least one infringement (9% had a maximum infringement severity of very serious, 13% were serious and 9% were minor). 69% of HGV drivers recorded no infringement.
- In total, 1,656 infringements were detected across the 2,287 HGV drivers; an average of 0.72 infringements per inspection.
- 'Inadequate breaks' was the most commonly recorded infringement (reported 444 times in 244 inspections).



5 Bus survey

The figure below shows the non-compliance rate of buses in the roadworthiness survey and the non-compliance rate of bus drivers to the EU drivers' hours' regulations and operator licencing requirements.



Overall 61% of buses inspected by the Vehicle Inspectors as part of this survey recorded one or more defects. 18% of the bus drivers inspected by the Transport Officers were found to have one or more infringements.



5.1 Key findings – roadworthiness inspections

Between 11th June 2012 and 31st May 2013 the RSA Vehicle Inspectors carried out 699 bus roadworthiness inspections as part of this survey.

Buses

The results showed:

- 61% of buses surveyed were recorded as having one or more defects (3% had a maximum defect severity of dangerous, 33% were major and 25% were minor). 39% of buses had no defect recorded.
- In total, 1,047 defects were detected across the 699 buses; an average of 1.5 defects per inspection.
- Buses most commonly failed on defects in the 'other equipment' (including safety belts, tachographs and speed limitation devices) category of defects (27% of inspections). Other common categories were 'lighting equipment and electric sub-systems' (22%) and 'chassis and chassis attachments' (19%).
- Faults with the fire extinguisher and an absence of a Certificate of Roadworthiness (CRW) at the roadside (captured as 'absence of technical inspection') were the most common issues recorded (reported in 10% of inspections).
- Of the defects listed within the top 10, 'tyres' was the defect most commonly recorded as major or dangerous (81%).

5.2 Key findings - driver compliance check

Between 14th May 2012 and 31st May 2013 the RSA Transport Officers stopped and checked 117 bus drivers as part of this survey.

Bus drivers

The results showed:

- 18% of inspections recorded at least one infringement (9% has a maximum infringement severity of very serious, 6% were serious and 3% were minor). 82% of bus drivers recorded no infringement.
- In total, 74 infringements were detected across the 117 bus drivers; an average of 0.63 infringements per inspection.
- 'Failed to correctly operate mode switch' was the most commonly recorded infringement (reported seven times in four inspections).