
**DVSA Roadworthiness and
Testing**

**Fleet
Compliance
Checks
2013/14**

v1.0

**In House Analytical
Consultancy**

October 2014



**Department
for Transport**



GOVERNMENT OPERATIONAL RESEARCH SERVICE

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The following Annexes are provided in a separate document:

Annex A: Analytical Assurance Statement

Annex B: Methodology

Annex C: Detailed results tables

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Chapter 1: Management Summary

1.1 Introduction

The Fleet Compliance Checks (FCCs) is a survey to determine the roadworthiness and traffic compliance of GB and non-GB registered Heavy Goods Vehicles (HGVs) and trailers, and the traffic compliance of Public Service Vehicles (PSVs).

The survey was designed by the Department for Transport's In House Analytical Consultancy (IHAC) and carried out by the Driver & Vehicle Standards Agency (DVSA). DVSA randomly selected and stopped GB HGV vehicles, non-GB HGV vehicles and PSVs between April 2013 and February 2014 as part of the 2013/14 FCC.

The table below shows the number of HGV vehicles and trailers checked for roadworthiness defects (condition) and traffic offences (compliance) by DVSA examiners at roadside inspections. 1,262 PSVs (both GB and non-GB) were checked for traffic offences (compliance) only, by DVSA examiners at locations such as service stations and tourist attraction car parks.

HGV Check Type	GB	Non-GB
Vehicle roadworthiness check	2,694	2,660
Trailer roadworthiness check	1,441	2,610
Vehicle traffic offence check	2,703	2,682

This report details the analysis of the 2013/14 FCC roadworthiness and traffic offence checks. HGV results are given in Chapter 3, separately for GB and non-GB HGVs. The results that follow list the combinations of factors that were most related to vehicle condition, trailer condition and traffic offences. PSV results are given in Chapter 4.

The accompanying Annexes provide full details on the survey methodology, statistical accuracy of the checks and detailed results tables and charts.

1.2 Key findings - HGV

Each encounter with an HGV during the FCC could have up to three different checks: for vehicle roadworthiness defects, for trailer roadworthiness defects and for traffic offences.

1.2.1 GB HGVs

Vehicles

Of the 2,712 GB vehicles stopped, examiners checked 2,694 for roadworthiness defects¹:

- 10.2% of vehicles were issued with prohibitions (3.8% immediate; 6.4% delayed)
- 14.9% warranted an inspection notice

¹ In certain cases, vehicles were not checked by both a vehicle examiner and a traffic examiner. In others, the results of checks could not be found on the data input system.

The 95% confidence interval² on the prohibition rate ranged from 9.0% to 11.4%.

Trailers

53.6% of the vehicles in the survey were towing a trailer. Of the 1,453 GB trailers stopped, examiners checked 1,441 for roadworthiness defects¹

- 12.5% of trailers were issued with prohibitions (5.1% immediate; 7.4% delayed)
- 8.6% warranted an inspection notice

The 95% confidence interval on the prohibition rate ranged from 10.7% to 14.3%.

Traffic Offences

Of the 2,712 GB vehicles stopped, examiners carried out 2,703 traffic offence checks¹:

- 9.5% of drivers / operators were committing serious traffic offences
- 3.9% warranted a verbal warning

The 95% confidence interval on the serious offence rate ranged from 8.4% to 10.7%.

1.2.2 Non-GB HGVs

Vehicles

Of the 2,686 non-GB vehicles stopped, examiners checked 2,660 for roadworthiness defects¹:

- 17.7% of vehicles were issued with prohibitions (5.3% immediate; 12.4% delayed)
- 11.1% warranted an inspection notice

The 95% confidence interval on the prohibition rate ranged from 16.1% to 19.2%.

Trailers

A higher proportion of non-GB vehicles were towing a trailer (98.1%) than GB vehicles. Of the 2,635 non-GB trailers stopped, examiners checked 2,610 for roadworthiness defects¹:

- 22.5% of trailers were issued with prohibitions (5.0% immediate; 17.5% delayed)
- 5.8% warranted an inspection notice

The 95% confidence interval on the prohibition rate ranged from 20.8% to 24.3%.

Traffic Offences

Of the 2,686 non-GB vehicles stopped, examiners carried out 2,682 traffic offence checks¹:

- 11.3% of drivers / operators were committing serious traffic offences
- 2.5% warranted a verbal warning

The 95% confidence interval on the serious offence rate ranged from 10.0% to 12.6%.

² A confidence interval is a range that we can be confident the result falls within. A fuller explanation of confidence intervals is given in Annex B2.

1.2.3 Further analysis

Prohibitions

When GB and non-GB checks were considered separately, GB HGVs had lower prohibition rates than non-GB HGVs for both vehicle and trailer checks, as well as a lower serious offence rate for traffic offences.

Yearly comparison

Since the FCCs began 17 years ago there has been a significant downward trend in the prohibition rate for GB vehicle condition checks, although the rates in recent years have been very similar. Likewise, there has been a significant downward trend in prohibition rates for GB trailer condition checks.

In addition, the average number of prohibitions per GB defective vehicle has decreased significantly over the same period.

The rate of non-GB serious traffic offences has also shown a decreasing trend over the last 17 years of checks. However, the rate of GB serious traffic offences has shown an increasing trend over the same period, although the rate in 2013 was significantly lower than that in 2012.

There was no overall trend in the prohibition rate for non-GB vehicle condition checks, although the rate in 2013 was significantly higher than in 2012.

There was no significant trend in prohibition rates for non-GB trailer condition.

Types of defect

Faults with 'Brake Systems & Components' were the most common defects found on GB vehicles and trailers and non-GB vehicle and trailers, accounting for between 19.0% and 31.2% of prohibitions, respectively.

Tachograph and Drivers' Hours offences accounted for 61% and 60% of all GB and non-GB serious traffic offences, respectively.

Significant factors in predicting defects

A range of factors were associated with HGV condition and compliance. Age was an important factor, if not the most important, for all GB and non-GB HGV vehicle or traffic checks (vehicle condition, trailer condition and serious traffic offences). In addition to age, area of check and body type were important factors for many of the different checks.

For GB HGVs vehicle weight was the most important factor associated with the level of serious traffic offences.

Country of origin was a factor associated with non-GB vehicle condition and serious traffic offences.

In addition to area of check, other factors determining where or when the check was conducted (i.e. time, day and month of check, and road type) were also associated with condition or compliance for some check types.

1.3 Key findings - PSV

Traffic Offences

Of the 1,262 PSV checks:

- 7.3% of vehicles were committing serious offences
- 5.4% received a verbal warning

The 95% confidence interval on the serious offence rate ranged from 5.2% to 9.4%.

Tachograph and Drivers' Hours accounted for 80% of all serious offences.

Many factors were associated with serious offences. Vehicle age was the most important, followed by area of check and time of check.

Chapter 2: Introduction

2.1 Fleet Compliance Checks

Fleet Compliance Checks (FCCs) are carried out in order to determine both the level of roadworthiness across the HGV and PSV fleet (“condition”) and the overall level of HGV and PSV Operator compliance with traffic regulations (“compliance”). FCCs have been carried out since 1997. In recent years, GB and non-GB checks have been performed annually, and PSV condition and compliance checks have been performed biannually, in alternating years. For the 2013/14 PSV compliance checks, the scope of the study was limited to coaches.

There are three main reasons why this survey is funded by DfT and carried out by DVSA:

- To determine trends in non-compliance with regulations and roadworthiness, to gauge the effects of changes in legislation, and the effectiveness of DVSA’s day-to-day targeted operations;
- To provide information to help identify potential areas for targeting, so that DVSA’s work can be more focused; and
- To compare differences in condition and compliance between GB and non-GB vehicles.

DVSA randomly selected and stopped 2,712 GB HGV vehicles, 2,686 non-GB HGV vehicles and 1,262 PSVs between April 2013 and February 2014 as part of the 2013/14 FCC.

HGV results are given in Chapter 3, separately for GB and non-GB HGVs. The results chapters that follow list of the combinations of factors that were most related to vehicle condition, trailer condition and traffic offences. PSV results are given in Chapter 4.

In the results section of this report, the term ‘vehicle’ generally refers to the tractor unit or rigid vehicle only, and not the vehicle and trailer combination. In addition, any reference to the year 2013 will include any checks from the 2013/14 FCCs, i.e. including those from January to February 2014.

2.2 Methodology

A full description of the methodology used for the checks and analysis is given in Annex B. This report contains the results of the GB HGV check, the non-GB HGV check and the PSV check. In previous years, these checks were reported separately.

Each of the 16 DVSA areas were asked to check a certain number of GB and non-GB HGVs. The check sites were not specified in advance as it would have been too restrictive on operations to specify individual sites, in order to check only five vehicles at that specific site. However, for GB HGVs only the road type that vehicles should be travelling on when they were stopped was specified, and specified in the same proportion as the national split of HGV miles driven by road type. For practical reasons, road type was not specified for non-GB HGV check sites. In addition, no data exists on which roads are used by non-GB HGVs.

The process for PSVs was devised separately. Each of the 16 DVSA areas were asked to check the traffic compliance of certain number of PSVs, and were left to choose their

own check sites where they would find appropriate vehicles. Previous FCCs have found that coaches were the least compliant PSV type. The 2013/14 checks focussed solely on coaches in order to collect a larger coach sample that would enable better insight into factors linked with non-compliance.

2.3 Accuracy

Each of the headline statistics that are quoted in this report have an associated uncertainty. That uncertainty is unavoidable and arises from the random sampling techniques that were used to carry out the survey. This report expresses that uncertainty in terms of two parameters: an accuracy level, plus a corresponding confidence interval.

Confidence Intervals have been given for each of the key figures. For more details on the confidence intervals, see Annex B.2.

Wherever a difference is said to be 'significant' it means that it can be stated with 95% confidence that the difference is not due to random sampling factors (i.e. the chance of observing such a difference, where there is none, is less than one in twenty). Details about the accuracy of the results can be found in Annex B.

For GB vehicles, the mix of check sites used did not exactly match the national profile of HGV traffic by area of check or road type. Over or under sampling by area or road type could have an effect on the results, as the area or road type a check was performed on is, in many cases, associated with defect or offence rates. However, even a reasonably large change in the proportion of checks from a particular area or road type would only have had a minimal effect on the overall reported prohibition rate. For more details see Annex B.

For non-GB vehicles, road types were not specified for check sites, only the time and the weekday of the check. Fewer night checks were performed than would have been expected given the national profile. Similar to GB vehicles, even large changes to the weightings would result in very small changes to the overall non-GB prohibition rate.

In some pie charts the percentages do not appear add up to 100 per cent; this is due to rounding the figures to 1 decimal place.

2.4 Notes about data

Traffic offence categories have changed since the checks started in 1997 – for example, prohibition and ORN (Offence Rectification Notice) were introduced in 2003, and Graduated Fixed Penalty Deposits (GFPD) in 2009 (though GFPDs were usually only issued in addition to other outcomes). In addition, from 2011 the results of any further investigation were not known at the time of writing, so these cases have an offence category of RFI (Reported for Further Investigation). Therefore it was decided that a single category of "Serious Offences" should be used throughout most of this report. A direct comparison between particular years would need to consider the changes to the traffic offence categories, however broad trends in serious traffic offences across all years are valid, as are yearly comparisons since 2011.

In this report, 'serious offences' include those which result in at least one of the following:

- Report for Prosecution or Report to the Traffic Commissioner

- Report for Further Investigation
- Prohibition
- ORN (Offence Rectification Notice)
- GFPD (Graduated Fixed Penalty Deposits)
- Advisory Letter
- Impounding

Where there was an offence recorded on the paper form that did not result in a prohibition or GFPD, the outcome of that offence was not always clear. Therefore in some cases assumptions had to be made about the likely outcome.

11 dangerous goods inspection notices were recorded, and these have been treated throughout this report as if the driver received a verbal warning – i.e. not a serious offence. 7 drivers received dangerous goods prohibition notices, and these were counted as serious offences.

Since 2010, the proportion of checks resulting in a verbal warning for traffic offences has been much lower than in previous years, for both GB and non-GB checks. It is likely that the survey methodology contributed to this. Prior to 2010, the check form asked if a verbal warning had been given for each offence type, whereas since 2010 there has been a single box to record details of any offence that would not be found on DVSA's electronic system. In 2010, the form did not explicitly ask for verbal warnings to be recorded. These were asked for in the 2011 and 2012 checks, but rates have remained low.

Chapter 3: HGV Checks

This chapter covers all HGV checks, both non-GB and GB. It includes vehicle defects, trailer defects and traffic offences. It contains a GB and non-GB check comparison.

3.1 GB Vehicles

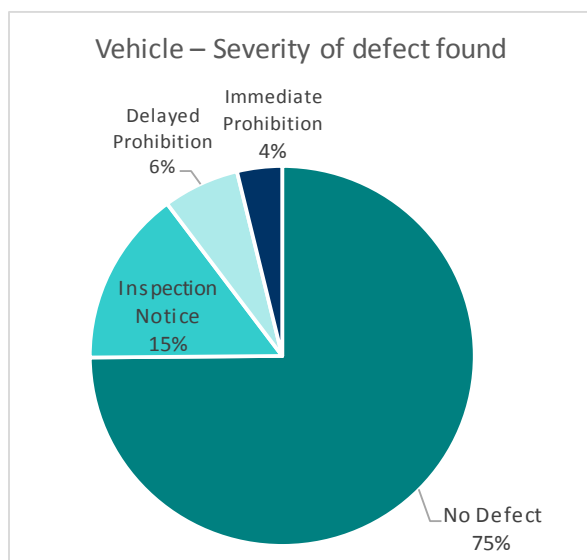
3.1.1 GB Vehicle Defects

Key findings

- 10.2% of vehicles were issued with prohibitions (3.8% immediate; 6.4% delayed)
- 14.9% warranted an inspection notice
- 74.9% had no roadworthiness defects
- The 95% confidence interval on the prohibition rate ranged from 9.0% to 11.4%
- Since FCCs began 17 years ago there has been a significant downward trend in the prohibition rate, although the rates in recent years have been very similar
- The average number of prohibitions (for vehicles with at least one prohibition) has decreased significantly over the last 17 years
- Faults with 'Brake Systems & Components' were the most common defects found, accounting for 21.2% of all prohibitions
- Several factors were associated with vehicle condition: age, road type, area, month, body type, and traffic area of operator

Overall results

Of the 2,712 GB HGVs stopped in the survey, examiners checked 2,694 for mechanical defects. In total, 10.2% of the vehicles checked were found to have prohibitable defects. Nearly three-quarters of the vehicles checked were free from roadworthiness defects. The following chart shows the severity of defects found on GB HGVs.

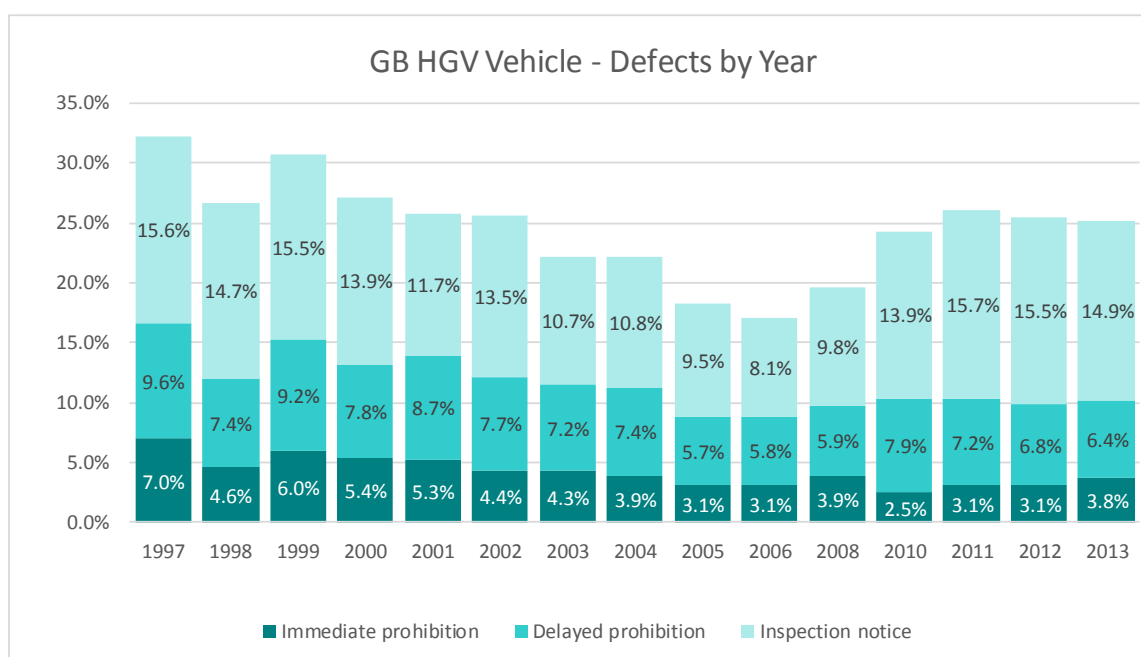


Drivers of 14 vehicles (0.6%) were issued with a Graduated Fixed Penalty Deposit (GFPD) as well as prohibitions. The GFPDs were given as follows:

Amount	Reason	Number issued
£200	Tyre tread below 1 mm	1
£120	Tyre tread below 1 mm	1
£100	Dangerous condition - load security	4
£100	Road wheel condition/security failure imminent	2
£100	Body interior dangerous condition	1
£60	Dangerous condition - load security	3
£60	Road wheel condition/security failure imminent	1
£50	View to front	1

It should be noted that the GFPD amounts increased in August 2013. For example, defects incurring a £30 penalty early in the year incurred a £50 penalty later in the year. Year on year comparisons

The chart below shows the defect rate by year.



The 2013 prohibition rate (10.2%) was similar to the rates in the previous year (9.9%).

There was a significant decreasing trend which showed a drop at an average rate of 0.4% per annum in the prohibition rate during the 17-year period the survey has been running.

Number of defects

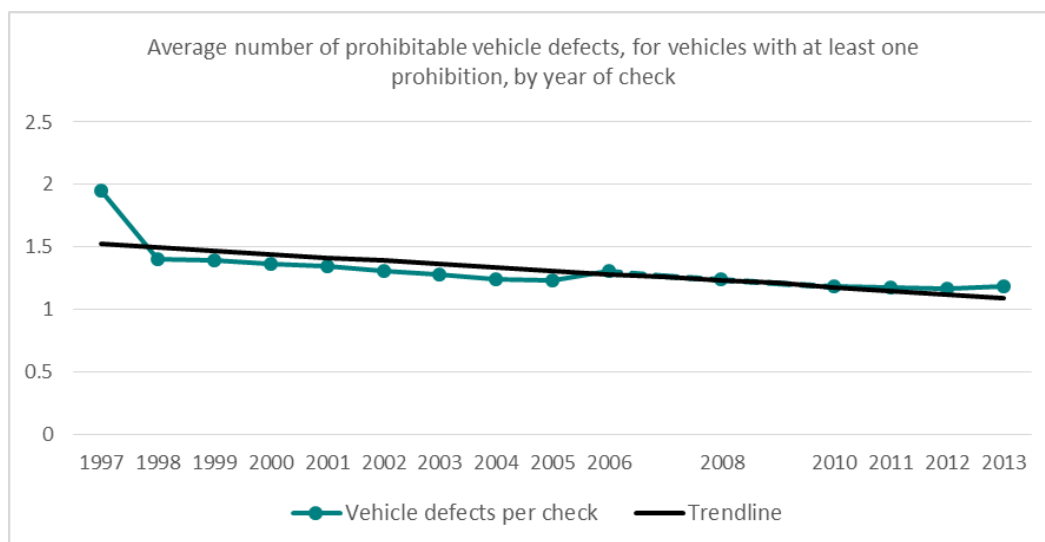
109 immediately prohibitable defects were found across the 102 vehicles with immediately prohibitable defects. In total, 325 defects (immediate or delayed) were found across the 275 vehicles with at least one prohibitable defect.

96 vehicles had one immediately prohibitable defect, five vehicles had two immediately prohibitable defects and one vehicle had three immediately prohibitable defects. Some of these vehicles also had delayed prohibitable defects.

The table below shows the count of vehicles with each different number of prohibitable defects found, in each year that the HGV FCC survey has been run. The highest number of prohibitable defects found on a single vehicle was 11 in 1997, compared with four in 2013.

Year	Number of prohibitable defects found per vehicle											Total
	1	2	3	4	5	6	7	8	9	10	11	
1997	326	232	49	52	10	13	2	4	0	1	2	691 (out of 4221 checks)
1998	287	73	33	6	0	1						400 (out of 3338 checks)
1999	365	90	34	10	1	1						501 (out of 3292 checks)
2000	451	96	34	9	4	1	0	1				596 (out of 4516 checks)
2001	398	72	20	9	4	0	1	1	1			506 (out of 3613 checks)
2002	324	57	16	9	2							408 (out of 3383 checks)
2003	367	75	12	8	2							464 (out of 4030 checks)
2004	422	75	16	3	1	0	1					518 (out of 4594 checks)
2005	308	49	9	4	2							372 (out of 4226 checks)
2006	245	47	11	4	2	1						310 (out of 3489 checks)
2008	307	44	12	3	1	1						368 (out of 3773 checks)
2010	318	46	9	1								374 (out of 3609 checks)
2011	215	29	8									252 (out of 2445 checks)
2012	221	34	4									259 (out of 2621 checks)
2013	236	30	7	2								275 (out of 2694 checks)

The chart below shows the average number of vehicle defects, where a defect has been detected, by year of the HGV FCC check. The highest average number of defects was in 1997 (1.96) and the lowest was 2012 (1.16). There was a significant downward trend, with an average drop of 0.03 (± 0.02 at the 95% confidence level) per year.



Types of defects

Annex C contains a full list of the categories of prohibitable defects found on vehicles. The categories with the highest number of prohibitions (immediate and delayed) were:

- Brake Systems and Components (69 prohibitions or 21.2% of the total);
- Condition of Tyres (57 or 17.5%);
- Direction Indicators and Hazard Warning Lamps (33 or 10.2%); and

The most common defect categories for immediate prohibitions were:

- Direction Indicators and Hazard Warning Lamps (33 prohibitions or 30.3% of all immediate prohibitions);
- Security of Body (20 or 18.3%);
- Lamps (13 or 11.9%);
- Condition of Tyres (13 or 11.9%)

The types of defect found were broadly similar in 2013 and 2012, except for the immediate prohibitions. In 2012, there were only 4 immediate prohibitions (4.9% of all immediate prohibitions) for Security of Body (this increase is likely to be linked to a change in load security policy). Also, only 13.4% of immediate prohibitions were for Direction Indicators and Hazard Warning Lamps in 2012.

The proportion of immediate prohibitions compared with all prohibitions issued increased slightly from 2012 to 2013 (34% were immediate in 2013, compared with 27% in 2012).

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that were associated with the level of vehicle prohibitions. The significant factors were: age, road type, area, month, body type, and traffic area of operator. The list below shows the significant variables associated with the level of prohibitions, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check.

- Age (higher prohibition rate for older vehicles)
- Rural minor roads (higher prohibition rate for vehicles checked on this road type)
- Area 6 – Merseyside, Cheshire & North Wales (lower prohibition rate for vehicles checked in this area)
- April (higher prohibition rate for vehicles checked in this month)
- Box (lower prohibition rate for vehicles of this body type)
- Refrigerated (lower prohibition rate for vehicles of this body type)
- Traffic area of operator – West Midland (lower prohibition rate for vehicles whose operator was registered in this traffic area)
- Rural primary roads (lower prohibition rate for vehicles check on this road type)
- Area 14 – South East (higher prohibition rate for vehicles checked in this area)
- Area 9 – East Anglia, Lincolnshire & Cambridgeshire (higher prohibition rate for vehicles checked in this area).

Annex D gives charts showing the prohibition rates for each of the variables.

3.1.2 GB Trailer Defects

Key findings

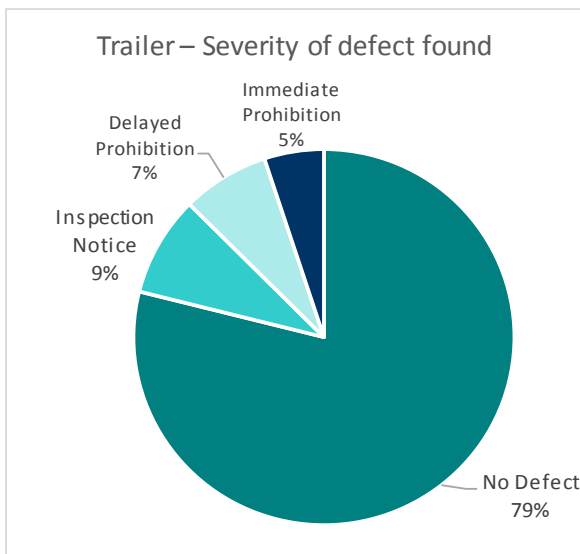
- 53.6% of GB vehicles were towing a trailer
- 12.5% of trailers were issued with prohibitions (5.1% immediate, 7.4% delayed)
- 8.6% warranted an inspection notice
- 78.9% had no roadworthiness defects
- The 95% confidence interval on the prohibition rate ranged from 10.7% to 14.3%
- The prohibition rates in most years have been similar
- Faults with 'Brake Systems & Components' were the most common defects, accounting for 31.2% of all prohibitions
- Several factors were associated with trailer condition: body type, age of the towing vehicle, and day of check

Overall results

1,453 trailers were being pulled by the 2,712 GB HGV vehicles stopped in the survey (53.6%). Of these, examiners checked 1,441 for mechanical defects. In total, 12.5% of the trailers checked were found to have prohibitable defects³. Nearly 80% of the trailers checked were free from roadworthiness defects.

³ After the analysis was completed, it was found that one trailer had been wrongly classified as having a prohibition. If this was removed, the prohibition rate would drop to 12.4%

The chart below shows the severity of defects found on GB HGV trailers.

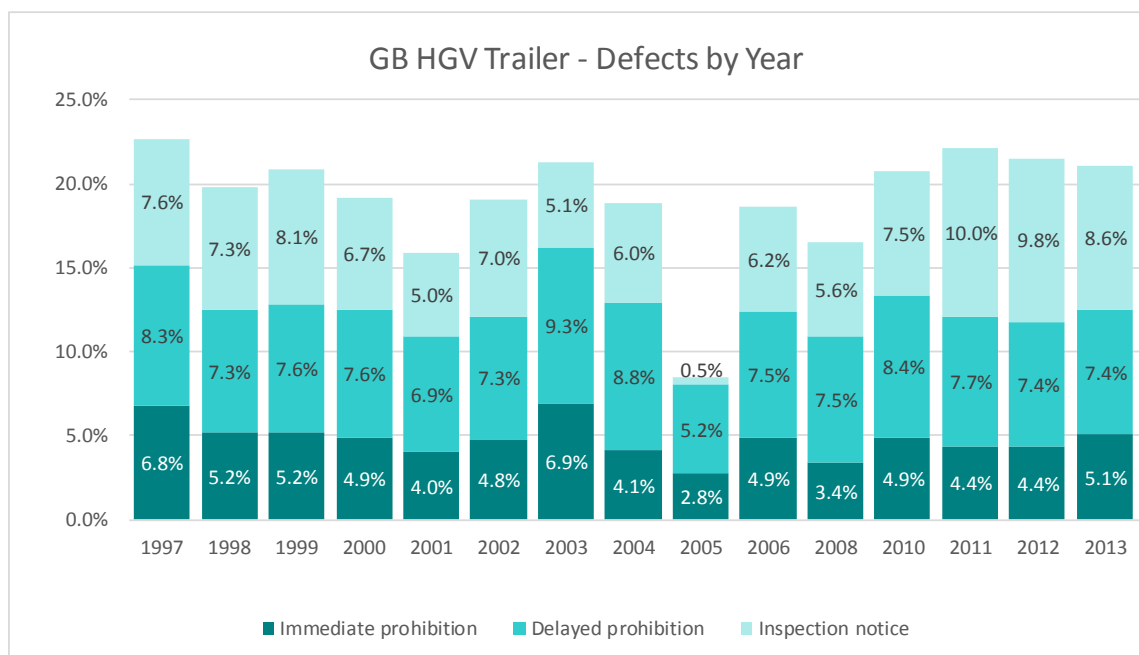


Eight trailers (0.6%) had a Graduated Fixed Penalty Deposit (GFPD) as well as prohibitions. The GFPDs were given as follows:

Amount	Reason	Number issued
£100	Dangerous condition - load security	2
£100	Braking system defective	1
£60	Dangerous condition - load security	2
£60	Braking system defective	1
£50	Defective / missing / obscured rear lights	1
£30	Defective / missing / obscured direction indicators	1

Year on year comparisons

The chart below shows the trailer defect rate by year of check.



The prohibition rate in 2013 (12.5%) was similar to that in the previous year (11.8%).

There was a significant decreasing trend which showed a drop at an average rate of 0.1% per annum in the proportion of vehicles being issued with prohibitions during the 17-year period the survey has been running.

Number of defects

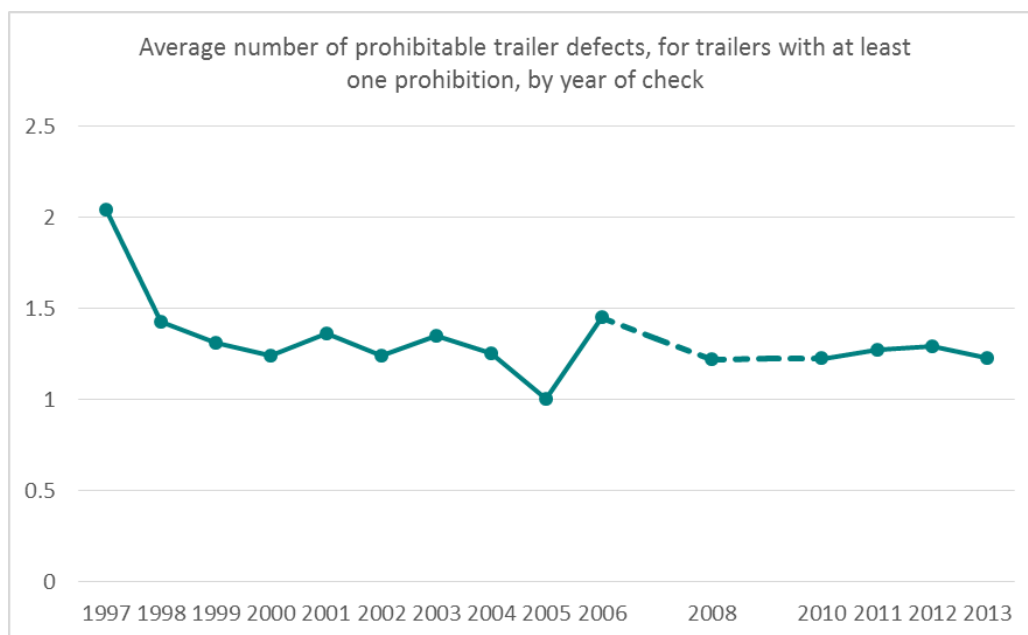
In total, 221 defects (immediate or delayed) were found across the 180 trailers with at least one prohibitable defect. 83 immediately prohibitable defects were found across the 73 trailers with immediately prohibitable defects.

66 trailers had one immediately prohibitable defect, five had two immediately prohibitable defects, one had three immediately prohibitable defects, and one had four immediately prohibitable defects. These trailers may also have had delayed prohibitable defects.

The table below shows the count of trailers with different numbers of defects found, in each year that the HGV FCC survey has been run. The highest number of defects found on a single trailer was 20 in 1997, compared with four in 2013.

Year	Number of prohibitable defects found per trailer												Total
	1	2	3	4	5	6	7	8	9	10	13	20	
1997	128	92	22	23	3	2	1	2	0	1	1	1	276 (out of 1602 checks)
1998	124	46	8	1	2	1							182 (out of 1066 checks)
1999	142	27	7	5									181 (out of 1418 checks)
2000	176	33	7	2									218 (out of 1748 checks)
2001	128	26	6	3	2	1							166 (out of 1525 checks)
2002	135	24	5	2									166 (out of 1365 checks)
2003	197	41	13	5	1	1							258 (out of 1584 checks)
2004	202	30	8	1	0	1	0	0	1				243 (out of 1891 checks)
2005	127	1											128 (out of 1601 checks)
2006	129	32	10	3	0	1	1	0	1				177 (out of 1430 checks)
2008	155	24	4	3									186 (out of 1701 checks)
2010	184	36	6	1									227 (out of 1712 checks)
2011	137	22	10	0	0	1							170 (out of 1397 checks)
2012	123	31	5	2									161 (out of 1370 checks)
2013	150	23	3	4									180 (out of 1441 checks)

The chart below shows the average number of trailer defects, where a defect has been detected, by year of the HGV FCC check. The highest average number of defects was in 1997 (2.04) and the lowest was in 2005 (1.01). In 2013 there was an average of 1.23 defects per defective trailer. There was no significant trend across the period since 1997.



Types of defects

Annex B contains a full list of the categories of prohibitable defects found on trailers. The categories with the most prohibitions (immediate and delayed) were similar to that seen in the vehicle checks:

- Brake Systems and Components (69 prohibitions or 31.2% of the total);
- Suspension (26 or 11.8%)
- Service Brake Operation (23 or 10.4%); and
- Condition of Tyres (22 or 10.0%);

The most common defect categories for immediate trailer prohibitions were:

- Lamps (15 prohibitions or 18.1% of all immediate prohibitions);
- Brake Systems and Components (14 or 16.9%);
- Direction Indicators and Hazard Warning Lamps (12 or 14.5%); and
- Service Brake Performance (11 or 13.3%); and
- Security of Body (10 or 12.1%).

The types of defects were similar in 2013 and 2012. As with vehicles, there has been an increase in the proportion of immediate prohibitions for Security of Body (only 2.6% of immediate prohibitions were for Security of Body in 2012). This increase is probably largely due to a recent change in load security policy.

The proportion of immediate prohibitions compared with all prohibitions issued was very similar (37.6% were immediate in 2013, compared with 37.3% in 2012).

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that affected the level of trailer prohibitions. The significant factors were body type, age of the vehicle towing the trailer, and day of check. The list below shows the significant variables that affected the level of prohibitions, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check:

- Box (lower prohibition rate for trailers towed by vehicles of this body type)
- Curtain sider (lower prohibition rate for trailers towed by vehicles of this body type)
- Age (higher prohibition rate for trailers towed by older vehicles)
- Monday (lower prohibition rate for trailers checked on this day).

Annex D gives the trailer prohibition rate by each factor.

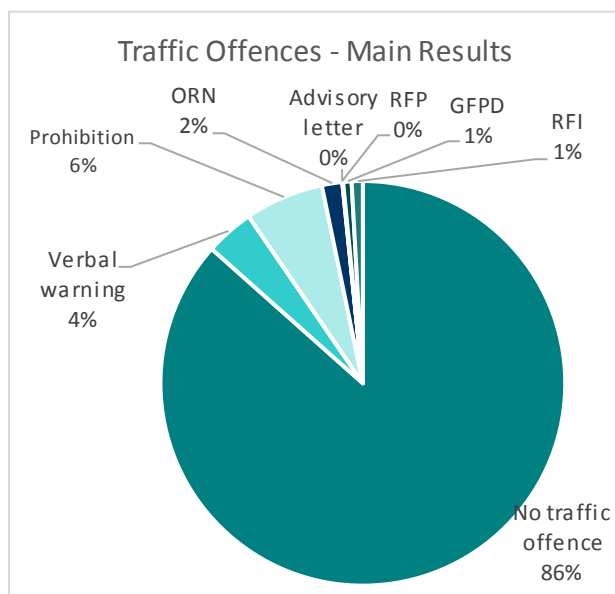
3.1.3 GB Traffic Offences

Key findings

- 9.5% of drivers/operators were committing serious traffic offences
- A further 3.9% warranted a verbal warning
- 86.6% of checks found no traffic offences
- The 95% confidence interval on the serious offence rate ranged from 8.4% to 10.7%
- There has been a significant increasing trend in the serious offence rate since FCCs began in 1997
- Drivers' hours and tachograph offences were the most common offences, accounting for 61% of all offences
- Several factors were associated with the level of serious traffic offences: weight, age of vehicle, number of trailer axles, area, and day of check.

Overall results

Of the 2,712 GB HGVs stopped in the survey, examiners checked 2,703 for traffic offences. The majority of these drivers/operators (86.6%) were not found to be committing traffic offences. The chart below shows the outcome of all GB HGV traffic offence checks.



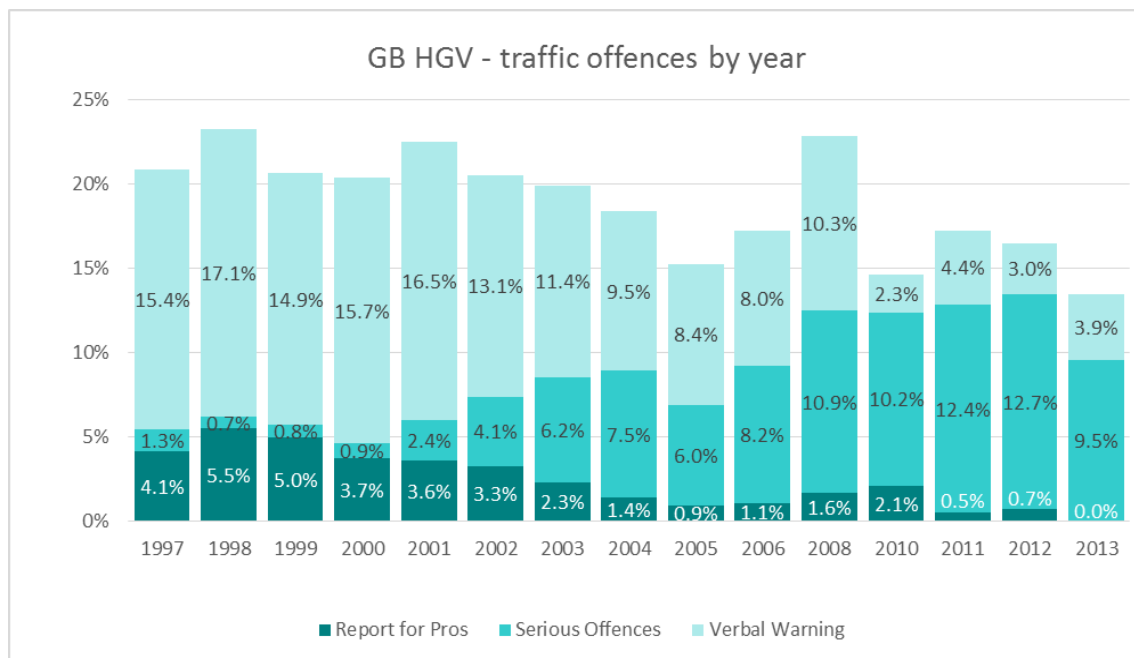
GFPDs were issued to a total of 86 drivers. Of these, two were issued with two GFPDs. Altogether, 88 separate GFPDs were issued and a total of £14,190 was collected. The majority of GFPDs were issued for drivers' hours offences:

Offence Type	Number of GFPDs
Drivers' Hours	37 issued
Overload	28 issued

Tachograph	18 issued
Other	5 issued

Year on year comparisons

The chart below shows the traffic offence rate by year of check.



The proportions of serious offences committed (including RFP) in 2013 was significantly lower than the previous year (9.5% compared with 13.5%). There was a statistically significant increasing trend, suggesting a rise at an average rate of 0.5% per annum in the number of serious offences (including RFP) during the 17 years from 1997 to 2013.

Number of offences

283 serious offences were found across the 258 checks with serious offences. In total, 406 offences (including verbal warnings) were found across the 363 checks with at least one offence.

The majority of checks with serious offences had only one serious offence. Twenty five drivers had two serious offences. These drivers may also have been given a verbal warning for other offences.

Year	Number of serious offences found per check					Total
	1	2	3	4	5	
1997	191	31	5	2		229 (out of 4221 checks)
1998	180	30	6	1		217(out of 3326 checks)
1999	156	27	4	1		188 (out of 3292 checks)
2000	170	31	6	2		209 (out of 4516 checks)
2001	180	31	5	1		217 (out of 3614 checks)
2002	224	26				250 (out of 3383 checks)
2003	311	30	3			344 (out of 4030 checks)

2004	377	24	7	0	1	409 (out of 4594 checks)
2005	267	20	2	0	2	291 (out of 4226 checks)
2006	292	26	4			322 (out of 3489 checks)
2008	410	53	7	2		472 (out of 3773 checks)
2010	387	37	1			425 (out of 3440 checks)
2011	266	46	3	1		316 (out of 2457 checks)
2012	301	51	2	1		355 (out of 2638 checks)
2013	233	25				258 (out of 2703 checks)

Types of offences

Annex C contains a full list of the categories of offence found. 17 offences were marked as an offence without showing what the offence was for – 15 of these resulted in verbal warnings, two were serious offences.

The most common offence categories were drivers' hours (31% of all offences) and tachograph (30%). Other offence categories were: other, overloading, plating & testing, driver's licence, operator's licence and other operator offences. There were no Vehicle Excise Duty or speed limiter offences.

There were 47 "other" offences. These included:

- No registration plate (10)
- Dangerous goods inspection notice (8)
- No trailer test (7)
- No ministry plate (4)

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that were associated with the level of serious traffic offences. The significant factors were: weight, age, number of trailer axles, area, and day of check. The list below shows the significant variables that affected the level of serious traffic offences, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check.

- Weight (lower offence rate for heavier vehicles)
- Age (higher offence rate for older vehicles)
- Two trailer axles (lower offence rate for vehicles with a trailer with two axles than all other vehicles)
- Area 1 – Scotland East (lower offence rate for vehicles checked in this area)
- Friday (higher offence rate for vehicles checked on this day)
- Area 15 – Metropolitan (higher offence rate for vehicles checked in this area)
- Area 3 – Cumbria, Lancashire, Tyne & Tees (higher offence rate for vehicles checked in this area)

Annex D contains charts showing the serious traffic offence rates for all variables.

3.2 Non-GB Vehicles

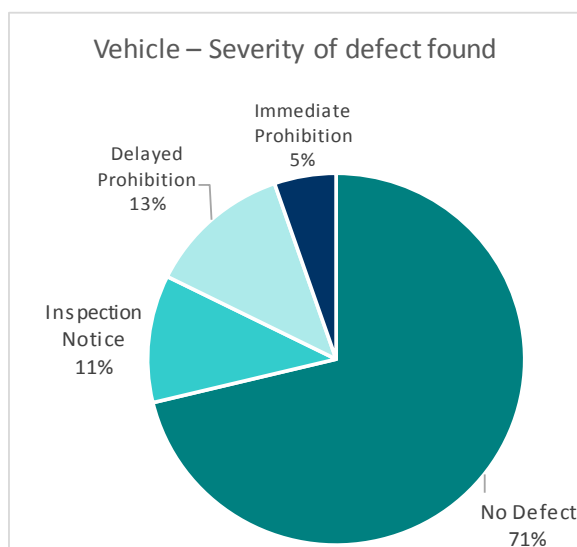
3.2.1 Non-GB Vehicle Defects

Key findings

- 17.7% of vehicles were issued with prohibitions (5.3% immediate, 12.4% delayed)
- 11.1% warranted an inspection notice
- 71.2% had no roadworthiness defects
- The 95% confidence interval on the prohibition rate ranged from 16.1% to 19.2%
- The prohibition rate has varied greatly over the last six surveys
- Faults with 'Brake Systems & Components' were the most common defects found, accounting for 19.0% of all prohibitions
- Several factors affect vehicle condition: age, area, country of origin and time period

Overall results

Of the 2,686 non-GB HGVs stopped in the survey, examiners checked 2,660 for mechanical defects. In total, 17.7% of the vehicles checked were found to have prohibitable defects. 71.2% of the vehicles checked were free from roadworthiness defects. The following chart shows the severity of defects found on non-GB HGVs.



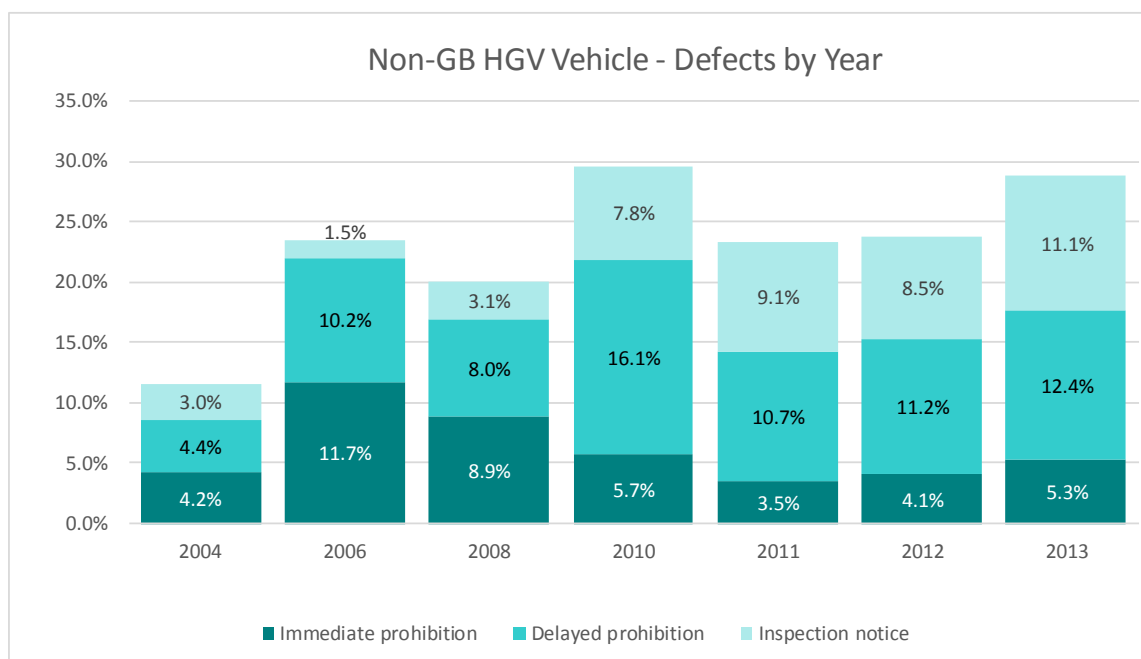
Drivers of 74 vehicles (2.8%) were issued with a Graduated Fixed Penalty Deposit (GFPD) as well as prohibitions. Five drivers received 2 GFPDs. The GFPDs were given as follows:

Amount	Reason	Number issued
£200	Tyre tread below 1 mm	3
£120	Tyre tread below 1 mm	2
£100	Braking system defective	9

£100	Road wheel condition/security failure imminent	1
£100	Suspension (not steering) defective	1
£100	Tyre condition/maintenance/sub 1.6mm	1
£100	Light or lamp insecure detachment imminent	1
£100	Defective steering. regulation 29 c&u regs 1986	1
£60	Braking system defective	9
£60	Suspension (not steering) defective	2
£60	Defective steering. regulation 29 c&u regs 1986	2
£60	Additional braking system insecure	1
£60	Tyre condition/maintenance/sub 1.6mm	1
£50	View to front	11
£50	Defective / missing / obscured direction indicators	8
£50	Defective / missing / obscured headlights.	3
£50	Exhaust system faulty	1
£50	Defective / missing / obscured brake lights.	1
£50	No wipers/washers when required	1
£50	Fuel filler cap missing.	1
£30	Defective / missing / obscured direction indicators	10
£30	View to front	5
£30	Defective / missing / obscured headlights.	1
£30	Defective / missing / obscured brake lights.	1
£30	Defective / missing / obscured rear lights	1
£30	Rear view mirror missing/ineffective	1

It should be noted that the GFPD amounts increased in August 2013. For example, defects incurring a £30 penalty early in the year incurred a £50 penalty later in the year. Year on year comparisons

The chart below shows the defect rate by year.



The prohibition rate has varied greatly over the last seven surveys and no clear trend was found. The 2013 prohibition rate (17.7%) was significantly higher than the rate in 2012 (15.3%).

Number of defects

161 immediately prohibitable defects were found across the 141 vehicles with immediately prohibitable defects. In total, 585 defects (immediate or delayed) were found across the 470 vehicles with at least one prohibitable defect.

123 vehicles had one immediately prohibitable defect, 16 vehicles had two immediately prohibitable defects and two vehicles had three immediately prohibitable defects. Some of these vehicles also had delayed prohibitable defects.

The table below shows the number of vehicles with each different number of prohibitable defects found, in each year that the non-GB HGV FCC survey has been run. The highest number of prohibitable defects found on a single vehicle was ten, in this year’s survey.

Year	Number of prohibitable defects found per vehicle										Total
	1	2	3	4	5	6	7	8	9	10	
2004	156	17									173 (out of 2015 checks)
2006	499	80	24	6	1	2					612 (out of 2784 checks)
2008	402	49	11	6	0	1					469 (out of 2778 checks)
2010	487	81	15	4	2	1	1	1			592 (out of 2715 checks)
2011	286	43	12	2							343 (out of 2410 checks)
2012	313	65	15	1							394 (out of 2581 checks)
2013	387	63	15	3	1	0	0	0	0	1	470 (out of 2660 checks)

There was an average of 1.24 prohibitable defects per defective vehicle in 2013. There was no significant trend in the average number of prohibitable defects, where a defect had been detected, by year of the check. The highest average number of defects was in 2006 (1.26) and the lowest was in 2004 (1.10).

Types of defects

Annex C contains a full list of the categories of prohibitable defects found on vehicles. The categories with the most prohibitions (immediate and delayed) were:

- Brake Systems and Components (111 prohibitions or 19.0% of the total);
- Spray Suppression, Wings and Wheel Arches (65 or 11.1%);
- Service Brake Operation (60 or 10.3%); and
- Direction Indicators and Hazard Warning Lamps (58 or 9.9%).

The most common defect categories for immediate prohibitions were:

- Direction Indicators and Hazard Warning Lamps (58 prohibitions or 36.0% of all immediate prohibitions);
- Lamps (39 or 24.2%);
- Glass and View of the Road (18 or 11.2%).

The proportion of prohibitions that were immediate was similar to the proportion in 2012 (28% were immediate in 2013, compared with 24% in 2012). The types of defects found were also similar in 2013 and 2012.

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that affected the level of vehicle prohibitions. The significant factors were: age, area, country of origin, and time period. The list below shows the significant variables associated with the level of prohibitions, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check.

- Age (higher prohibition rate for older vehicles)
- Area 15 – Metropolitan (higher prohibition rate for vehicles checked in this area)
- Germany (lower prohibition rate for vehicles from this country)
- Area 5 – Manchester, South Yorkshire & Nottinghamshire (lower prohibition rate for vehicles checked in this area)
- Netherlands (lower prohibition rate for vehicles from this country)
- Area 2 – Scotland West (lower prohibition rate for vehicles checked in this area)
- Night – 10pm-6am (higher prohibition rate for vehicles checked during this time period)
- Area 9 – East Anglia, Lincolnshire & Cambridgeshire (higher prohibition rate for vehicles checked in this area)

The charts in Annex D show the vehicle prohibition rate for all significant variables.

3.2.2 Non-GB Trailer Defects

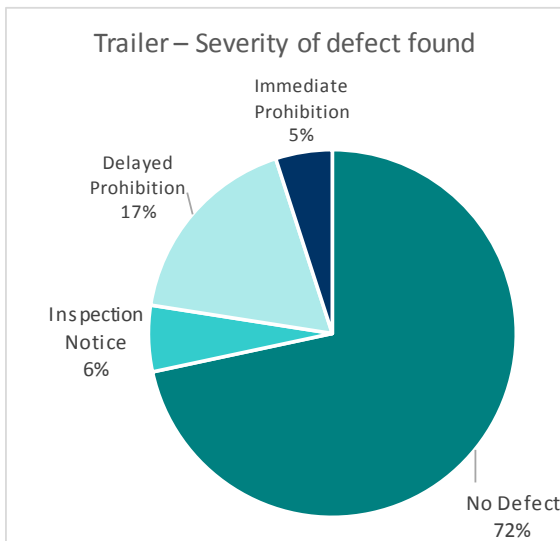
Key findings

- 98.1% of vehicles were towing a trailer
- 22.5% of trailers were issued with prohibitions (5.0% immediate, 17.5% delayed)
- 5.8% warranted an inspection notice
- 71.6% had no roadworthiness defects
- The 95% confidence interval on the prohibition rate ranged from 20.8% to 24.3%
- Faults with 'Brake Systems & Components' were the most common defects, accounting for 27.0% of all prohibitions
- Several factors were associated with trailer condition: age, area, and month.

Overall results

2,635 trailers were being pulled by the 2,686 non-GB HGV vehicles stopped in the survey. Of these, examiners checked 2,610 for mechanical defects. In total, 22.5% of the trailers checked were found to have prohibitable defects. 71.6% of the trailers checked

were free from roadworthiness defects. The chart below shows the severity of defects found on non-GB HGV trailers.

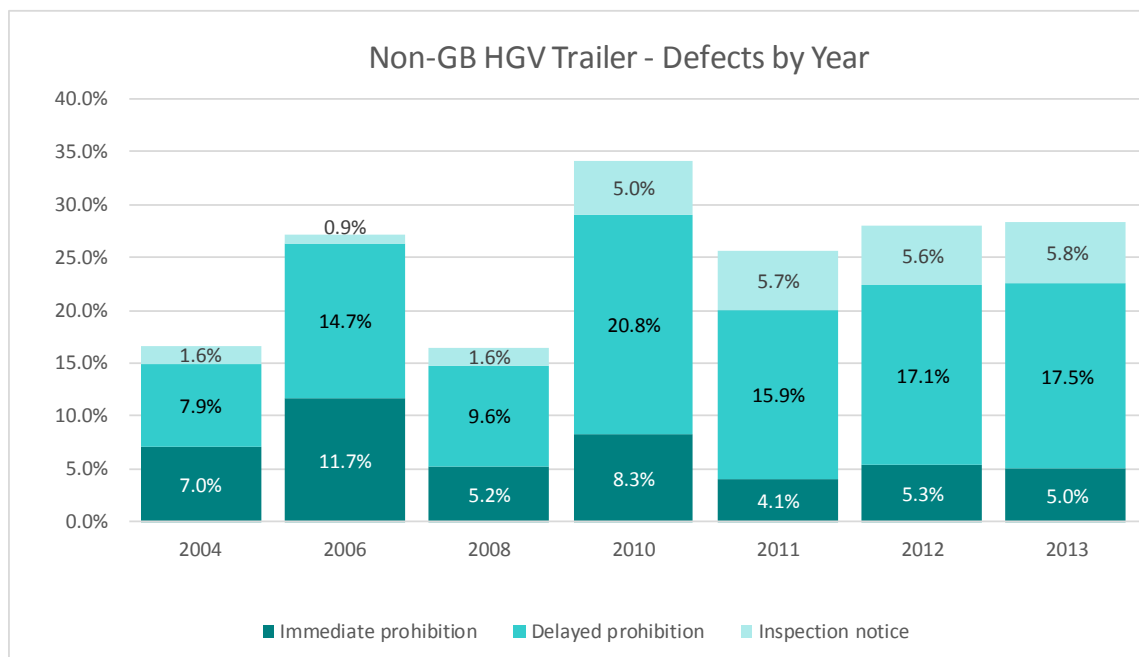


65 trailers (2.5%) had a Graduated Fixed Penalty Deposit (GFPD) as well as prohibitions. Three trailers had 2 GFPDs. The GFPDs were given as follows:

Amount	Reason	Number issued
£200	Tyre tread below 1 mm	1
£120	Tyre tread below 1 mm	1
£100	Braking system defective	21
£100	Road wheel condition/security failure imminent	4
£100	Dangerous condition - load security	4
£100	Tyre condition/maintenance/sub 1.6mm	2
£100	Body exterior damaged/protruding	1
£100	Braking system warning device missing	1
£60	Braking system defective	19
£60	Road wheel condition/security failure imminent	3
£60	Tyre condition/maintenance/sub 1.6mm	3
£60	Body exterior damaged/protruding	1
£60	Dangerous condition - load security	1
£60	Suspension (not steering) defective	1
£50	Defective / missing / obscured brake lights.	2
£50	Defective / missing / obscured direction indicators	1
£30	Defective / missing / obscured brake lights.	2

Year on year comparison

The chart below shows the trailer defect rate by year of check.



The prohibition rate has varied greatly over the last seven surveys and no clear trend was found.

The 2013 prohibition rate (22.5%) was similar to the 2012 rate (22.4%).

Number of defects

150 immediately prohibitable defects were found across 130 trailers with immediately prohibitable defects. In total, 804 defects (resulting in immediate or delayed prohibitions) were found across the 588 trailers with at least one prohibitable defect.

The table below shows the number of trailers with different numbers of defects found, in each year that the non-GB HGV FCC survey has been run. The highest number of defects found on a single trailer was 16 in 2006, compared with six in 2013.

Year	Number of prohibitable defects found per trailer											Total
	1	2	3	4	5	6	7	8	9	13	16	
2004	238	41	6									285 (out of 1904 checks)
2006	534	109	37	15	7	0	3	1	1	1	1	709 (out of 2693 checks)
2008	291	85	13	4	5							398 (out of 2691 checks)
2010	574	132	32	13	4	1	2					758 (out of 2605 checks)
2011	371	71	15	7	1	0	0	0	1			466 (out of 2338 checks)
2012	420	105	23	10	3							561 (out of 2502 checks)
2013	433	115	24	12	3	1						588 (out of 2610 checks)

There was an average of 1.37 prohibitable defects per defective vehicle in 2013. There was no significant trend in the average number of prohibitable defects, where a defect

had been detected, by year of the non-GB HGV FCC check. The highest average number of defects was in 2006 (1.45) and the lowest was in 2004 (1.19).

Types of defects

Annex C contains a full list of the categories of prohibitable defects found on trailers. The categories with the most total prohibitions (immediate and delayed) were:

- Brake Systems and Components (217 prohibitions or 27.0% of the total);
- Suspension (161 or 20.0%);
- Condition of Tyres (100 or 12.4%); and
- Spray Suppression, Wings and Wheel Arches (83 or 10.3%).

The most common defect categories for immediate prohibitions were:

- Brake System and Components (26 prohibitions or 17.3% of all immediate prohibitions);
- Direction Indicators and Hazard Warning Lamps (20 or 13.3%); and
- Trailer parking and Emergency Brake and Air Line connections (16 or 10.7%).

A similar proportion of prohibitions were issued with immediate effect in 2013 (19%) and 2012 (21%). The types of defects found were similar in 2013 and 2012.

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that affected the level of trailer prohibitions. The significant factors were: age, area, and month. The list below shows the significant variables that affected the level of prohibitions, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check.

- Age (higher prohibition rate for trailers towed by older vehicles)
- Area 12 – Wessex (higher prohibition rate for trailers checked in this area)
- Area 9 – East Anglia, Lincolnshire & Cambridgeshire (higher prohibition rate for trailers checked in this area)
- May (higher prohibition rate for trailers checked in this month)
- November (lower prohibition rate for trailers checked in this month)

The charts in Annex D show the trailer prohibition rate for all factors

3.2.3 Non-GB Traffic Offences

Key findings

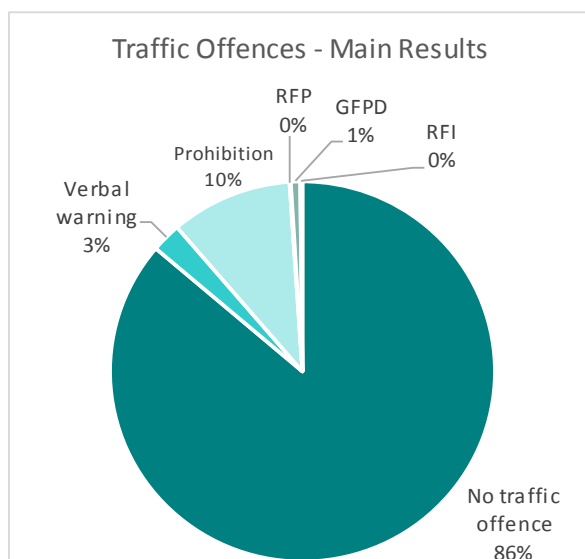
- 11.3% of drivers/operators were committing serious traffic offences
- 2.5% warranted a verbal warning
- 86.2% of checks found no traffic offences
- The 95% confidence interval on the serious offence rate ranged from 10.0% of 12.6%
- There was a significant decreasing trend in the rate of serious offences over the last six checks
- Drivers' hours, tachograph and overloading were the most common offences, accounting for 85% of all offences
- Several factors were associated with the level of serious traffic offences: area, age, body type, time period, country and direction of travel.

Overall results

Of the 2,686 non-GB HGVs stopped in the survey, examiners checked 2,682 for traffic offences. The majority of these drivers/operators (86.2%) were not found to be committing traffic offences.

The outcome of some offences was not always as clear in the 2010, 2011, 2012 and 2013 checks as in previous years' checks, as examiners were asked to record any other offences not available from the system in a single free text box, rather than having to tick a yes/no box for every possible traffic offence. Therefore, a judgement had to be made about the likely outcome in some cases. For more information see the introduction chapter.

The chart below shows the outcome of all non-GB HGV traffic offence checks.

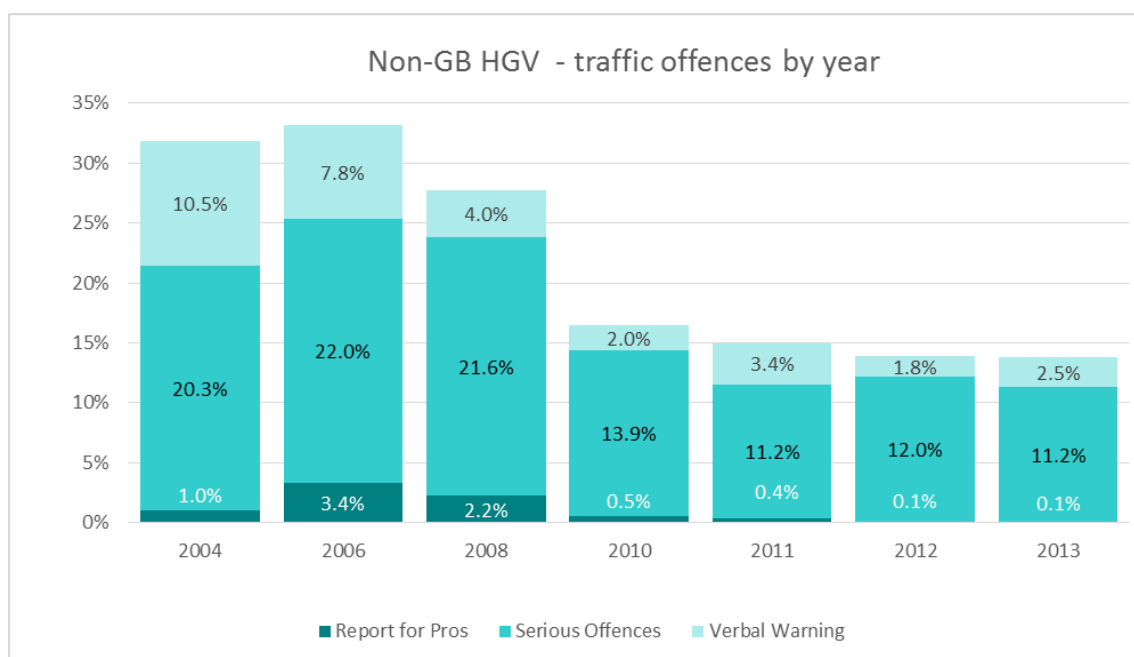


GFPDs were issued to a total of 226 drivers. Of these, 19 were issued with two GFPDs and two received three GFPDs. Altogether, 249 separate GFPDs were issued and a total of £43,910 was collected. The majority of GFPDs were issued for drivers' hours and overloading, as shown in the table below.

Offence Type	Number of GFPDs
Hours	89 issued
Overload	83 issued
Tachograph	62 issued
Other	15 issued

Year on year comparisons

The chart below shows the traffic offence rate by year of check.



Overall the proportions of verbal warnings and serious offences (including RFP) have been decreasing, with a significant trend suggesting an average decrease of 1.7% for serious offences (including RFP) per annum during the years 1997-2013.

The serious offence rate in 2013 (11.3%) was similar to 2012 (12.1%).

Number of offences

358 serious offences were found across the 303 checks with serious offences. In total, 430 offences (including verbal warnings) were found across the 370 checks with at least one offence.

As with GB HGV traffic offences, the majority of checks with serious offences had only one serious offence, as shown in the table below. One check revealed serious traffic offences in four categories (tachograph, drivers' hours, operator's licence and other – false entry).

Year	Number of serious offences found per check						Total
	1	2	3	4	5	6	
2004	387	40	4				431 (out of 2015 checks)
2006	648	86	6	1			741 (out of 2923 checks)
2008	600	56	5				661 (out of 2778 checks)
2010	242	134	32	3			411 (out of 2852 checks)
2011	253	24	7	2			286 (out of 2480 checks)
2012	234	67	15	0	0	1	317 (out of 2611 checks)
2013	255	42	5	1			303 (out of 2682 checks)

Types of offences

Annex C contains a full list of the categories of offence found. 15 offences were marked as offence without showing what the offence was for – one was for a serious offence and the rest were verbal warnings.

The most common offence categories were drivers' hours (33% of all offences), tachograph (27%), and overloading (25%). Other offence categories were: other, operator's licence, driver's licence, and plating/testing offences. There were no VED, speed limiter, or other operator offences.

There were 28 "other" offences, including:

- Failure to comply (10)
- Dangerous goods prohibition notice (5)

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that affected the level of serious traffic offences. The significant factors were: area, age, body type, time period, country, and direction of travel. The list below shows the significant variables that affected the level of serious traffic offences, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check.

- Area 14 – South East (lower offence rate for vehicles checked in this area)
- Age (higher offence rate for older vehicles)
- Refrigerated (higher offence rate for vehicles of this body type)
- Night – 10pm-6am (higher offence rate for vehicles checked during this time period)
- Poland (lower offence rate for vehicles from this country)
- Tanker (higher offence rate for vehicles of this body type)
- Italy (higher offence rate for vehicles from this country)
- Car transporter (higher offence rate for vehicles of this body type)
- Slovakia (lower offence rate for vehicles from this country)
- Export (lower offence rate for vehicles travelling in this direction)
- Area 16 – Hertfordshire, Essex & Bedfordshire (lower offence rate for vehicles checked in this area)

The charts in Annex D show the serious traffic offence rate for all variables.

3.3 Comparison of GB and non-GB HGVs

This year, each of three compliance measures (vehicle prohibitions, trailer prohibitions and serious traffic offences), were significantly lower in the GB check than in the non-GB check. The table below gives the comparative rates for the last four years. For year-on-year analysis, please refer to the relevant sections earlier in this chapter.

Vehicle checks

	GB Prohibitions	Non-GB prohibitions
2010	10.4%	21.8%
2011	10.3%	14.2%
2012	9.9%	15.3%
2013	10.2%	17.7%

Trailer checks

	GB Prohibitions	Non-GB prohibitions
2010	13.3%	29.1%
2011	12.2%	19.9%
2012	11.8%	22.4%
2013	12.5%	22.5%

Traffic checks

	GB Serious Offences	Non-GB Serious Offences
2010	12.4%	14.4%
2011	12.9%	11.5%
2012	13.5%	12.1%
2013	9.5%	11.3%

Chapter 4: PSV Compliance Checks

This chapter covers all PSV compliance checks. It describes the level of compliance and common areas of non-compliance, and analyses the statistically significant factors relating to compliance.

4.1 PSV results

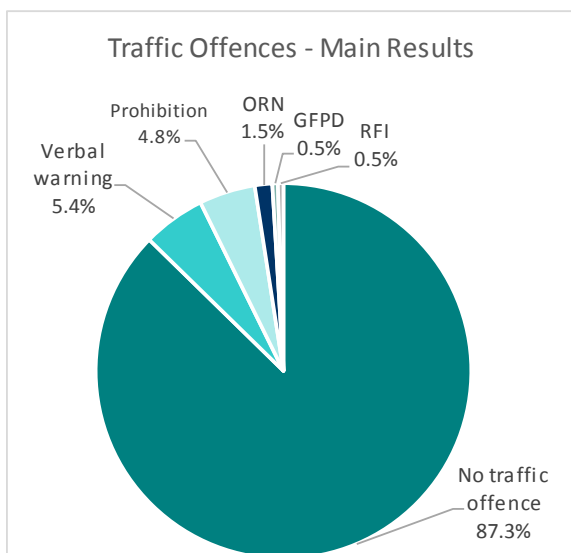
Key findings

- Of the 1,262 checks on PSVs:
 - 7.3% found a serious offence
 - 5.4% resulted in a verbal warning
 - 87.3% found no traffic offence
- 4.8% of vehicles/drivers were issued with prohibitions
- Several factors were associated with serious offences: vehicle age, area and time period of check

Overall results

Of the 1,262 checks on PSVs, 92 (7.3%) found serious offences, and a further 68 (5.4%) resulted in drivers being given a verbal warning.

Of the 92 checks with serious offences, 61 (4.8%) resulted in vehicles issued with prohibitions, six (0.5%) resulted in vehicles/drivers being reported for investigation (RFI); 19 (1.5%) an Offence Rectification Notice (ORN), and six (0.5%) with a Graduated Fixed Penalty Deposit (GFPD).



In total 101 serious offences were found⁴. Nearly half of all serious offences were drivers' hours offences (47), a third were tachograph offences (34). The remaining offences were 15 "other" offences, four other operator licensing offences and one driver licence offence.

⁴ There were 8 checks that found multiple serious offences.

Drivers of 24 vehicles (0.6%) issued with prohibitions were also issued with a GFPD. There were 30 GFPDs issued in total.

Amount	Offence Type	Number issued
£300	Drivers' hours	6
£200	Drivers' hours	10
£120	Drivers' hours	3
£100	'Other' offence	1
£100	Tachograph	1
£60	Drivers' hours	1
£50	Drivers' hours	1
£50	'Other' offence	1
£50	Tachograph	1
£30	Tachograph	2
£30	Drivers' hours	3

Of the 74 verbal warnings issued, the majority were given for drivers' hours offences (48). 12 were given for tachograph offences and the remaining 14 for a mixture of offence types (9 'other' offences, 2 for other operator licensing offences and 1 for each of dimension and limiters, driver licensing and overloading offences). For five drivers/vehicles, verbal warnings were accompanied by more serious offences, and one driver/vehicle received two verbal warnings.

Year on year comparisons

The 2013 serious offence rate (7.3%) was similar to the rate observed in the 2011 PSV coach checks (9.7%). Including verbal warnings, the overall 2013 offence rate was 12.7%, again, similar to the 2011 PSV rate for coach checks (14.0%).

Significant factors in predicting defects

All vehicle/check characteristics were analysed together to look at the factors that were associated with serious offences. The significant factors were: age, area and time period of check. The list below shows the significant variables associated with whether serious offences were found, in decreasing order of importance. These variables together made up the best model to predict the outcome of an individual check.

- Older vehicles - higher serious offence rate for vehicles aged 14+ years
- Area 2, Scotland West – higher serious offence rate for vehicles checked in this area
- Younger vehicles – lower serious offence rate for vehicles aged 0-1 years and 4-5 years
- Area 1, Scotland East - lower serious offence rate for vehicles checked in this area
- Time of check - higher serious offence rate for vehicles checked in the afternoon
- Area 8, Central Midlands - lower serious offence rate for vehicles checked in this area

The charts in Annex D show the serious offence rates for all variables.