

Northampton Borough Council

Hackney Carriage and Private Hire Vehicle Age Limit – MOT Inspection Findings Report

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Executive Summary

This report contains the findings following analysis of MOT inspectors reports on all Hackney and Private Hire vehicles tested at the two Vehicle testing centres contracted by Northampton Borough Council between November 25th 2011 until 29th February 2012.

Key Findings

- There is no evidence to suggest from those vehicles tested that if an upper age limit is introduced it should not be common to both Hackney and Private Hire vehicles
- If the proposed upper limit of 8 years was introduced the analysis shows that of the 389 vehicles tested 138 vehicles would be unable to trade. This would reduce the failure rate on mechanical and structural defects by 15% from a benchmark utilising 2010 failure rates of vehicles tested.
- If an upper age limit of 10 years was introduced the analysis shows that 54 of the 389 vehicles tested would be unable to trade and this would reduce the failure rate on mechanical and structural defects by 22% from a benchmark utilising 2010 failure rates of vehicles tested
- If an upper age limit of 10 years was introduced the analysis shows that 20 of the 389 vehicles would be unable to trade and this would reduce the failure rate on mechanical and structural defects by 24% from a benchmark utilising 2010 failure rates of vehicles tested
- There is no evidence to suggest that the current lower age limit of 3 years subject to Hackney carriages only has any measurable relevance.
- There is no evidence to suggest that a lower age limit should not be common to both Hackney and Private Hire vehicles
- If a lower age limit was introduced there is some evidence to suggest that 5 years would be more realistic as of those vehicles tested, those of that age had the lowest failure rate and the highest number tested.
- While this research focussed on the mechanical/structural defects on vehicles tested, it should be noted that routine failures were consistent across the age range and vehicle types. In many instances the amount of 'routine' defects' could contribute to the roadworthiness and safety of a vehicle. This indicates that everyday maintenance and care of the vehicle in-between MOT tests is a key factor in roadworthiness and safety.
- By utilising the current emissions tests associated with the year of manufacture of the vehicle, emissions is not shown to be a serious cause of concern in Hackney and Private Hire vehicles.

2. Introduction

On 27 September 2011 the Northampton Borough Council Licensing Committee agreed to consult on the feasibility of introducing age limits for Hackney Carriages and Private Hire Vehicles, to increase the engine capacity of Private Hire Vehicles from 1400cc to 1600cc and associated exemptions.

The committee requested that all interested parties, be they in the trade, associated with the trade or members of the public, have the opportunity to have a say.

A part of the reasoning when implementing Age Limits is that the age of a vehicle is related to its roadworthiness and safety. Questions in relation to roadworthiness and safety have been asked during the consultation and opinions have been received from respondents. Those responses are being analysed separately and will inform the main report.

However, it is essential that as well as opinions, perceptions and experiences, other evidence specifically in relation to the condition of vehicles should be included to inform the overall findings.

We have obtained vehicle testing reports from the two contracted MOT inspectors for Hackney and Private Hire vehicles.

The results of the analysis of these tests are contained within this report.

3. Methodology

To assist the Licensing committee in making any decision about introducing an age limit in relation to Hackney and Private Hire vehicles it was decided to analyse inspection reports from the two NBC contracted inspectors. The purpose being to identify whether there was any clear correlation between the age of a vehicle and any mechanical or structural failure

A total of 389 reports of tests undertaken between 25th November 2011 and 29th February 2012 were received. They were analysed and the following details were recorded:

- Hackney Carriage or Private Hire vehicle
- Its year of registration
- Whether it passed or failed
- Whether the failure was due to a routine defect or a defect that related to mechanical or structural wear

It was important to differentiate between defects that are common to any age vehicle, and those that tend to happen to an older vehicle. An assessment was undertaken and defects that were classed as routine included but were not limited to:

- Brake pads and discs
- Lights, bulbs, headlight aim
- Tyres
- Cleanliness
- Trim issues
- Wipers, washers
- Non corroded body work issues
- Licence conditions issues such as spare bulbs, fire extinguisher, first aid kit and plates, signage
- Emissions

Mechanical and structural defects included but were not limited to:

- Anti roll bar issues

- Oil and fuel leaks
- Cv issues
- Trailing arms
- Driveshafts
- Engine mounts
- Steering rack issues including leaks to power steering
- Ball joints
- Wheel bearings
- Corrosion to bodywork including sills, wings, inner wings, floor, wheel arches
- Suspension
- Leaking callipers
- Corroded brake pipes and hoses

It is also recognised that due to the high mileage that these vehicles cover, mechanical and structural wear is likely to occur sooner than on an average vehicle.

The graphs below predominantly use a measurement in number of vehicles rather than percentages as some of the numbers are so low that to use percentages could give a skewed perspective.

As defects that are classed as routine can occur on any age vehicle the intention has been to exclude them from the graphs below and only consider mechanical/structural defects. However, reference is made to them within the Additional Observations at the end of this report.

It should also be stressed that this is only analysis of the 389 test reports and cannot be utilised as an accurate assessment of the state or condition of all Hackney or Private Hire vehicles in Northampton. It could be that if we did this exercise again in six months time a different picture could be shown. This analysis should only be viewed as an indicator of the condition of a significant proportion of vehicles that operate in Northampton during the time period when the vehicles went in to be tested.

It should also be remembered that all those vehicles that failed would have to have had all faults rectified in order to be licensed as a Hackney or Private Hire vehicle.

Vehicle reports were also used for vehicles under 12 months old. While these vehicles do not require an MOT, they still undergo a six monthly test.

4. Equalities

An Equalities impact Assessment was undertaken prior to the consultation process being undertaken

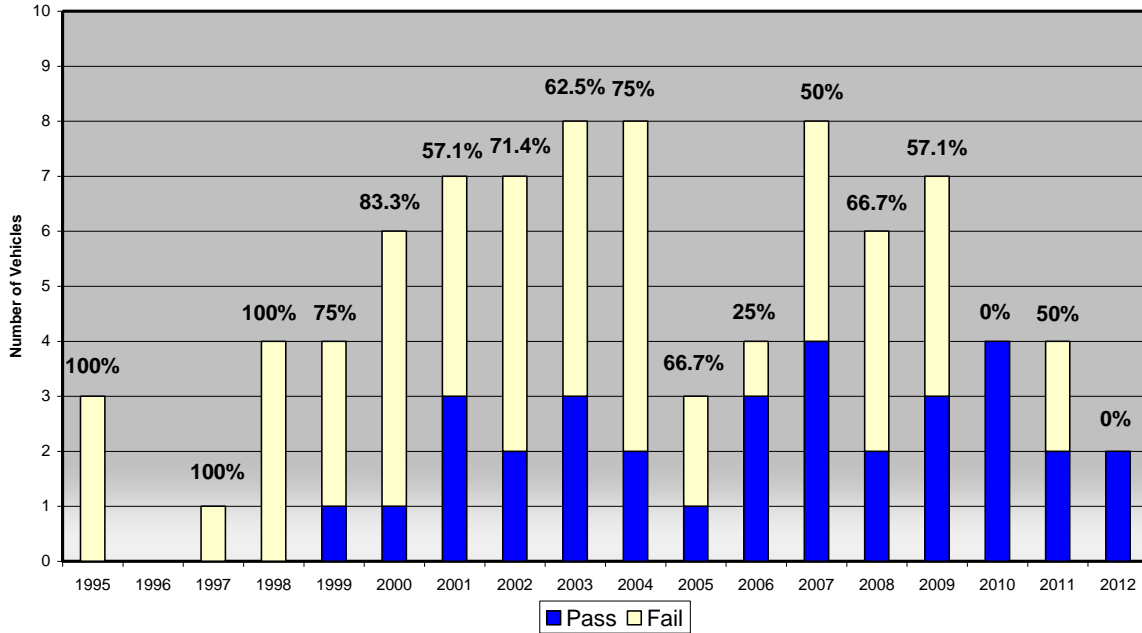
5. How will these findings be used?

Results and recommendations will be presented to the Licensing Committee on 8 May 2012.

6. Graphs

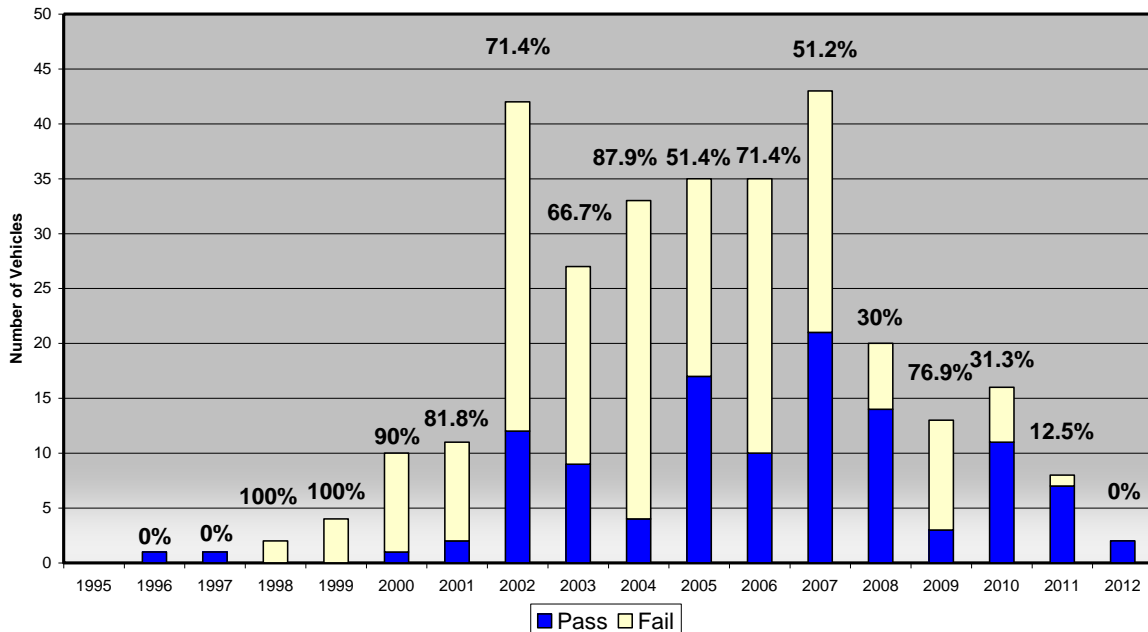
In the following graphs, the blue and cream mixed columns, or a complete blue column represent the number of vehicles by year of manufacture. The measurement in numbers is down the left of the graphs. The cream element of the column or a cream column represents the failure rate of the vehicles tested by year of manufacture. The number at the top of the column represents the percentage failure rate by year of manufacture.

Hackney Vehicles: M.O.T Failure Rate By Age of Vehicle



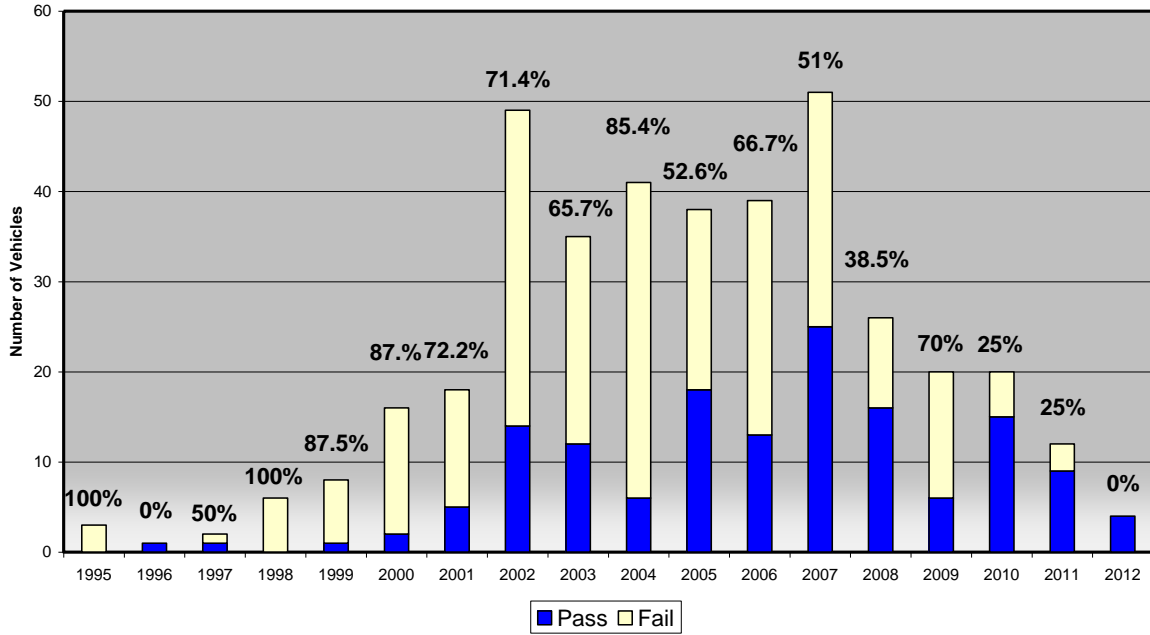
The above graph shows the pass/failure rates of all Hackneys by year of registration. Apart from all eight vehicles failing in the 95,97 and 98 columns and the six vehicles passing in the 2010 and 2012 columns there is no clear trend as the pass/failure rate is fairly constant.

Private Hire Vehicles: M.O.T Failure Rate By Age of Vehicle



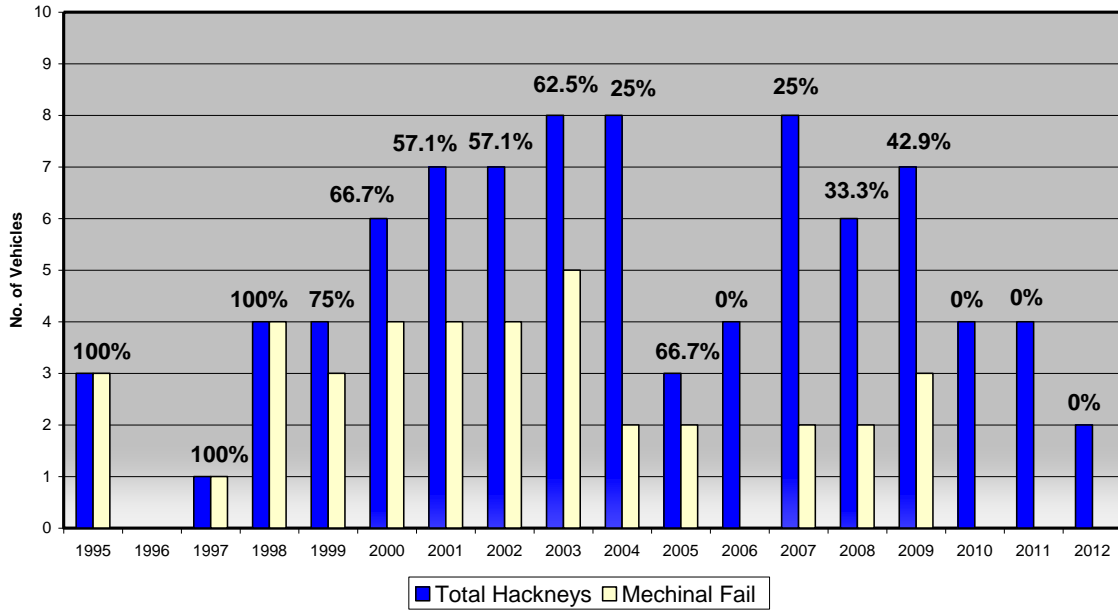
The graph above shows the pass/failure rate of all Private Hire vehicle reports received by year of registration. The oldest private hire vehicles passed in comparison with the older Hackneys, but these are very low numbers. Again, there is no clear trend in pass/failure rates when the number of vehicles tested in each year is considered

All Vehicles: M.O.T Failure Rate By Age of Vehicle



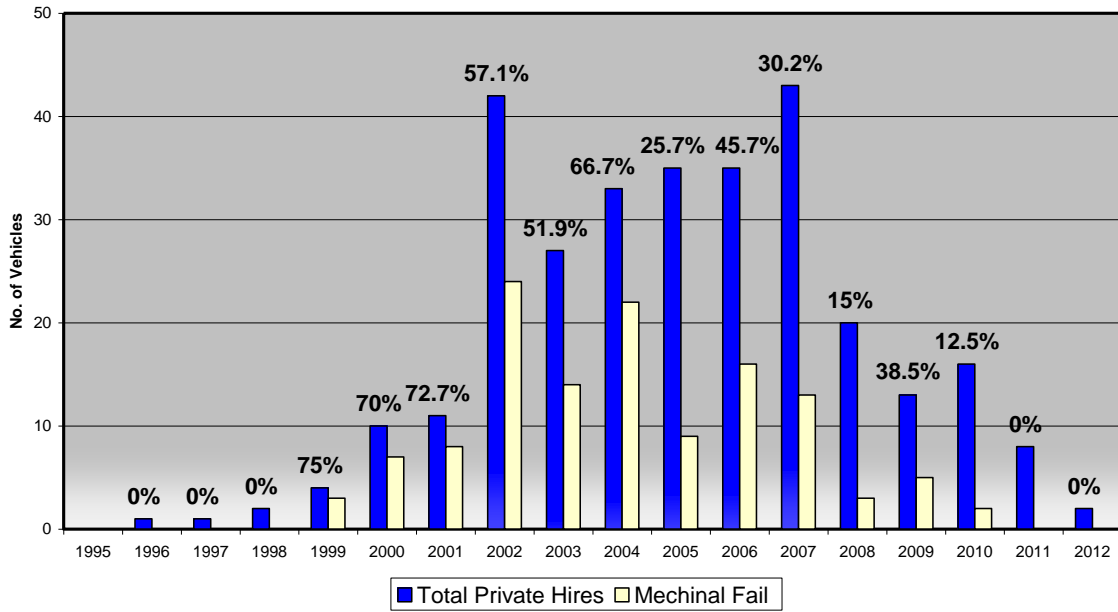
The above graph shows the overall pass/fail rate of all licensed vehicles. Again there is no clear trend bearing in mind the numbers tested from each year.

Hackney Vehicles: % which failed M.O.T on Mechanical/ Structural Failure



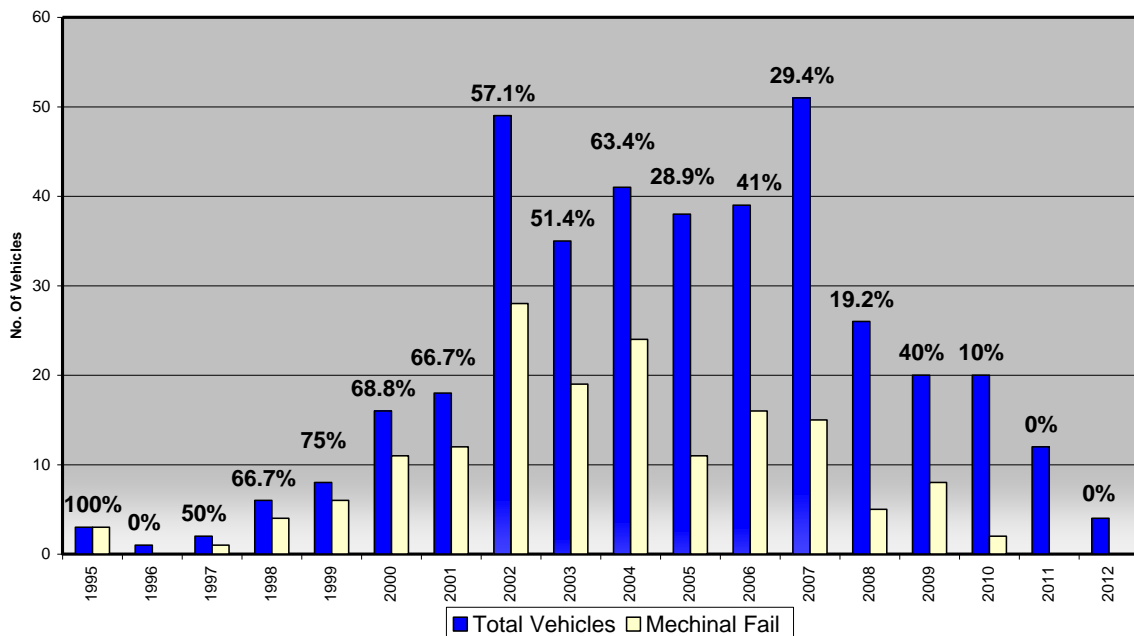
This graph shows the percentage of Hackneys from each year that failed where mechanical and structural defects were present.

Private Hire Vehicles: % which failed M.O.T on Mechanical/ Structural Failure



The above graph shows the percentage of Private Hire vehicles that failed the MOT where mechanical/structural defects were also present. The blue column shows the number of vehicles tested and the brown columns show the number that failed. The percentage number relates to the percentage of failures. The oldest Private Hire vehicles tested did not demonstrate mechanical/structural failures, but it should be noted that numbers tested are very low.

All Vehicles: % which failed M.O.T on Mechanical/ Structural Failure

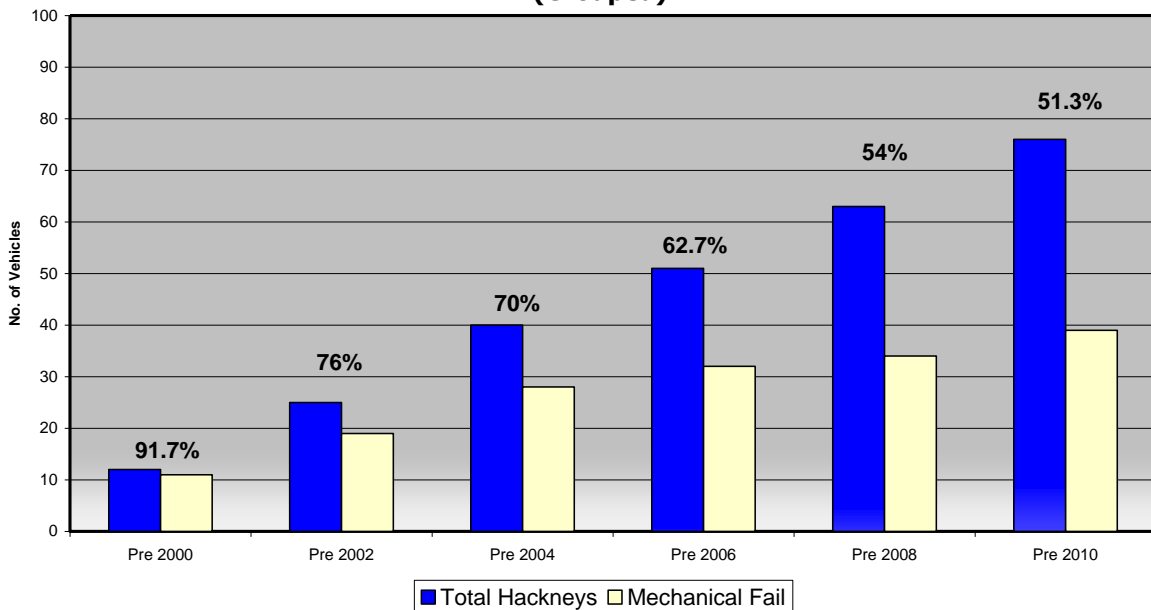


The above graph shows the percentage failure rate where mechanical or structural defects were present, and the number of vehicles tested by year. While initially it may indicate that vehicles from 2002 through to 2008 had less mechanical or structural defects this should be weighed against the considerably higher numbers of vehicles tested from those years.

The following graphs have been presented in a way which places MOT failures where mechanical/structural defects were present into age groups. This has been done to show the rate

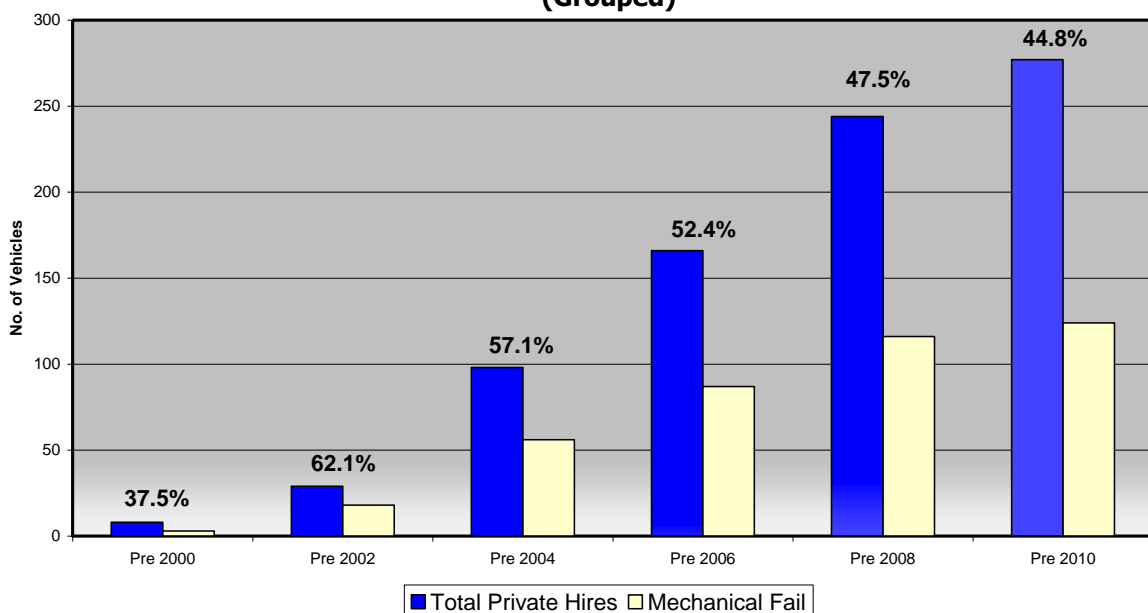
of failures pre and post 2004. 2004 being the upper age limit in the original Age Limit proposal document. Please note that the columns are cumulative so incorporate the figures from the associated column. E.g. Pre 2004 column includes the figures in the pre 2002 and pre 2000 columns

Hackney: % which failed M.O.T on Mechanical/ Structural Failure (Grouped)



This graph indicates that of the 12 pre 2000 Hackneys tested, 91% failed partly due to mechanical/structural defects.
 Of the 25 pre 2002 Hackneys tested, 76% failed partly due to mechanical/structural defects
 Of the 40 pre 2004 Hackneys tested, 70% failed partly due to mechanical/structural defects
 Of the 46 post (and including) 2004 Hackneys tested 24% failed partly due to mechanical/structural defects.
 Of the 35 post (and including) 2006 Hackneys tested, 20% failed partly due to mechanical/structural defects

Private Hire: % which failed M.O.T on Mechanical/ Structural Failure (Grouped)



The above graph indicates that of the 9 pre 2000 Private Hire vehicles tested, 38% failed partly due to mechanical/structural defects.

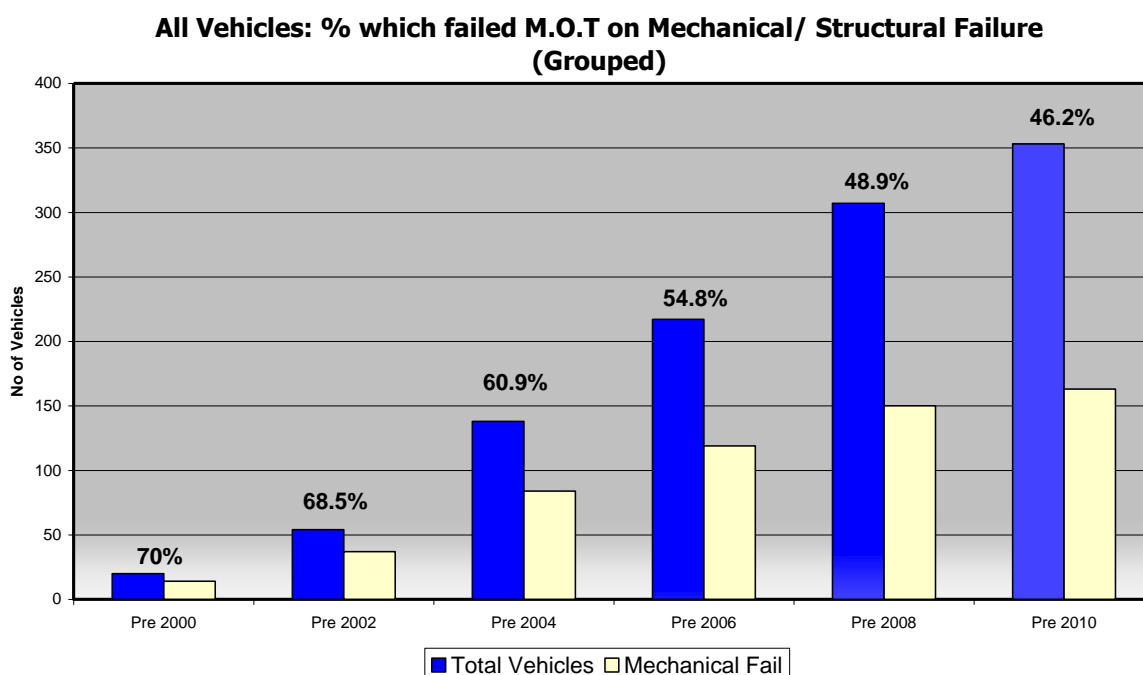
Of the 30 pre 2002 Private Hire vehicles tested, 61% failed partly due to mechanical/structural defects.

Of the 93 pre 2004 Private Hire vehicles tested, 58% failed partly due to mechanical/structural defects

Of the 205 post (and including) 2004 Private Hire vehicles tested, 32% failed partly due to mechanical/structural defects

Of the 137 post (and including) 2006 Private Hire vehicles tested, 29% failed partly due to mechanical/structural defects.

This indicates that the older Private Hire vehicles tested during this time suffered less from mechanical/structural defects than similar aged Hackneys.



The above graph captures the overall percentage failure rate where mechanical and structural defects were present. It also shows the number of vehicles tested by age group. It is clear that a higher percentage of older vehicles failed on these grounds than newer vehicles. However, there are substantially higher numbers of newer vehicles so it could be argued that if there are more vehicles then there is a higher probability that more would pass.

7. Upper Age Limit

8 years

The proposal document attached to the consultation questionnaire suggested as a guideline, an upper age limit of 8 years. The current overall failure rate where mechanical and structural defects were present of all 389 vehicles tested was 42%. If the 8 year cut off was to be introduced at this time, 138 (35.5%) of the vehicles tested would be unable to trade. The 138 vehicles would be made up of 40 Hackneys and 98 Private Hire vehicles. There would be an overall reduction in the failure rate where mechanical and structural defects are present of 10% from 42% to 32%.

10 years

At this time, a 2002 cut off would remove 54 (13.9%) vehicles of the 389 tested and reduce the overall failure rate where structural/mechanical defects were present by a further 6%. The 54 vehicles would be made up of 35 Hackney Carriages and 29 private Hire vehicles.

12 years

Using 12 years as a cut off would result in 20 (5.1%) of the 389 tested vehicles being unable to trade and reduce the failure rate where structural/mechanical defects were present by a further 2.5%. The 20 vehicles would be made up of 12 Hackney Carriages and 8 Private Hire vehicles.

The impact of any of the above on the owners/operators/drivers in order to achieve such a percentage reduction, also bearing in mind those vehicles of similar ages that did not have these defects would need to be taken very seriously.

On analysis of the information received there is no evidence to suggest that Hackney carriages are less susceptible to mechanical/structural defects than Private Hire vehicles. Therefore if an upper age limit was introduced it should be common to both types of vehicle.

8. Lower Age Limit

There is no evidence to suggest that the lower age limit of three years currently only relevant to Hackney carriages has any relevance.

Considering the number of vehicles tested and the failure rate on mechanical/structural grounds, a more realistic lower age limit would be 5 years. The highest number of vehicles tested and the lowest failure rate was 2007. There is also no reason why, if a lower age limit was introduced, it should not be common to both Hackney and Private Hire vehicles

9. Emissions

Of the 389 MOT reports received, only 24 listed emissions as a fault which led to failure. This would indicate that emissions are not an issue of concern in relation to Hackney and Private Hire vehicles. However, the requirement in Northampton in order to pass the emissions test is that the vehicle needs only to pass the test that was in place during the vehicle's year of manufacture. If all vehicles were tested at Euro standards level 4 or level 5, which is the latest emissions test, and has been introduced in some local authority areas, we could see a completely different perspective

10. Additional Observations

While defects classed as 'routine' have been excluded from this analysis due to the fact that they can occur on any age vehicle, it has become apparent whilst undertaking this study that they should not be disregarded completely. The graph below shows that failure on routine defects matched or exceeded mechanical or structural defects on every age of vehicle post 1998. The nature and number of these routine defects that feature on a wide range and age of vehicles could seriously affect the safety or roadworthiness of a vehicle. The main observation was that it is often how the vehicle is looked after and maintained in-between MOTs by the driver/owner that is the most important factor in determining the condition of a vehicle.

All Vehicles: Routine & Mechanical M.O.T Failures

