### Title: Historic Vehicles MOT Exemption Review Impact Assessment (IA) Date: 06/02/2011 IA No: DfT00118 Stage: Final Lead department or agency: Department for Transport Source of intervention: Domestic Other departments or agencies: Type of measure: Secondary legislation Contact for enquiries: Jeaur Rahman 020 7944 8027 jeaur.rahman@dft.gsi.gov.uk **RPC:** RPC Opinion Status

## **Summary: Intervention and Options**

Cost of Preferred (or more likely) Option							
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	· · · · · · · · · · · · · · · · · · ·				
£14.6m	£0m	£0m	Yes	OUT			

#### What is the problem under consideration? Why is government intervention necessary?

The overall objective of a MOT test is to ensure private vehicles over a prescribed age are checked at least once a year to see that they comply with key roadworthiness and environmental requirements. Currently, both the age and the categories of vehicles requiring the MOT test in Great Britain (GB) go further than the EU Directive on roadworthiness test 2009/40/EC. We consider pre-1960 manufactured vehicles (which are not required by the EU Directive to do a roadworthiness test) to be of historic interest. A Government intervention is required to reduce the regulatory burden on owners of these vehicles.

### What are the policy objectives and the intended effects?

As part of the Red Tape Challenge the Government intends to exempt vehicles of historic interest from the statutory MOT test and bring the age of vehicles requiring the statutory MOT test in line with The Goods Vehicles (Plating and Testing) Regulations 1988, which already exempts unladen pre-1960 manufactured HGVs from the roadworthiness test. The proposed objective is to ensure motorists in GB are not subject to gold plating of an EU Directive, and that the MOT test focuses on vehicles which have high MOT test failure rate, road casualty rate and annual mileage. The intended effect is deregulation and lowering motoring costs without significantly affecting road safety.

### What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The policy options that have been considered are:

Option 0: Retaining the MOT scheme as it is (do nothing - baseline);

Option 1: Exempt all pre-1960 manufactured vehicles from the MOT test;

Option 2: Exempt all pre-1945 manufactured vehicles from the MOT test;

Option 3: Exempt all pre-1920 manufactured vehicles from the MOT test.

Option 1 is preferred, because this will bring the MOT test requirement for pre-1960 manufactured vehicles in line with The Goods Vehicles (Plating and Testing) Regulations 1988, which already exempts unladen pre-1960 manufactured HGVs from the roadworthiness test. This option will also meet the Government's Reducing Regulation agenda and reduce the gold plating of the EU Directive on roadworthiness test.

Will the policy be reviewed? It will not be reviewed. If applicable, set review date: Month/Year						
Does implementation go beyond minimum EU requirements?  No						
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Small Yes	Me Ye:	e <b>dium</b> S	<b>Large</b> Yes		
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)					<b>Non-t</b> 0.142	raded:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Signed by the responsible SELECT SIGNATORY:	Date:	
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# **Summary: Analysis & Evidence**

Description: Exempt all pre-1960 manufactured vehicles from the statutory MOT test

#### **FULL ECONOMIC ASSESSMENT**

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
<b>Year</b> 2011	<b>Year</b> 2011	Years 10	<b>Low:</b> 36.6	High: -7.3	Best Estimate: 14.6		

COSTS (£m)	Total Tra (Constant Price)	ansition Years	Average Annual (excl. Transition) (Constant Price)	<b>Total Cost</b> (Present Value)
Low	0.055		0.24	2.02
High	0.055		10.24	84.56
Best Estimate	0.055		5.25	43.36

#### Description and scale of key monetised costs by 'main affected groups'

There may be costs to society as removing the MOT test could have a negative impact on road safety, and the environment as CO2 and air pollutant emissions may increase. If the number of historic vehicles driven on highway increase there would be additional operating costs. The reduction in volume of initial MOT test by less than 0.3% in VOSA is expected to have almost negligible affect on finance and no affect on their contracts. However, updating VOSA IT system would incur a one-off cost.

## Other key non-monetised costs by 'main affected groups'

We have not identified non-monetised costs.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)
Low	0		4.64	38.61
High	0		9.29	77.23
Best Estimate	0		6.96	57.92

#### Description and scale of key monetised benefits by 'main affected groups'

There will be benefits to owners of pre-1960 manufactured vehicles as they will not have to pay the MOT test fee, or have to travel to a MOT test centre - saving on time and operating costs. Only the fuel resource cost was used to estimate the benefit as the savings on fuel duty and VAT would be a loss to taxpayers.

#### Other key non-monetised benefits by 'main affected groups'

The welfare benefits resulting from an increase in the number of vehicles being driven on the road if the vehicles are exempted from the MOT test have not been quantified. We would expect these benefits to be greater than the fuel costs for drivers to increase driving.

## Key assumptions/sensitivities/risks

Discount rate (%)

3.5%

The MOT test fees remain unchanged and contain no direct profit element. Estimated 161,995 pre-1960 manufactured vehicles require the MOT test. The number of pre-1960 manufactured vehicles to fall according to the average annual change over the past 14 years. Number of pre-1960 manufactured vehicles driven regularly on the highway: low estimate: 50%, best estimate: 75% and high estimate: 100%.

#### **BUSINESS ASSESSMENT (Option 1)**

Direct impact on bus	siness (Equivalent Annu	In scope of OIOO?	Measure qualifies as	
Costs: 0	Benefits: 0	Net: 0	Yes	OUT

# **Summary: Analysis & Evidence**

Description: Exempt all pre-1945 manufactured vehicles from the statutory MOT test

#### **FULL ECONOMIC ASSESSMENT**

Price Base		Time Period	Net Benefit (Present Value (PV)) (£m)				
<b>Year</b> 2011	<b>Year</b> 2011	Years 10	<b>Low:</b> 15.6	High: -1.8	Best Estimate: 6.9		

COSTS (£m)	Total Tra (Constant Price)	ansition Years	Average Annual (excl. Transition) (Constant Price)	<b>Total Cost</b> (Present Value)
Low	0.055		0.01	0.15
High	0.055		4.01	33.18
Best Estimate	0.055		2.01	16.69

#### Description and scale of key monetised costs by 'main affected groups'

There may be costs to society as removing the MOT test could have a negative impact on road safety, and the environment as CO2 and air pollutant emissions may increase. If the number of historic vehicles driven on highway increase there would be additional operating costs. The reduction in volume of initial MOT test by less than 0.1% in VOSA is expected to have almost negligible affect on finance and no affect on their contracts. However, updating VOSA IT system would incur a one-off cost.

### Other key non-monetised costs by 'main affected groups'

We have not identified non-monetised costs.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)
Low	0		1.89	15.72
High	0		3.79	31.43
Best Estimate	0		2.84	23.57

#### Description and scale of key monetised benefits by 'main affected groups'

There will be benefits to owners of pre-1945 manufactured vehicles as they will not have to pay the MOT test fee, or have to travel to a MOT test centre - saving on time and operating costs. Only the fuel resource cost was used to estimate the benefit as the savings on fuel duty and VAT would be a loss to taxpayers.

#### Other key non-monetised benefits by 'main affected groups'

The welfare benefits resulting form an increase in the number of vehicles being driven on the road if the vehicles are exempted from the MOT test have not been quantified. We would expect these benefits to be greater than the fuel costs for drivers to increase driving.

## Key assumptions/sensitivities/risks

Discount rate (%)

3.5%

The MOT test fees remain unchanged and contain no direct profit element. Estimated 57,496 pre-1945 manufactured vehicles require the statutory MOT test. The number of pre-1945 manufactured vehicles to fall slightly according to the average annual change over the past 14 years. The number of pre-1960 manufactured vehicles to fall. Number of pre-1945 manufactured vehicles driven regularly on the highway: low estimate: 50%, best estimate: 75% and high estimate: 100%.

#### **BUSINESS ASSESSMENT (Option 2)**

Direct impact on bus	siness (Equivalent Annu	In scope of OIOO?	Measure qualifies as	
Costs: 0	Benefits: 0	Net: 0	Yes	OUT

# **Summary: Analysis & Evidence**

Description: Exempt all pre-1920 manufactured vehicles from the statutory MOT test

#### **FULL ECONOMIC ASSESSMENT**

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
<b>Year</b> 2011	<b>Year</b> 2011	Years 10	<b>Low:</b> 0.41	High: -0.68	Best Estimate: -0.13		

COSTS (£m)	<b>Total Tra</b> (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.055		0.004	0.09
High	0.055		0.20	1.67
Best Estimate	0.055		0.01	0.88

#### Description and scale of key monetised costs by 'main affected groups'

There may be costs to society as removing the MOT test could have a negative impact on road safety, and the environment as CO2 and air pollutant emissions may increase. If the number of historic vehicles driven on highway increase there would be additional operating costs. The reduction in volume of initial MOT test by less than 0.006% in VOSA is expected to have almost negligible effect on finance and no effect their contracts. However, updating VOSA IT system would incur a one-off cost.

## Other key non-monetised costs by 'main affected groups'

We have not identified non-monetised costs.

BENEFITS (£m)	<b>Total Tra</b> (Constant Price)	ansition Years	Average Annual (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)
Low	0		0.06	0.50
High	0		0.12	0.99
Best Estimate	0		0.09	0.75

#### Description and scale of key monetised benefits by 'main affected groups'

There will be benefits to owners of pre-1920 manufactured vehicles as they will not have to pay the MOT test fee, or have to travel to a MOT test centre - saving on time and operating costs. Only the fuel resource cost was used to estimate the benefit as the savings on fuel duty and VAT would be a loss to taxpayers.

#### Other key non-monetised benefits by 'main affected groups'

The welfare benefits resulting form an increase in the number of vehicles being driven on the road if the vehicles are exempted from the MOT test have not been quantified. We would expect these benefits to be greater than the fuel costs for drivers to increase driving.

## Key assumptions/sensitivities/risks

Discount rate (%)

3.5%

The MOT test fees remain unchanged and contain no direct profit element. Estimated 1,873 pre-1920 manufactured vehicles require the statutory MOT test. The number of pre-1920 manufactured vehicles to increase according to the average annual change over the past 14 years. Number of pre-1920 manufactured vehicles driven regularly on the highway: low estimate: 50%, best estimate: 75% and high estimate: 100%.

## **BUSINESS ASSESSMENT (Option 3)**

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0	Benefits: 0	Net: 0	Yes	OUT

# **Evidence Base (for summary sheets)**

#### Introduction

- 1. This Impact Assessment (IA) focuses on the possibility of exempting all pre-1960 manufactured vehicles (historic vehicles) from the statutory MOT test as allowed under Article 4(2) of the EU Directive 2009/40/EC, and bring the age of vehicles requiring the test in line with The Goods Vehicles (Plating and Testing) Regulations 1988.
- 2. Three options are examined, against a 'do nothing' baseline. The three options are:
  - Option 1 exempting all pre-1960 manufactured vehicles from the statutory MOT test
  - Option 2 exempting all pre-1945 manufactured vehicles from the statutory MOT test
  - Option 3 exempting all pre-1920 manufactured vehicles from the statutory MOT test

### Regulatory Policy Committee (RPC) Opinion

- 3. RPC opinion on pre-consultation IA:
  - Costs to MoT Providers. The IA claims that there will be a small cost to MOT providers as a result
    of this proposal as they will receive less business now that pre-1960's cars no longer require a
    MOT. It would appear that the loss to MOT providers is the result of an efficiency improvement
    resulting from the removal of a burden on pre-1960 car owners. Given this, this should be
    considered as improving the allocation of the UK's resources and should not be considered as a
    cost of this proposal.

**Action taken by the Department for Transport (DfT):** All claims about costs to providers have been taken out of the IA.

• Reduction in Air Pollution. The IA claims there will be a net reduction in the amount of Carbon Dioxide (CO<sub>2</sub>) produced as a result of this proposal as pre-1960 vehicles will no longer have to travel to a MOT servicing centre. However, this could be partially or wholly offset by an increase in the level of CO<sub>2</sub> as a result of the increase in pre-1960s cars on the road which the IA estimates "would increase by half to 75% of the total number of licensed pre-1960 vehicle". The IA should provide clearer analysis concerning the net effect on the levels of CO<sub>2</sub> that result from this proposal.

**Action taken by the DfT**: To account for the projected increase in the number of historic vehicles being driven on the highway if these vehicles are exempted from the MOT test, we have included the additional costs mentioned below (see calculations in Table 1).

- Additional CO<sub>2</sub> emissions and their cost to society, including air quality impacts. A further breakdown of the calculations is in 'Cost tabs' in the attached excel sheet.
- Cost to motorists for additional fuel use and vehicles operating costs (encompassing maintenance costs and vehicle depreciation),
- The welfare benefits resulting from an increase in the number of vehicles being driven on the highway have not been quantified. For drivers to increase their driving on the road, we would expect the benefits to be greater than the private cost (fuel, other operating costs) for drivers.

#### Consultation

- 4. This final stage IA follows a public consultation exercise carried out by DfT on 3 November 2011. The purpose of the consultation was to invite views on proposals to exempt pre-1960 manufactured vehicles from the statutory MOT test in GB. The consultation closed on 26 January 2012.
- 5. In addition to the three options mentioned in paragraph 2, views were sought on whether the options should include all vehicle categories (e.g. cars, motorcycles, buses, coaches and light goods vehicles) and vehicles used for commercial purposes. Views were also sought about the possible impact MOT exemption would have on motor insurance premiums. Respondents were asked whether they had comments on the consultation-stage impact assessment, or had any data or

analysis that would enable the DfT to refine its analysis of costs, benefits and other impacts likely to arise from the options.

#### Outcome of the consultation

- 6. The DfT received 447 responses by the closing date: 335 from general members of the public, 36 from representative and interest groups, 32 from those who voluntarily confirmed they were owners of historic vehicles, 23 from small and medium enterprises (SMEs), 9 from large companies and the remaining 12 respondents selected 'other' this category included vehicle museums, historic vehicle collectors, clubs, classic car part suppliers, workshops and charitable trusts. Respondents' views and DfT's responses are as follows:
  - In all, 73% of respondents agreed with the review of the MOT test requirements for vehicles of historic interest. 83% of 'other' respondents, 78% of general members of the public and 70% of representative and interest groups favoured an MOT exemption review. On the other hand, 56% of large organisations and classic car owners, and 52% of SMEs opposed a review.
  - Of those in favour of an MOT exemption review, 81% favoured Option 1, 5% favoured Option 2, and 8% favoured Option 3. About 6% suggested alternative options.
  - **DfT response:** The DfT has decided to pursue Option 1.
  - Of those in favour of an MOT exemption review, 79% agreed that all vehicles categories subject to MOT testing should be treated equally.
  - **DfT response:** The DfT has decided to include all vehicle categories to an MOT exemption.
  - Overall, a majority of respondents (57%) opposed including vehicles used for commercial purposes to any MOT exemption. Of those who supported a MOT exemption review, 51% favoured exempting vehicles used for commercial purposes from the MOT test.
  - **DfT response:** The DfT does not wish to exclude vehicles used for commercial purposes from the MOT exemption. This is because both the DVLA and VOSA do not keep a record of vehicle use and enforcement is likely to be left to the police. Automatic Number Plate Recognition would not be able to tell police whether or not a vehicle was being used for commercial purposes. It would take a physical stop and a number of probing questions to enforce the commercial use aspect, at a time when police resources are stretched. Owners of exempt vehicles, nevertheless, could still do voluntary MOT tests. Businesses could opt for a voluntary MOT test, and motor insurance providers could still require historic vehicles used for commercial purposes to do a MOT test.
  - The insurance industry representatives have said they do not expect an immediate impact on insurance premiums simply from a change in the MOT requirement of itself. Any change would depend, all other factors being equal, on whether insurers noticed any change in the claims experience of these vehicles. They stated that vehicles are not generally rated by their age.
  - **DfT response:** The DfT is of the view that the pre-1960 manufactured vehicles will largely continue to be well maintained by their owners, and as is the case for all motorists, insurance premiums are likely to be high for high risk drivers. The DfT believes a voluntary MOT test could leave room for motor insurance providers to require historic vehicles to do a MOT test.

#### Comments on Impact Assessment

- 7. The concerns raised by respondents and response by the Government regarding the IA is as follows:
  - Some organisations in the motor trade have said that they disagreed with the assumption that there is no direct profit element in the MOT test fee and the assumption that exempting pre-1960 manufactured vehicles from the MOT test would have no impact on business.
  - **DfT response:** The DfT remains of the view that the cost of the MOT test was calculated using the actual (average) time to conduct the test, the average labour cost rates and the recovery of the investment required to provide and equip a garage to DfT/VOSA specifications; hence there is no direct profit element in the MOT test fee.
  - A couple of respondents felt that the IA relied too heavily on the Transport Research Laboratory (TRL) report on the Effect of vehicle defects in road accidents to calculate possible road

- accidents and injuries if historic vehicles are exempted from the MOT test. The TRL report, they argued, was too limited in its scope and analysis.
- **DfT response:** The calculation of projected road casualties in the IA was based on the TRL report because this report provided the most recent study of the link between casualties and vehicle defects.
- One respondent pointed out that the vehicle depreciation cost did not include the cost of repairs due to depreciation.
- DfT response: The IA calculates the benefits of not driving vehicles to an MOT station, one of these benefits is the reduction in vehicle operating costs, including reduced depreciation from reduced mileage and lower maintenance costs.
- Two respondents raised a question about the calculation of the number of historic vehicles that have an MOT test each year.
- **DfT response:** Whilst there are approximately 162,000 pre-1960 manufactured vehicles that are required by law to do a MOT test, according to VOSA, just over 78,000 pre-1960 manufactured vehicles actually did an MOT test in 2009. Hence the pre-1960 manufactured vehicles that did a MOT test in 2009 accounted for less than 0.3% of the total initial MOT tests done that year.
- 8. No additional evidence was presented which could be used to improve the consultation stage IA methodology which remains unchanged.

#### **Problem under consideration**

9. Sections 45 to 48 of the Road Traffic Act 1988 provide the legislative basis for MOT testing. The purpose of the MOT test is to ensure that cars, other light vehicles (including some light goods vehicles), private buses and motorcycles over a prescribed age are checked at least once a year to see that they comply with key roadworthiness and environmental requirements in the Road Vehicle Construction and Use Regulations 1986 and the Road Vehicle Lighting Regulations 1989 (as amended). A test certificate is issued following successful completion of an examination.

Examples of vehicles exempted from the MOT testing include electrically propelled goods vehicles, track laying vehicles, vehicles constructed or adapted to form part of an articulated combination, works trucks, trailers, pedestrian controlled mechanically propelled vehicles and electronically powered pedal cycles.

The EU Directive on roadworthiness test 2009/40/EC, Chapter I, General Provisions, Article 1 states: "In each Member State, motor vehicles registered in that State and their trailers and semi-trailers shall undergo periodic roadworthiness tests in accordance with this Directive."

Whilst it is important to ensure that vehicles are safe to use on the highway, it is also important to ensure that regulations imposed are not excessive. Currently, both the age and the categories of vehicles requiring the MOT test in GB go further than the EU Directive on roadworthiness test, which only subjects post-1960 registered vehicles to a compulsory roadworthiness test and does not require motorcycles of any age to carry out a roadworthiness test. The EU Directive 2009/40/EC, Chapter II, Exceptions, Article 4 states:

"Member States may, after consulting the Commission, exclude from the scope of this Directive, or subject to special provisions, certain vehicles operated or used in exceptional conditions and vehicles which are never, or hardly ever, used on public highways, including vehicles of historic interest which were manufactured before 1 January 1960 or which are temporarily withdrawn from circulation. Member States may, after consulting the Commission, set their own testing standards for vehicles considered to be of historic interest."

We consider pre-1960 manufactured vehicles to be of historic interest.

#### Rationale for intervention

10. As part of the Red Tape Challenge the Government intends to exempt pre-1960 manufactured vehicles from statutory MOT test, as allowed under Article 4(2) of the EU Directive 2009/40/EC, and bring the age of vehicles requiring the statutory MOT test in line with The Goods Vehicles (Plating and Testing) Regulations 1988, which already exempts unladen pre-1960 manufactured HGVs from the roadworthiness test. This will also meet the Government's Reducing Regulation agenda and reduce the gold plating of the EU Directive on roadworthiness test.

Research in the impact assessment shows that in GB:

- Pre-1960 manufactured vehicles are on average driven 1,300 miles per year significantly less than the 9,000 miles per year driven on average by all licensed vehicles.
- Two-thirds of pre-1960 manufactured vehicles are driven less than 500 miles a year.
- Whilst the pre-1960 registered vehicles made up about 0.6% of the 35.2m registered vehicles in GB in 2010, they were involved in just 0.03% of road casualties and accidents.
- The pre-1960 registered vehicles are largely well maintained by their owners, for instance, the initial MoT test failure rate for these vehicles in 2009 was less than 10% a third of that of post-1960 licensed vehicles.

Having to do an annual MOT test for most pre-1960 manufactured vehicles may be unnecessarily excessive.

#### Intended effect

11. The intended effect is deregulation and lowering motoring costs, whilst not significantly affecting road safety. The proposed objective is to ensure that the pre-1960 manufactured vehicles, which are on average driven just 25 miles per week, are not subject to gold plating of the EU Directive on roadworthiness testing, and that the MOT test focuses on post-1960 manufactured vehicles, which have higher: MOT test failure rates, road casualty rates and annual mileages.

### Description of options considered (including do nothing)

#### Baseline

12. Retaining the MOT test scheme as it is - a 'do nothing' approach where the DfT continues with the existing MOT test scheme. In this baseline pre-1960 manufactured vehicles will continue to do an MOT test on an annual basis. The number of pre-1960 manufactured vehicles doing an MOT test and consequently, the number of these vehicles driven on the highway will remain at 50% of the number of pre-1960 licensed vehicles. All options in this IA are assessed against a 'do nothing' baseline.

#### Options being considered

- 13. We have based our three options on vehicle manufactured date, which were agreed with our key stakeholders. The three options considered are:
- Option 1 (preferred option): Exempt all pre-1960 manufactured vehicles from the MOT test as allowed under Article 4(2) of the EU Directive 2009/40/EC. This option maximises the Government's reducing regulation agenda, it is the closest to the exemption allowed under the EU Directive, and brings the MOT requirement for historic vehicles in line with unladen pre-1960 manufactured HGVs, which are already exempted from the annual roadworthiness test.
- **Option 2**: Exempt all pre-1945 manufactured vehicles from the MOT test as allowed under Article 4(2) of the EU Directive 2009/40/EC. Under this option, vehicles manufactured between 1945 and 1959 will still be subject to statutory MOT test.
- **Option 3**: Exempt all pre-1920 manufactured vehicles from the MOT test as allowed under Article 4(2) of the EU Directive 2009/40/EC. Under this option, Vehicles manufactured between 1920 and 1959 will still be subject to statutory MOT test.

### MOT test frequency

14. As the EU Directive 2009/40/EC does not require vehicles manufactured prior to 1960 to do a roadworthiness test, reducing MOT test frequency for pre-1960 manufactured vehicles in GB would still amount to gold plating of the EU Directive on roadworthiness test. This would also be incompatible with Better Regulation principles. For these reasons, we have not considered reducing MOT test frequency for pre-1960 manufactured vehicles.

#### Costs and benefits

#### The main costs considered

- 15. Costs arising from removing the MOT test for historic vehicles:
  - a negative impact on road safety as some vehciles may not be roadworthy as a result of exempting these vehciles from the MOT test.
  - CO<sub>2</sub> and air pollutant emissions may increase as a result of an increase in the number of historic vehciles being driven on the highway if they are exempt from the MOT test.
  - Increase in vehicle opertaing cost (fuel and maintennace cost) as we project that the number of historic vehicles driven on the highway is expected to rise if they are exempted from the MOT test.
  - Any changes to the MOT test would incur a one-off cost to VOSA as they will need to update their IT system.

#### The main benefits

- 16. Benefits arising from removing the MOT for historic vehicles:
  - Owners of historic vehicles would not need to pay MOT test fee.
  - They would not need to travel to a MOT test centre saving on fuel, time and reduction in vehicle maintenance cost (vehicle depreciation).
  - Less CO<sub>2</sub> and air pollutant emissions as a result of historic vehicles not needing to go to a MOT test centre to do the MOT test.

### Sensitivities

17. It is difficult to predict the change in behaviour (if any) of owners of pre-1960 manufactured vehicles if their vehicles are exempted from the statutory MOT test. We assume that the owners of approximately 50% of pre-1960 manufactured vehicles that do not regularly do the MOT test each year rarely drive their vehicles (if at all). As a result of this, we have two figures. The first is the number of registered vehicles licensed with DVLA – approximately 162k (Table 3). The second is the number of initial MOT tests done by historic vehicles – approximately 78k (Table 7). We are not certain whether, if historic vehicles are exempted from the MOT test, the number of vehicles driven regularly on the highway will stay at the number of MOT tests carried out each year, or increase to the number of total registered vehicles or somewhere in between. So to show the impacts of the policy, we have taken the two extremes to show the difference in effects - and taken the midpoint as the best estimate in the absence of better information.

We have based our 'low estimate', 'best estimate' and the 'high estimate' on the potential number of historic vehicles that may be driven on the highway on a regular basis if the pre-1960 manufactured vehicles are exempted from the MOT test (see bullet points below), because our calculations show that this would have, by far, the biggest impact on the costs and benefits to motorists compared to other factors.

 The 'low estimate' assumes that the number of pre-1960 manufactured vehicles driven regularly on the highway equals the approximately 50% of the 162k of the pre-1960 licensed vehicles that do the MOT test each year.

- The 'best estimate' assumes that the number of pre-1960 manufactured vehicles driven regularly on the highway after they are exempted from the MOT test would increase by half to 75% of the total number of pre-1960 licensed vehicles.
- The 'high estimate' assumes that all pre-1960 licensed vehicles (162k) would be driven regularly on the highway after they are exempted from the MOT test.

#### Costs and benefits of each option

## One-off cost

18. In all three options we expect there to be a one-off cost (£55k) to VOSA. This is to account for the cost of updating VOSA IT system.

#### Option 1

#### Costs

19. In the 'low estimate', without additional vehicles being taken onto the road, TRL estimate that the number of additional casualties and accidents caused by vehicle defects that would normally be picked up by routine MOT testing would increase by 50% as we assume that half of pre-1960 manufactured vehicles owners might not maintain their vehicles if they are exempt from the MOT test. This would cause approximately £2.4m (million) of casualty and accident costs over 10 years. The assumptions underlying this are in Tables 1 and 2. Further information on how the estimates of road safety impacts were reached is included on page 21.

For our 'best' and 'high' estimates, we also forecast an increase in historic vehicles driven regularly on the road. Therefore, we would expect the number of additional casualties and accidents to increase proportionally to the number of pre-1960 manufactured vehicles driven on the highway if these vehicles are exempted from the MOT test. The number of pre-1960 manufactured vehicles to be driven on the highway if they are exempted from the MOT is projected to increase from just over 80k vehicles (low estimate) to around 120k vehicles (best estimate) and to just over 160k vehicles (high estimate). This results in casualty and accident costs of £3.6m (best estimate) and £4.8m (high estimate) over 10 years.

As a result of the projected increase in the number of vehicles being driven on the highway, we also expect there to be additional operating costs to motorists (as a result of increased fuel use and maintenance costs due to vehicle depreciation). Assuming that the additional vehicles on the road drive the same number of miles on average as the existing historic vehicles on the road, this results in additional fuel and maintenance costs of £39.4m (best estimate) and £78.6m (high estimate). Assumptions on mileage are in Table 9, and assumptions on fuel consumption are in Table 21.

The additional fuel consumption will also lead to a cost to society through increased  $CO_2$  emissions and air quality impacts. These are estimated at £9.5m (best estimate) and £19m (high estimate) over 10 years. Assumptions on carbon costs and air quality costs are contained in Tables 14-16 on page 20.

#### Benefits

20. In Option 1, benefits are: money saved from not paying an MOT fee, time and fuel saved from not having to drive to an MOT station, society benefiting from less CO<sub>2</sub> emissions and air quality damage as a result of drivers not needing to drive to a MOT station for a test. Vehicle owners would benefit from reduced maintenance cost (vehicle depreciation) resulting from not driving their vehicles to a MOT station for a test.

These benefits accrue to approximately 80k motorists and vehicles in the 'low estimate', valued at £46.4m over 10 years, 120k in the 'best estimate' (£69.6m) and 160k in the 'high estimate' (£92.9m). The breakdown of the benefits between different categories is given in Table 2.

#### Option 2

#### Costs & benefits

21. We expect all the costs and benefits mentioned in Option 1 to apply to Option 2. But the number of vehicles in Option 2 is smaller than Option 1. The number of pre-1945 manufactured vehicles to be driven on the highway if they are exempted form the MOT is projected to increase from just over 28k vehicles (low estimate) to just over 57k vehicles (high estimate).

If only pre-1945 manufactured vehicles are exempted from the MOT test this would cause approximately £119k of casualty and accidents costs over 10 years. For 'best' and 'high' estimates the costs would be £179k and £238k respectively.

The additional operating costs as a result of the projected increase in the number of vehicles being driven on the highway under 'best' and 'high' estimates would be £16m and £32m respectively.

The costs to society due to additional fuel consumption for 'best' and 'high' estimates would be £3.9m and £7.9m respectively.

The benefits accrue to approximately 28k motorists and vehicles in the 'low estimate', valued at £18.9m over 10 years, 43k in the 'best estimate' (£28.4m) and just over 57k in the 'high estimate' (£37.9m).

#### Option 3

#### Costs & benefits

22. We expect all the costs and benefits mentioned in Option 1 to also apply to Option 3. But the number of vehicles in Option 3 is a lot smaller than Option 1. The number of pre-1920 manufactured vehicles to be driven on the highway if they are exempted form the MOT is projected to increase from just under a thousand vehicles (low estimate) to just under two thousand vehicles (high estimate).

If only pre-1920 manufactured vehicles are exempted from the MOT test this would cause approximately £42k of casualty and accidents costs over 10 years. For 'best' and 'high' estimates the costs would be £63k and £84k respectively.

The additional fuel and maintenance costs as a result of the projected increase in the number of vehicles being driven on the highway under 'best' and 'high' estimates would be £751k and £1.5m respectively.

The costs to society due to additional fuel consumption for 'best' and 'high' estimates would be £186k and £371k respectively.

The benefits accrue to approximately just under a thousand motorists and vehicles in the 'low estimate', valued at £601k over 10 years, 1,400 in the 'best estimate' (£901k) and just under two thousand in the 'high estimate' (£1.2m).

## Costs and benefits - 10 year projection

## Total costs

23. The Table 1 below provides the total costs by each option over a 10 year period. This table does not include the one-off cost to VOSA (£55K) to update its IT system.

Table 1 - Total costs over 10 years (£ 2011 prices, undiscounted)

Costs - Low Estimate	Option 1	Option 2	Option 3
Casualty related costs	2,310,106	106,184	39,746
Accident related costs	88,202	13,030	2,447
Total	2,398,308	119,214	42,193

Costs - Best Estimate	Option 1	Option 2	Option 3
Casualty related costs	3,465,159	159,276	59,619
Accident related costs	132,303	19,545	3,670
Additional CO2 emission costs	8,262,565	3,484,272	165,313
Additional air quality costs	1,218,767	442,577	20,373
Additional fuel costs	26,453,707	10,199,352	466,896
Additional vehicle depreciation	12,926,652	5,843,358	283,851
Total	52,459,153	20,148,379	999,722

Costs - High Estimate	Option 1	Option 2	Option 3
Casualty related costs	4,620,212	212,367	79,492
Accident related costs	176,404	26,060	4,893
Additional CO2 emission costs	16,535,241	6,971,486	330,626
Additional air quality costs	2,437,533	885,154	40,745
Additional fuel costs	52,907,414	20,398,703	933,793
Additional vehicle depreciation	25,678,437	11,635,514	567,702
Total	102 355 241	40 129 284	1 957 252

## **Total Benefits**

24. The Table 2 below provides the total benefits by each option over a 10 year period.

**Table 2** - Total benefits over 10 years (£ 2011 prices, undiscounted)

Benefits - Low Estimate	Option 1	Option 2	Option 3
Fee Saved	35,329,465	14,486,969	460,713
Time Saved	9,176,176	3,691,454	117,118
Fuel Saving - cars	402,939	184,576	6,196
Fuel Saving - buses	42,327	12,923	462
Fuel Savings - LGVs	228,574	64,142	1,277
Fuel Saving - motorcycles	126,594	45,389	1,387
Vehicle depreciation - cars	535,012	245,004	8,208
Vehicle depreciation - buses	99,678	30,418	1,087
Vehicle depreciation - LGVs	210,204	58,910	1,174
Vehicle depreciation - motorcycles	N/A	N/A	N/A
Reduction CO <sub>2</sub> petrol	103,658	43,235	1,402
Reduction CO <sub>2</sub> diesel	138,824	49,714	1,418
Reduction Air Quality damage - petrol	2,535	1,056	34
Reduction Air Quality damage - diesel	32,047	11,468	327
Total	46,428,033	18,925,260	600,803

Benefits - Best Estimate	Option 1	Option 2	Option 3
Fee Saved	52,994,198	21,730,453	691,070
Time Saved	13,764,263	5,537,182	175,678
Fuel Saving - cars	604,409	276,865	9,294
Fuel Saving - buses	63,491	19,385	692
Fuel Savings - LGVs	342,861	96,213	1,915
Fuel Saving - motorcycles	189,891	68,083	2,080
Vehicle depreciation - cars	802,517	367,505	12,312
Vehicle depreciation - buses	149,517	45,627	1,630
Vehicle depreciation - LGVs	315,306	88,366	1,761
Vehicle depreciation - motorcycles	N/A	N/A	N/A
Reduction CO <sub>2</sub> petrol	155,487	64,853	2,103
Reduction CO <sub>2</sub> diesel	208,237	74,571	2,128
Reduction Air Quality damage - petrol	3,802	1,585	51
Reduction Air Quality damage - diesel	48,070	17,203	490
Total	69,642,050	28,387,890	901,204

Benefits - High Estimate	Option 1	Option 2	Option 3
Fee Saved	70,658,931	28,973,938	921,426
Time Saved	18,352,351	7,382,909	234,237
Fuel Saving - cars	805,878	369,153	12,392
Fuel Saving - buses	84,655	25,846	923
Fuel Savings - LGVs	457,148	128,284	2,553
Fuel Saving - motorcycles	253,188	90,778	2,773
Vehicle depreciation - cars	1,070,023	490,007	16,416
Vehicle depreciation - buses	199,356	60,836	2,174
Vehicle depreciation - LGVs	420,408	117,821	2,348
Vehicle depreciation - motorcycles	N/A	N/A	N/A
Reduction CO <sub>2</sub> petrol	207,316	86,471	2,804
Reduction CO <sub>2</sub> diesel	277,649	99,428	2,837
Reduction Air Quality damage - petrol	5,069	2,113	68
Reduction Air Quality damage - diesel	64,094	22,937	654
Total	92,856,066	37,850,520	1,201,606

## **Data**

## 25. Number of pre-1960 licensed vehicles

Table 3 - Number of licensed vehicles as at December 2010 - DVLA

		MOT required			MOT not required					
Vehicle first registered	Cars	Motorcycles	Buses & Coaches	LGVs requiring MOT*	LGVs not requiring MOT	Hackney Carriages	HGVs	Agricul.	Others	Total
Post-1960	29,203,926	1,198,190	175,183	2,186,660	1,093,166	44,439	494,105	345,508	210,806	
Total		32,763,9	59		2,188,024				34,951,983	
Pre-1920	1,094	689	18	72	36	2	13	104	311	2,339
1920-1944	36,238	16,202	413	2,770	1,385	59	250	4,271	3,457	65,045
1945-1959	45,836	47,366	1,216	10,081	5,039	43	566	26,139	3,668	139,954
Column total	83,168	64,257	1,647	12,923	6,460	104	829	30,514	7,436	207,338
Total		161,99	5				45,343			

<sup>\*</sup>Assumes two-thirds of LGVs are 3,500Kg (or less) gross vehicle weight and are required to have a statutory MOT test

Table 4 - Number of licensed vehicles in GB from 1996 to 2010 - DVLA

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Year		MOT required					
Post-1960 Registered Vehicles	Cars	Motorcycles	Buses & Coaches	LGVs	Total		
1996	22,145,661	666,065	155,995	1,437,821	24,405,542		
2000	24,318,708	886,444	170,978	1,576,715	26,952,845		
2005	27,435,312	1,140,198	176,813	1,949,740	30,702,063		
2010	29,203,926	1,198,190	175,183	2,186,660	32,763,959		
Pre-1960 Registered Vehicles							
1996	91,733	72,627	1,639	11,423	177,422		
2000	86,692	67,206	1,582	11,667	167,147		
2005	84,908	66,206	1,619	12,502	165,235		
2010	83,168	64,257	1,647	12,923	161,995		

<sup>\*</sup>Includes only the two-thirds of the LGVs that are assumed to be 3,500Kg (or less) gross vehicle weight and are required to have a statutory MOT test

Table 5 - A break down of the number of licensed pre-1960 vehicles from 1996 to 2010 - DVLA

Pre-1920 Registered		Average annual			
Vehicle Category	1996	2000	2005	2010	change
Cars	868	962	1,031	1,094	1.7%
Motorcycles	744	681	715	689	-0.5%
Buses & Coaches	18	15	20	18	0.0%
LGVs*	63	64	67	72	0.9%
Total	1.693	1.722	1.833	1.873	•

Pre-1945 Registered		Ye	Average annual		
Vehicle Category	1996	2000	2005	2010	change
Cars	39,429	37,668	37,495	37,332	-0.4%
Motorcycles	20,410	18,552	17,945	21,314	0.3%
Buses & Coaches	450	438	418	486	0.6%
LGVs*	2,421	2,478	2,745	3,311	2.3%
Total	62,710	59,136	58,603	62,443	•

Pre-1960 Registered		Υe	ear	Average annual	
Vehicle Category	1996	2000	2005	2010	change
Cars	91,733	86,692	84,908	83,168	-0.7%
Motorcycles	72,627	67,206	66,206	64,257	-0.9%
Buses & Coaches	1,639	1,582	1,619	1,647	0.0%
LGVs*	11,423	11,667	12,502	12,923	0.9%
Total	177.422	167.147	165.235	161.995	

\*Includes only the two-thirds of the LGVs that are assumed to be 3,500Kg (or less) gross vehicle weight and are required to have a statutory

The numbers of licensed vehicles may fluctuate or increase over time as a result of the following

- Vehicles taken off the road using Statutory Off Road Notification (SORN) may be registered again,
- Owners may fail to routinely license their vehicles,
- Vehicles purchased from abroad may be registered in GB,
- Vehicles may be converted e.g. from cars to LGVs

### 26. Number of road casualties and accidents

Table 6 - Number of casualties resulting from reported personal injury road accidents by casualty severity and year of vehicle registration/manufacture (GB: 2010, DfT)

Accidents involving at least one of the	Vehicle first registered or	Number	of casualtie	es resulting acc	dents by severity
following type of vehicle	manufacture <sup>2</sup>	Killed	Seriously injured	Slightly injured	Damage only accident <sup>1(a)</sup>
Car	<1920	0	1	1	3
	1920-1944	0	0	4	5
	1945-1959	1	4	15	27
Buses/Coaches	<1920	0	0	0	0
	1920-1944	0	0	1	1
	1945-1959	0	0	0	0
Motorcycles	<1920	0	0	0	0
	1920-1944	0	1	2	4
	1945-1959	3	18	16	49
LGV	<1920	0	0	0	0
	1920-1944	0	0	2	3
	1945-1959	0	0	1	1
HGV <sup>(b)</sup>	<1920	0	0	0	N/A
	1920-1944	0	0	0	N/A
	1945-1959	0	0	0	N/A
Total		4	24	42	93
All Vehicles		1,857	22,660	184,138	278,000

<sup>(</sup>a) As we do not have a breakdown of the total damage-only claims made by insured motorists by vehicle type and vehicle manufactured date, we have based our estimate above using the ratio of the number of damage-only claims in 2010: 278,000, compared to the number of total road casualties 208,655 in 2010, which provided a ratio of 1:1.33.

<sup>(</sup>b) Heavy Goods Vehicles (HGVs) – are required to have a statutory roadworthiness test under The Goods Vehicles (Plating and Testing) Regulations 1988. However, unladen pre-1960 manufactured HGVs are exempted from roadworthiness test.

Based on total claims from insured motorists in 2010 - Association of British Insurers see www.abi.org.uk/Media/Releases/2011/02/Insurers\_helped\_over\_450000\_customers\_weather\_the\_December\_2010\_freeze.aspx

## 27. MOT test

Table 7 - MOT Failure Rate (Initial Test) - Year of test 2009 - VOSA

Tunio I	Main category of	Vehicle first registered						
Class of	vehicles included in		venicie firs	st registered				
Vehicle <sup>2</sup>	the class	< 1920	1920 - 1945	1946 - 1959	1960 >			
C 1&2		323	4,689	18,347	931,168			
MOT Failed		2	101	642	126,562			
MOT Failure %	Motorcycles	0.7%	2.1%	3.5%	13.6%			
C 3&4	Cars	1,226	21,786	31,425	25,795,960			
MOT Failed	Three-wheeled vehicles	22	1,354	5,417	7,970,050			
MOT Failure %	LGVs <3,000kg	1.8%	6.2%	17.2%	30.9%			
C5		0	82	390	49,242			
MOT Failed		0	11	43	13,935			
MOT Failure %	Private buses & coaches	0.0%	13.4%	11.0%	28.3%			
C7		1	17	32	555,449			
MOT Failed	LGVs	0	3	7	230,511			
MOT Failure %	3,000kg-3,500kg	0.0%	17.6%	21.9%	41.5%			
Total		1,550	26,574	50,194	27,331,819			
Total MOT Failed		24	1,468	6,109	8,341,059			
Total MOT Failure	е	1.5%	5.5%	12.2%	30.5%			
All pre-1960 vehic	cles				78,318			
Total MOT failed					7,601			
MOT Failure %					9.7%			

<sup>&</sup>lt;sup>2</sup> A full list of classes of vehicle and type of vehicles within a class is available in the link: www.dft.gov.uk/vosa/mottestingdata-userguide.htm

Table 8 – 2011 MOT test fees<sup>3</sup>

Classes 1 and 2 (class 1 engine size up to 200 cc) Vehicle type	Age first test certificate required (years)	Fee
Motor bicycles	3	29.65
Motor bicycles with side car	3	37.80
Class 3 (up to 450 kg unladen weight)	Age first test certificate	
Vehicle type	required (years)	Fee
3 wheeled vehicles	3	37.80
Class 4 Vehicle type	Age first test certificate required (years)	Fee
Cars (up to 8 passenger seats)	3	54.85
Motor caravans	3	54.85
3 wheeled vehicles (over 450 kg unladen weight)	3	54.85
Quads (max unladen weight 400 kg - for goods vehicles 550		
Kg and max net power of 15 kw)	3	54.85
Dual purpose vehicles	3	54.85
Private hire and public service vehicles (up to 8 seats)	3	54.85
Ambulances and taxis	1	54.85
Private passenger vehicles and ambulances (9-12 passenger seats)	1	57.30
Class 4a (includes seat belt installation check)	Not applicable	64.00
Class 5 (with more than 13 passenger seats)	Age first test required	
Vehicle type	(years)	Fee
Private passenger vehicles and ambulances - 13-16	V	
passenger seats	1	59.55
Private passenger vehicles and ambulances - more than 16 passenger seats	1	80.65
Class 5a (includes seat belt installation check) Vehicle type	Age first test required (years)	Fee
Private passenger vehicles and ambulances - 13-16	() 5 5 /	
passenger seats	Not applicable	80.50
Private passenger vehicles and ambulances - more than 16		
passenger seats	Not applicable	124.50
Class 7	Age first test required	
Vehicle type	(years)	Fee
Goods vehicles (over 3,000 kg up to 3,500 kg DGW)	3	58.60

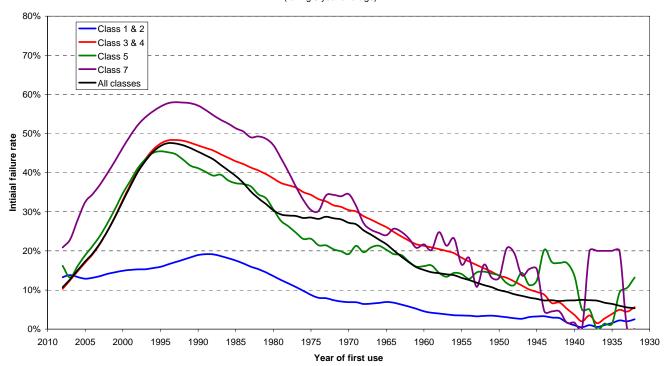
Note: the fees shown are the maximum fees and they are not subject to VAT.

 $<sup>^{3}\ \</sup>mathsf{Directgov}\ \mathsf{website:www.direct.gov.uk/en/Motoring/OwningAVehicle/Mot/DG\_4022514}$ 

Graph 1 - Initial MOT Test failure rate by first year of use - DfT MOT Computerisation

### Initial MOT Test failure rate by year of first use

(rolling 5 year average)



## 28. Average number of miles travelled by pre-1960 registered vehicles

**Table 9** - Average miles per year travelled by vehicle category – based on 2009 MOT test<sup>4</sup>

Vehicle	Catego	ries 1 & 2	Categories 3 & 4		Cate	egory 5	Categories 1-5			
first	Moto	rcycles	Cars		Buses & Coaches		Cars Buses & Coaches		All Vehicles	
registered	Mean	Median	Mean	Median	Mean	Median	Mean	Median		
Pre-1920	751	407	2,673	317	N/A	N/A	2,450	324		
Pre-1945	1,045	212	1,589	291	424	191	1,529	280		
Pre-1960	1,000	224	1,460	340	445	295	1,317	303		

Number of pre-1960 registered vehicles driven under 500 miles in 2009 = 63.1%

At the end of 2010 there were 34.1m vehicles registered in GB<sup>5</sup> and the overall motor vehicle traffic volume in GB was 308.1 billion vehicle miles<sup>6</sup>. Thus the average miles driven per registered vehicle was about 9,000 miles per year.

<sup>&</sup>lt;sup>4</sup> VOSA, based on MoT test carried out on over 30,000 vehicles. Data excludes vehicle data with anomalies.

<sup>&</sup>lt;sup>5</sup> Department for Transport, Vehicle Licensing Statistics, Summary of latest key results: http://www2.dft.gov.uk/pgr/statistics/datatablespublications/vehicles/licensing/index.html

<sup>&</sup>lt;sup>6</sup> Department for Transport, Road Traffic Statistics, The latest information on road traffic in GB: http://www2.dft.gov.uk/pgr/statistics/datatablespublications/roads/traffic/index.html

### 29. Road casualty and accident costs

**Table 10** - Average value of prevention of road accidents by severity and element of cost 2011<sup>7</sup>

		Cost Element (In £)							
	С	asualty related co	osts	P	Accident related	costs			
Accident severity	Lost output	Medical & ambulance	Human costs	Police cost	Insurance & admin	Damage to property	Total		
Fatal	624,419	5,871	1,229,743	1,934	305	11,170	1,873,442		
Serious	24,872	14,894	169,233	256	189	5,135	214,579		
Slight	3,097	1,310	14,745	60	115	3,038	22,365		
All injury	13,840	3,194	50,803	110	128	3,422	71,497		
Damage only	-	-	-	3	54	1,913	1,971		

### 30. Cost of updating system & advice materials

- a) One-off cost<sup>8</sup> for updating VOSA system, manpower cost and publicity materials cost is estimated to be £55k.
- b) VOSA the reduction in volume of MOT test is expected to have a very minor affect on finance (almost negligible) and no affect at all on VOSA contracts as the number of initial MOT tests carried out by pre-1960 manufactured vehicles amounts to less than 0.3% of total initial MOT test carried out each year.

### 31. Cost of time & vehicle usage and vehicle depreciation

**Table 11** - Value of Non-Working (Non-commuting) Time per person (£ per hour, 2011 prices and values<sup>9</sup>) - Market Price

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Values	5.29	5.44	5.58	5.73	5.88	6.04	6.21	6.37	6.55	6.72	6.9

The proportion of petrol cars in 2015 will be approximately 51%<sup>10</sup>. We have used this estimate as this would provide us a central figure to calculate the changes over a decade.

The use of vehicles on highway gives rise to operating costs for the user. These include the obvious costs of fuel (see i) below), oil and tyres, and an element of vehicle maintenance. The distance-related costs to vehicle owners are included in the car non-fuel operating costs by inclusion of an allowance for mileage related depreciation (see ii) below).

**Table 12** - Resource cost in pence per litre petrol and diesel<sup>11</sup>

Fuel						Year					
type	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010	2021
Petrol	40.4	40.9	41.3	41.8	42.2	42.7	43.0	43.6	44.1	44.4	45.6
Diesel	44.6	45.1	45.6	46.1	46.6	47.1	47.6	48.1	48.6	49.1	50.4

**Table 13** - Estimate of the cost (vehicle depreciation) per mile<sup>12</sup> travelled by category of vehicle

Cost per mile travelled (	(in pence)
Cars	6.99
Other Goods Vehicle	15.95
Buses & Coaches	62.74

Source: WebTAG, section 2.2.3 Average value of prevention of road accidents by severity and element of cost, uplifted to 2011 prices using HMT GDP deflators <a href="https://www.hm-treasury.gov.uk/data\_gdp\_fig.htm">www.hm-treasury.gov.uk/data\_gdp\_fig.htm</a>

<sup>9</sup> Source: WebTAG, section 1.1.20 – Values of Time and Operating Costs 2002 prices (paragraph 1.1.20) and Forecast Growth in the Working and Non-Working Values of time (paragraph 1.2.21). Uplifted prices using HMT GDP deflators <a href="https://www.hm-treasury.gov.uk/data\_gdp\_fig.htm">www.hm-treasury.gov.uk/data\_gdp\_fig.htm</a>

Source: WebTAG, section 1.3.11a - Proportion of Cars and LGVs Using Petrol or Diesel by Vehicle Kms (%)
 Source: WebTAG, section 1.3.10a - Fuel Costs, Fuel Duty and VAT Rates in 2011 \*Uplifted prices using HMT GDP deflators: www.hm-

<sup>&</sup>lt;sup>8</sup> VOSA

Source: Web IAG, section 1.3.10a - Fuel Costs, Fuel Duty and VAT Rates in 2011 \*Uplifted prices using HMT GDP deflators: www.nm-treasury.gov.uk/data\_gdp\_fig.htm

<sup>&</sup>lt;sup>12</sup> Source: WebTAG, section 1.3.17 - Non-Fuel Resource VOCs

#### 32. Calculating the cost to the environment

Table 14 - Kg of CO<sub>2</sub>e emissions per litre 13

Year	Petrol	Diesel
2011	2.254	2.544

Table 15 - Non-traded central carbon price and sensitivities 2011-2021, 2009 £/tCO<sub>2</sub>e<sup>14</sup>

		Non-traded	
Year	Low	Central	High
2011	26	52	79
2012	27	53	80
2013	27	54	81
2014	27	55	82
2015	28	56	84
2016	28	57	85
2017	29	57	86
2018	29	58	87
2019	30	59	89
2020	30	60	90
2021	31	61	92

Table 16 - Regional air quality damage cost<sup>15</sup> by fuel

Area	Car petrol	Car diesel
Transport average p/litre (2011 estimate)	0.31	3.35

# **Assumptions**

#### Manufactured, licensed and registered vehicles

33. All vehicle registration and licensing is governed by the Vehicle Excise and Registration Act 1994 (as amended). The Act requires all mechanically propelled vehicles that are used or kept on the public road to be correctly licensed. Once licensed, a vehicle must also be registered and this involves allocating each vehicle a unique registration mark. DVLA then sets up a record on its vehicle register. The register maintained by DVLA is based on the vehicle details and records the registered keeper. The registered keeper is the person responsible for the vehicle's use and licensing on the public roads.

The EU Directive 2009/40/EC, Chapter I, General Provisions, Article 1 refers to motor vehicles which are <u>registered</u> as being required to undergo roadworthiness test. Chapter II, Exceptions, Article 4 of the state allows members states to exempt from the road worthiness test vehicles <u>manufactured</u> before 1 January 1960.

As most vehicle statistics are based on the date vehicle first registered rather than on the date vehicle was manufactured (see Tables 3, 4, 5, 7 and 9) vehicle data used in this IA are largely based on the date vehicle first registered. The date in which a vehicle is manufactured and registered may vary due to, for example, vehicles being imported from abroad or delay in registration. However, the total number of licensed registered vehicles would be the same as the total number of licensed manufactured vehicles. For the purpose of calculation, we are assuming that the statistics on registered vehicles would be same as statistics on manufactured vehicles. Thus, we have in this IA, used the terms 'registered vehicles', 'manufactured vehicles' and 'licensed vehicles' interchangeable.

<sup>&</sup>lt;sup>13</sup> Source: DECC toolkit - Table 2b: Converting road fuels to CO<sup>2</sup> (Marginal emissions factors), kgCO2/litre

<sup>&</sup>lt;sup>14</sup> Source: DECC toolkit - Table 3: Summary of all carbon prices and sensitivities 2008-2100, 2009 £/tCO2e

<sup>&</sup>lt;sup>15</sup> Source: DECC toolkit - Table 28: Regional air quality damage costs for the transport sector, 2009 p/litre, uplifted to 2011 prices using HMT GDP deflators www.hm-treasury.gov.uk/data\_qdp\_fig.htm

#### Number of pre-1960 registered vehicles

34. The data in Table 3 provides a breakdown of the number of pre-1960 registered vehicles by vehicle category and by MOT test requirement. Cars, motorcycles and private buses & coaches are required by Sections 45 to 48 of the Road Traffic Act 1988 to have a statutory MOT test.

The Light Goods Vehicles (LGVs) under 3,000kg gross vehicle weight are tested as Class 4s (same group as cars – see Table 7). Those between 3,000kg and 3,500kg gross vehicle weight are tested as Class 7s. LGVs over 3,500kg gross vehicle weight are tested by VOSA as HGVs (not in MOT database). For the purpose of calculation, we are assuming that two-thirds of LGVs are 3,500kg (or less) gross vehicle weight and are required by law to have a statutory MOT test.

The DVLA database does not provide further (readily available) information on vehicles regarded as 'Other', which are mostly made up of cranes and other commercial vehicles, and tricycles. For the purpose of calculation we are assuming that they are not required by law to have a statutory MOT test (see Table 3).

Following the assumptions mentioned above, we calculate that there are 161,995 pre-1960 manufactured vehicles that are required by law to have a statutory MOT test (see Table 3).

#### Calculation of additional road casualties and accidents

- 35. According to the TRL report on the Effect of Vehicle Defects in Road Accident <sup>16</sup> about 3% of road casualties could be associated with vehicle defects. The TRL report examined in detail, how road casualty figures are recorded and complied and looked at the reasons why vehicles failed their MOT test. Using accident/casualty databases for all accidents (Table 6) involving historic vehicles (currently approx 80k on the road, based on MOT data); we have taken 3% (TRL assumption) of these as the baseline for annual casualties associated with defects. This is shown in Table 17.
  - a) With regard to pre-1960 registered vehicles, we have established that:
  - i) the initial MOT failure rate was below 10% (see Table 7) compared to over 30% for post-1960 registered vehicles.
  - ii) the initial MOT failure rate for vehicles over 13 years old declines by age of the vehicle (see Graph 1, page 18) rather than increase by age,
  - iii) the average miles pre-1960 registered vehicles are driven each year is 1,300 (see Table 9) compared to 9,000 miles for all vehicles in GB.
  - b) We assume from the three points in a) above that the pre-1960 manufactured vehicles are well maintained and are rarely driven by their owners. As a result of this, the estimated road casualties and accidents associated with vehicle defect of 3% calculated by the TRL report for modern vehicles is likely to be higher than the actual link for pre-1960 manufactured vehicles. However, in the absence of a detailed study linking pre-1960 manufactured vehicles to road casualties, we have used the 3% link as the best available estimate.
- 36. For the low estimate, we assume the number of vehicles is unchanged from the baseline (about 80k), then using the TRL report, which states that half of people look after their car and half don't, then in the absence of an MOT there will be a 50% increase in the historic vehicle fleet that will be defective in some way. This will lead to an additional 50% defect-related casualties on top of the baseline (Table 18 shows this).
- 37. For the 'best estimate' we assume that of the 80k historic vehicles that do not do a MOT test each year, 50% of them will take to the roads adding additional 40k vehicles on the highway, this takes the total pre-1960 manufactured vehicles expected to be driven regularly on the highway to 120k. Assuming the same proportion of these new vehicles will be defective (50%) there is an additional impact on casualties (Table 19 shows the best estimate casualty assumptions).

 $<sup>^{16}</sup>$  Transport Research Laboratory, Effect of Vehicle Defects in Road Accidents, March 2011

- 38. For the high estimate, we assume there is an additional 80k historic vehicles on the road to add to the current 80k. By using the same assumptions as stated in paragraph 37, this gives a further increase in the impact on road safety compared to the baseline (Table 20 shows the high estimate casualty assumptions).
- 39. The above calculations are for one year only they are assumed to remain unchanged over 10 years. They are valued using the values in Table 10. Figures will not round perfectly because Tables 18-20 are to 2 decimal places.

**Table 17** - Number of casualties resulting from reported personal injury road accidents by casualty severity and year of vehicle registration/manufacture linked to vehicle defects

Accidents involving at least one of the	Vehicle first registered or manufacture	Number of casualties resulting accidents by severity				
following type of vehicle		Killed	Seriously injured	Slightly injured	Damage only accident	
Car	<1920	0.00	0.03	0.03	0.08	
	1920-1944	0.00	0.00	0.12	0.16	
	1945-1959	0.03	0.12	0.45	0.80	
<b>Buses/Coaches</b>	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.03	0.04	
	1945-1959	0.00	0.00	0.00	0.00	
Motorcycles	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.03	0.06	0.12	
	1945-1959	0.09	0.54	0.48	1.48	
LGV	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.06	0.08	
	1945-1959	0.00	0.00	0.03	0.04	

- d) The TRL report's half-conform assumption (conservative assumption) assumes that half of vehicle owners routinely check their vehicles regardless of the MOT test frequency or criteria, and half use the MOT test time to annually trigger any necessary maintenance or service work required. The report assumes that without a MOT test, the number of vehicles with defects in the first year of MOT exemption would increase by about half, and consequently, the number of road casualties caused by vehicle defect would increase proportionally. Table 18 below applies this assumption and shows the additional road casualties and accidents that would arise if pre-1960 registered/manufactured vehicles are exempted from the MOT test.
- e) We consider Table 18 below to be our low estimate. This is because the road casualties and accidents in the table are based on the actual number of pre-1960 registered/manufactured vehicles that do the MOT test and are likely to be driven regularly on the highway. Our best estimate (Table 19) assumes that the number of pre-1960 registered/manufactured vehicles driven on the highway would increase by 50%, and our high estimate (Table 20) assumes that all pre-1960 registered/manufactured vehicles (an increase of 100%) will be driven on the highway if these vehicles are exempted from the MOT test.

**Table 18** – Estimated number of casualties resulting from reported personal injury road accidents by casualty severity and year of vehicle registration/manufacture linked to vehicle defects and in the first year of MOT test exemption (low estimate)

Accidents involving at least one of the	Vehicle first registered or manufacture	Number of casualties resulting accidents by severity				
following type of vehicle		Killed	Seriously injured	Slightly injured	Damage only accident	
Car	<1920	0.00	0.02	0.02	0.04	
	1920-1944	0.00	0.00	0.06	0.08	
	1945-1959	0.02	0.06	0.23	0.40	
Buses/Coaches	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.02	0.02	
	1945-1959	0.00	0.00	0.00	0.00	
Motorcycles	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.02	0.03	0.06	
	1945-1959	0.05	0.27	0.24	0.74	
LGV	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.03	0.04	
	1945-1959	0.00	0.00	0.02	0.02	

**Table 19** - Estimated number of additional road casualties and accidents using the half conform assumption and 75% of registered vehicles (best estimate)

Accidents involving at least one of the	Vehicle first registered or manufacture	Number of casualties resulting accidents by severity				
following type of vehicle		Killed	Seriously injured	Slightly injured	Damage only accident	
Car	<1920	0.00	0.02	0.02	0.06	
	1920-1944	0.00	0.00	0.09	0.12	
	1945-1959	0.02	0.09	0.34	0.60	
Buses/Coaches	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.02	0.03	
	1945-1959	0.00	0.00	0.00	0.00	
Motorcycles	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.02	0.05	0.09	
	1945-1959	0.07	0.41	0.36	1.11	
LGV	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.05	0.06	
	1945-1959	0.00	0.00	0.02	0.03	

**Table 20** - Estimated number of additional road casualties and accidents using the half conform assumption and 100% registered vehicles (high estimate)

Accidents involving at least one of the	Vehicle first registered or manufacture	Number of casualties resulting accidents by severity				
following type of vehicle		Killed	Seriously injured	Slightly injured	Damage only accident	
Car	<1920	0.00	0.03	0.03	0.08	
	1920-1944	0.00	0.00	0.12	0.16	
	1945-1959	0.03	0.12	0.45	0.80	
Buses/Coaches	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.03	0.04	
	1945-1959	0.00	0.00	0.00	0.00	
Motorcycles	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.03	0.06	0.12	
	1945-1959	0.09	0.54	0.48	1.48	
LGV	<1920	0.00	0.00	0.00	0.00	
	1920-1944	0.00	0.00	0.06	0.08	
	1945-1959	0.00	0.00	0.03	0.04	

f) It is difficult to predict with any certainty whether, in the absence of a statutory MOT test, the owners of pre-1960 manufactured vehicles who currently take no action to check on vehicle condition would alter their behaviour if their vehicles are exempted from the MOT test. However, we know for sure that unlike modern vehicles under 10 years old (which the TRL report focused on) where the MOT test failure rate increases by the age of vehicle, the MOT test failure rate for vehicles older than 13 years old decline by age of the vehicle (see Graph 1, page 18). On this basis, we assume that the number of pre-1960 manufactured vehicles with defects and consequently the number of road casualties and accidents caused by these vehicles would stabilise after increasing by half.

#### Time, travel & vehicle speed

- 40. Based on the survey carried out in the Department for Transport's MOT Scheme Evidence-base document 2008<sup>17</sup>, we assume that average time taken to carry out a MOT test is 1 hour and 55.4 minutes (1.92 hours) which is made up of the following:
- 60 min MOT service
- 38.5 min average travel time
- 16.9 min average waiting time

The MOT Scheme survey takes into account that:

- A proportion of people have to make two journeys to a testing station (delivering and collecting their vehicle),
- Some people wait whilst their vehicle is being tested,
- Some people have to spend further time whilst their vehicle is being retested after an initial test fail.
- b) The MOT Scheme survey suggests that 85% of all postal districts have at least one testing station within their boundary. According to the Highway Code, the speed limit in the built up areas is 30 miles per hour (mph), hence we calculate that a vehicle travelling at 30mph for 38.5 min (average travel time to a MOT station and back) would travel a total of 19.25 miles.
- c) We assume that in cases where vehicle owners would be using routes with higher speed limits to get to an MOT station (and back), any gain in time or fuel saving would be offset by vehicle owners using routes with speed limits below 30mph or by vehicles stopping at traffic lights, road crossings etc.

#### **Fuel Consumption**

41. The following fuel consumption <sup>18</sup> by category of vehicle was used with the assumption that vehicles on average would be travelling 30mph:

Table 21 - fuel consumption by category of vehicle

Fuel type	Vehicle category	Litres / Km	Litres / Mile	Miles / Litre
Petrol	Car (Average)	0.08	0.13	7.95
	Buses & Coaches	0.35	0.56	1.77
	LGVs	0.23	0.37	2.73
Diesel	Car	0.07	0.11	9.24
	Buses & Coaches	0.35	0.56	1.77
	LGVs	0.23	0.37	2.73
Petrol	Motorcycle <sup>19</sup>			19.81

<sup>17</sup> Based on random survey carried out by the Department for Transport for the document: MoT Scheme Evidence-base, December 2008

<sup>&</sup>lt;sup>18</sup> Source: WebTAG, section 1.3.5 – Vehicle Operating Costs – Fuel

<sup>&</sup>lt;sup>19</sup> Average fuel consumption by motorcycle was not available on the WebTAG. We used median levels of fuel consumption by motorcycles using the survey on the website www.motorcyclefuelconsumption.com/

### Risks and sensitivity analysis

#### DVLA's vehicle relicensing processes

42. Because of existing commitments, including other deregulatory measures, DVLA would not be able to upgrade their IT systems ahead of their IT contract re-let due to take place in 2015. We have explored alternative temporary electronic solutions. The only feasible temporary fix (whilst DVLA develop a long term permanent solution) would be for VOSA to adjust their MOT database to send a 'yes' message to DVLA when a vehicle licensing application is made for an exempt or potentially exempt historic vehicle. Because EU rules require an exemption to be linked to date of vehicle manufacture, the temporary IT fix to the relicensing process would potentially affect up to 770k vehicles where the manufacture date is unknown. Some of these vehicles may have been manufactured prior to 1960. If owners felt that they should enjoy MOT exemption there would be a hurdle to overcome in proving that fact to DVLA the first time the question arose. Considering just under 80k MOT tests were done by pre-1960 registered vehicles (see Table 7) and our best estimate already assumes that the number of pre-1960 manufactured vehicles regularly driven on the highway is projected to increase by half to just over 121k vehicles (see paragraph 17) – we believe that we have factored in the potential rise in the number of vehicles being driven regularly on the highway.

#### Insurance premiums

43. The Association of British Insurers' (ABI) response to the consultation suggests that they do not expect an immediate impact on insurance premiums simply from a change in the MOT requirement of itself. Any change would depend, all other factors being equal, on whether insurers noticed any change in the claims experience of these vehicles. If this were noted, then they would expect to see premiums rise.

They added that premiums will be calculated on the same basis as now, but any noticeable worsening of the claims experience would be likely to lead to an increase. Vehicles are not generally rated by their age, but for historic vehicles which are likely to be cherished by their owner, may be valuable for their historic interest, and would therefore be more expensive to repair due to low availability of parts and require more specialist mechanics and engineers to repair. ABI sees a particular risk should there be more collisions due to mechanical failure missed in the absence of an MOT test.

Due to the specific risks involved in insuring historic vehicles, they are not generally covered by every motor insurer, and there are some insurers that specialise. These companies would be particularly hit by any worsening of the claims experience, and the relatively limited number of insurers could therefore exacerbate any premium increases.

Our cost calculations include insurance costs relating to road casualties and damage-only accidents (see Table 10).

## **Specific Impact Tests**

#### Greenhouse Gas Assessment

44. According to our 'best estimates', Option 1 would lead to a net increase of 0.142m tonnes of CO<sub>2</sub> emissions over 10 years; whereas Options 2 and 3 would lead to a net increase of 0.055 and 0.003m tonnes of CO<sub>2</sub> emissions respectively over the same period.

#### Small Firm and or Competition Assessment

- 45. This is a deregulatory measure which will affect private drivers. We do not expect this measure to affect the MOT test centres.
- 46. We do not expect any impact on competition.

## One in one out (OIOO)

47. This is a deregulatory measure. We have not stated the equivalent annual net cost to business because we do not know what percentage of historic vehicles are owned by businesses versus private owners (this is also one of the reasons why we decided not to exclude vehicles used for commercial purposes – see paragraph 6), hence we cannot establish what percentage of savings go to businesses. However, consultation responses included firms (or possibly charities) such as historic vehicle museums, so we feel able to assume that this is within scope of OIOO to some extent, even if the extent cannot be determined.