



# Motoring Towards 2050

## Transport Planning in an Economic Downturn

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Director RAC Foundation

IHT Harrogate 28th January 2010



There is a lot going on!



# 12 October 2009

**The Prime Minister:**

**“sell off the assets” – inc. Dartford bridge**

**Mayor of London “Draft Transport Strategy”**

**London Population up 1.3 million by 2031**

**London road charging?**

**Committee on Climate Change “First Report”**

**Decarbonisation of transport**

**National road charging?**



**21 October 2009**

ONS:

UK population of 61.4 million

rise to 71.6 million by 2033



**31 December 2009**

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Delivery of High Speed 2 Report to  
Secretary of State for Transport

Apparent all-party support for  
“a network of new high speed railways”



# Winter 2009-10

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Flooding

Frost damage

to already poorly maintained roads

Cost of putting infrastructure into good condition?



# January 2010

## Tory policies on rail

Less than 10% of passenger and freight market  
Heavily loss-making.

Reduce fares

Reduce crowding



implies more capacity?

Increase competitive pressure on Network Rail

Reduce competitive pressure on train operators

Invest heavily in High Speed Rail network

Teresa Villiers, 12 January



# January 2010

## Tory policies on road

More than 90% of passenger and freight market  
Profit-making

Road congestion and unreliability a recognised as a problem...

Improve road works, traffic lights

More localised decision-making

Lorry road user-charging (No general road user-charging)

Make Highways Agency more efficient

New road projects only “where ... consistent with a responsible  
approach to the public finances”.

<sup>n</sup> Teresa Villiers, 22 January.



# After General Election

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Gvt expenditure cuts

Transport NOT “protected”



## **A need for a strategy that is:**

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**Long term: road and rail**

**Makes roads safer**

**Deals with carbon**

**Affordable – how do we pay for it?**



# Long Term Strategy: road and rail



All parties are claiming the economy will  
recover

Implies return to growing demand for road  
and rail

We are already short of capacity on both!



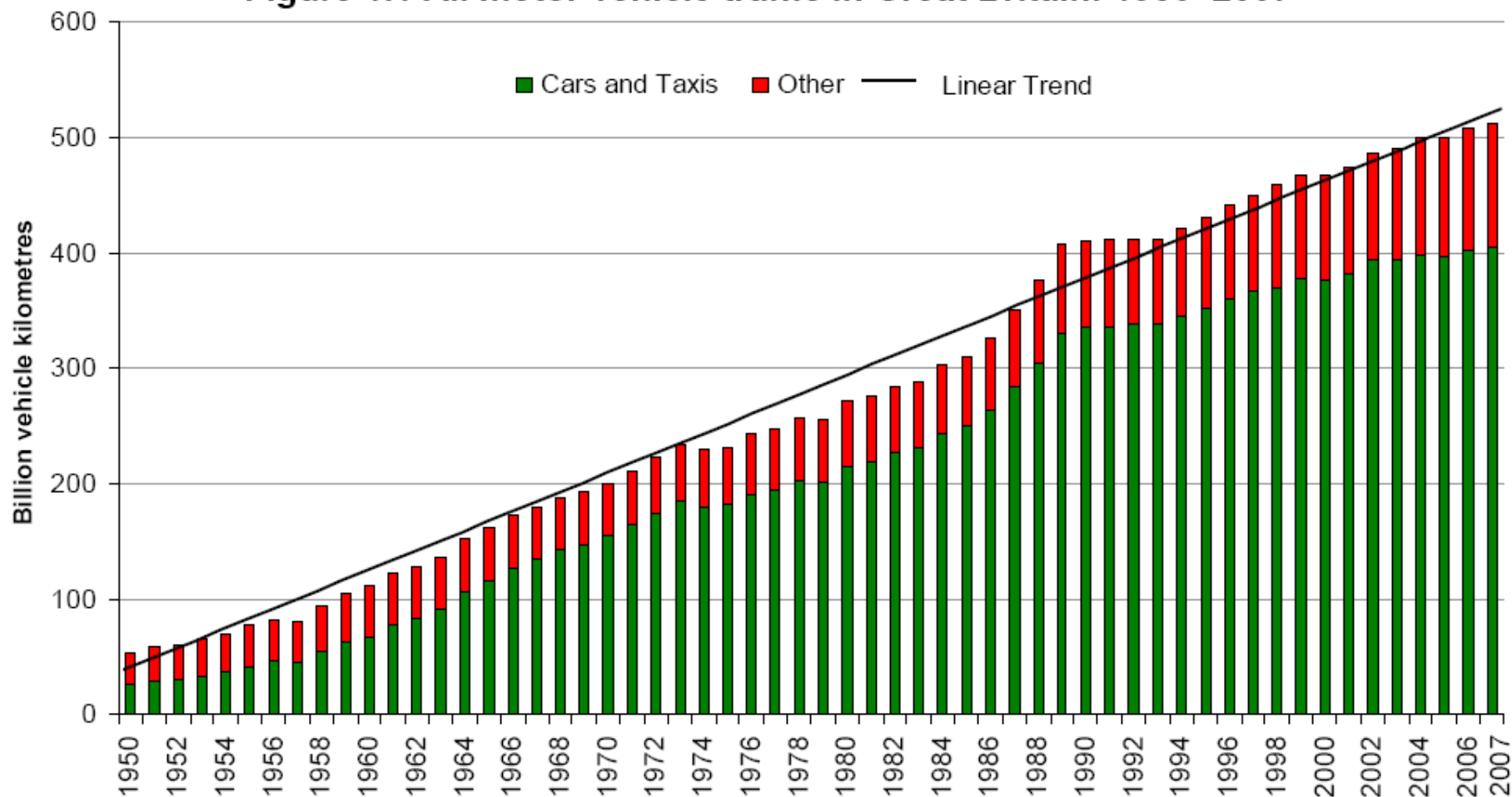
We have been here before

In the 1970s!

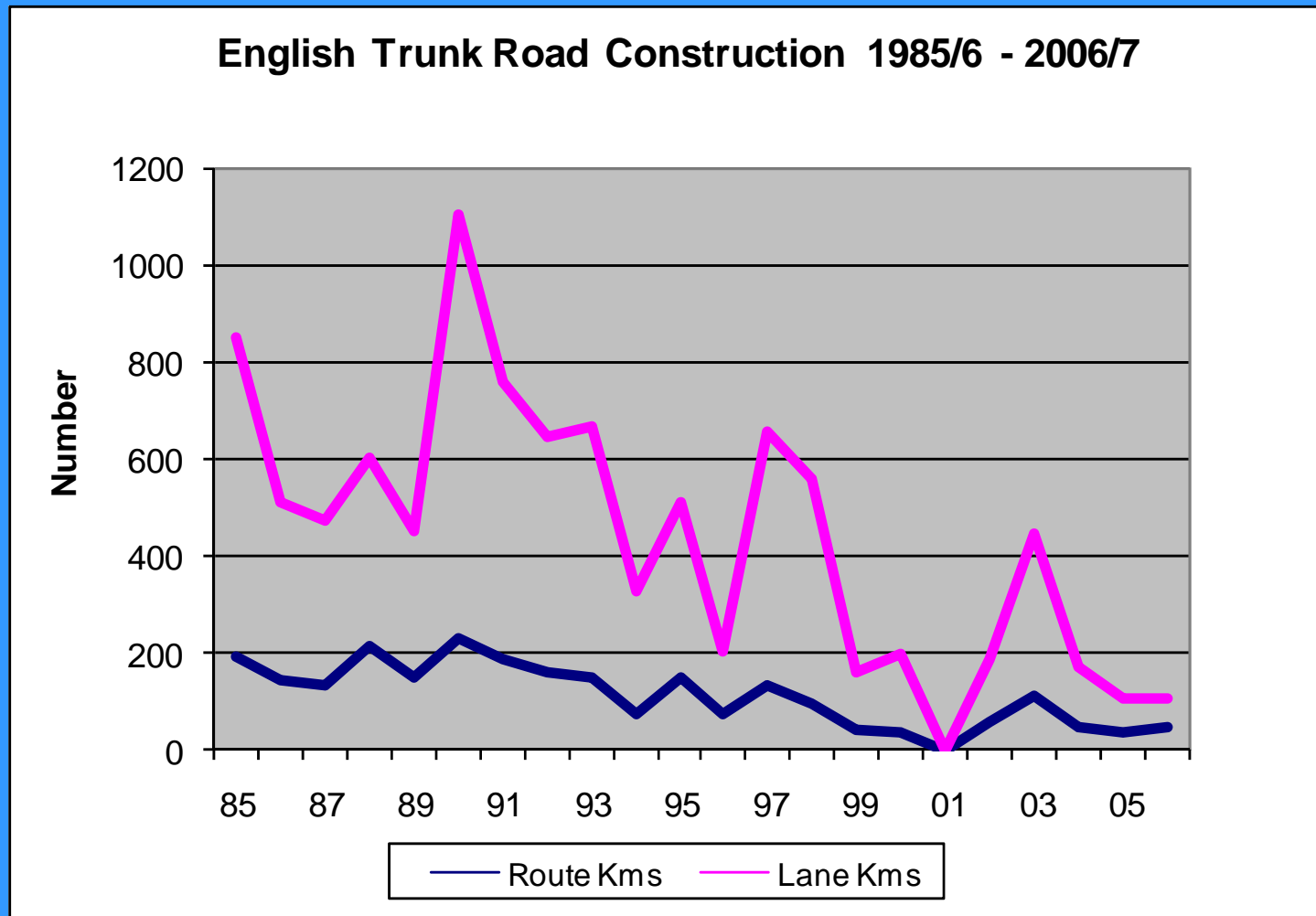
# Relentless road traffic growth

(source: Road Statistics 2007, DfT)

Figure 1.1 All motor vehicle traffic in Great Britain: 1950–2007



# Why congestion has got worse





## It will get worse in future?

**Between 2005 and 2041:** (RAC Foundation estimates)

Population will grow by more than 11%

Most growth in the E, S and London

Incomes will double

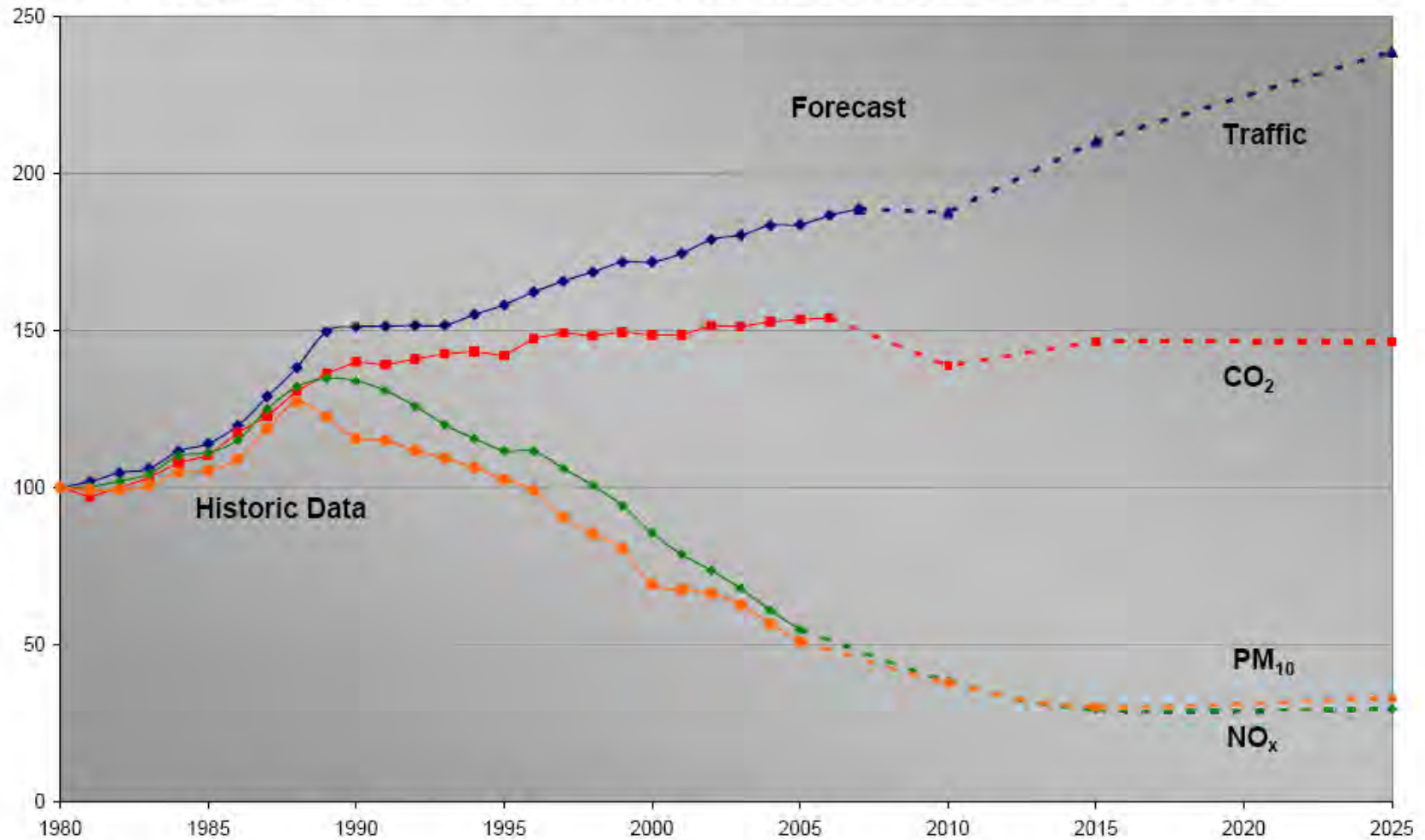
Number of cars will increase by 44%

Road traffic demand up by 43%

Rail planning is assuming that rail growth will continue at recent rate

# National Traffic Forecast (DfT, 2008)

**Figure 1: Road Traffic and Road Transport Emissions, Past and Forecast**



Source: Historic traffic data from DfT (2007); Historic emissions data from DECC (2007); forecasts from the NTM



## Plans to 2015

January 2009

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Hard shoulder running alternative to motorway widening,

520 additional lane miles to the national strategic road network, of which 340 lane miles through hard shoulder running.

£6bn announced in July 2008

Not much new capacity for local roads?



# Investment good value for money?

Sector	Number of projects	Average Benefit: cost
Highways Agency	93	4.7
Local Road	48	4.2
Local Public Transport	25	1.7
Rail	11	2.8
Light Rail	5	2.1
Walking and Cycling	2	13.6
Total	184	

Source: Eddington (Dodgson, RAC Foundation, 2009)



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Appraisal methods subject to revision

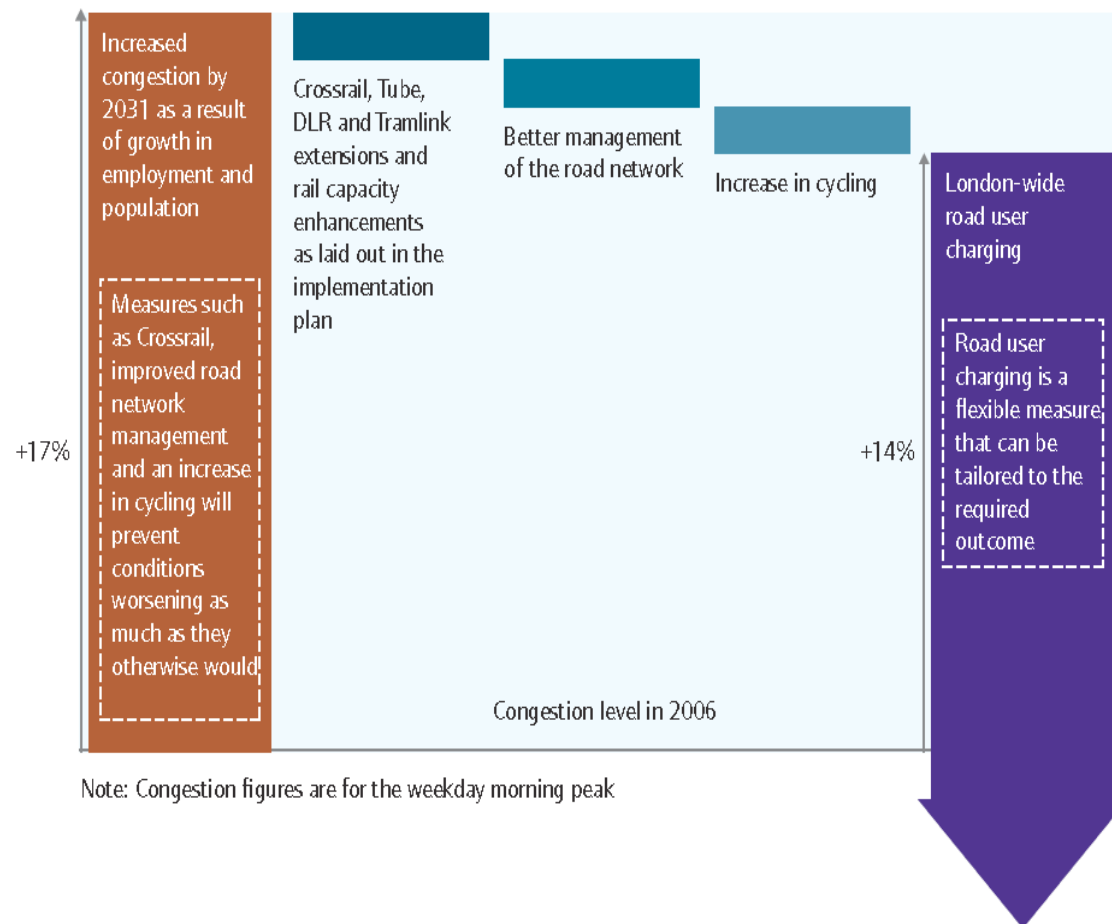
...but economic returns look very good

for the right road schemes

(Eddington)

# London has the same problem!

**Figure 63:** Mitigation of increased road congestion through better management of the road network and road user charging





# Road Charging a solution?

Road pricing deals with congestion  
Extra capacity restores mobility

Both are needed to do the job – a policy package

Road pricing would generate substantial new cash flow



Make roads safer

# Small expenditures on improving roads have very high returns!

## Key findings

**Risk on high risk sections is more than 15 times higher than the safest roads**



**10%**

of Britain's road length accounts for over half of all road deaths and one-third of all serious injuries

**1 in 7**

non-primary A roads are rated as higher risk, compared to 1 in 25 primary A roads

**1 in 4**

fatal and serious collisions on Britain's motorways and A roads involves a motorcyclist

**18%**

reduction in fatal and serious collisions across Britain's motorways and A roads in the last three years for which data were available (2005-2007)

**62%**

of fatal or serious collisions happen on single carriageways, 13% on duals and 10% on motorways

**Half**

On Britain's ten most improved roads, the number of fatal and serious collisions has halved in the last three years, from over 600 to under 300

**12%**

of the network has unacceptably high risk

**6 times more risk**

Single carriageways are twice the risk of dual carriageways and 6 times riskier than motorways, with 1 in 5 rated in the higher risk categories

**45,000kms**

This year's analysis is the most comprehensive yet, measuring and mapping road safety risk on Britain's entire motorway and A road network, covering 45,000kms of roads outside urban cores

**18%**

are rated as low risk, 45% low-medium risk, 25% medium risk, 9% medium high risk and 3% high risk

**One-third**

of all fatal and serious collisions on motorways and A roads are at junctions, 17% involve pedestrians and cyclists, 16% are vehicles running off the road, and 14% are head-on between oncoming traffic flows. The remaining 21% are often rear end shunts, prevalent on bends and at junctions

**60%**

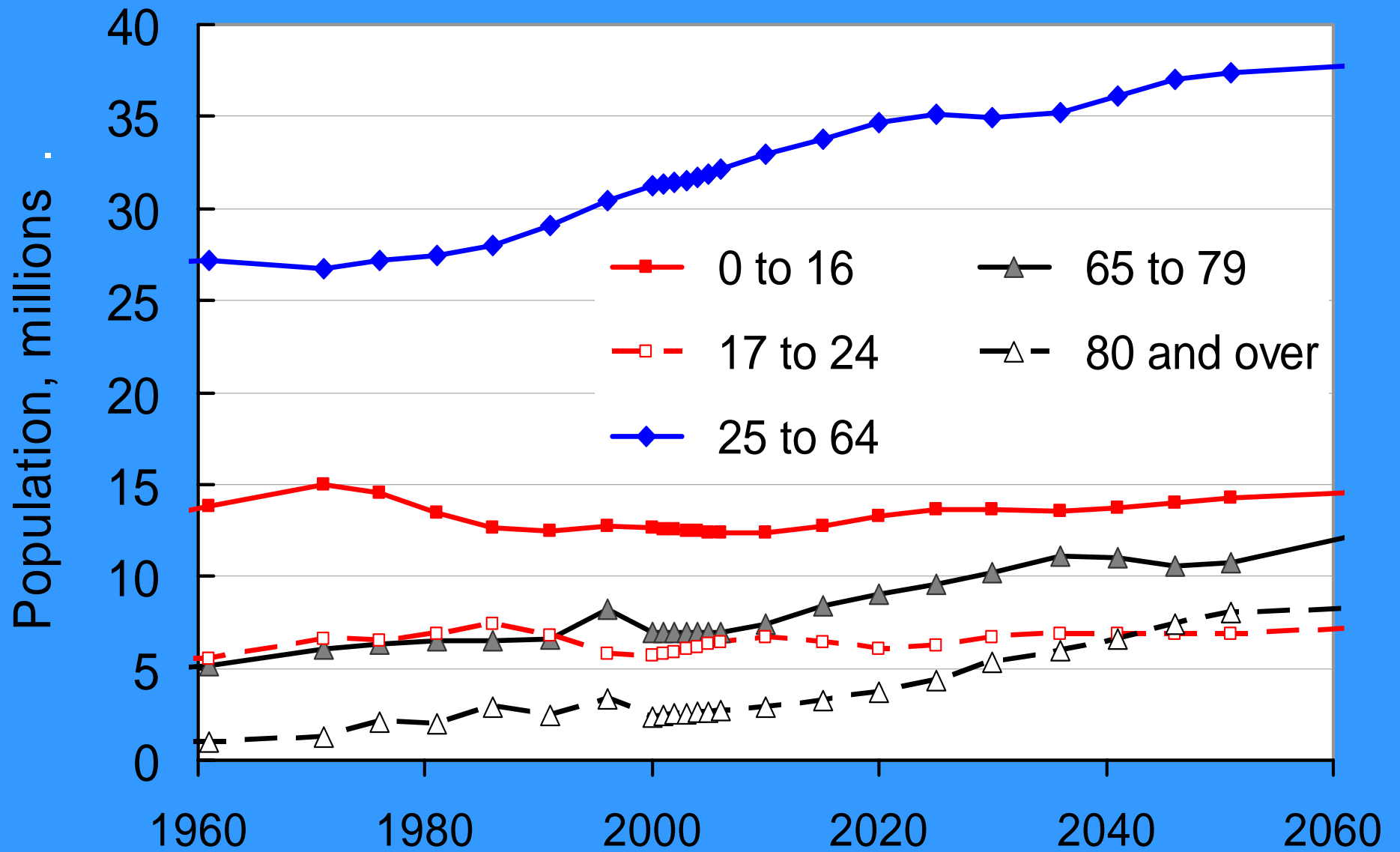
of the A road network and 25% of motorways fall to rate as safe

**30%**

Risk is 30% higher on non-primary A roads compared to primary A roads

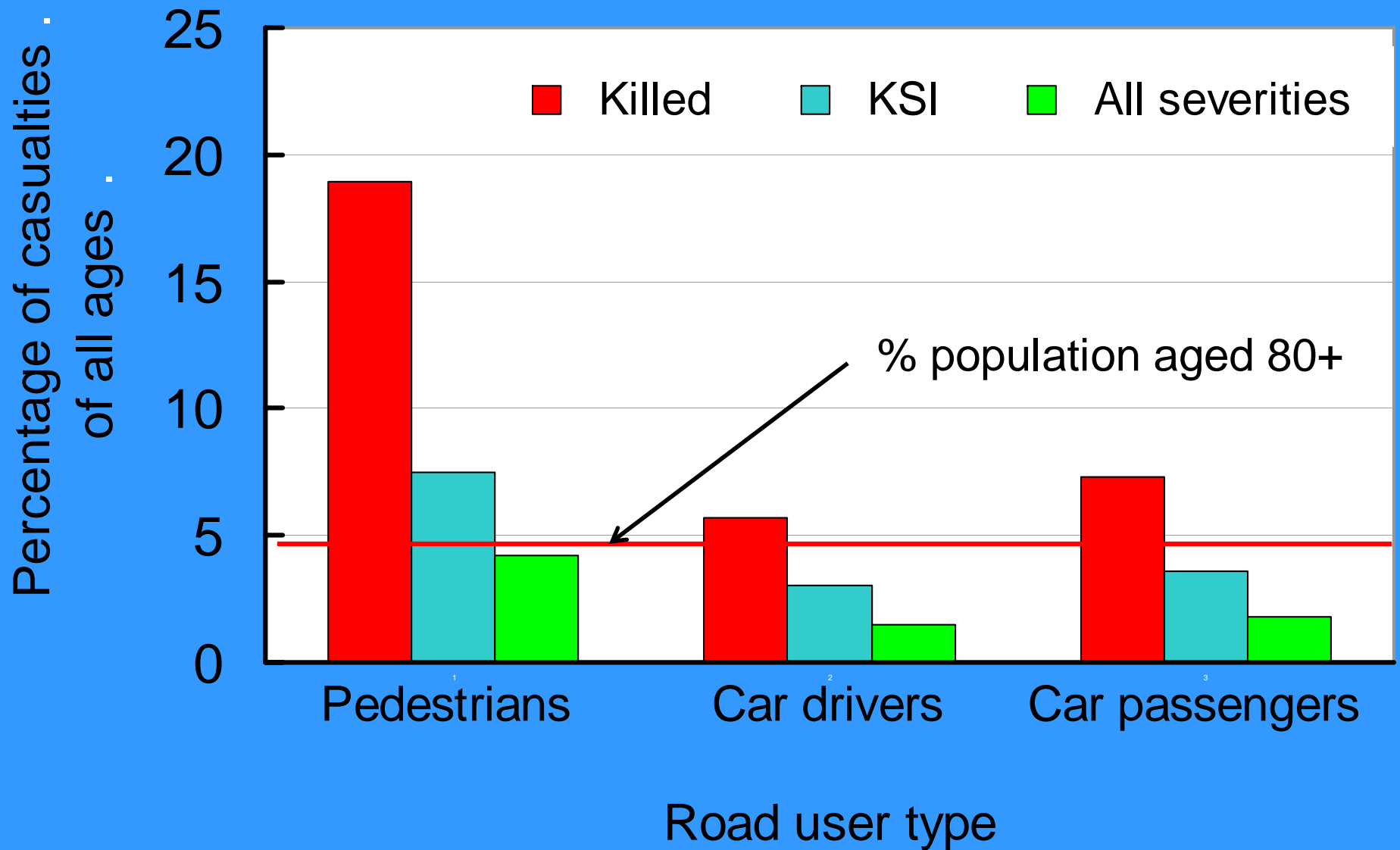
Source: Road Safety Foundation, 2009

# POPULATION UK



Source: Mitchell, RAC Foundation, March 2010

# CASUALTIES AGED 80+ PERCENTAGE OF ALL CASUALTIES 2006

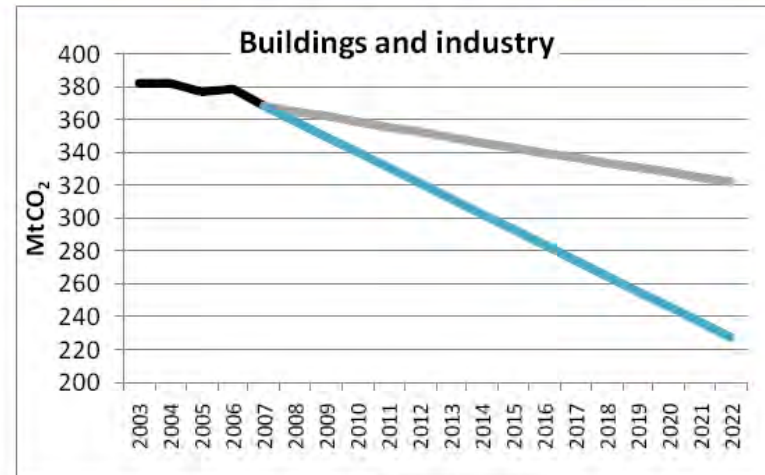
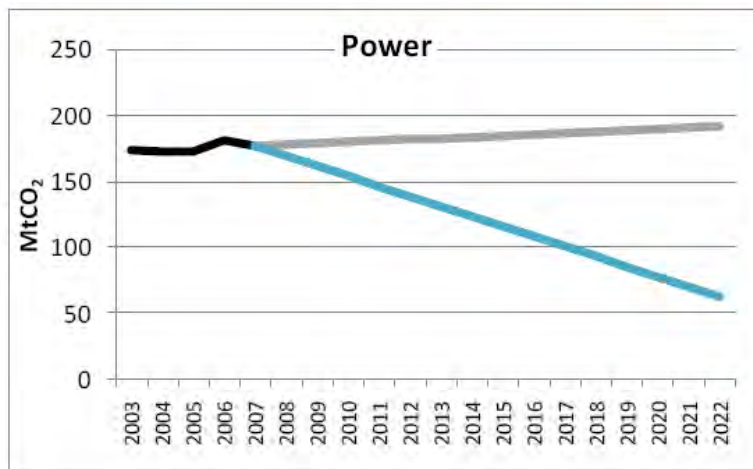




# Deal with carbon

# Committee on Climate Change, First Report, 12 October 2009

## ii) Required progress in major sectors



— Historic  
— Extrapolation  
— Required path

## iv) Road transport

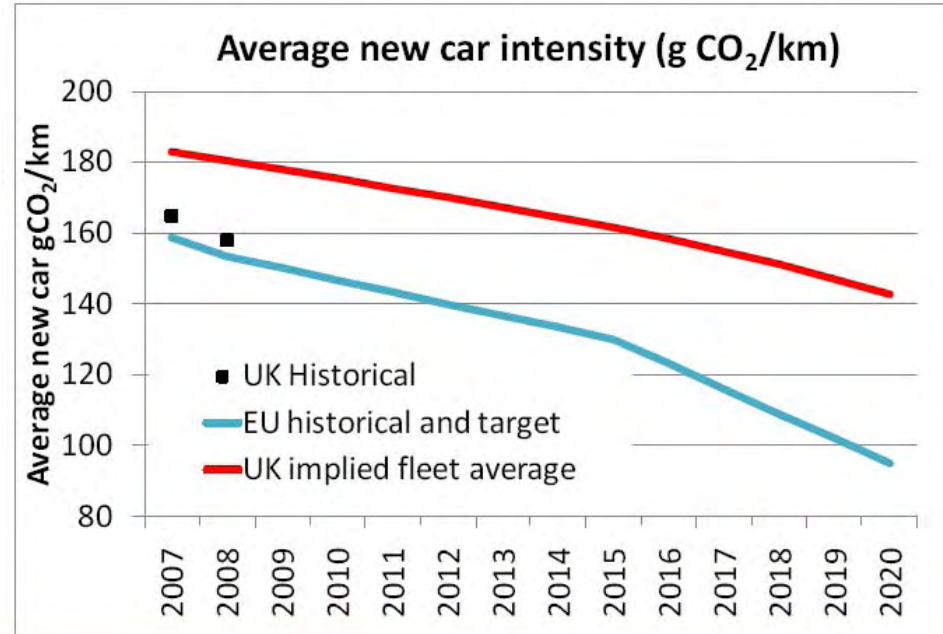


### Consumer behaviour change (total savings over 13 MtCO<sub>2</sub>)

- Roll out of **Smarter Choices** based on Sustainable Travel Town pilots (3 MtCO<sub>2</sub>)
- 4 million drivers trained and practising **eco-driving** by 2020 (1 MtCO<sub>2</sub>)
- Enforce **speed limit** at 70 mph (1.4 MtCO<sub>2</sub>)
- Integrated **transport and land use planning** strategy (2 MtCO<sub>2</sub>)
- Road pricing could save additional 6MtCO<sub>2</sub> in 2020

### Improving the car fleet

- Meet EU target for new car emissions of **130g/km** in 2015 and **95g/km** in 2020
- Would save **11MtCO<sub>2</sub>** in 2020





# Carbon:

## Follow through principles of Stern and Eddington

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Decide what the price of carbon should be

Ensure everybody pays it

Do road and rail appraisals properly **and use them!**



## Picture is of more traffic

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Stable transport carbon emissions

Achieved by improved vehicle technology etc.

Implication: **we will need more road capacity!**

On current values

Congestion is a much bigger problem than carbon

Carbon in transport will be reduced by

- Implementation of better technology
- Decarbonising surface transport
- More sensible pricing



Affordable: how do we pay for it?



# “Affordability”?

## 2009 Budget Report

**Table C2: Summary of public sector finances**

	Per cent of GDP						
	Outturn	Estimate	Projections				
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Fiscal consolidation</b>							
Surplus on current budget	-0.4	-3.6	-9.3	-9.4	-7.2	-5.6	-4.3
Cyclically-adjusted surplus on current budget	-0.7	-3.1	-6.7	-6.4	-4.9	-3.9	-3.2
Consolidation in the cyclically-adjusted surplus on current budget <sup>1</sup>	-	-	-	0.3	1.6	1.0	0.7
<b>Economic impact</b>							
Net investment	2.1	2.6	3.1	2.5	1.9	1.6	1.3
Public sector net borrowing (PSNB)	2.4	6.3	12.4	11.9	9.1	7.2	5.5
Cyclically-adjusted PSNB	2.7	5.7	9.8	8.9	6.8	5.5	4.5
<b>Sustainability</b>							
Public sector net debt <sup>2,3</sup>	36.5	43.0	55.4	65.0	70.9	74.5	76.2
Core debt <sup>2,3</sup>	36.6	42.5	52.4	59.2	63.2	65.7	66.9
Net worth <sup>4</sup>	28.9	25.5	21.1	10.5	4.0	-0.3	-2.9
Primary balance	-0.9	-4.6	-10.8	-9.3	-6.1	-4.1	-2.5
<b>Financing</b>							
Central government net cash requirement	2.3	11.3	15.6	12.3	9.6	7.3	6.0
Public sector net cash requirement <sup>3</sup>	1.5	4.2	13.3	12.3	9.7	7.5	6.0

Increase fuel duty or VED??



# National Road Charging

NOT essential, but it helps!

A means to manage demand  
more efficient use of existing network

A way of generating more funds  
in order to enhance the network  
safety, management, physical capacity

A way of dealing with carbon



## Reform of road investment and charging

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The primary problem:

Lack of public understanding

Even if understood, lack of public trust

Nobody promotes interests of road users



## Institutions and governance matter!

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With or without national road charging ...

... change will require change in the  
institutions



## For Rail there is a coherent strategy

High Level Output Specification (HLOS) }  
Statement of Funds Available (SoFA) }

Network Rail to promote railways

Independent Regulator to adjudicate that it all adds up

High Speed Rail proposals should fit within this framework



# Water industry has many lessons?

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Massive investment funded by charges to users

Improvement in water quality

Gradual acceptance of domestic metering

Benchmarking an important driver of efficiency

Statutory users' representation

Industry has a duty to supply



## Defective roads governance

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Byzantine confusion about who is accountable for what

The absence of a customer billing relationship between the service provider and the road user

No independently reported measure of quality of service

No independent consumer protection

**No long term charging or investment strategy**



# Governance reform

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Some lessons taken from the other public utilities ?

New and independent authorities could be a useful part of future reform.

We need better measures of quality of service

This would facilitate the necessary rebuilding of trust between accountable bodies and users.

But it must be national



# Corporate governance options for roads

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Reform of national and local government??

More independence for HA?

Public Benefit Corporation or public trust?

Regulated private provider?



## Geographical scope?

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National?

Regional?

Route-based?



## Conclusions

- Do nothing??
- Highways Agency given [what?] corporate status
- An independent regulator for roads and road safety?
- Government HLOS and SoFA for roads?
- Informed by input from road users, local authorities and regional bodies?



**We need a long term strategy for  
railways and  
especially roads!**

**Safer**

**Deals with carbon**

**Affordable – how it is paid for?**