Motoring Towards 2050

A strategy for roads in a low carbon and lean expenditure future

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Long term strategy

Affordable – how do we pay for it?

Deals with carbon

www.racfoundation.org

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?

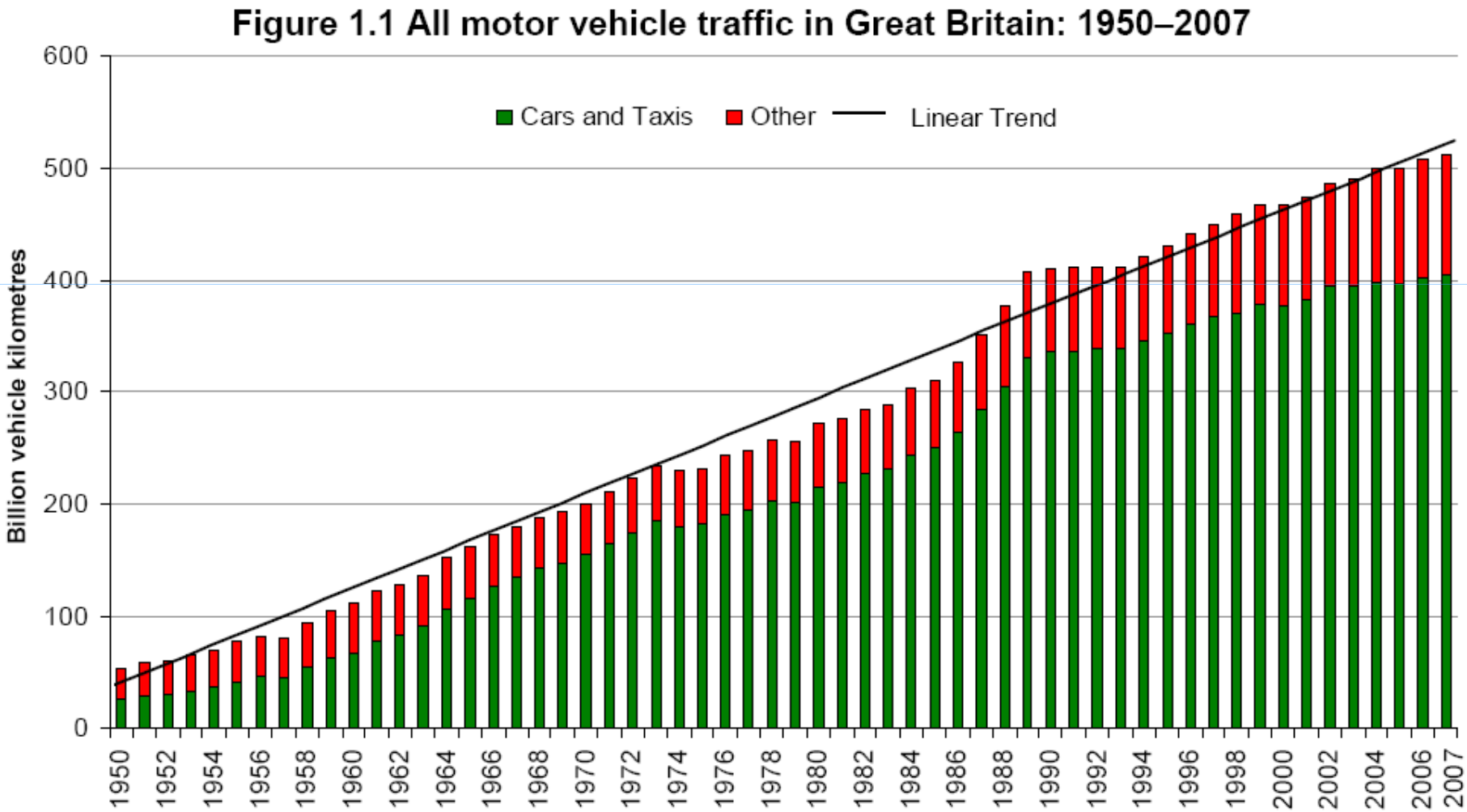
Committee on Climate Change "First Report"

Decarbonisation of transport

National road charging?

Relentless road traffic growth

(source: Road Statistics 2007, DfT)



Compare the mid 1970s and now

Energy crisis: rise in oil prices – “oil running out”

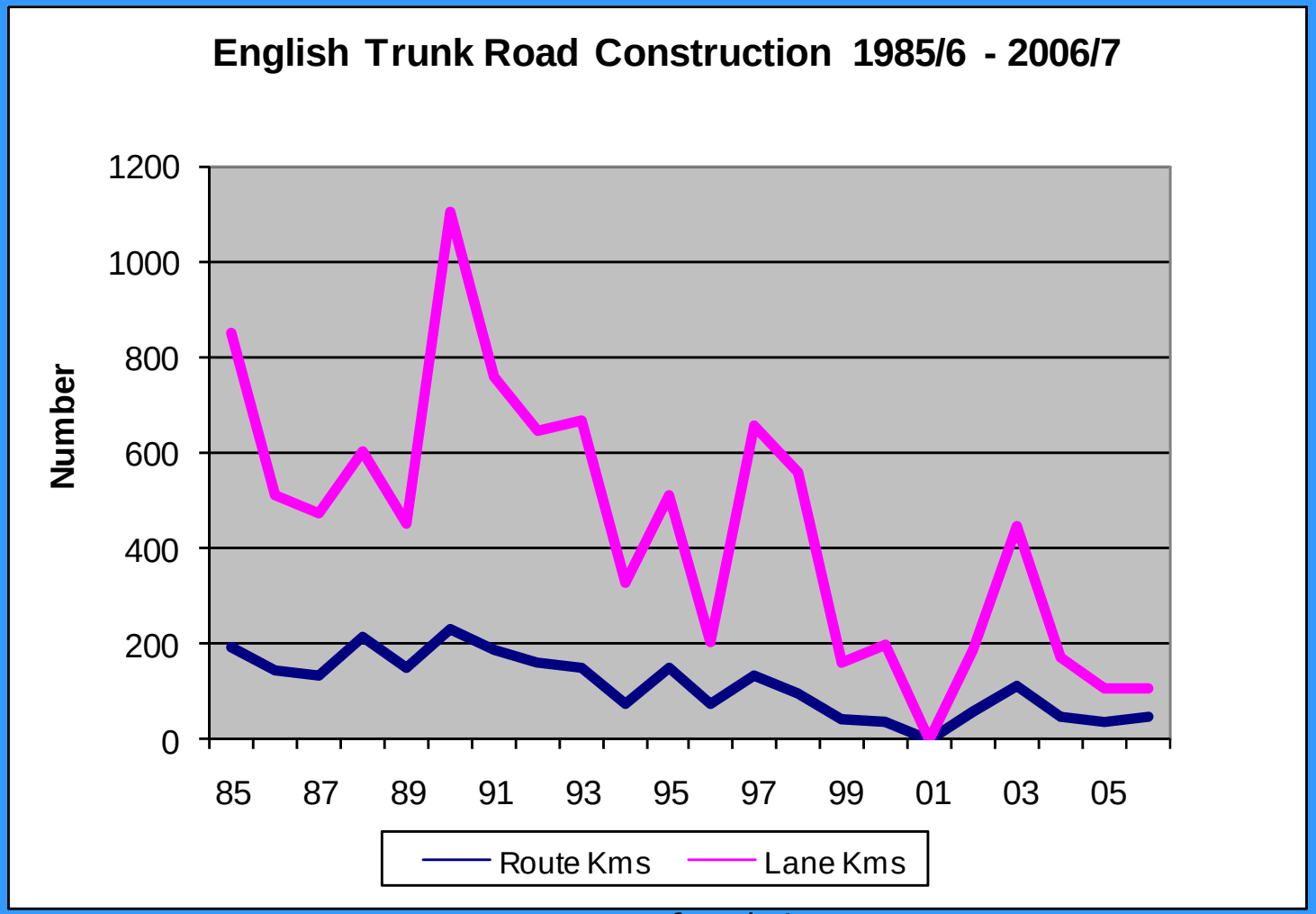
Severe recession

Desperate need to cut public expenditure

“It will never be the same again”

But the demand for infrastructure did quickly recover!

Why congestion has got worse



It will get worse again in future

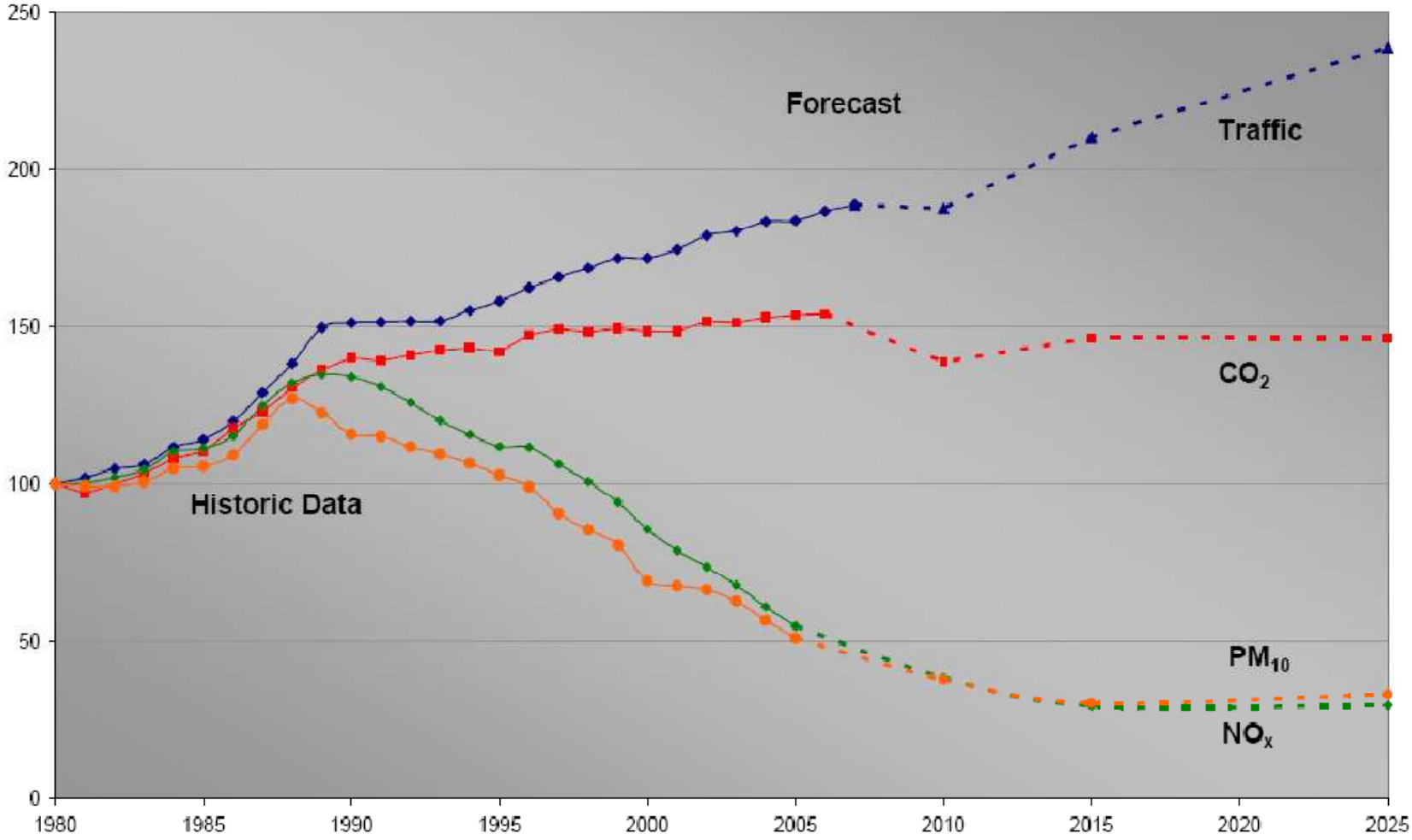
Between 2005 and 2041:

- Population will grow by at least 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%

(RAC Foundation estimates)

National Traffic Forecast (DfT, 2008)

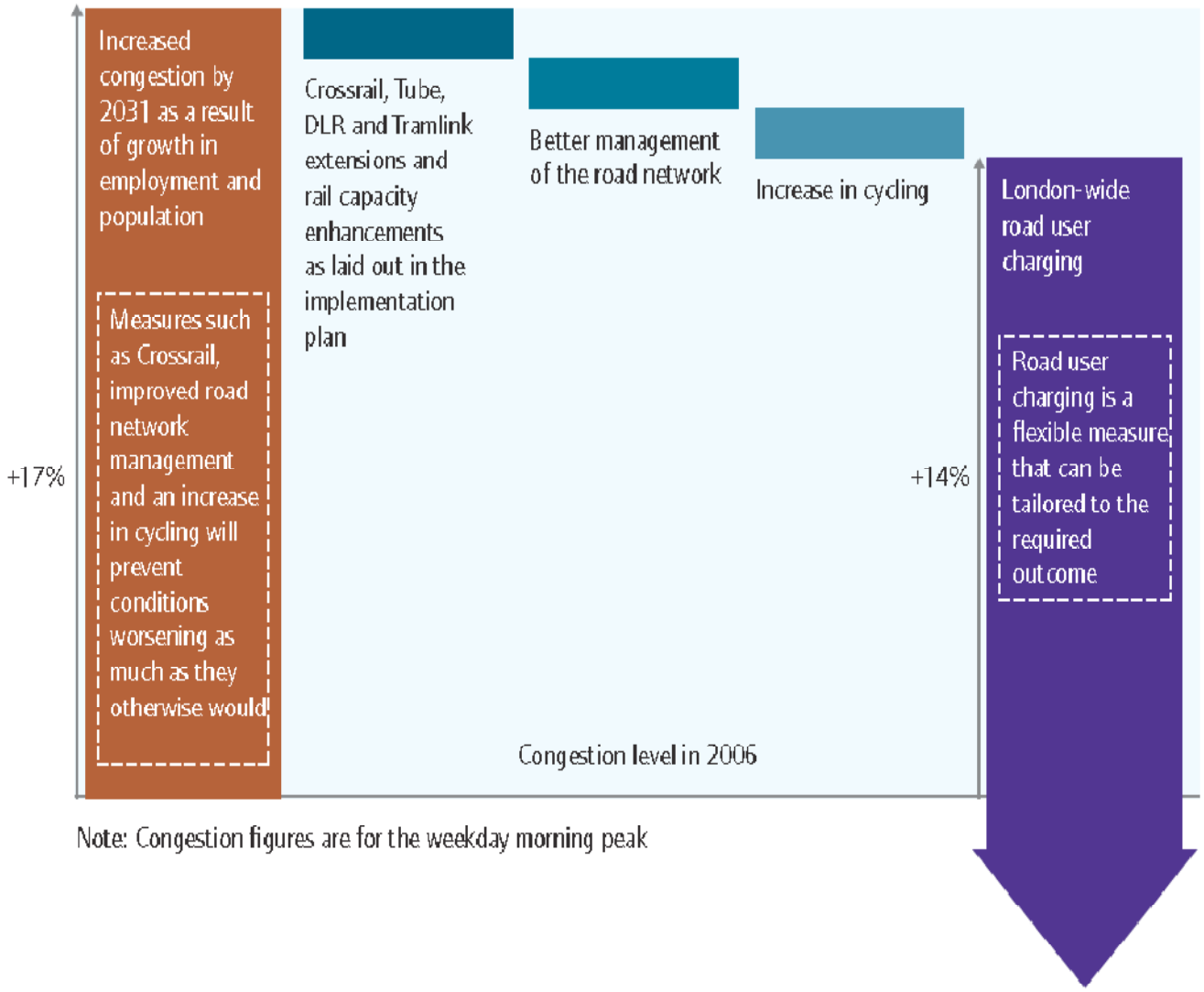
Figure 1: Road Traffic and Road Transport Emissions, Past and Forecast



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

Mayor's draft Transport Strategy, 12 October 2009

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



Note: Congestion figures are for the weekday morning peak

"Affordability"?

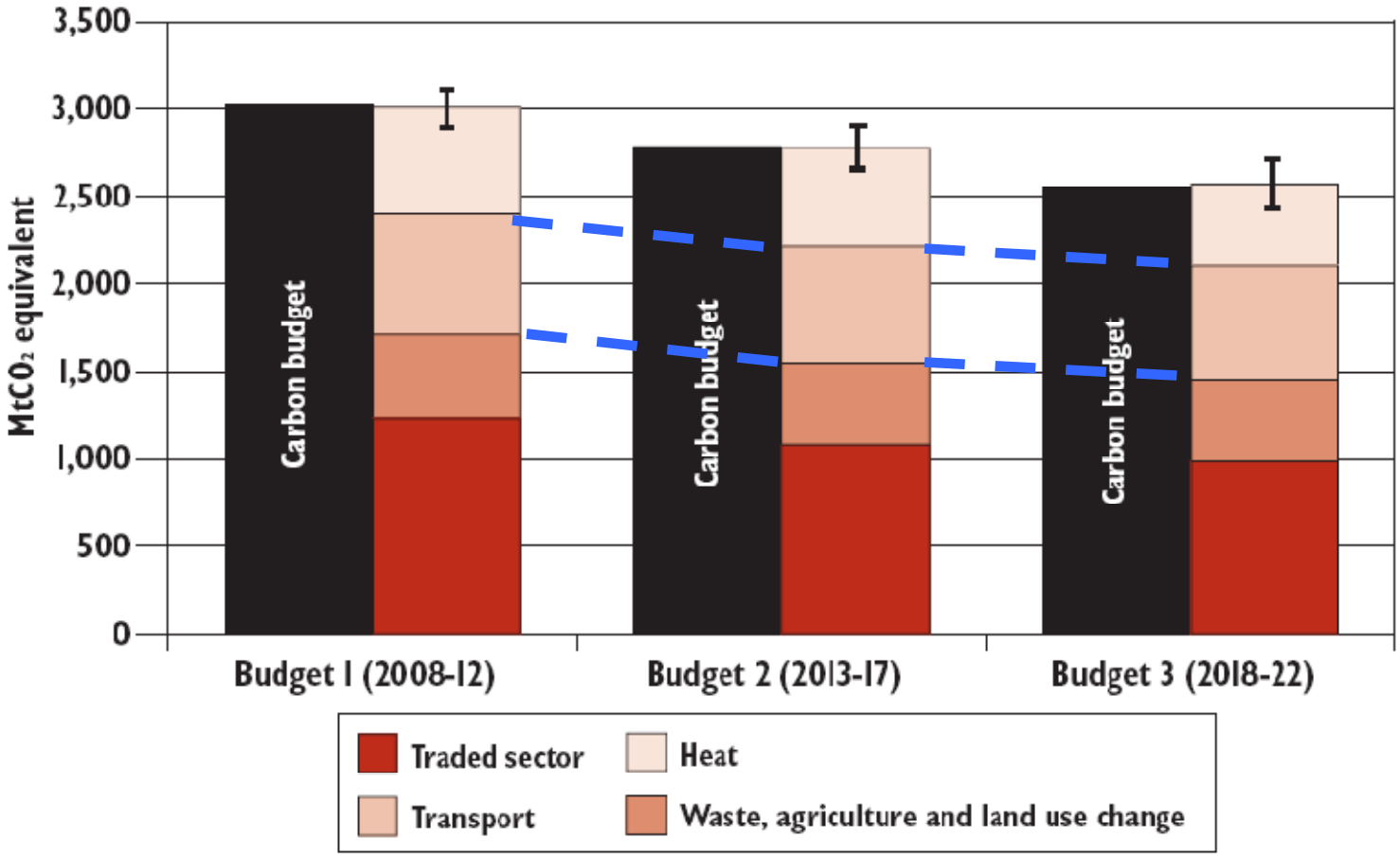
2009 Budget Report

RAC Foundation

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
Fiscal consolidation							
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 [1]	-	-	-	0.3	1.6	1.0	0.7
Economic impact							
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
Sustainability							
Public sector net debt [2,3]	36.5	43.0	55.4	65.0	70.9	74.5	76.2
Core debt [2,3]	36.6	42.5	52.4	59.2	63.2	65.7	66.9
Net worth [4]	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
Financing							
Central government net cash requirement	2.3	11.3	15.6	12.3	9.6	7.3	6.0
Public sector net cash requirement [3]	1.5	4.2	13.3	12.3	9.7	7.5	6.0

Chart 7.1: Carbon budgets against projected emissions by sector



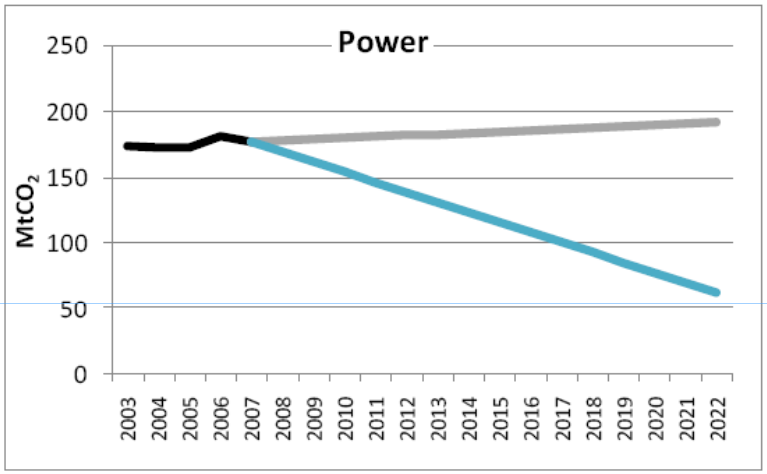
Source: Department of Energy and Climate Change

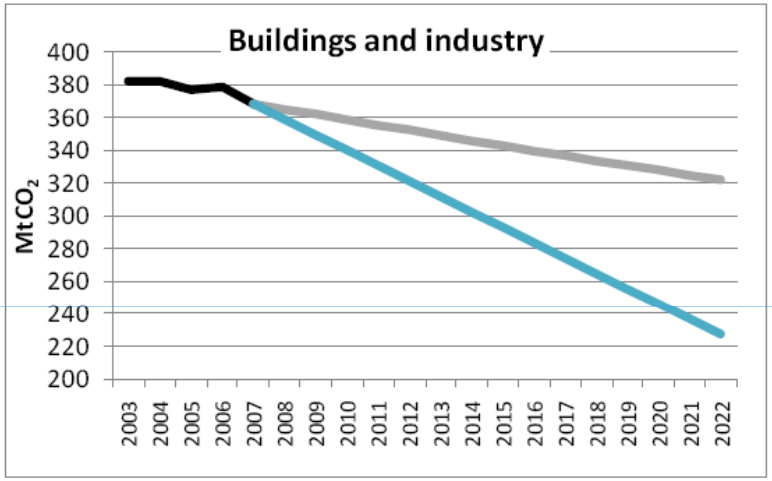
Notes: Projected emissions are based on an updated version of the UEP32 emissions projections, adjusted for consistency with Budget economic growth assumptions and improved estimates of policy savings. For further detail, please see Updated Energy and Carbon Emissions Projections, Department of Energy and Climate Change, November 2009.

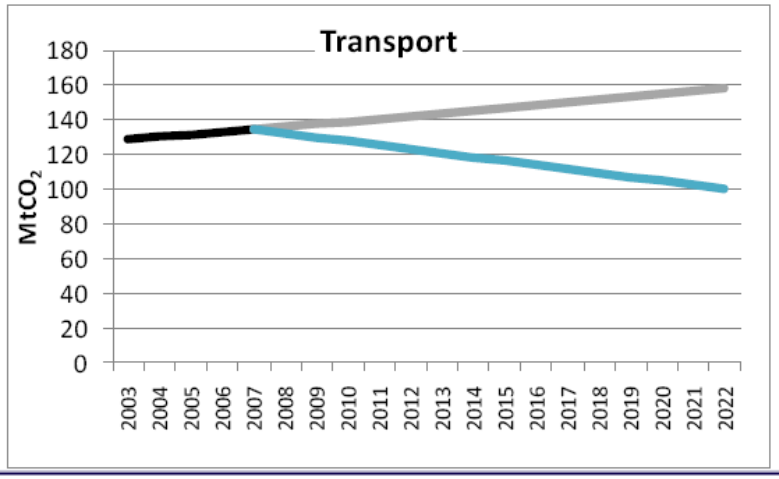
Budget 2009: Official Carbon Budgets Transport emissions stable

Committee on Climate Change, First Report, 12 October 2009

ii) Required progress in major sectors







Historic
Extrapolation
Required path

Committee on Climate Change, First Report, 12 October 2009

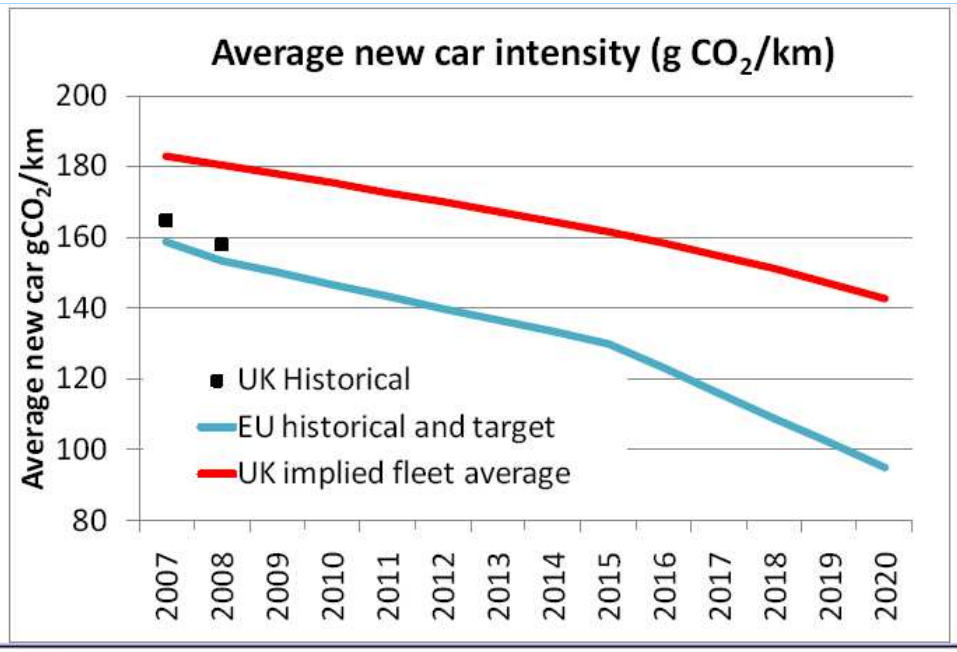
iv) Road transport

Consumer behaviour change
(total savings over 13 $MtCO_2$)

- Roll out of **Smarter Choices** based on Sustainable Travel Town pilots (3 $MtCO_2$)
- 4 million drivers trained and practising **eco-driving** by 2020
  (1 $MtCO_2$)
- Enforce **speed limit** at 70 mph
  (1.4 $MtCO_2$)
- Integrated **transport and land use planning** strategy (2 $MtCO_2$)
- Road pricing could save additional 6$MtCO_2$ 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 **11$MtCO_2$** in 2020



Public transport cannot help much

Public transport improvements may be good policy

BUT

They cannot make much impact on road congestion
or carbon emissions at a cost that is feasible

Rail and local bus each have 6% of passenger market

Defective roads governance

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

Reform of road investment and charging

The primary problem:

- Lack of public understanding
- Even if understood, lack of public trust
- Nobody promotes interests of road users

National Road Charging

NOT essential, but it helps!

A means to manage demand
more efficient use of existing network

A way of dealing with carbon

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

With or without national road charging …

… change will require change in the institutions

To progress, a scheme …

… must offer a clear “deal”

Understandable (keep it simple)
Broadly “fair” (spell out winners and losers)
Credible (the arithmetic stacks up)
Technologically robust
Worthy of trust (can check if it’s delivered)

Has to be national (deal on existing road taxes)?
except London, Cambridge….?

Design requirements

1) Transparency and accountability for both income and expenditure… hence…

2) More separation from national and local government

3) Continue to deliver revenue for general government expenditure

4) Give some new benefit to road users

Requirements (cont)

5) Give some new benefit to general public
   e. g. new funding for public transport?

6) Secure economy and efficiency in delivery

7) Credible protection for lenders

8) Statutory protection for consumers

9) Proper safety regime

The UK regulated utility
Telecoms, Gas, Electricity, Water, Rail

Consumer pays a fee for use

Fee determined by independent regulator

publicly declared principles:

economy, efficiency, fair return on capital,

capacity investment funded

Consumer protection: eg Quality of Service is published and debated

Direct connection between value to consumer and investment in capacity

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

This rail regime aligns

- predicted numbers of users
- sources of funds (fares, taxes)
- charges to users
- investment in capacity

High Speed Rail should fit within this framework

Corporate governance options

Reform of national and local government??

More independence for HA?

Public Benefit Corporation or public trust?

Regulated private provider?

Caution on “privatisation” …

Any change in corporate structure

Or national road user charging

(or both)

Should be part of an explicit package

clear on existing taxes

enforceable duty to maintain and enhance the network

Conclusions

Do nothing??

Highways Agency given new corporate status [what?]

An independent regulator for roads and road safety?

Government HLOS and SoFA for roads?

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Better output & Q of S measures and associated reporting systems

A customer representation body for road users?

Funding for maintenance and enhancement

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We need a long term strategy for our roads!

Affordable – how it is paid for?

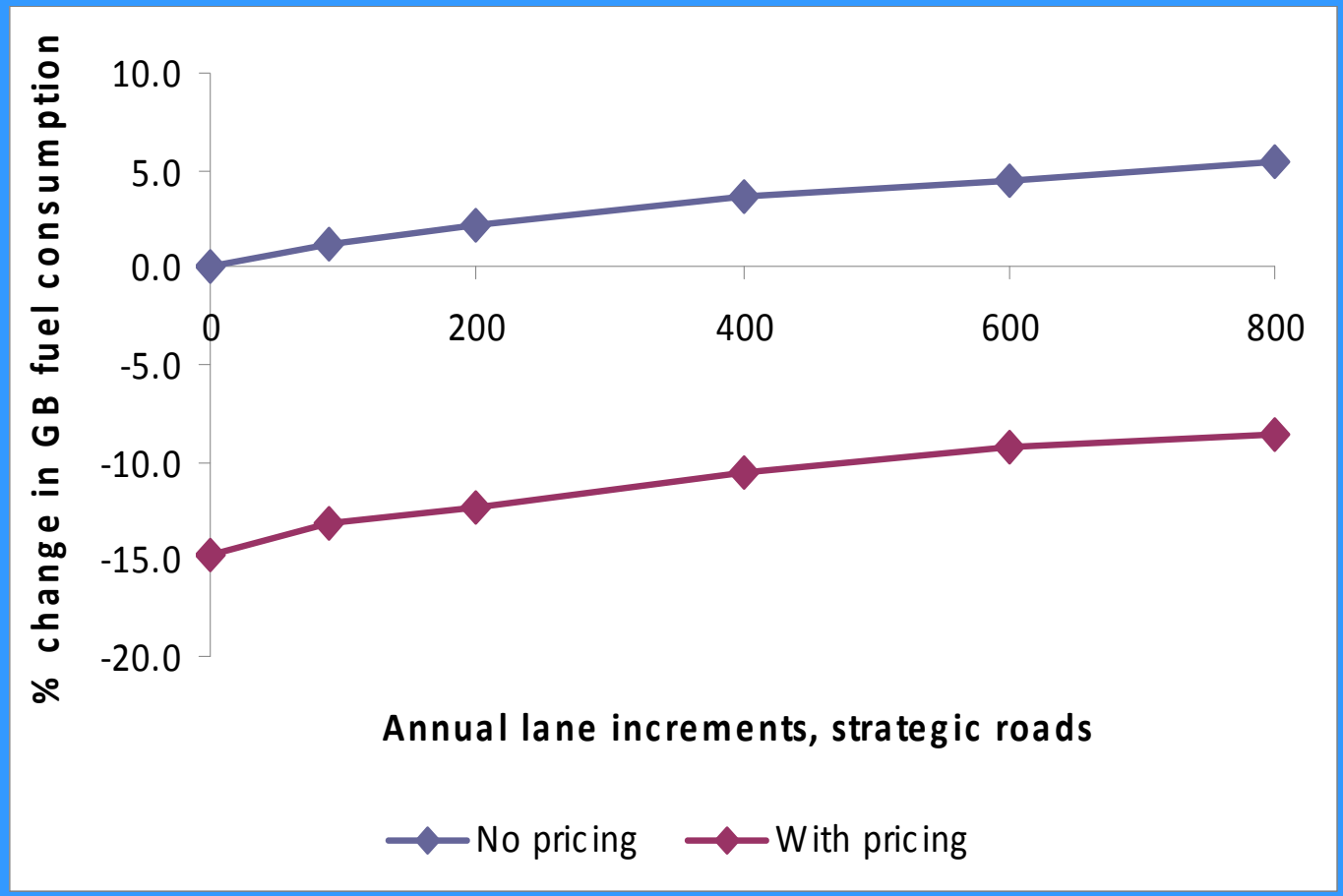
Deals with carbon

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)

Effects on fuel consumption and carbon emissions



Plans to 2015

January 2009,

- 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?

Like other regulated utilities?

Road infrastructure provider

- With an income stream
- Held accountable by independent regulation
- A duty to meet the needs of users
- Ensure that it is able to finance its functions
- Monitor its performance in relation to stewardship and service delivery; and