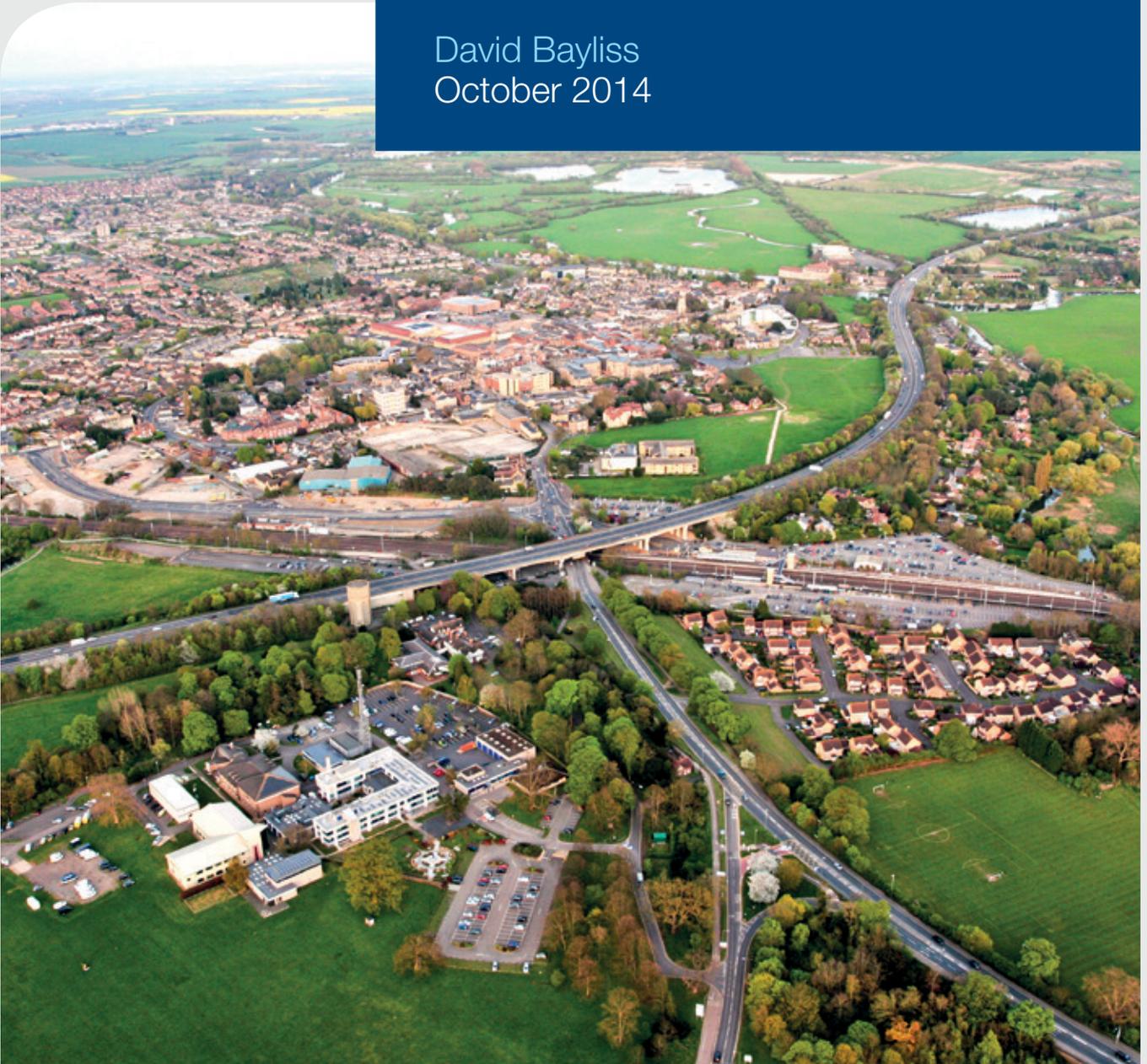




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Public Expenditure, Taxes and Subsidies Land transport in Great Britain

David Bayliss
October 2014



The Royal Automobile Club Foundation for Motoring Ltd is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users. The Foundation publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interest of the responsible motorist.

RAC Foundation
89–91 Pall Mall
London
SW1Y 5HS

Tel no: 020 7747 3445
www.racfoundation.org

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About the Author

David Bayliss is a chartered engineer and town planner he started his career with Manchester Corporation and then moved to the Greater London Council where he became Chief Transport Planner. Subsequently as Director of Planning for London Transport he was involved in planning the Docklands Light Railway, the Jubilee Line Extension and Croydon Tramlink. On retirement from London Transport in 1999 he was a director of Halcrow Consulting for the following ten years. During his career he been involved in almost all aspects of domestic transport has been an advisor to a number of international organisations and overseas governments. He has written and lectured widely and is currently a trustee of the Rees Jeffreys Road Fund and of the RAC Foundation.

Disclaimer

This report has been prepared for the RAC Foundation by David Bayliss. The report content reflects the views of the author and not necessarily those of the RAC Foundation.

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1. Introduction

This paper brings together information on the public finances of land transport in Great Britain. It draws on published material (mainly but not exclusively from central government sources) and identifies the monetary flows between users of transport and the government and its agents.



It has not always been possible to present comprehensive and/or consistent data, and in some instances estimates have had to be made. Where this has been done, the bases of the estimates are explained; moreover, sources have been identified throughout. The issue of what should be the correct levels of taxation and subsidy are also very important – but these are not dealt with in this paper.



2. The Overall Public Expenditure Picture

As Table 2.1 shows, over the last five years, spending on roads has averaged £8.6 billion a year, but has been falling, and as these figures are at outturn prices the fall in real terms has been greater. Applying the relevant GDP deflator (1.098; DfT, 2013b: Table TSG B1309), real spending on roads fell by 22% between 2008/9 and 2012/13.



2.1 Roads

Table 2.1: Public expenditure on roads in Great Britain, 2008/9–2012/13

Expenditure			Outturn prices				
Level of government	Type of spending	Type of road	Financial year				
			2008/9	2009/10	2010/11	2011/12	2012/13
Central	Capital	National	£1,535m	£2,537m	£2,139m	£1,731m	£1,613m
		Local	£102m	£220m	£134m	£104m	£131m
	Current	National	£1,912m	£1,567m	£1,395m	£1,337m	£1,222m
	All	All	£3,549m	£4,324m	£3,668m	£3,172m	£2,966m
Local	Capital	Local	£3,153m	£3,084m	£3,270m	£2,979m	£2,824m
	Current	Local	£2,077m	£2,297m	£1,966m	£1,746m	£1,727m
	All	All	£5,230m	£5,381m	£5,236m	£4,725m	£4,551m
Public corporations	Capital	National	£18m	£10m	£14m	£8m	£0m
All	All	All	£8,797m	£9,715m	£8,919m	£7,905m	£7,518m

Source: DfT (2013a)

2.2 Rail

Over the last five years, spending on rail has averaged just over £7 billion a year (see Table 2.2), but, as with roads, expenditure has been falling recently, and – as above – because these figures are at outturn prices the fall in real terms has been greater. Applying the GDP deflator, real spending on rail fell by 12% between 2008/9 and 2012/13.

Table 2.2: Public expenditure on rail¹ in Great Britain, 2008/9–2012/13

Expenditure		Outturn prices				
Level of government	Type of spending	Financial year				
		2008/9	2009/10	2010/11	2011/12	2012/13
Central	Capital	£4,498m	£4,188m	£4,037m	£3,945m	£4,065m
	Current	£437m	£1,171m	£974m	£919m	£925m
	All	£4,935m	£5,359m	£5,011m	£4,864m	£4,990m
Local	Capital	£6m	£8m	£6m	£7m	£7m
	Current	£481m	£769m	£812m	£689m	£505m
	All	£487m	£777m	£818m	£696m	£512m
Public corporations	Capital	£1,501m	£1,426m	£1,436m	£1,351m	£1,158m
All	All	£6,922m	£7,561m	£7,264m	£6,911m	£6,660m

Source: DfT (2013a)

2.3 Local public transport

Table 2.3: Public expenditure on local public transport in Great Britain, 2008/9–2012/13

Expenditure		Outturn prices				
Level of government	Type of spending	Financial year				
		2008/9	2009/10	2010/11	2011/12	2012/13
Central	Capital	£4m	£6m	£7m	£25m	£3m
	Current	£707m	£735m	£703m	£699m	£612m
	All	£711m	£741m	£710m	£724m	£615m
Local	Capital	£541m	£1,035m	£963m	£917m	£973m
	Current	£2,211m	£2,045m	£1,835m	£1,867m	£1,745m
	All	£2,752m	£3,080m	£2,798m	£2,784m	£2,718m
All	All	£3,464m	£3,821m	£3,508m	£3,508m	£3,333m

Source: DfT (2013a)

¹ National railways, London Underground and companies considered to be in public ownership such as London Continental Railways and East Coast Trains

Over the last five years, spending on local public transport (see Table 2.3) has averaged just over £3.5 billion a year but has been falling; once more, as these figures are at outturn prices the fall in real terms exceeds this. After applying the GDP deflator, it can be seen that real spending on local public transport fell by 12% between 2008/9 and 2012/13.

2.4 All public expenditure

The overall picture over this five-year period was a reduction in public expenditure in Great Britain on transport as a whole (including aviation and miscellaneous services) from £20.4 billion in 2008/9 to £18.8 billion in 2012/13 – a *real* reduction of 16%. Clearly roads have taken a larger share of the reductions than rail and other public transport – and spending on these modes was a third higher than on roads (£10bn compared with £7.5bn in 2012/13) despite the fact that roads carried 90% of passenger traffic (DfT, 2013c) (or 86% excluding local bus use; DfT, 2013c) and 70% of freight traffic (or 85% if one excludes coastal shipping; DfT, 2013d). Public expenditure on rail, bus and ferries funds vehicles as well as infrastructure, whilst most road vehicle expenditure is privately funded by firms and households. In 2008/9 for example (the latest year for which comparable data has been published), of the £5,149m invested in rail, £346m (nearly 7%) was for rolling stock and, in addition to the £5,290m of public expenditure on road infrastructure, almost £34.9 billion (largely private) was invested in cars and motorcycles and £9.6 billion in other road vehicles. Of this £34.9 billion, £14.2 billion was spent by households and £20.6 billion by organisations of various kinds (DfT, 2010).



3. Transport Taxes

3.1 Direct road user taxes

Transport users pay taxes on a range of transport goods and services, and road transport is the most highly taxed mode. Direct motoring taxes comprise fuel duty and vehicle excise duty (VED) – Table 3.1 sets these out for 2008–2012.



Table 3.1: Direct road users taxes, 2008–2012/13, outturn prices

Type of tax	Type of fuel	Calendar/financial year					
		2008	2009	2010	2011	2012	2012/13
Fuel duty	Leaded petrol	£10m	£9m	£10m	£11m	£9m	-
	Ultra-low sulphur petrol	£11,114m	£11,175m	£11,001m	£10,642m	£10,080m	-
	Ultra-low sulphur diesel	£12,284m	£12,683m	£13,923m	£14,382m	£14,695m	-
	All	£23,408m	£23,867m	£24,934m	£25,035m	£24,784m	£25,571m
Sector							
VED	Household	£4,639m	£4,722m	£4,903m	£4,889m	£4,933m	-
	Business	£885m	£908m	£937m	£931m	£940m	-
	All	£5,524m	£5,630m	£5,840m	£5,820m	£5,873m	£6,012m
Both		£28,932m	£29,497m	£30,774m	£30,855m	£30,657m	£31,583m

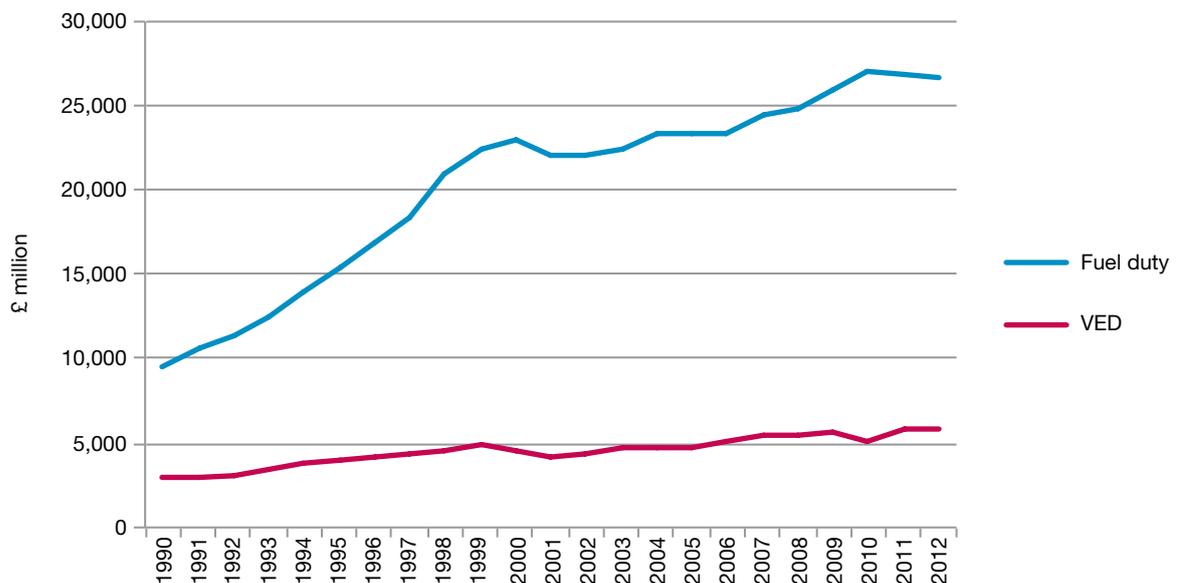
Source: DfT (2013e)

Direct road user taxes have increased over recent years, but not as sharply as in the era of the fuel duty escalator. Between mid-2003 and March 2011, fuel duty increased from 45.82p/litre to 58.95p/litre, and was then reduced to 57.95p/litre, at which level it has since then remained (DECC, 2013), except within the Inner and Outer Hebrides, the Northern Isles, the Islands in the Clyde and the Isles of Scilly, where it has been 5p/litre lower since January 2012 (HMRC, 2011).

Similarly, the increase of VED has been fairly limited, and the direct motoring tax yield has lagged behind RPI (the Retail Prices Index) and CPI (the Consumer Prices Index) over the period 2008/9 to 2013 (which grew by 13.9% and 13.3%, respectively; DfT, 2013b: Table TSGB1309). The longer-term picture is illustrated in Figure 3.1.

These taxes can be related to particular vehicle types; the share of VED tax revenues by vehicle class is given in Table 3.2, with cars and vans paying 94% of all VED. If the car and van parcs have similar average VED rates, then cars pay 84% of the total VED.²

Figure 3.1: Fuel duty and VED trends, 1990–2012 (outturn prices)



Source: IAM (2011) & DfT (2013e)

Table 3.2: VED by vehicle type, 2012/13

Type of vehicle	Number (2012)	VED (2012/13)
	thousands	
Private and light goods	30,606	£5,654.1m
Motorcycles, scooters & mopeds	1,089	£59.9m
Buses & coaches	108	£30.0m
Goods	379	£248.8m
Other	74	£19.1m
Crown & exempt vehicles	2,267	£0.0m
All vehicles	34,522	£6,012.0m

Source: DfT (2013f) & DfT (2013g)

² $94\% \times 27,286/30,605$ – see DfT (2013g), Table VEH0103, for split between private cars and light vehicles

The share of fuel duties can be estimated by comparing the amounts of fuel used by different types of vehicle; this is set out in Table 3.3.

Buses and heavy goods vehicles (HGVs) pay a larger share of fuel taxes as they have higher fuel consumption rates and travel further per year than cars and vans. From Tables 3.2 and 3.3, controlled to the 2012/2013 totals shown in Table 3.1, the motoring taxes paid by each broad class of vehicle can be estimated. The results are shown in Table 3.4.

Table 3.3: Fuel consumed by type and vehicle class, 2011 (thousands of tonnes)

Type of vehicle	Diesel	Petrol	Share of total
Buses & coaches	1.373		4.0%
Cars	7.275	12.324	59.4%
Motorcycles, scooters & mopeds	-	0.163	0.5%
Light goods vehicles	4.605	0.232	14.7%
Heavy goods vehicles	7.033	-	21.3%
Other vehicles			
All vehicles	20.286	12.719	100.0%

Source: DECC (2014a, b)

Table 3.4: Motoring taxes by vehicle type, 2012/13

Type of vehicle	VED	Fuel duty	Total (%)
Buses & coaches	£30m	£1,061m	£1,091m (3.5%)
Cars	£5,042m	£15,155m	£20,197m (63.9%)
Motorcycles, scooters & mopeds	£60m	£126m	£186m (0.6%)
Light goods vehicles	£612m	£3,740m	£4,352m (13.8%)
Heavy goods vehicles	£249m	£5,438m	£5,687m (18.0%)
Other vehicles	£19m	£51m	£69m (0.02%)
All vehicles	£6,012m	£25,571m	£31,583m (100.0%)

Source: Derived from Tables 3.1, 3.2 and 3.3



3.2 Value-added taxes (VAT)

In addition to specific road user taxes, some transport expenditure is liable to VAT.

For private households, expenditure on purchasing and running motor vehicles amounted to £73.4 billion³ in 2012, including VAT. At VAT of 20% this yields a total of £12.2 billion in VAT (and that excludes VAT on VED payments). With households spending over £23 billion on vehicle purchases in 2012 (ONS, 2013; Table A6), the VAT paid would amount to £3.84 billion. The £33.8 billion spent on fuel⁴ would have incurred £5.64 billion of VAT. In addition to purchasing vehicles and fuel, road users also buy other motoring-related goods and services adding £2.72 billion to make up the total of £12.2 billion VAT derived from motorists buying, running and using their vehicles.

VAT on all motor fuels is estimated to amount to £9.8 billion in 2012/13,⁵ of which £5.1 billion⁶ is imposed on fuel duty payments (i.e. a tax on a tax – the same arrangement applies to alcohol and tobacco duties).

Public passenger transport is generally zero-rated for VAT, which was estimated to cost the Exchequer £3.2 billion in 2011/12 (Browne & Roantree, 2012). Zero-rated goods or services pay VAT at 0% and providers can generally reclaim VAT on any purchases that relate to those sales. This is in contrast to exempt goods or services, where the provider cannot normally reclaim VAT on purchases they make in connection with their sales (HMRC, 2014a).

3.3 Other taxes paid by motorists

Motorists are also taxed for the use of company cars as a benefit in kind. The Road Users' Alliance estimated the proceeds of this tax to have been £3.7 billion in 2011/12 (Road Users' Alliance, 2013). With 2.376m company-registered cars (DfT, 2013h) this amounts to around £1,560 per vehicle, which is comparable with £1,680 liability for a Ford Mondeo Estate 1.6T 160PS Ecoboost Zetec Business Edition 5-door 2012/13 (HMRC, 2014b), and so appears to be a reasonable estimate. Company cars are not the only benefit in kind subject to taxation: vouchers, credit tokens and company living accommodation may also be subject to such taxes (HMRC, 2014c).

Motorists pay an insurance premium tax when they insure their vehicle (insurance payments being exempt from VAT), and insurance premiums written in 2012 amounted to £9.9 billion (Edmonds, 2014). The rate of tax for most motor vehicles is 6%, so road vehicle insurance premium tax costs road users about £560m a year.

3 £2,790 per household per year × 26.3m households (ONS, 2013: Table A6 & DCLG, 2013)

4 £1,285 per household per year × 26.3m households (ONS, 2013: Table A6 & DCLG, 2013)

5 Author's estimate, which compares with £9.9 billion in 2011/12 estimated by Road Users' Alliance (2013)

6 £25.571 billion × 20%

Motorists also pay for driving tests, MOT vehicle tests, and parking and other fees and fines. As these are associated with either a service or penalty, they are not treated as taxes in this analysis.

3.4 Buses and coaches

Buses also pay fuel duty and VED. Table 3.4 shows that buses and coaches paid roughly £30m in VED and £1.06 billion in fuel taxes in 2012/13. There are around 52,000 vehicles operating local bus services (DfT, 2013i) out of a total of about 166,000 buses and coaches (DfT, 2013j). Pro-rated this would mean approximately £10m a year in VED for local buses.

Local bus services account for approximately 2.53 billion vehicle kilometres (DfT, 2013k) out of a total of 4.4 billion vehicle kilometres (DfT, 2013l) accumulated by all bus and coach operations so, allowing for higher fuel consumption on bus services it is reasonable to expect these to have paid at least £600m of the £1.06 billion in fuel duty in 2012/13. However, as described in Section 4, local bus operations and community transport schemes (but not coach operations) receive a subsidy which was originally introduced to offset fuel duty costs but is now a more general bus service operator's grant (DfT, 2012).

3.5 Rail

Rail operators pay duty on the fuel oil they burn, but this is levied at a lower rate (11.14p/litre) than that which applies to most road transport. The rail industry used 683 thousand tonnes of gas oil and 26 thousand tonnes of petroleum products in 2012. This implies annual fuel duty revenue from rail of about £90m.⁷ Freight train traffic amounts to about 60m train kilometres per year,⁸ compared with 520m train kilometres for passenger traffic (DfT, 2013m). However, a smaller proportion of freight train miles than passenger are electric, and fuel consumption will be higher given the greater weight of freight trains. This suggests that about £70m a year should be attributed to the passenger sector.

⁷ 835m litres at £0.1114/litre

⁸ Author's estimate from ORR (2011): Tables 3.3a & 3.3b



4. Subsidies

4.1 Road transport

Private road transport does not receive general financial subsidies. However, there are several classes of vehicles that are exempt from VED (vehicles used by a disabled person, disabled passenger vehicles, mobility scooters, powered wheel chairs and invalid carriages, historic vehicles, electric vehicles, steam vehicles, mowing machines and vehicles used only for agriculture, horticulture and forestry (GOV.UK, 2014a). Low emission vehicles are also exempt

from central London's Congestion Charge – which is not generally regarded as a tax.⁹ The (gross) receipts from this amounted to £222m in 2013 (TfL, 2013: 113).

Recently the government has introduced subsidies for the purchase of ultra-low-emission cars and vans (ULEVs). In 2013 there were about 4,300 such new vehicles registered (DfT, 2013n); at up to £5,000 each for cars and £8,000 each for vans, this subsidy would have amounted to a total of £21m. Also there has been funding for the provision of charge points for electric vehicles; by the end of March 2013, over 4,000 charge points had been provided through the eight Plugged-in Places projects. About 65% of these Plugged-in Places charge points are publicly accessible. Using data provided by charge point manufacturers, it is estimated that non Plugged-in Places organisations may have also installed about 5,500 charge points nationwide. This spending on infrastructure is thought to be the main use of the £100m or so allocated (but only partly spent) by government for stimulating ULEV uptake.

Other than those supporting local bus operations, direct subsidies for road transport are confined to a few 'welfare' purposes including the mobility component of the Disability Living Allowance, community transport operations and the London Taxicard scheme. The mobility component of the Disability Living Allowance was £6.24 billion in 2012/13 (DWP, 2013). In Scotland, about



⁹ Some foreign embassies refuse to pay the London Congestion Charge, as they claim it is a tax.

£4.5m was spent on community transport by local authorities and health authorities in 2011/12 (Age Scotland, 2013), but there does not appear to be comprehensive information on spending across the whole of Britain.

4.2 Local buses¹⁰

Table 4.1: Support for bus operations and passengers, 2012 (2012/13 prices)

Area	Bus Service Operators Grant	Concessionary travel	Service funding	Total support
England	£437m	£1,010m	£878m	£2,324m
Scotland	£62m	£186m	£60m	£308m
Wales	£22m	£62m	£11m	£95m
Great Britain	£521m	£1,258m	£949m	£2,727m

Source: DfT (2013o), Transport Scotland (2013; Table 9) & Welsh Government (2013; Table 1)

Local bus travel is subsidised in several ways (see Table 4.1). Operators receive the Bus Service Operators Grant (BSOG) directly, local authorities pay for contracted ‘unremunerative’ services, and some types of passengers (mainly pensioners) are provided with concessionary (often free) fares for which support is paid by central government. In total, support for buses amounts to about 45% of all bus operators’ revenues. The bus grants system is in the process of being changed (Butcher, 2013), and BSOG payments that currently go to operators are to be channelled through local authorities.

Concessionary fares compensation is estimated on the basis of making the operators no better or worse off than they would be with neither the concessions nor the compensation, and as such is not regarded as an operator subsidy. However, as other payments to operators are for the benefit of passengers, this is a nice distinction.

4.3 Railways

Public subsidies for national railways, London Underground, London Continental Railways and East Coast Trains¹¹ (considered together) are set out in Table 2.2 and amounted to £6.66 billion in 2012/13. Local rail subsidies are contained with the £3.33 billion total in Table 2.3.

10 “A local bus service uses public service vehicles (PSVs) to carry passengers who pay separate fares over short distances. The route can be any length, as long as passengers can get off within 15 miles (measured in a straight line) of where they got on.” (GOV.UK, 2014b)

11 Although East Coast’s predecessor has been subsidised in the past (in 2012/13), it was one of the two operators (the other being South West Trains) producing a small financial surplus (see Table 5.5).

Government support for national railways over recent years is set out in Table 4.2. This has averaged £4.6 billion over the last five years, with almost all the support being for passenger operations. Currently it covers about one third of the industry's costs. Support is provided under several headings. The main element is a grant to Network Rail towards the cost of operating, maintaining and improving the national rail infrastructure. Payments are made to and from passenger franchise operators, depending on their financial circumstances, by the Department for Transport, Transport Scotland and the Welsh Assembly Government (Welsh Government, 2013; Table 1). In the provincial metropolitan areas the Passenger Transport Executives also provide support for some rail services in their areas, although fares on these are still subject to the national regulation regime.

Network Rail has also borrowed to help finance its investments; these debts, which amounted to approximately £30 billion in 2012/13, are guaranteed by the government. Network Rail's borrowing costs are included in the estimate of the costs of government support, as these are estimated on an accruals basis.

Table 4.2: Government support to the national rail industry*

	Central government	Passenger Transport Executives	Direct support	Other	Total support for passenger rail	Freight
2005/6	£879m	£332m	£3,367m	£24m	£4,602m	£23m
2006/7	£1,456m	£313m	£4,463m	£76m	£6,308m	£30m
2007/8	£1,123m	£310m	£3,673m	£187m	£5,293m	£18m
2008/9	£237m	£317m	£4,266m	£356m	£5,176m	£21m
2009/10	£450m	£316m	£3,564m	£38m	£4,368m	£20m
2010/11	-£51m	£207m	£3,492m	£345m	£3,993m	£20m
2011/12	-£131m	£214m	£3,745m	£708m	£4,536m	£17m
2012/13	-£420m	£164m	£3,780m	£1,536m	£5,060m	£17m

Source: ORR (2013a)

* Note: This support comprises:

- central government grants – these are net payments to/from Train Operating Companies (TOCs) and performance receipts;
- grants made to Passenger Transport Executives (PTEs);
- direct rail support – the grant payment to Network Rail and, in prior years, to London and Continental Railways;
- freight grants; and
- other miscellaneous elements of government support, including major projects.

The difference between the £5.06 billion total in Table 4.2 and the £6.6 billion in Table 2.2 reflects the inclusion of other rail operations – including the London Underground in the £6.66 billion. The totals in Table 4.2 include support in earlier years to London and Continental Railways, and support for major rail projects. Transport for London's (TfL's) accounts show that London

Underground received financial support in 2012/13 of £980m (TfL, 2013: 206), which would leave approximately £0.6 billion for other non-local rail support.

4.4 Other local transport

Total financial support for local public transport in 2012/13 was £3.33 billion (Table 2.3). With support for local bus operations (including concessionary fares) amounting to £2.73 billion (Table 4.1), this leaves £0.6 billion for local rail, local authority spending on community transport, and so on.



5. Taxation and Subsidy Rates

The scale of taxes and subsidies can be better viewed in relationship to the amount of travel with which they are associated. Personal travel by the main modes is estimated in Table 5.1, by number of trips, distance travelled by those making the journeys, and distance travelled by the vehicle itself.



5.1 Personal travel

Table 5.1: Passenger travel by main mode in Britain, 2012

Mode	Trips	Person kilometres	Vehicle/train kilometres
	billions	billions	billions
Car & van	45	642.7	450
Local bus	5.13	32	2.53
Other bus & coach ¹²	0.8	24.5	1.5
Motorcycle	0.5	5.2	5.1
Pedal cycle	1	5	5
Taxi & private hire	0.62	5.28	3.5
National rail	1.5	58.4	0.522
London Underground	1.23	10.1	0.076
Local rail	0.235	1.46	0.027

Derived from: DCLG (2013), DfT (2003), DfT (2009a), DfT (2009b), DfT (2013c), DfT (2013k), DfT (2013l), DfT (2013m), DfT (2013o), DfT (2013p), DfT (2013q), DfT (2013r), DfT (2013s), DfT (2013t), DfT (2013u), DfT (2013v), DfT (2013w) & ORR (2011)

From these estimates, the tax and subsidy rates can be estimated for the main types of travel, as shown in Tables 5.2 to 5.4 (one for each of the methods shown in Table 5.1 of measuring the volume of travel).

¹² Based on 2008/9 data

Table 5.2: Trip taxation and subsidy rates (per person trip)

Mode	Taxation	Subsidy	Net (taxation less subsidy)
Car & van	54p	0p ¹³	54p
Local bus	12p	53p ¹⁴ (28.6p) ¹⁵	-41p (-16.6p)
Other bus & coach	80p	0p	80p
Motorcycle	37p	0p	37p
National rail	4p	336p	-332p
London Underground	0p	80p	-80p

Source: Author's estimate

Figures excluding concessionary fares support are shown in parentheses, as this is sometimes classed as a user rather than an operator subsidy.

13 Excludes disability and other welfare payments and ULEV grants

14 Includes concessionary fares support

15 Excludes concessionary fares support



Table 5.3: Travel taxation and subsidy rates (per person kilometre)

Mode	Taxation	Subsidy	Net
Car & van	3.8p	0p ¹⁶	3.8p
Local bus	2p	8.5p ¹⁷ (4.6p) ¹⁸	-6.5p (-2.6p)
Other bus & coach	2.6p	0p	2.6p
Motorcycle	3.6p	0p	3.6p
National rail	0.1p	8.6p	-8.5p
London Underground	0p	9.7p	-9.7p

Source: Author's estimate

Table 5.4: Traffic taxation and subsidy rates (per vehicle or train kilometre)

Mode	Taxation	Subsidy	Net
Car & van	5.4p	0p ¹⁹	5.4p
Local bus	25p	107p ²⁰ (58p) ²¹	-82p (-33p)
Other bus & coach	34p	0p	34p
Motorcycle	3.6p	0p	3.6p
National rail	11p	970p	-959p
London Underground	0p	129p	-129p

Source: Author's estimate

National rail subsidy rates vary widely, as shown in Table 5.5, from a maximum of 34p/passenger kilometre down to a small negative amount. Subsidy rates per journey vary with trip length and range from over £11 in Wales to a surplus of 85p on East Coast Trains.

16 Excludes disability and other welfare payments and ULEV grants

17 Includes concessionary fares support

18 Excludes concessionary fares support

19 Excludes disability and other welfare payments and ULEV grants

20 Includes concessionary fares support

21 Excludes concessionary fares support

Table 5.5: National Rail operators subsidy rates, 2012/13

Operator	Subsidy per journey	Subsidy per passenger kilometre
Northern Rail	£7.94	34p
Arriva Trains Wales	£11.72	29p
First ScotRail	£8.19	25p
Merseyrail	£3.13	21p
LOROL (London Overground Rail Operations Ltd)	£1.10	18p
First TransPennine Express	£7.92	12p
London Midland	£4.32	12p
New Cross Country	£8.98	9p
East Midlands Trains	£8.82	9p
Southeastern	£2.05	8p
Chiltern	£3.86	7p
First Great Western	£2.25	4p
Virgin Trains	£6.39	3p
C2C Rail	£0.63	2p
Abellio Greater Anglia	£0.59	2p
Southern	£0.52	2p
First Capital Connect	£0.29	1p
South West Trains	-£0.02	0p
East Coast	-£0.85	0p

Source: ORR (2014)

Local rail subsidy rates are not possible to estimate with any reliability, but would appear to be significantly higher than those of local buses. Taxis and private hire vehicles probably pay higher taxation rates than cars and vans because, on the one hand their VED payments are spread over a larger number of journeys, but on the other they pay a higher proportion of fuel duty on the unproductive travel between trips. Recently there has been an increase in public expenditure on cycling facilities and, as cycling does not attract any direct road use taxes, travel by cycle will be subsidised. By how much it is not possible to say, but with TfL planning to invest £145m on cycling in 2015 (TfL, 2013: 54) and £123m planned in eight provincial cities between 2013 and 2015 (DfT, 2013x; Table 2.1), expenditure across the whole of Britain must be at least £200m a year, which would mean subsidy rates of around 20p/journey²² or about 4p/km.²³ Employer provision of a range of cycling equipment is tax-exempt (DfT, 2011). It is not known what the value of this exemption amounts to, but it is probably quite small in relation to other transport taxes and subsidies.

22 Based on approximately 1 billion cycle journeys/year (16 per capita; DfT, 2013q)

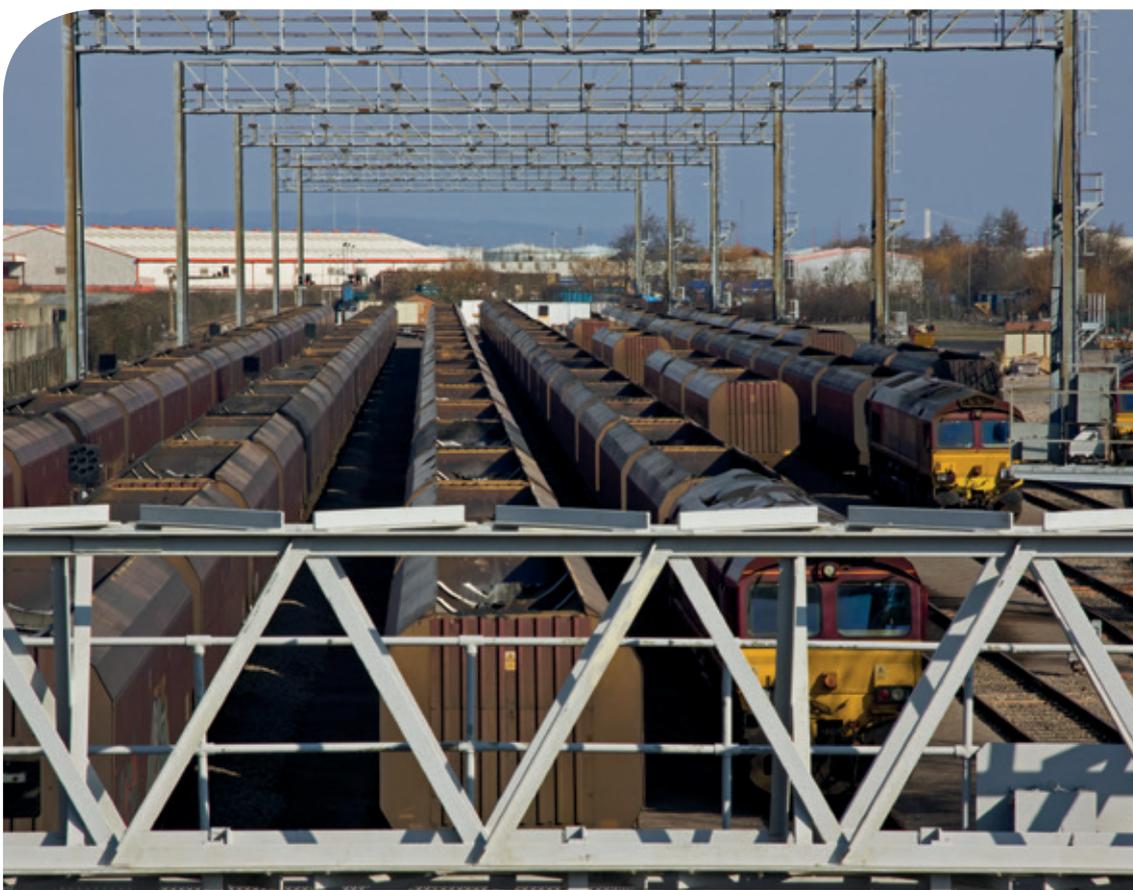
23 Based on approximately 5 billion cycle km/year (DfT, 2013c)

5.2 Freight transport

Rail freight received a grant of £17m in 2012/13, but as freight operators paid fuel duty of a similar order the net result will be negligible. Freight trains are charged access fees for using Network Rail's infrastructure, and it is not entirely certain whether these reflect the full costs which they impose on it. In 2011/12 Network Rail received £51m from rail freight operators, and as part of its 2013 periodic review the ORR estimated freight avoidable costs to be around £300m to £400m per annum (ORR, 2013b: 41). Ignoring the shortfall in covering track access costs, this would mean that rail freight would not be subsidised – and if this shortfall were included it would be between 1.5p and 2p/tonne-kilometre.²⁴

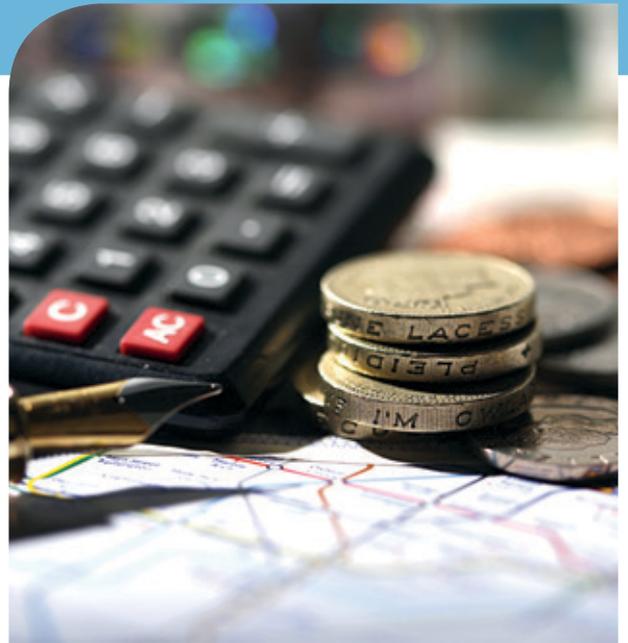
Road freight (travelling by HGV) pays both VED and fuel duty on its operations. Together these came to £5,687m in 2012/13 (see Table 3.4). In 2010 (latest available data), road freight amounted to 151 billion tonne-kilometres (including freight carried by vehicles smaller than 3.5 tonnes gross vehicle weight) (DfT, 2013d). This means that the taxation rate would be about 4p/tonne-kilometre.

24 Rail carried 21 billion tonne-kilometres and lifted 102m tonnes of freight in 2011 (ORR, 2014).



6. Conclusions

Transport activities are subject to a complex set of taxes and subsidies. Published data does not allow a complete and consistent picture of these to be made, for which reason a number of estimates and approximations have been made in this paper to piece a picture together.



The total of public expenditure on land transport in Britain came to £18.7 billion in 2012/13. Direct transport taxes yielded approximately £31.6 billion; therefore overall direct transport taxation exceeded public spending on transport by approximately £13 billion.

In addition to direct taxation, much transport expenditure (but not that channelled into public transport – estimated to cost the Exchequer £3.2 billion in 2011/12) is subject to VAT, which yielded about £12.2 billion from household spending on motoring. This included £5.6 billion of the total of £9.8 billion VAT paid on road transport fuel purposes. Additionally, company car and insurance premium taxes amount to around £4 billion a year.

Public expenditure on transport includes investment, maintenance and operation of infrastructure, as well as providing operator subsidies for some types of public transport, and compensation for concessionary fares. In 2012/13, capital spending on roads was £4.6 billion, and on rail £5.2 billion.

Total spending on roads in 2012/13 was £7.5 billion (having reduced from £9.7 billion in 2009/10) and £31.6 billion was raised in direct road user taxes. Of the £23.6 billion spent on public transport (excluding non-local buses and taxis), approximately £13.6 billion was paid by passengers and £10 billion by government. When other buses and taxis are included, total household spending on public transport amounts to about £16 billion a year.

The extent to which different forms of transport are used varies substantially, as do the rates of taxation and subsidy. These are summarised in Tables 6.1 and 6.2.

Table 6.1: Net **subsidy & taxation rates for personal travel in Britain**

Mode	Per journey	Per person kilometre
Car & van	54p tax	3.8p tax
Local bus	41p (16.6p) subsidy	6.5p (2.6p) subsidy
Other bus & coach	80p tax	2.6p tax
Motorcycle	37p tax	3.6p tax
National rail	332p subsidy	8.5p subsidy
London Underground	80p subsidy	9.7p subsidy

Source: Author's estimate

Note: Bracketed figures for local buses exclude concessionary fares support.

Table 6.2: Net **subsidy & taxation rates for freight travel in Britain**

Mode	Per tonne lifted	Per tonne-kilometre
Rail	392p subsidy	2p subsidy
Road	330p tax	4p tax

Source: Author's estimate



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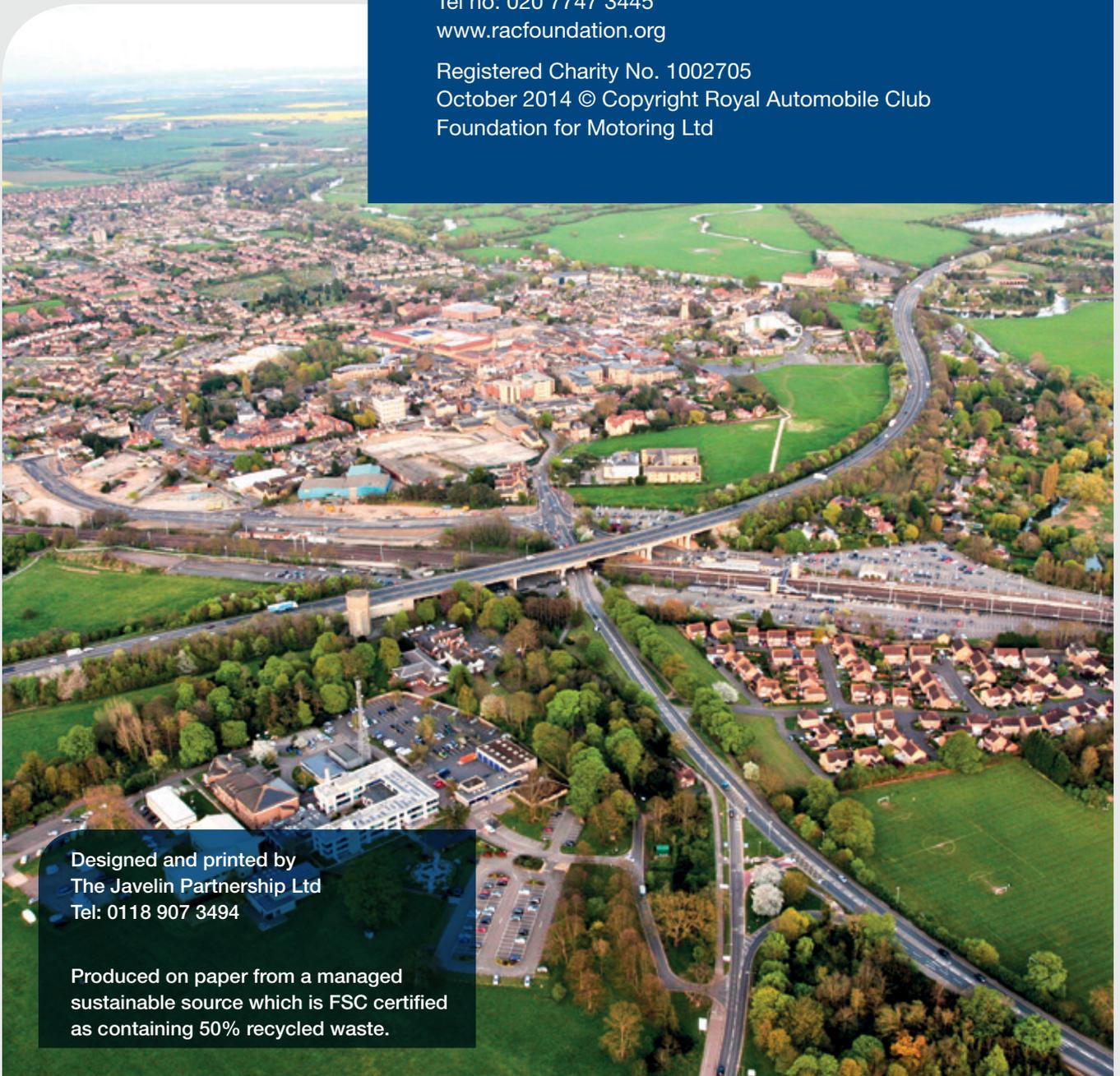
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