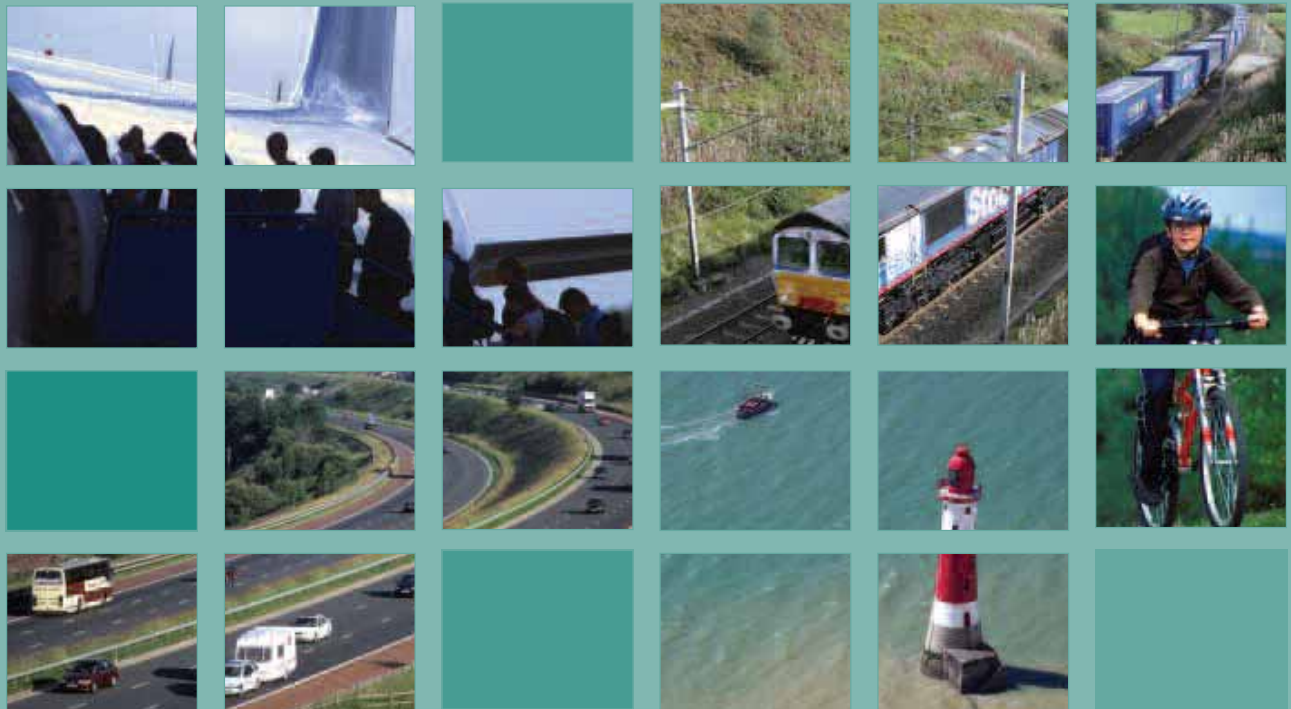


# Autumn Performance Report 2007





## **Department for Transport**

### **Autumn Performance Report 2007**

Presented to Parliament  
by the Secretary of State for Transport  
by command of Her Majesty  
December 2007

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# Chapter 1

## Introduction

This is the Autumn Performance Report for the Department for Transport (DfT). It provides Parliament with a progress report on performance against the Department's Public Service Agreement (PSA) targets using data available up to November 2007.

### Departmental objectives and PSA targets set for 2001-08

Public Service Agreements link the allocation of public expenditure to published targets with the aim of delivering modern, responsive public services. PSA targets are set for services or outcomes which the Government sees as key national priorities. They express the outcomes sought by the Government, defining clear, long-term goals to provide ambition and a sense of direction, as well as representing a contract between the public and Government.

The Department's current set of PSA targets for the period 2005-08 was published in Spending Review 2004 and the targets took effect from 1 April 2005. The coverage of these targets is broadly the same as the previous targets set in Spending Review 2002, with the addition of one new target on climate change. The Efficiency target, which was a PSA target prior to April 2005, will continue to be monitored. The transfer of responsibility for London Underground Limited (LUL) to the Mayor of London means that a PSA target was not retained for LUL, and information on performance monitoring will no longer be published by DfT. Details on LUL performance will continue to be published in the Transport for London annual report and their quarterly operational and financial reports.

A new set of PSAs for the period 2008-11 was published as part of Spending Review 2007.

### What the report covers

- DfT's current PSA targets, showing how they have evolved from the 2002 set.
- The performance indicators used to measure progress.
- Progress against targets based on the most recently available data.
- Data quality.

## What the report shows

Taken together, the seven PSA targets cover key issues of public interest. They are ambitious in the improvements to be achieved against a background of increasing demand and rising expectations, and innovative in the way they make use of new sources of data (for example by measuring person journey times rather than vehicle journey times).

Considerable progress has been achieved against the PSA set, although in some cases targets are unlikely to be achieved in all respects. The main points are as follows.

- Our roads are becoming safer. There has been the lowest level of deaths on the road since records began. The element of the target on disadvantaged communities has already been achieved and we are on course to meet or exceed other elements of the target.
- Rail performance in all sectors has continued to improve. Punctuality and reliability is at the highest level for six years and is on track to achieve the 2008 target. In terms of distance travelled, people are using the railways more than at any other time in the last 60 years.
- There has been an overall increase of bus and light rail usage, with accessibility and reliability of bus services continuing to improve. We are on course to achieve the national patronage target and associated improvements to reliability and disabled access. The target for growth in patronage in every region remains challenging.
- Overall performance on the inter-urban reliability target shows a reduction in reliability since the baseline period. On some routes reliability has improved, on others it has reduced. The Highways Agency has made good progress with its delivery plan and early results show the interventions to be effective, meaning that reliability is better than it would otherwise have been. However, it is unlikely that the target will be met due to the continuing challenge posed by traffic growth and by the roadworks necessary to improve and maintain the network.
- Four of our seven air quality objectives are currently being met, and the long-term trend is of improving air quality. A review of the Air Quality Strategy was completed and published in July 2007, and together with the Department for Environment, Food and Rural Affairs and other departments, we are now considering the additional measures that were recommended in order to move towards meeting the objectives.

- The UK is on course to more than meet our Kyoto target of keeping annual greenhouse gas emissions between 2008 and 2012 at 12.5 per cent below base year levels. The domestic carbon dioxide goal was always designed to be stretching and looks increasingly difficult to achieve. We are making definite progress towards it and the projected 16 per cent reduction by 2010 is testimony to that progress.

### Objectives and PSA performance targets

**Objective I:** Support the economy through the provision of efficient and reliable inter-regional transport systems by making better use of existing road network; reforming rail services and industry structures to deliver significant performance improvements for users; and investing in additional capacity to meet growing demand.

**PSA 1.** By 2007-08, make journeys more reliable on the strategic road network.

**PSA 2.** Improve punctuality and reliability of rail services to at least 85 per cent by 2006, with further improvements by 2008.

**Objective II:** Deliver improvements to the accessibility, punctuality and reliability of local and regional transport systems through the approaches set out in Objective I and through increased use of public transport and other appropriate local solutions.

**PSA 3.** By 2010, increase the use of public transport (bus and light rail) by more than 12 per cent in England compared with 2000 levels, with growth in every region.

**PSA 4.** By 2010-11, the 10 largest urban areas will meet the congestion targets set in their local transport plan relating to movement on main roads into city centres. The target will be deemed to have been met if, on target routes in the 10 largest urban areas in England, an average increase in travel of 4.4 per cent is accommodated with an average increase of 3.6 per cent in person journey time per mile. The local targets on which this is based include:

- in London, accommodate an increase in travel of 3 per cent with an increase in journey time of 1.5 per cent;
- in Manchester, accommodate an increase in travel of 1.5 per cent with no increase in journey time; and
- in the West Midlands, accommodate an increase in travel of 4 per cent with an increase in journey time of 5 per cent.

**Objective III:** Balance the need to travel with the need to improve quality of life by improving safety and respecting the environment.

**PSA 5.** Reduce the number of people killed or seriously injured in Great Britain in road accidents by 40 per cent and the number of children killed or seriously injured by 50 per cent, by 2010 compared with the average for 1994-98, tackling the significantly higher incidence in disadvantaged communities.

**PSA 6.** Improve air quality by meeting the Air Quality Strategy targets for carbon monoxide, lead, nitrogen dioxide, particles, sulphur dioxide, benzene and 1,3 butadiene. **Joint target with Defra.**

**PSA 7.** To reduce greenhouse gas emissions to 12.5 per cent below 1990 levels in line with our Kyoto commitment and move towards a 20 per cent reduction in carbon dioxide emissions below 1990 levels by 2010, through measures including energy efficiency and renewables. **Joint with Defra and the Department for Business, Enterprise and Regulatory Reform (BERR).**

**Objective IV:** Improve cost-effectiveness through sound financial management, robust cost control, and clear appraisal of transport investment choices across different modes and locations.

**There are no PSA targets under this objective.**



## Chapter 2

# Road journey time and reliability

### Strategic roads

#### SR2004 PSA target

**By 2007-08, make journeys more reliable on the strategic road network (PSA1)**

#### SR2002 PSA target

Reduce congestion on the inter-urban road network in England below 2000 levels by 2010.

#### Performance indicator

The target will be met if, in 2007-08, for the 10 per cent worst daytime journeys on each of the routes, average vehicle delay across the network is less than during the baseline period (August 2004 – July 2005 for most routes).

Delay is the difference between observed journey time and a reference journey time (the time that could theoretically be achieved when the traffic is free flowing).

**Coverage: Highways Agency roads in England.**

For monitoring purposes the network has been split into 103 routes. Ninety-one routes are included in this report; the remaining routes have been excluded due to data quality considerations.

The same set of routes was used to monitor progress in the Departmental Annual Report in May 2007.

Further information on the routes included in the target can be found in the data quality section below.

#### Progress

**Status: Slippage.**

Delays on the worst 10 per cent of journeys across the 91 routes covered by the target increased from 3.78 minutes per 10 miles in the baseline period to 4.16 minutes per 10 miles using the latest data for the year September 2006 to August 2007. This is equivalent to an extra 23 seconds per 10 miles, or the average speed on these routes dropping from 44.7 mph to 43.5 mph.

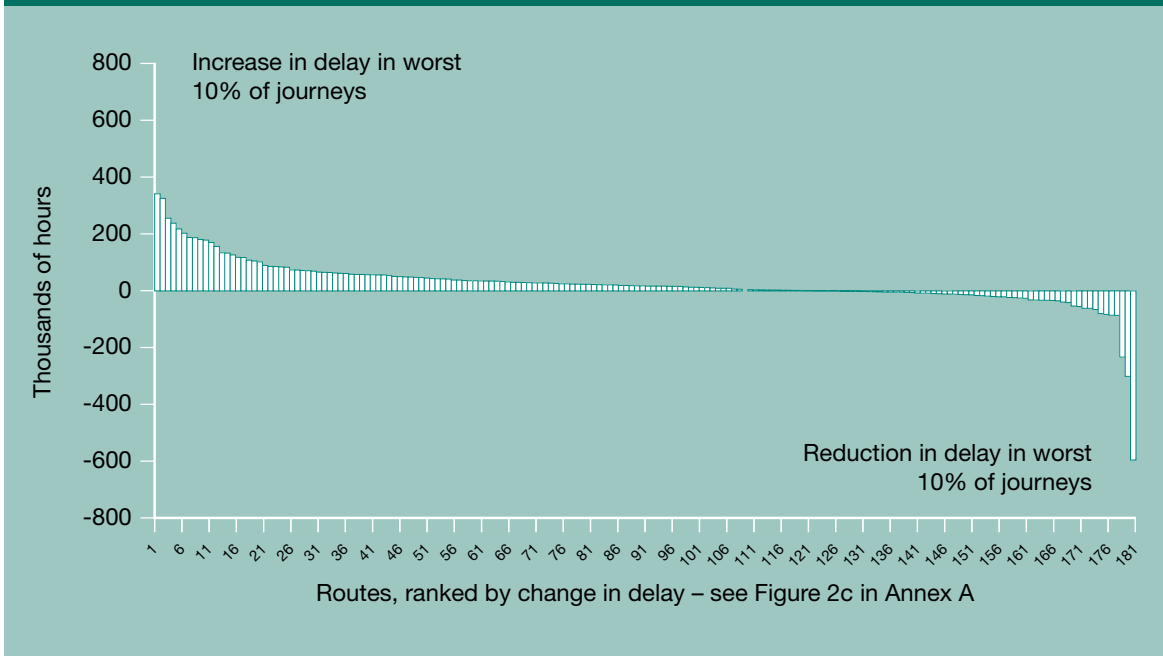
Figure 2a shows the monthly trend.

Figure 2a: **Journey time reliability measure for 91 target routes on the strategic road network**



Reliability for each of the 91 routes covered by the target, again using the latest data for the 12 months from September 2006 to August 2007 compared with the baseline period, shows a mixed picture of performance.

**Figure 2b: Change for each of the 91 two-way routes. Changes in total delay in the worst 10 per cent of journeys between baselines and the latest period**



Details of the changes in total delay for each route in the worst 10 per cent of journeys are listed in Figure 2c in Annex A to this chapter.

In summary, expressed in terms of delay per 10 vehicle miles in the worst 10 per cent of journeys:

- one twelfth of routes have at least 1 minute less delay per 10 vehicle miles in the 12 months to August 2007 compared with the baseline period. In general, these reductions in delay reflect roadworks in place during the baseline period that have since been removed;
- a quarter of routes have at least 1 minute more delay per 10 miles in the 12 months to August 2007 compared with the baseline period. Again, in general, this reflects the presence of roadworks in the year to August 2007 that were not in place during the baseline year;
- over two thirds of routes have less than a 1 minute change in delay per 10 miles in the 12 months to August 2007 compared with the baseline period.

The additional journey time from speed restrictions during roadworks, introduced for the safety of road users and road workers, gives an indication of the challenge in improving reliability whilst improving and maintaining a heavily used road network.

The route with the largest additional delay is the 25 mile M1 route from junction 13 (Milton Keynes) to junction 6a (M25), covering the 10 mile widening scheme between junctions 10 and 6a. On this route, average speeds on the worst 10 per cent of journeys declined by 7 mph. The roadworks were in place throughout the latest 12 month period, but no long-term roadworks were in place during the baseline period. This reduction in speed affected large volumes of traffic, resulting in the total increased delay of 342 thousand hours shown in Figure 2c.

Roadworks are vital to improve and maintain our inter-urban roads, ensuring they are fit for purpose in the long term. Measures have been introduced under the Highways Agency's Delivery Plan to reduce the impact of roadworks, including measures to safely allow an increase of speed limits through roadworks from 40mph to 50mph on 50 miles of the inter-urban road network. For the future, we have initiated a feasibility study to look into the scope for different types of motorway improvement schemes, such as Active Traffic Management with hard shoulder running, which could have a lower impact on reliability performance during construction.

We are undertaking further work to try to quantify the impact of roadworks on PSA performance. We are also examining the relationship between events, such as the flooding in July 2007, and reliability performance on individual routes.

Our preliminary research also shows that delay on the most congested routes increases at a faster rate than traffic growth. Work is continuing to improve our understanding of this complex relationship. Work is also continuing to better understand the relationship between traffic growth and other factors such as roadworks, so we can better manage the network.

## Highways Agency's Delivery Plan

In line with best practice for all PSAs, the Highways Agency's Delivery Plan, agreed with Ministers, details a full range of new and improved services aimed at delivering the target. Good progress has been made to implement the Delivery Plan. Three quarters of measures (in terms of benefit delivered) had been implemented at the mid point of the measurement year. The remaining initiatives are on course to be completed during this financial year.

The services, or interventions, are focused on reducing severe delays and improving journey reliability through a variety of methods, including:

- better management and prevention of incidents;
- minimising the impact of roadworks;
- improving information services to road users; and
- better management of the way traffic flows.

The Highways Agency has implemented a process to identify and implement opportunities to revise the Delivery Plan, as evidence emerges on the performance of completed or new initiatives. Early results indicate that the interventions delivered so far are effective, for example:

- Active Traffic Management on a section of the M42, including use of the hard shoulder during congested times, has reduced delays on the worst journeys by around 18 per cent;
- following a programme of targeted enhancements, the average response time of Incident Support Units to serious accidents has improved by 11 per cent; and
- the use by 10 police forces of better collision investigation equipment provided by the Highways Agency has improved clearance times by an average of approximately 40 minutes at each relevant incident.

Many measures have been in place less than a year, so the full effect will not yet have been seen as the target is measured using a rolling year of data.

### Quality of data

The target measure is constructed from traffic data derived from four separate data sources including the Highways Agency's National Traffic Control Centre cameras, and MIDAS loops under the road surface, as well as data from two external suppliers.

The database used to manage the Highways Agency network and calculate the PSA target measure and other indicators is large and complex, using innovative data capture and processing techniques.

As set out in the Departmental Annual Report in May 2007, the Highways Agency undertook a comprehensive data quality improvement programme, rectifying some problems identified in 2006. Following these improvements it was possible to increase the number of routes used for PSA monitoring purposes to 91. A revised Technical Note updated in May 2007 provides more detail on the data quality improvements and the routes incorporated in the target.

The quality of the data on the 91 routes has been monitored since the publication of the Departmental Annual Report and a professional judgement has been made to continue to use this set of routes for PSA targeting purposes. One route has been retained by switching to a more reliable data source. It should be noted that the quality of data varies from route to route and therefore care should be taken when looking at trends in the data for individual routes in isolation.

Decisions on which routes to include for monitoring purposes are informed by an assessment of the trends in the quality of the data available from the various sources and consistency between different sources, with the aim of including as many routes as possible.

## Urban roads

### SR2004 PSA target

By 2010-11, the 10 largest urban areas will meet the congestion targets set in their local transport plan relating to movement on main roads into city centres. The target will be deemed to have been met if, on target routes in the 10 largest urban areas in England, an average increase in travel of 4.4 per cent is accommodated with an average increase of 3.6 per cent in person journey time per mile.

The local targets on which this is based include:

- in London, accommodate an increase in travel of 3 per cent with an increase in journey time of 1.5 per cent;
- in Manchester, accommodate an increase in travel of 1.5 per cent with no increase in journey time; and
- in the West Midlands, accommodate an increase in travel of 4 per cent with an increase in journey time of 5 per cent.

### SR2002 PSA target

Reduce congestion in large urban areas in England below 2000 levels by 2010.

### Performance indicator

As local economies grow, more people will be travelling to work in peak hours. With a largely fixed urban road network, the challenge for each authority is to make best use of that capacity (through traffic management and effective use of public transport) so that more people can travel, without significant extra delays.

Each urban area has set a person journey time target for 2010-11, in the context of the expected increase in travel.

Journey time relates to the average journey time experienced by people rather than vehicles. For example a bus with 20 passengers will count 20 times within the target whereas a car with a single occupant will count only once. Journey times are being calculated mainly for in-bound routes for the morning peak.

Travel is defined as person miles travelled on the target routes.

The local targets are weighted to the national target using traffic flow on all major roads across each urban area, excluding Highways Agency roads.

**Coverage:** The 10 largest urban areas are London, Greater Manchester, Merseyside, South Yorkshire, West Yorkshire, Tyne and Wear, West Midlands, Bristol, Leicester and Nottingham. Across these areas a total of 166 routes are included in the target. The target relates to the morning peak period.

## Progress

### Status: Not yet assessed.

The original baseline figures for the target were published in July 2006, using the data that were available at the time. This meant that the person journey time baseline used a mixture of data mainly from 2004-05 and 2005-06 (essentially vehicle journey times and numbers of people respectively). Person journey time data for 2006-07 will be available for the next Departmental Annual Report where they will be compared with the target baseline, and looked at alongside changes in travel.

Methodological improvements to journey time processing needed to be implemented before we could produce figures for 2006-07. These are explained in the section on quality of data.

Each of the 10 urban areas that comprise the PSA target has produced a delivery plan setting out how it intends to meet their local congestion target. These plans include trajectories for the target, showing intermediate years between the baseline and 2010-11. Future performance reports will compare outturn performance against these trajectories.

## The role of local authorities

Local authorities in the 10 largest urban areas are responsible for the delivery of their local targets, which in turn comprise the PSA target. The measures that local authorities are putting in place include the following:

- promoting alternatives to car use, for example seeking to expand use of public transport, working with major employers and schools to produce travel plans to lessen their impact during the peak, increased use of park and ride schemes, and measures to promote cycling and walking;
- better network management, for example in the form of improved technology for controlling urban traffic, allowing it to flow more freely and measures to restrict parking on key routes;
- integrating transport, land use and parking policies;
- improved information to road users, for example through real time bus information; and
- improvements to infrastructure, for example bus lanes or changes to junctions to improve traffic flow.

Local authorities in the 10 largest urban areas have produced delivery plans setting out how they intend to meet their local targets and explaining options for exceeding them. The plans will be used to manage performance against the target, and will be adjusted as necessary to respond to recorded performance and to new incentives.

## The role of the Department

While the delivery of the target is a matter for local authorities, the Department is providing support through five channels.

**(a) Guidance, challenge and support**

All 10 authorities have produced an initial delivery plan which explains how they intend to meet their target, and explores options for exceeding it. The Department has provided guidance and support to individual authorities throughout this process, including the preparation of their delivery plan.

**(b) Financial support**

Reward funding is available from the Congestion Performance Fund up to a total of £60 million over four years. Payments from the £5 million available in 2007-08 have been made to authorities whose delivery plans provide confidence that their targets will be met or exceeded.

More generally, the Department is supporting local authorities through the Local Transport Plan (LTP) system. £462 million has been allocated to the nine areas excluding London. London is funded through Greater London Authority transport grant and not the LTP process. Good progress is being made with DfT's programme of major schemes (those costing over £5 million) to improve the local road network. Since 2000, 12 major road schemes have been completed in the target areas. A further nine major road schemes are under construction in these areas.

**(c) Legislation**

The Traffic Management Act 2004 gives local authorities new powers and new duties. The Act extends the powers of local authorities to enforce traffic regulations and gives them greater power to control and manage works on the street. New regulations relating to parking and street works were laid in Parliament in July 2007. The Department will consult on bus lane and moving traffic regulations in 2008.

The Act also introduced new network management duties for local traffic authorities. Authorities are required to manage their road network to secure the expeditious movement of traffic on that network and to facilitate the same on the network of others. The *Guidance on Intervention Criteria* associated with the duties came into force in March 2007.

**(d) Supporting best practice**

The Department is supporting the dissemination of best practice through workshops, a shared internet site and compiling examples from local delivery plans.



(e) **Data**

The new data sources that underpin the target have allowed authorities to build a detailed picture of the congestion problem in their area. More information on this is provided below.

### Quality of data

Journey time data for all vehicles other than staged passenger bus services is provided to local authorities by the Department. These data are derived from in-vehicle GPS tracking systems. Coverage varies from route to route and from section to section over individual routes and some infilling is necessary where sample sizes are low. Journey times for each hour in the target are based on an annual weekday average, excluding school holidays.

Bus journey times are collected by local authorities as the Department's GPS data does not cover buses. Traffic flows and vehicle occupancy rates for all vehicles are also collected by local authorities. Guidance on data collection has been issued to local authorities to ensure consistency of methodology between authorities.

A number of revisions have been made to the baseline figures originally published in July 2006, correcting small inaccuracies and making methodological changes to improve how the journey time data are processed. Our intention to make such changes was set out in the original Technical Note, and the changes have no impact on the targets or the challenge inherent in meeting them. Full details, and the new baselines, will be published in a new version of the target Technical Note on the DfT website. Implementing these methodological improvements has entailed a significant amount of data analysis, and this work needed to be done before 2006-07 data could be made available. In summary, the changes are:

- improved processing algorithms to make better use of the in-vehicle GPS data, resulting in better estimates of journey times. This has included, for example, removing some vehicles from the sample that were giving biased results;
- correcting some small errors in calculations. For example, in a couple of urban areas, bus data supplied by local authorities were incorrectly fed into the indicator calculation; and
- improving the consistency of approach between local authorities.

We have recently signed a new contract for the supply of journey time data that lasts until the end of the urban congestion target. The new contract is for a set of data with a vehicle mix that reflects general traffic, which will continue to provide robust estimates of journey times.

## Annex A

**Figure 2c Changes in total delay in the worst 10 per cent of journeys (thousands of hours), ranked by biggest increase for each of the two-way routes.**

Rank	Route	Change (thousands of hours)
1	M1 J13 – J6a	342
2	M5 J15 – M6	325
3	M62 A1 – J18	255
4	M56/A5117 Wales – M60	238
5	A34 M40 – M3	218
6	M25 J23 – J16	202
7	M5 M6 – J15	188
8	M40 M42 – J10 <sup>1</sup>	187
9	M25 J23 – J30	181
10	A34 M3 – M40	178
11	M25 J30 – J23	170
12	M20 Folkestone – London	156
13	M11 J14 – J4	134
14	M1 J13 – J19	133
15	M62 J18 – A1	126
16	A27/A259 Portsmouth – Hastings	118
17	M25 J16 – J7	117
18	M25/A282 J7 – J30	108
19	M3 Southampton – London	105
20	M6 M1 – J8	102
21	A14 A11 – A1	89
22	M62 J6 – J12	86
23	M25 J16 – J23	85
24	A1/A1(M) Scotch Corner – Newcastle (A69)	84
25	M40 J10 – M42 <sup>1</sup>	83
26	A12 Ipswich – M25	74
27	A1/A1(M) London – Peterborough	73
28	M4 Wales – J13	71
29	A50/A500 M6 – M1	71
30	A3 London – Portsmouth	69
31	M6 J8 – M1	66
32	M271/M27 Portsmouth – Southampton	65

<sup>1</sup> The baseline for these routes is April 2005 to March 2006

<sup>2</sup> The baseline for these routes is September 2004 to August 2005

<sup>3</sup> Adjustments have been made for missing data

**Figure 2c Changes in total delay in the worst 10 per cent of journeys (thousands of hours), ranked by biggest increase for each of the two-way routes.**

Rank	Route	Change (thousands of hours)
33	M56/A5117 M60 – Wales	64
34	A417/A419 Swindon – Brockworth	63
35	A3 Portsmouth – London	61
36	A5 M1 J18 – M1 J9	61
37	A1/A1(M) Newcastle (A69) – Scotch Corner	58
38	M67/A57/A628/A616 M1 – Manchester	57
39	M27/A31/A35 Southampton – Honiton	57
40	M3 London – Southampton	57
41	M26 M20 – M25	56
42	M271/M27 Southampton – Portsmouth	56
43	M18 M62 – M1	56
44	M4 J13 – J1	53
45	M60 J18 – J4 via Stockport	50
46	M54/A5 M6 – Wales	50
47	A14 M6 – A1	49
48	A14 A1 – M6	48
49	A14 A1 – A11	47
50	A417/A419 Brockworth – Swindon	47
51	M1 J6a – J13	45
52	M62 J12 – J6	43
53	M27/A31/A35 Honiton – Southampton	43
54	A303 M3 – Amesbury	42
55	M4 J13 – Wales	41
56	M62/A63/A1033 A1 – Hull	38
57	A303/A30 Exeter – Amesbury	38
58	A47 Peterborough – Norwich	36
59	A30 Bodmin – Penzance	36
60	M55 Blackpool – M6	35
61	M60 J4 via Stockport – J18	35
62	A19/A168 Dishforth – A1 N of Newcastle	34
63	M42/A42 M6 Toll – M1 <sup>1</sup>	34
64	A428 M11 – A1	34
65	A38 M1 – Birmingham	33

1 The baseline for these routes is April 2005 to March 2006

2 The baseline for these routes is September 2004 to August 2005

3 Adjustments have been made for missing data

**Figure 2c Changes in total delay in the worst 10 per cent of journeys (thousands of hours), ranked by biggest increase for each of the two-way routes.**

Rank	Route	Change (thousands of hours)
66	M2/A2 Folkestone – J1 via Dover	32
67	A453 Nottingham – Kegworth	30
68	A303/A30 Amesbury – Exeter	30
69	M26 M25 – M20	29
70	A428 A1 – M11	29
71	M1 J36 – J32	28
72	A13/A1089 Tilbury – Aveley <sup>1</sup>	28
73	M6/A74 Scotland – J32 <sup>2</sup>	28
74	A453 Kegworth – Nottingham	27
75	M6 Toll M6 J11a – M42 <sup>3</sup>	26
76	A43 Northampton – M40	24
77	A404(M)/A404 M4 – M40	24
78	M66/A56 M62 – M65	23
79	A30 Penzance – Bodmin	23
80	M67/A57/A628/A616 Manchester – M1	23
81	M55 M6 – Blackpool	23
82	A404(M)/A404 M40 – M4	22
83	A5 A38 – M1 J18	22
84	A38 Exeter – Bodmin	21
85	A46 Leicester – Lincoln	21
86	M1 J1 – J6a <sup>1</sup>	20
87	A1/A1(M) Peterborough – London	19
88	M18 M1 – M62	19
89	A38 Birmingham – M1	18
90	A47 Norwich – Peterborough	18
91	M40 J10 – J1	17
92	M2/A2 J1 – Folkestone via Dover	17
93	A5 M1 J18 – A38	16
94	A11 A14 – A47	16
95	A11 A47 – A14	16
96	A5 M1 J9 – M1 J18	16
97	A38 Bodmin – Exeter	16
98	A49 A40 – Shrewsbury	15

<sup>1</sup> The baseline for these routes is April 2005 to March 2006

<sup>2</sup> The baseline for these routes is September 2004 to August 2005

<sup>3</sup> Adjustments have been made for missing data

**Figure 2c Changes in total delay in the worst 10 per cent of journeys (thousands of hours), ranked by biggest increase for each of the two-way routes.**

Rank	Route	Change (thousands of hours)
99	M42/A42 M1 – M6 Toll <sup>1</sup>	14
100	M6 Toll M42 – M6 J11a <sup>3</sup>	12
101	A43 M40 – Northampton	12
102	M11 J4 – J14	12
103	A421 A1 – M1	11
104	M180/A180 M18 – Grimsby	10
105	M25 J7 – J16	9
106	A1/A1(M) M1 – Peterborough	9
107	M180/A180 Grimsby – M18	9
108	A47/A12 Lowestoft – Norwich <sup>1</sup>	6
109	M1 J48 – J42	6
110	A66(M)/A66 Middlesbrough – Darlington	5
111	A46 Lincoln – Leicester	4
112	A23/M23 London – Crawley	4
113	M6 J20A – J32	3
114	A49 Shrewsbury – A40	3
115	A303 Amesbury – M3	3
116	A69 Newcastle – Carlisle	3
117	M50/A449/A40 Monmouth – M5	2
118	M50/A449/A40 M5 – Monmouth	2
119	M53/A55 Wallasey – Wales	1
120	M4 J1 – J13	1
121	A46 Coventry – Tewkesbury	1
122	A23 Brighton – Crawley	1
123	A120 Harwich – Colchester	1
124	M45/A45 M1 – Coventry <sup>2</sup>	0
125	A11 A14 – M11	0
126	A556 M56-M6	0
127	M45/A45 Coventry – M1 <sup>2</sup>	0
128	M69 M6 – M1	-1
129	M66/A56 M65 – M62	-1
130	A66(M)/A66 Darlington – Middlesbrough	-1
131	M1 J42 – J48	-1

1 The baseline for these routes is April 2005 to March 2006

2 The baseline for these routes is September 2004 to August 2005

3 Adjustments have been made for missing data

**Figure 2c Changes in total delay in the worst 10 per cent of journeys (thousands of hours), ranked by biggest increase for each of the two-way routes.**

Rank	Route	Change (thousands of hours)
132	M1 J6a – J1 <sup>1</sup>	-2
133	A69 Carlisle – Newcastle	-3
134	M25/A282 J30 – J7	-3
135	M1 J32 – J36	-4
136	M53/A55 Wales – Wallasey	-5
137	M62/A63/A1033 Hull – A1	-5
138	A23/M23 Crawley – London	-5
139	A595/A66 Penrith – Sellafield	-5
140	M5 J15 – J31	-5
141	A64 A1 – Scarborough	-6
142	M60 J4 – J18 via Barton	-8
143	A11 M11 – A14	-8
144	A556 M6-M56	-9
145	A595/A66 Sellafield – Penrith	-10
146	A120 Colchester – Harwich	-10
147	M20 London – Folkestone	-11
148	A421 M1 – A1	-11
149	M54/A5 Wales – M6	-12
150	A47/A12 Norwich – Lowestoft <sup>1</sup>	-13
151	A13/A1089 Aveley – Tilbury <sup>1</sup>	-13
152	A66 Scotch Corner – Penrith	-14
153	A21 Hastings – Sevenoaks	-16
154	A52/A5111/A6 Grantham – Derby	-17
155	A590 Barrow-in-Furness – M6	-19
156	A590 M6 – Barrow-in-Furness	-20
157	M42 J7 – J1	-21
158	A66 Penrith – Scotch Corner	-21
159	A52/A5111/A6 Derby – Grantham	-23
160	A50/A500 M1 – M6	-24
161	A27/A259 Hastings – Portsmouth	-26
162	A23 Crawley – Brighton	-26
163	M40 J1 – J10	-32
164	A64 Scarborough – A1	-33

<sup>1</sup> The baseline for these routes is April 2005 to March 2006

<sup>2</sup> The baseline for these routes is September 2004 to August 2005

<sup>3</sup> Adjustments have been made for missing data

**Figure 2c Changes in total delay in the worst 10 per cent of journeys (thousands of hours), ranked by biggest increase for each of the two-way routes.**

Rank	Route	Change (thousands of hours)
165	A21 Sevenoaks – Hastings	-33
166	A46 Tewkesbury – Coventry	-33
167	M5 J31 – J15	-34
168	A12 M25 – Ipswich	-35
169	M1 J19 – J13	-40
170	M69 M1 – M6	-41
171	A19/A168 A1 N of Newcastle – Dishforth	-53
172	M42 J1 – J7	-55
173	M60 J18 via Barton – J4	-61
174	A1/A1(M) Peterborough – M1	-62
175	M6/A74 J32 – Scotland <sup>2</sup>	-66
176	A14 A11 – Felixstowe	-80
177	A14 Felixstowe – A11	-83
178	M6 J20A – J8	-86
179	M6 J32 – J20A	-86
180	M1 J19 – J32	-234
181	M1 J32 – J19	-301
182	M6 J8 – J20A	-596

1 The baseline for these routes is April 2005 to March 2006

2 The baseline for these routes is September 2004 to August 2005

3 Adjustments have been made for missing data

## Chapter 3

### Rail services

#### SR2004 PSA target

Improve punctuality and reliability of rail services to at least 85 per cent by 2006, with further improvements by 2008.

This target was introduced to give an increased focus to the punctuality and reliability of passenger train services, which reflected the immediate priority (of both passengers and the Government) of improving performance.

The PSA target for rail by 2008 has now been set (in the 2006-07 Annual Report), and aims for punctuality and reliability to rise further to at least 89.4 per cent by March 2008.

#### SR2002 PSA target

Secure improvements in rail punctuality and reliability with a 50 per cent increase in rail use in Great Britain from 2000 levels by 2010.

#### Performance indicators

##### **Punctuality and reliability**

The Public Performance Measure (PPM) combines figures for punctuality and reliability into a single performance measure. It measures the performance of every scheduled franchised passenger train against the daily timetable, and is measured at the destination. A train is designated 'on time' if it arrives within five minutes (four minutes 59 sec) of the planned arrival time. This time is extended to 10 minutes (nine minutes 59 sec) for long-distance trains. A train that fails to complete all its journey is recorded as part-cancelled and treated in the PPM as a train not on time.

##### **Rail use**

This is measured using passenger kilometre<sup>1</sup> data from the rail industry's central ticketing system. This covers over 90 per cent of all ticket sales. For those ticket sales that the system does not record correctly, notably some operator-specific tickets and multi-modal tickets, the Office of Rail Regulation (ORR), with the help of train operating companies and Passenger Transport Executives, is able to produce a robust estimate of passenger kilometre levels.

<sup>1</sup> The number of passengers multiplied by the distance each passenger travels, on average, in kilometres.



## Coverage: England and Wales train operators

### Progress

2006: met; 2008: on plan

The 2006 target was reached six months early and the PPM has continued to improve. Progress has continued and a higher target of 89.4 per cent by March 2008 has now been agreed between the Department and HM Treasury.

Rail performance, as measured by PPM, reached its lowest point in 2001. Since then there has been steady recovery in punctuality and reliability to the current level.

Overall PPM performance, on a moving annual average (MAA) basis, was 88.5 per cent in August 2007, up from 87.3 per cent in August 2006. This compares to the PPM low point of 74.2 per cent in October 2001.

Performance in all sectors showed improvement. In the long distance sector PPM was 84.9 per cent for the year to August 2007 against 84.1 per cent at August 2006. In the regional sector, PPM increased to 88.3 per cent for the year to August 2007 from 86.0 per cent in the previous year. London and the South East performance improved to 89.2 per cent for the year to August 2007 from 88.7 per cent in the previous year.

Rail use continues to increase. In terms of the distance travelled, people are using the railways more than at any other time since 1946. Passenger kilometres were 7.6 per cent higher in the 12 months to the end of March 2007 compared to the same period in the previous year.

Data source: <http://www.networkrail.co.uk/asp/742.aspx>

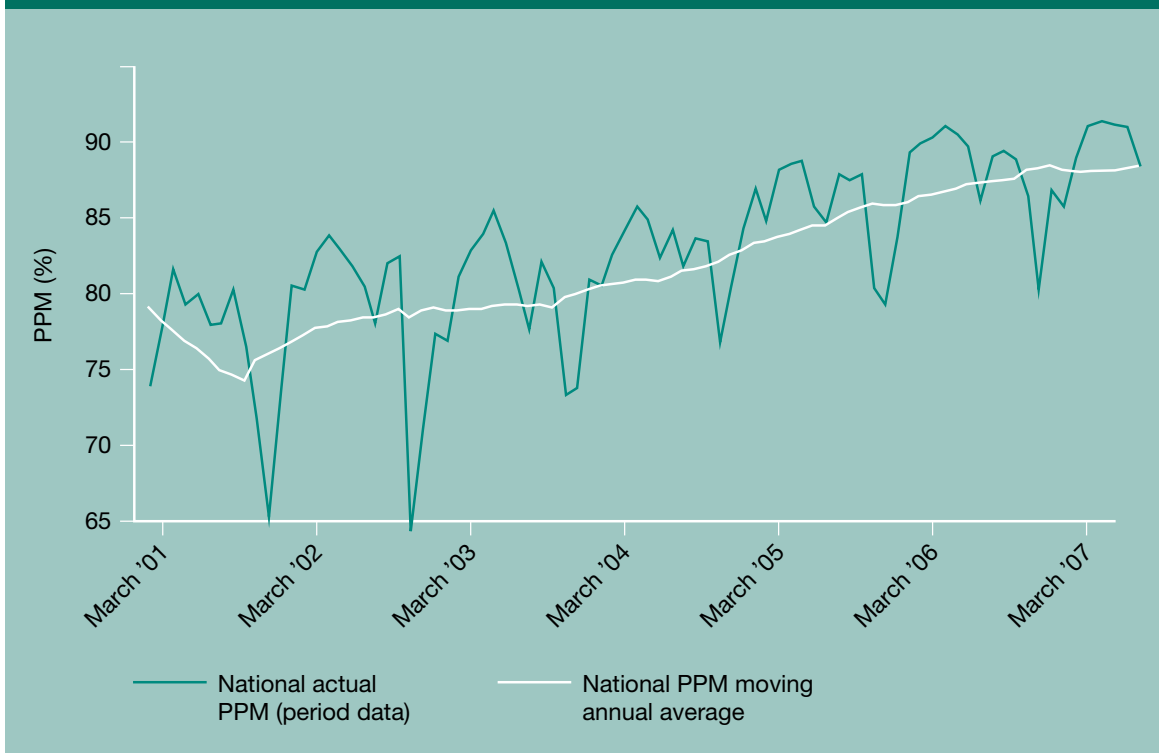
<http://www.networkrail.co.uk/companyinformation/PerformanceData/index.htm>

<http://www.rail-reg.gov.uk/upload/pdf/330-rev.pdf>

### Quality of data

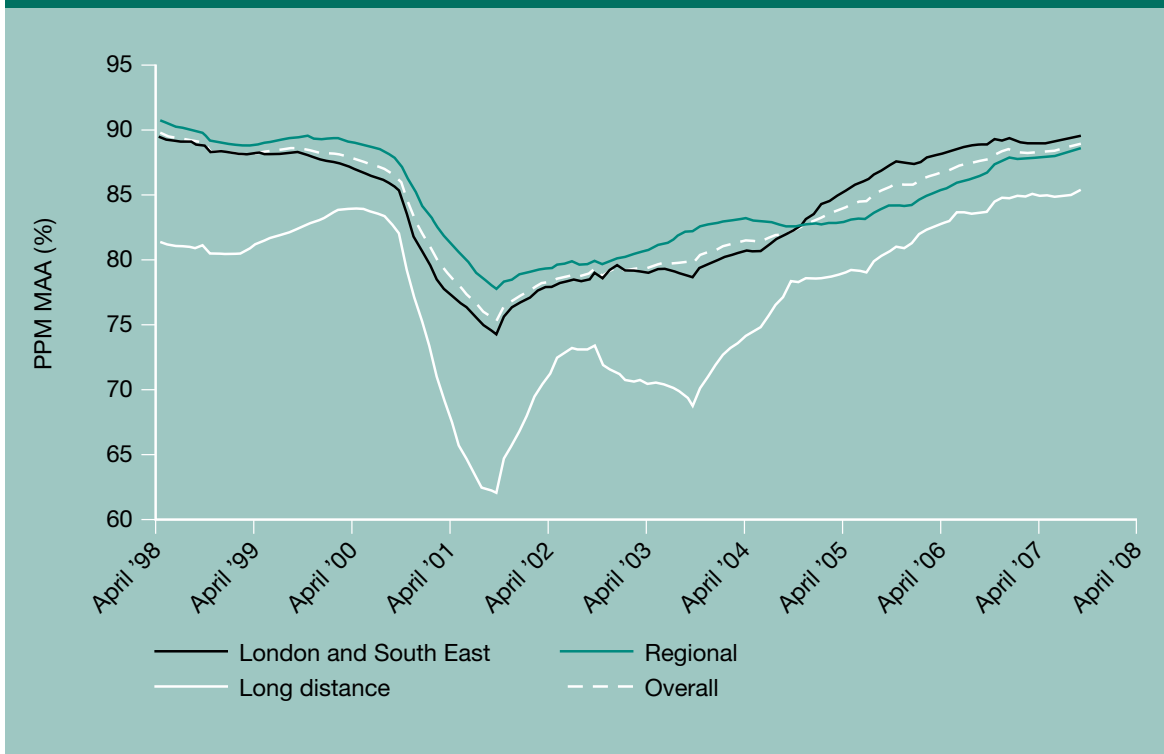
Statistics on passenger kilometres, punctuality and reliability are published by ORR. Since April 2005, figures on punctuality and reliability have been collated by Network Rail. The measures employed are well-established and used across the rail industry. They are currently published quarterly by ORR. Consistency of train performance data is underpinned by the rail industry's own data quality management and internal audit activities. There has been no material change in the collection of the data which generates the PPM.

Figure 3a: National PPM – Period data and MAA



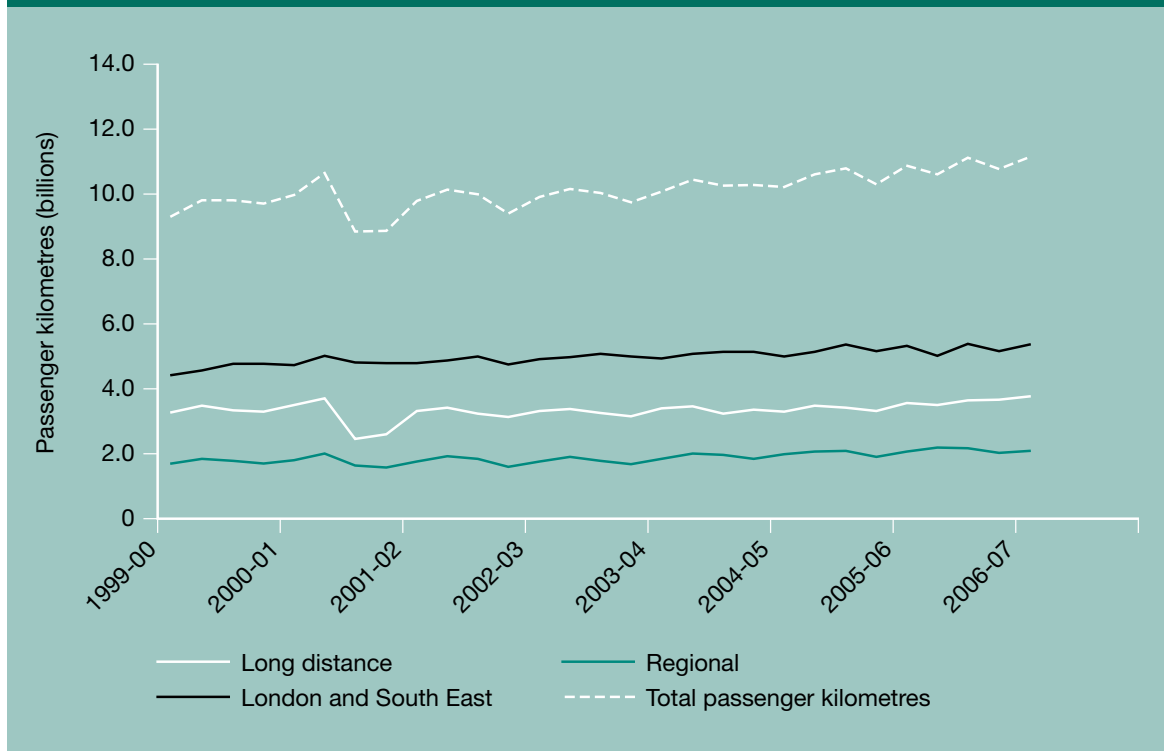
The above graph shows the PPM by period and MAA. PPM MAA has been rising steadily since a low point in 2001. Performance suffers in autumn each year but since 2002, that has also been improving year on year.

Figure 3b: PPM MAA by sector



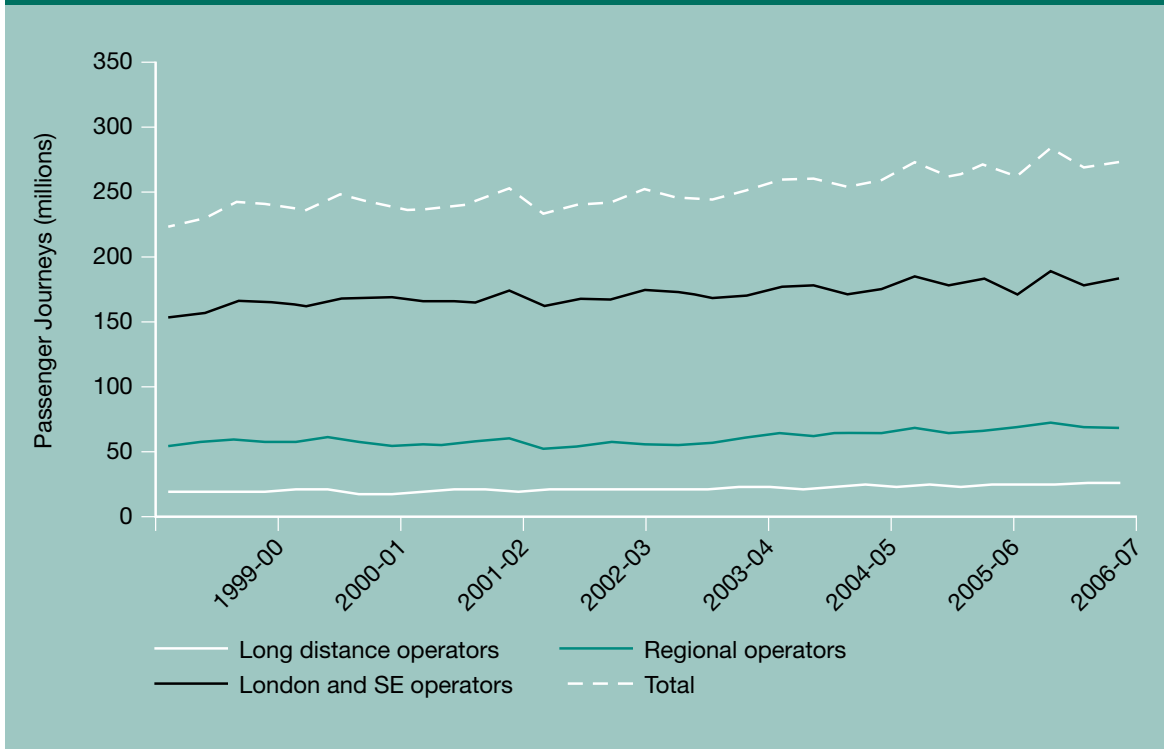
Performance across all passenger sectors has been improving since 2001, a trend expected to continue into 2008. Long distance services suffered the greatest drop in 2001, but have since recovered and are now performing almost as well as other services.

Figure 3c: **Number of passenger kilometres travelled (in billions), 1999-00 to 2006-07, by business sector**



In total, the number of passenger kilometres has risen steadily from 9.3 billion in the first quarter of 1999-00 to **11.9** billion in the **fourth** quarter of 2006-07, the most recently published figures. This is an increase of **29** per cent.

Figure 3d: **Number of passenger journeys (in millions), 1999-00 to 2006-07, by business sector**



The total number of passenger journeys taken has risen steadily from 222 million in the first quarter of 1999-00 to **307** million in the **fourth** quarter of 2006-07. This is an increase of **39** per cent.

## Chapter 4

### Bus and light rail usage

#### SR2004 PSA target

By 2010, increase the use of public transport (bus and light rail) by more than 12 per cent in England compared with 2000 levels, with growth in every region.

The SR 2002 target was revised to include a commitment to growth in every region. Set against the historic trend of declining bus patronage outside London, this will be a significant challenge. For this reason, there was no expectation that growth in all regions could be achieved during the SR2004 period (April 2005 – March 2008). Instead, we would aim for year on year growth in every region during the final three years of the PSA target period (April 2008 – March 2011).

Improvements to punctuality, reliability, and vehicle accessibility, though no longer mentioned in the target, remain as part of an overarching objective.

#### SR2002 PSA target

Secure improvements to the accessibility, punctuality and reliability of local public transport (bus and light rail) with an increase in the use of more than 12 per cent by 2010 compared with 2000 levels.

#### Performance indicators

##### **Number of passenger journeys undertaken each year (bus and light rail)**

Baseline year is 2000-01. 'Light rail' is a broad term referring to any public passenger-carrying railway system using rolling stock that is lighter in weight or strength than that used on mainline railways or London Underground. Use is defined as the number of passenger journeys undertaken each year, called patronage. This is measured annually using data from the Department's annual surveys of bus and light rail operators.

##### **Percentage of vehicles with low floor wheelchair access**

Annual data is available from the Department's survey of bus and coach operators on the percentage of local buses of low floor construction. Figures show that 22 per cent of local buses were low floor vehicles in the baseline year 2000-01 (although some were not wheelchair accessible).

**Bus reliability (%)**

The Confederation of Passenger Transport (CPT) has agreed with the Department a target of 99.5 per cent reliability, defined as percentage of scheduled service actually run, excluding losses outside the operator's control. Reliability is not currently considered to be an area of concern with regard to light rail.

**Bus punctuality**

National Statistics on bus punctuality were published for the first time on 15 June 2006. A further punctuality survey was carried out in May 2007 with publication of the results in early 2008.

You can find further information at:

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/publicbuspunctuality/>

**Access to services**

The Department, together with the Central Local Working Group on Accessibility Planning, has developed six 'core' access to services indicators. These are based on total journey time (walking, cycling, public transport) to a set of key destinations (schools, further education colleges, GPs, hospitals, jobs and supermarkets). An 'experimental' set for 2004 was calculated centrally using consistent data sets and a consistent methodology, and the results were published. The indicators for 2005 were published in March, using higher quality data – see <http://www.dft.gov.uk/pgr/statistics/datatablespublications/ltp/coreaccessindicators2005>

Journey time is not, however, the only determinant of accessibility, and the importance of other influences on accessibility (such as cost, reliability, safety) varies from area to area and group to group. Local authorities have therefore been required to include at least one locally appropriate accessibility indicator and target in their second local transport plan.

**Coverage: England**

**Progress**

**Status: On course to achieve national patronage target and associated improvements to reliability and disabled access: target for growth in patronage in every region remains challenging.**

**Patronage**

A 12 per cent increase in usage for bus and light rail above year 2000 levels has already been exceeded and further growth is likely. London is largely responsible for the rise since 2000, and patronage outside London also rose during 2006-07. This reflected the introduction of free local concessionary fares in April 2006 which boosted passenger numbers outside London, particularly in the non-Metropolitan areas, and the introduction of a free national scheme from April 2008 will generate further growth in all areas. Some local authority areas outside London have delivered increases in patronage in earlier years as well. Examples of these areas are Telford, Brighton, Dorset, York, West Sussex and Cambridgeshire.

4,371 million bus passenger journeys were made in 2006-07, up from the 2005-06 total of 4,196 million. Bus patronage is 14 per cent above the 2000-01 baseline of 3,842 million after six years.

Light rail patronage increased by 9.3 per cent in 2006-07 compared with 2005-06, to 179 million passenger journeys. Light rail schemes operating in London accounted for the greatest increase with journeys on the Dockland Light Railway increasing by nearly 20 per cent and by 9 per cent on Croydon Tramlink. In total patronage on light rail has increased by 44 per cent since the baseline period of 2000-01.

Combined bus and light rail patronage has increased by 14.7 per cent over the first six years of the period to which the 12 per cent target relates.

Combined bus and light rail patronage fell in only two English regions during 2006-07 (North West and West Midlands regions). These regions contained PTEs already offering free local concessionary fares before 1 April 2006. In London patronage increased by 6.4 per cent. In the six years since the 2000-01 baseline, patronage has risen by nearly 50 per cent in London, but has changed by between +4 per cent and -13 per cent in the other English regions. Those regions outside London with the highest levels of bus ridership per head have generally shown the largest falls in patronage.

**Accessibility of vehicles**

Fifty-eight per cent of full size buses were low floor wheelchair accessible vehicles at 31 March 2007. All new light rail vehicles and systems are required to be accessible to disabled people, including wheelchair users.



**Reliability**

Bus reliability has improved from the baseline of 98.2 per cent in 2000-01 to 98.9 per cent in 2006-07.

Related information (see Chapter 2 in the latest Quarterly Bulletin):

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/public/buslightrail/>

**Quality of data****Patronage**

The bus element of the target comprises three separate measures covering bus passenger journeys, reliability and punctuality. Passenger journey and reliability data are obtained from two sources. For patronage, the Department conducts its own sample surveys of bus operators. Research has been undertaken that shows that the increasing numbers of non-cash fare passengers were not being fully reflected in bus operator's data. Further research has shown that the introduction of free local concessionary fares did not affect the level of driver under-recording. Both these findings have been incorporated in revised patronage figures for England outside London (including historical figures). Data for the London area is based on that provided by Transport for London (TfL). The TfL data is based on ticket sale data matched with information about likely usage for each type of ticket. It was revised significantly upwards in 2007, to take more account of Oystercard validations.

**Light rail**

For the light rail part of the target, figures are based on an annual return provided by each of the companies or PTEs operating light rail systems in England. These are required to provide information on light rail patronage including ticket sales, number of passenger journeys and sales revenue. Outturn figures are National Statistics.

**Reliability**

Reliability is assessed by the Department through a panel of large operators outside London. TfL reports for its bus contractors in London. The resulting estimates of journey numbers and reliability are both National Statistics.

## Punctuality

Punctuality estimates are currently only available for England outside London. These are based on the Traffic Commissioner's guidelines on what constitutes a bus being 'on time' – 1 minute early to 5 minutes 59 seconds late. London estimates are prepared on a different basis, using differing definitions. In particular, TfL uses a punctuality window of 2 minutes and 30 seconds early to 4 minutes 59 seconds late. Thus, it is difficult to produce punctuality estimates for England as a whole.

### **Accessibility of buses**

The accessibility of buses is measured by annual data for the percentage of vehicles which meet PSV Accessibility Requirements (PSVAR). In practical terms this means low floor buses with wheelchair access. Data is obtained from the Department's annual sample survey of bus operators. The Department's survey is designed to obtain good coverage and more detail from the larger operators, so it is considered to be a reliable source. It is not possible to obtain detailed information on vehicle design from the Driver and Vehicle Licensing Agency records.

All light rail vehicles and systems are built to be accessible to wheelchair users, so physical accessibility of light rail does not need to be monitored.

### **Access to services**

Access to services indicators are measured by calculating minimum journey times from origins to destinations by public transport, walking and cycling. The data required to produce these indicators are origins (as taken from census data), destinations (primary and secondary schools, further education colleges, hospitals, GPs, workplaces and supermarkets), road network and public transport data, and geodemographic data from the census and other central government sources to determine at risk population groups.

Figure 4a: **Bus and light rail passenger journeys 1989-90 to 2006-07**  
**(with projection to 2010-11)**

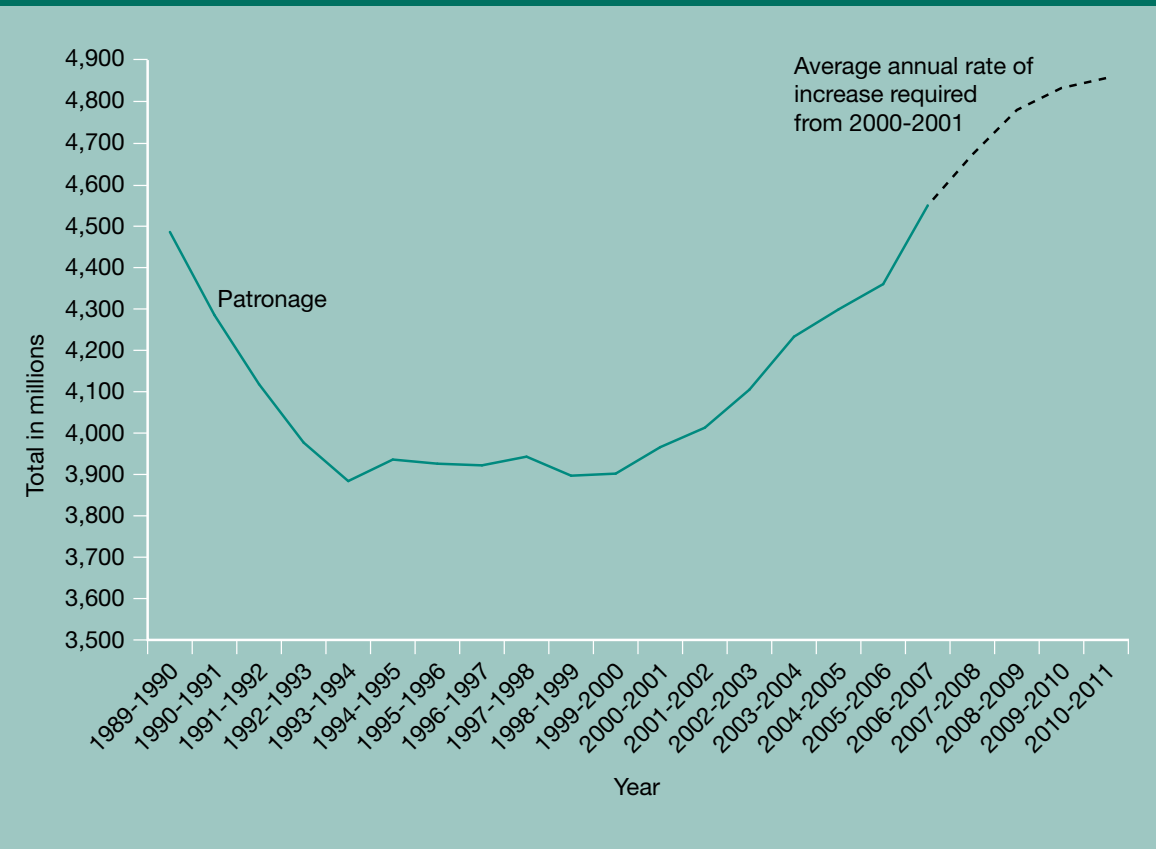


Figure 4b: **Bus and light rail patronage 1989-90 to 2006-07, England\***

	Bus (million)	Light rail (million)	Total (million)*
1989-90	4,427	62	4,489
1990-91	4,227	59	4,286
1991-92	4,065	54	4,119
1992-93	3,918	59	3,977
1993-94	3,821	64	3,885
1994-95	3,868	69	3,937
1995-96	3,853	73	3,926
1996-97	3,844	78	3,922
1997-98	3,859	84	3,943
1998-99	3,808	89	3,897
1999-00	3,804	98	3,902
2000-01	3,842	124	3,966
2001-02	3,881	132	4,013
2002-03	3,964	141	4,105
2003-04	4,087	147	4,233
2004-05	4,140	159	4,299
2005-06	4,196	163	4,359
2006-07	4,371	179	4,550

\* Historic figures have been amended since publication of the Annual Report 2006 due to the changes relating to under-counting of bus passengers (see under quality of data)

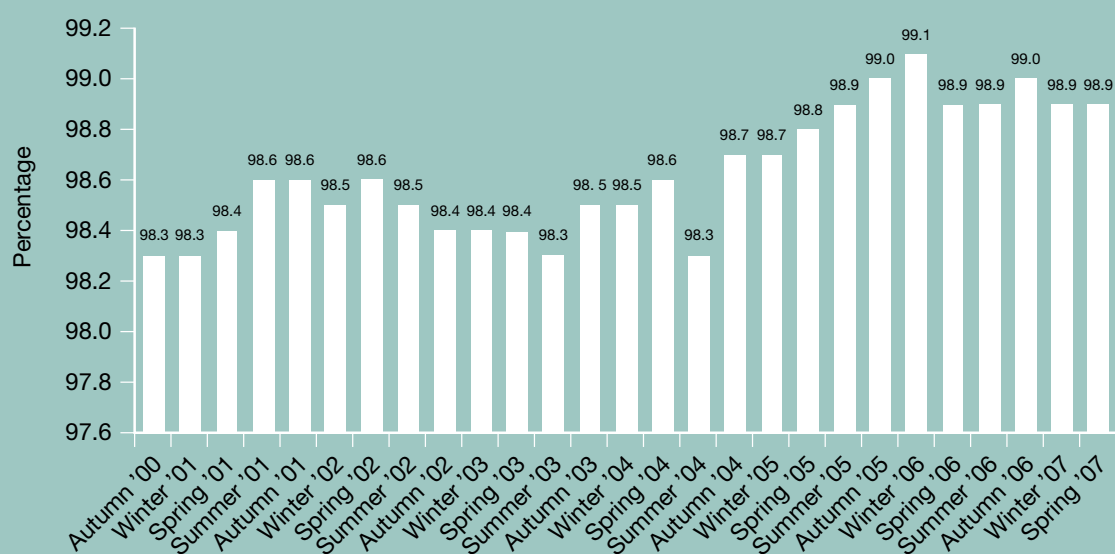
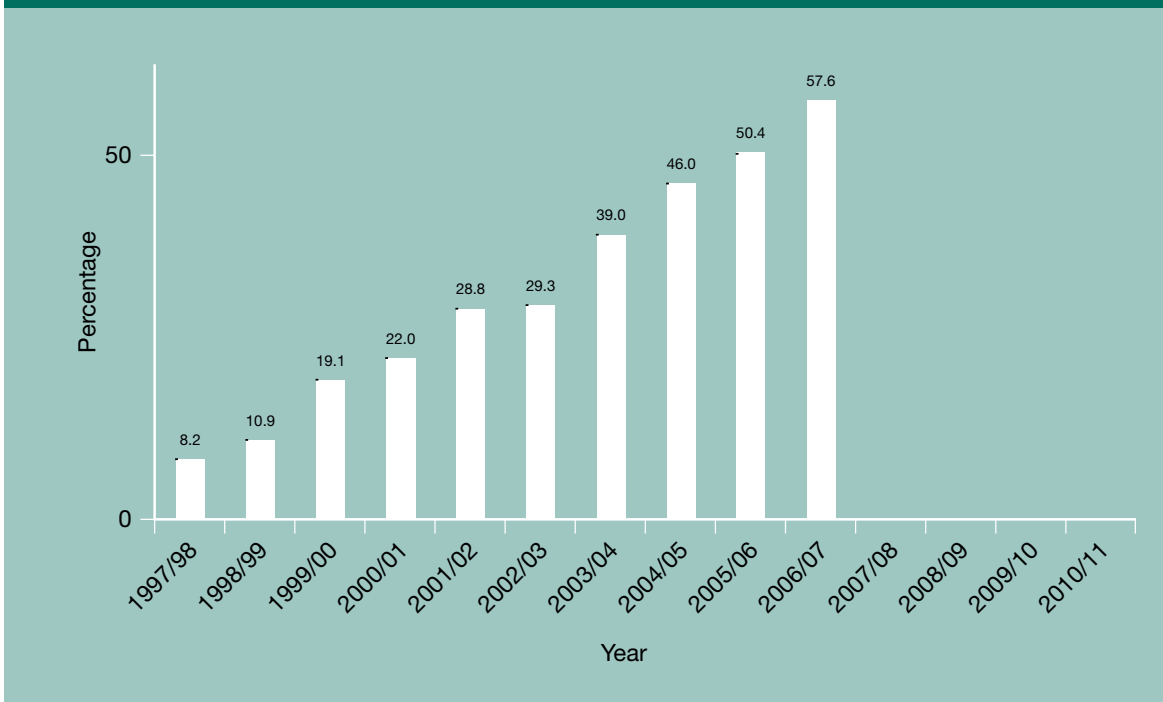
Figure 4c: **Reliability of service: percentage of local bus schedule run in England: spring 2000 to spring 2007 (excludes losses outside operators' control)**

Figure 4d: Percentage of full-size bus fleet that is wheelchair accessible – GB



## Chapter 5

### Road safety

#### SR2004 PSA target

Reduce the number of people killed or seriously injured in Great Britain in road accidents by 40 per cent, and the number of children killed or seriously injured by 50 per cent by 2010 compared with the average for 1994-98, tackling the significantly higher incidence in disadvantaged communities.

#### SR2002 PSA target

Same as SR2004 target.

#### Performance indicator

##### **Total number of people killed or seriously injured in road accidents**

Baseline: Average annual number of all killed or seriously injured in the period 1994-98 – 47,656. (Measured through casualties reported to the police.)

##### **Total number of children killed or seriously injured in road accidents**

Baseline: Average annual number of children (under 16) killed or seriously injured in the period 1994-98 – 6,860. (Measured through casualties reported to the police.)

##### **A greater percentage reduction in the number of road deaths and injuries for the 88 local councils that are eligible to receive Neighbourhood Renewal Funding (NRF), compared to that for England as a whole**

Baseline: Average for the period 1999-01 – 118,345

**Coverage:** The 40 per cent and 50 per cent targets apply to Great Britain, but the focus on disadvantaged communities applied to England only.

#### Progress

**Status:** Disadvantage target met. Police data indicates that the Department is on course to meet other elements of the target.

The road safety strategy published in March 2000 set out a comprehensive range of measures to help achieve the casualty reduction targets to be achieved by 2010. Details are on the Department's website at:

<http://www.dft.gov.uk/pgr/roadsafety/strategytargetsperformance/tomorrowsroadssaferforeveryone>

The second of the three-yearly reviews promised in the strategy to check progress towards meeting the targets was published in February 2007. The review looks at progress to date and identifies the key areas on which we will focus for the remainder of the target period. Details can be found at:

<http://www.dft.gov.uk/pgr/roadsafety/strategytargetsperformance/2ndreview/>

Annual figures for performance against the road safety target in 2006 were published in June 2007.

The number of people killed or seriously injured in 2006 was 33 per cent below the 1994-98 average. (Reported figures: 31,845 in 2006, compared with 32,155 in 2005 and an average of 47,656 per year in the baseline period 1994-98.)

The number of children killed or seriously injured in 2006 was 52 per cent below the 1994-98 average. (Reported figures: 3,294 in 2006, compared with 3,472 in 2005 and an average of 6,860 per year in the baseline period 1994-98.)

The numbers of reported deaths and serious injuries both fell by 1 per cent in 2006 compared with 2005. This represents the lowest level of road deaths since records began.

The percentage drop in total casualties in districts in the 88 NRF areas for 2005 compared to the annual average for 1999-2001 was greater than the overall percentage drop for England, so this element of the target has been met. England showed a 15 per cent fall and the NRF areas showed a 19 per cent fall in reported casualties.

Further information, including the latest provisional casualty data, is at: <http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/>

### Quality of data

Performance is measured using the police data on all reported road accidents that involve human injury. Responsibilities and quality assurance procedures are well established. The Department applies considerable effort to ensure that returns are submitted by all police forces. It also clearly specifies the information required from the police forces and mitigates the risk of errors arising in data collation/aggregation by operating a series of monitoring and validation checks with clearly defined error tolerance levels and procedures for follow up.

It is thought that virtually all fatalities are reported to the police. However, some non-fatal road accidents are not reported. The Department, working with the Office for National Statistics, is undertaking further research to investigate whether levels of reporting to the police have changed in recent years. A note on levels of reporting is on the DfT website at

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/roadaccidentstatisticsgrea1835>

Figure 5a: Killed or seriously injured casualties: 1994-2006

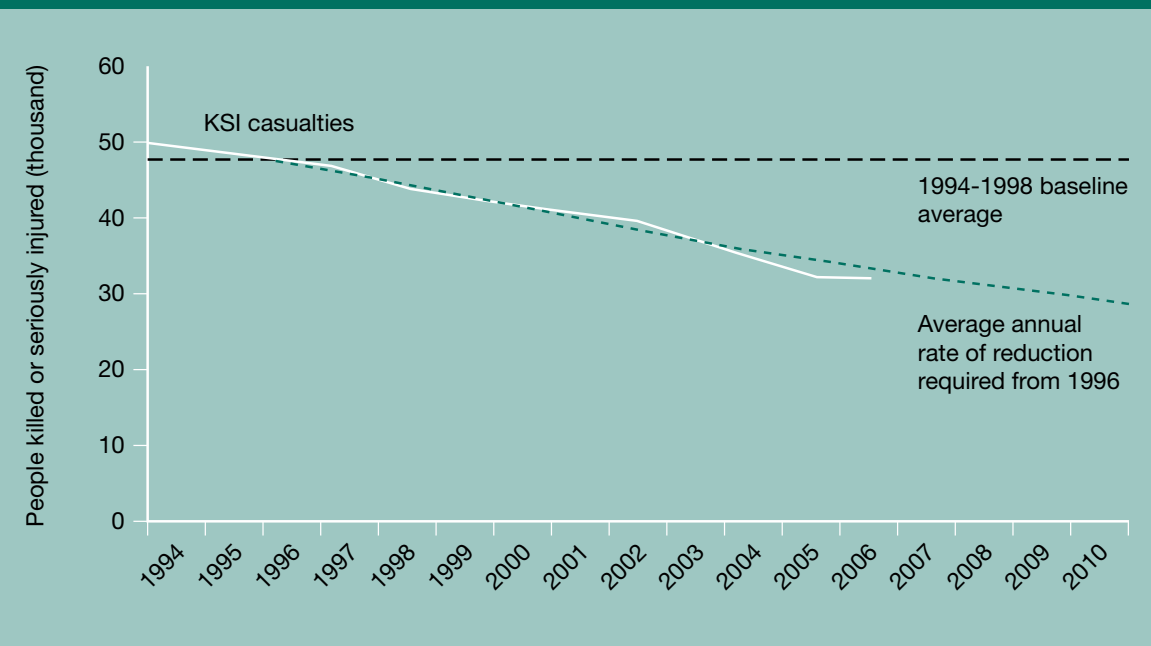
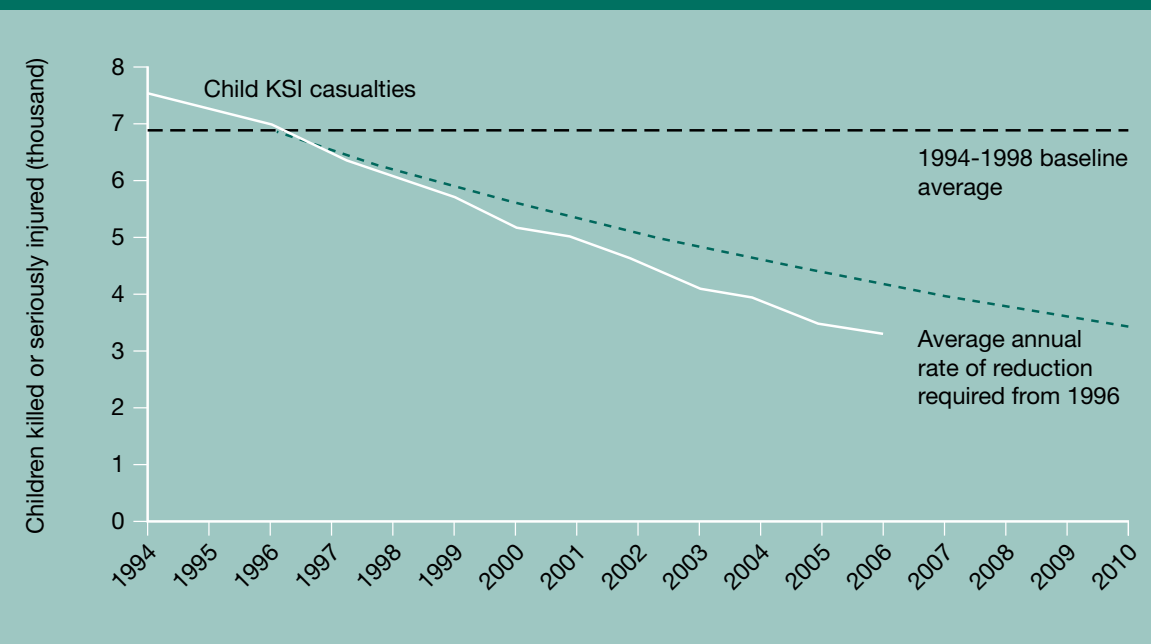


Figure 5b: Killed or seriously injured child casualties: 1994-2006





## Chapter 6

### Air quality

#### SR2004 PSA target

Improve air quality by meeting the Air Quality Strategy targets for carbon monoxide, lead, nitrogen dioxide (NO<sub>2</sub>), particles (PM<sub>10</sub>), sulphur dioxide (SO<sub>2</sub>), benzene and 1,3-butadiene. Joint target with the Department for the Environment, Food and Rural Affairs (Defra).

#### SR2002 PSA target

Same as SR2004 target.

#### Performance indicator

##### **Desired concentrations of individual pollutants in air to be achieved by a fixed date**

The Government's Air Quality Strategy, published in July 2007, sets out different dates for achieving objectives for each of the air pollutants between 2003 and 2010. The policy objectives are similar to, but, in some cases, tighter than the corresponding mandatory EU limit values. Details of the objectives are set out in the Strategy at:

<http://www.defra.gov.uk/environment/airquality/strategy/index.htm>

Performance is assessed annually by means of data from the national air quality monitoring network:

[http://www.airquality.co.uk/archive/data\\_and\\_statistics.php?f\\_group\\_id=2&action=exceedence&go=Step+1](http://www.airquality.co.uk/archive/data_and_statistics.php?f_group_id=2&action=exceedence&go=Step+1)

A general assessment of progress in improving air quality is also published each year against two air quality headline indicators for sustainable development.

Details are at:

<http://www.sustainable-development.gov.uk/progress/national/61.htm>

This PSA target does not include carbon dioxide (CO<sub>2</sub>), which is covered in the section on greenhouse gas emissions.

**Coverage: England**

#### Progress

**Status: four out of seven objectives are currently being met.**

Figure 6a presents information from our national air quality monitoring network. Monitoring data indicates that objectives for four of the seven pollutants in the air quality target were met throughout the UK in 2006. The four are benzene; 1,3-butadiene; carbon monoxide; and lead. DfT is also meeting current objectives for all air pollutants in 95 per cent of the UK, and only a limited number of hotspots remain.

Modelling shows that although the vast majority of the country will meet the air quality objectives with present policies and technologies, there are some areas (mostly by busy roads and urban locations) where there has been or will be difficulty in meeting the objectives.

The 2006 results of measured concentrations of air pollutants show that there were no breaches of the sulphur dioxide (SO<sub>2</sub>) objectives recorded at national monitoring sites. However, 12 local authorities have declared Air Quality Management Areas (AQMAs) for SO<sub>2</sub> and are working to improve air quality in their areas.

The PSA objectives are assessed in terms of concentrations of pollutants and although we have made considerable progress in the last few years, recent measurements show that long term reducing trends for nitrogen dioxide (NO<sub>2</sub>) and particles (PM<sub>10</sub>) are flattening or even reversing at a number of locations, despite current mitigation measures. Following publication of the new Air Quality Strategy in July this year, the 2010 objectives for fine particles (PM<sub>10</sub>) in London, England, Wales and Northern Ireland have been replaced by a new PM<sub>2.5</sub> exposure reduction objective, which will be reported on next year.

A review of the Air Quality Strategy was completed and published in July 2007. We are now discussing the additional transport measures recommended in the Strategy with other Government departments such as Defra and HM Treasury, in order to move us closer to meeting those remaining challenging targets which we are still missing.

The review also took account of the EC's Thematic Strategy and proposal for a new air quality Directive, currently under negotiation. The published document and its annexes are available on Defra's website.

The Department continues to implement the Government's strategy for transport contained in *The Future of Transport* white paper, published in July 2004. We published our response to the *Eddington Transport Study* (published December 2006) in *Towards a Sustainable Transport System* in October 2007.

We are continuing work with our European partners to develop even tighter standards for new vehicles and fuels.

We are working directly with key local authorities to identify effective measures to improve air quality. Where air quality levels have been exceeded at specific locations, local authorities are required to declare AQMAs, and then must establish an Air Quality Action Plan to tackle the problem. Around 207 local authorities have so far designated AQMAs and more than 143 authorities have drawn up action plans with proposals to tackle the problems.

The Department also issues guidance to local authorities on local transport planning (LTP). This guidance included the recommendation to incorporate Air Quality Management Plans into LTPs. In areas where AQMAs have been declared, the content of the plans to tackle poor air quality is one of the nine criteria on which the LTPs were judged for funding.

TfL is currently in the implementation phase of the Mayor's London Low Emission Zone (LLEZ). The LLEZ should encourage the most polluting diesel engine lorries, buses, coaches, light goods vehicles and minibuses to reduce their particulate emissions. The Scheme will go live from 4 February 2008 for heavy goods vehicles above a certain gross weight, and will require vehicles to meet the particulate matter element of the Euro III emissions standard for free entry into Greater London.

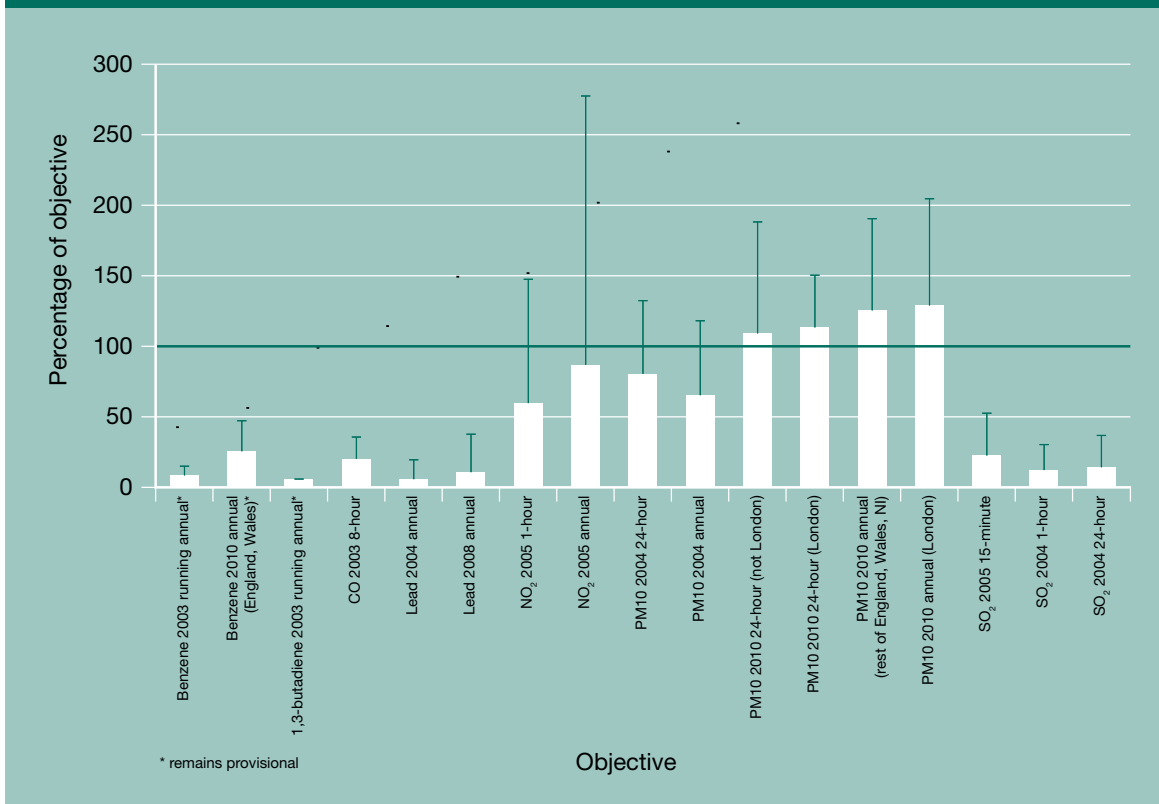
The Department supports the aims of the LLEZ and has agreed to the inclusion of specific trunk routes within the Scheme.

### Quality of data

During 2007-08 and 2008-09 there will be large changes to the national air quality monitoring networks due to revised monitoring requirements for many pollutants in the proposed new air quality directive and new Air Quality Strategy objectives for  $PM_{2.5}$ . This is likely to alter the assessment of some of the pollutants in the PSA. Annual mean statistics for 2008 onwards are likely to increase due to a rise in the number of sites at traffic locations and a reduction in the number of sites at urban background locations.

Figure 6a shows measured results in 2006 of concentrations of the Air Quality Strategy pollutants in England. Pollutants below the horizontal line met the relevant objective in 2006; the vertical green lines represent the range of measurements; the white bars are the average of all measurements.

Figure 6a: Measured concentrations of Air Quality Strategy pollutants in England 2006



You can find information on concentrations of other air pollutants in Chapter 2 of Defra's 2007 departmental report:

<http://www.defra.gov.uk/corporate/deprep/2007/chapter02.pdf>

## Chapter 7

### Climate change

#### SR2004 PSA target

To reduce greenhouse gas emissions to 12.5 per cent below 1990 levels in line with our Kyoto commitment and move towards a 20 per cent reduction in carbon dioxide emissions below 1990 levels by 2010, through measures including energy efficiency and renewables. Joint target with the Department for the Environment, Food and Rural Affairs (Defra) and the Department for Business, Enterprise and Regulatory Reform (BERR).

#### Performance indicator

##### **Carbon dioxide and other greenhouse gas emissions**

Carbon dioxide (CO<sub>2</sub>) and other greenhouse gas (GHG) emission estimates are published annually on the Defra website at:

<http://www.defra.gov.uk/environment/statistics/globalatmos/gagccukem.htm>

#### Supporting indicators on transport

##### **Fuel efficiency of vehicles**

Statistics on average new car fuel efficiency are published every year, using DVLA and Society of Motor Manufacturers and Traders (SMMT) data. As part of the Voluntary Agreement between the European Commission and the automotive industry, there is an EU-wide average new car fuel efficiency target of 140 g/km to be met by 2008-09.

##### **Carbon content of fuel**

The carbon content of petrol and diesel has remained largely unchanged over time, and on current trends will continue to do so. Thus, in order to reduce the carbon content of road fuels there needs to be increased uptake of low carbon fuels such as biofuels and in the longer term low carbon electricity and hydrogen.

Coverage: United Kingdom

#### Progress

**Status:** The UK is on course to more than meet our Kyoto target of reducing annual greenhouse gas emissions by 12.5 per cent below base year levels by 2008-2012. On current projections we expect to achieve about 23 per cent greenhouse gas reductions by 2010. The 2010 domestic goal, to cut CO<sub>2</sub> emissions by 20 per cent on 1990 levels, was always designed to be stretching and looks increasingly difficult to achieve. We are making definite progress towards it, and the projected 16 per cent reduction by 2010 is testimony to that progress.

The Kyoto target is not directly comparable to the domestic target because the

former covers a basket of greenhouse gases which includes methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride as well as carbon dioxide, while the second covers only carbon dioxide.

The Energy White Paper (May 2007) reported that the UK is set to deliver savings beyond those in its Kyoto target of a 12.5 per cent reduction in greenhouse gas emissions by 2008-2012. Based on the latest projections, UK greenhouse gas emissions are set to be around 23 per cent lower than 1990 levels in 2010 and UK carbon dioxide emissions are set to be around 16 per cent lower than 1990 levels in 2010.

Analysis for the recent Climate Change Programme Review showed that existing Government policies in transport would save similar amounts of carbon in 2010 (proportional to sector emissions) as in other sectors and that had we not acted emissions from transport would have been 15 per cent higher in 2010.

### Current trends in transport emissions

Emissions from domestic transport have increased by 11 per cent since 1990 to over 129 million tonnes of carbon dioxide (CO<sub>2</sub>) in 2005, representing around a quarter of the UK's total carbon emissions. The growth in CO<sub>2</sub> emissions is expected to slow down as growth in demand for transport moderates, fuel efficiency continues to improve, and lower carbon fuels – such as biofuels – increase their market share.

Data on new car fuel efficiency shows that new cars have continued to become more fuel efficient. New cars sold in the UK in 2006 were on average some 12.5 per cent more fuel-efficient than in 1995 – and they were 20 times cleaner and made a third less noise than cars bought in the 1980s. New cars sold in 2006 were 1.2 per cent more fuel efficient on average than new cars sold in 2005. Latest figures for the European Union are for 2004 and indicate that the average fuel efficiency of new cars was 162.4 g/km.

### A new framework to deliver a transport system to support the economy and reduce carbon emissions

The Department has published recently (October 2007) a new framework document setting out how transport can support economic growth in a low-carbon world. <http://www.dft.gov.uk/about/strategy/transportstrategy/pdfsustaintranssystem.pdf>.

Carbon pricing, technological improvements and removing the obstacles to behavioural change will all be important to ensuring transport makes a substantial contribution to the goal of at least a 60 per cent reduction of CO<sub>2</sub> by 2050. The document describes our approach to tackling emissions from both domestic and international transport.

### Reducing CO<sub>2</sub> from domestic journeys

Our starting point must be to take action now to tackle domestic emissions if transport is to maximise its contribution to our national CO<sub>2</sub> reduction goals, particularly on road transport which currently produces about 93 per cent of all CO<sub>2</sub> emissions from domestic transport.

We will address this through continuing to give the right carbon price signals, supporting technology development, and removing barriers to behaviour change. Some examples of these approaches are described below.

Under the Renewable Transport Fuels Obligation, 5 per cent of transport fuel sold in the UK will have to come from renewable sources by 2010. This will deliver significant carbon savings, and will help reduce our reliance on fossil fuels. This will also ensure a major market for biofuels in the UK, and, we believe, stimulate significant production in the UK. The Department has undertaken extensive consultation on the detailed design of the RTFO and on the environmental reporting schemes which lie at its heart. In June this year, the Secretary of State announced that from 2010 the Government aims to reward biofuels under the RTFO according to the carbon that they save rather than on a volume of sales basis. In addition, from 2011 the Government aims to reward biofuels under the RTFO only if they meet appropriate sustainability standards. These aims will enhance the environmental focus of the RTFO, directly benefiting those who produce and sell the most sustainable biofuels.

The Government's *Low Carbon Transport Innovation Strategy* (LCTIS), published in May 2007 alongside the Energy White Paper, set out the measures the Government is taking to incentivise the development of lower carbon transport technologies. In September 2007, we issued the first call for research and development proposals under the new Low Carbon Vehicles Innovation Platform. This call, which has up to £20 million in funding available, will support UK-based, commercially focused research into a wide range of lower carbon vehicle technologies.

DfT and the Technology Strategy Board will provide up to £30 million in total under the Platform, as well as critical coordination. We will also contribute an additional £5 million per annum to the low carbon transport theme of the Energy Technologies Institute. Finally, in the LCTIS the Government announced that it would develop a new procurement programme to help public sector organisations meet the cost of procuring and promoting lower carbon vehicles. This will make an initial £20 million available for small fleet demonstrations and to provide early markets for new innovative lower carbon vehicle technologies.

In July 2007 the Department published a discussion paper inviting views on key issues relating to the programme. We expect to publish initial proposals for running the programme, based on this stakeholder engagement and expert advice, later this year.

The first phase of the King Review was published on 9 October 2007, alongside the Pre-Budget Report. The Review is examining the vehicle and fuel technologies with the potential to help decarbonise road transport over the next 25 years and beyond. It is being led by Professor Julia King, Vice Chancellor of Aston University. The Review reports to the Secretaries of State for Transport, DEFRA and BERR and to the Chancellor of the Exchequer.

The first phase of the review highlights a range of technologies and behavioural measures with the potential, in combination, to deliver substantial reductions in carbon emissions from road transport. It also stresses the strong links between clean energy generation and large scale de-carbonisation of road transport. The report of the first phase of the Review can be found at: [http://www.hm-treasury.gov.uk/pbr\\_csr/reviews/pbr\\_csr07\\_king\\_index.cfm](http://www.hm-treasury.gov.uk/pbr_csr/reviews/pbr_csr07_king_index.cfm)

The Government continues to invest record amounts in public transport to give people a real choice of ways to travel. For example, we are currently spending over £4 billion a year on supporting the railways. In addition, as part of this commitment to providing real alternatives to the car, local and central government are now spending around two and a half billion pounds a year to provide bus services and in September we unveiled the new pass that will give older and disabled people free off-peak bus travel across England from 1 April 2008.

In March the Department launched a consumer facing communications strategy covering smarter driving and new car purchasing. The campaign was the first initiative under the Government's new 'Act on CO<sub>2</sub>' brand and has been developed to help minimise CO<sub>2</sub> emissions from cars through behaviour change. It complements the Department's work on reducing CO<sub>2</sub> emissions from cars through technology development and is in line with the 'integrated approach', which aims to tackle all factors affecting car CO<sub>2</sub> emissions (technology, use, mileage and so forth), as endorsed by the recent EC Communication on CO<sub>2</sub> from cars.

Key messages from the campaign include:

- if all drivers in the UK follow the smarter driving tips, CO<sub>2</sub> emissions from cars could be reduced by 8 per cent – or over 5.5 million tonnes of CO<sub>2</sub> a year, saving over £2 billion a year in fuel costs;
- by choosing the car with the most fuel efficient engine in its class, drivers could reduce their CO<sub>2</sub> emissions by 24 per cent and potentially save a quarter on fuel costs.



The campaign has now been rolled out with advertising including TV and radio coverage, national and motoring press and on-line activity targeted at drivers and new car purchasers. The campaign won the Greenfleet 2007 Green Marketing Campaign of the Year award.

Under the Travelling to School Initiative – joint with DCSF – 56 per cent of schools in England now have an approved school travel plan and more than £70 million in small capital grants has been allocated to schools with an approved travel plan.

The Government also published *Manual for Streets* earlier this year, which promotes residential developments to create more people-orientated streets. Our aim, through the Manual, is to reduce the dominance of motor vehicles in residential street design by assigning a higher priority to the needs of pedestrians and cyclists. The Manual is aimed at all practitioners involved in the planning, design, approval and provision of residential streets.

### Reducing CO<sub>2</sub> from international journeys

The report on the progress of policy commitments set out in *The Future of Air Transport* White Paper confirmed the Government's commitment to ensure that aviation meets the full cost of its climate change emissions. This included the introduction of a new emissions cost assessment to inform decisions on major increases in airport capacity and consider whether the aviation sector is meeting its external climate change costs. A consultation paper on the Aviation Emissions Cost Assessment was published in August, with the consultation period closing at the end of October.

We are taking steps towards bringing international aviation within the European Union Emissions Trading Scheme (EU ETS). Encouraged by the UK, in December 2006 the European Commission proposed a new Directive to include air transport in the EU ETS which would:

- require airlines to have permits/allowances to emit CO<sub>2</sub>;
- limit permits to the average level of emissions in the period 2004-2006; and
- require airlines to pay for emissions reductions in other sectors, corresponding to growth in CO<sub>2</sub> emissions from air travel beyond the average 2004-2006 levels.

This would ensure that, although aviation is expected to continue to grow as our economy expands and people become wealthier, this growth will not result in any overall growth in carbon emissions. Across Europe, the Emissions Trading Scheme would require that each extra tonne of carbon from aviation must be matched by a tonne saved somewhere else. In effect, aviation emissions would be stabilised at 2004-2006 levels.

The great benefit of this approach is that it allows CO<sub>2</sub> reductions to be made at the least cost to the UK economy, and ensures emissions do not exceed the level set by the overall limit. It will also make consumers aware of the costs of their flying decisions, since the CO<sub>2</sub> cost will be reflected in the ticket price.

On 9 October, the Pre-Budget Report 2007 announced that with effect from 1 November 2008, the Government will correct an anomaly to ensure passengers on 'business class only' flights are liable for the standard rate of air passenger duty (APD). In addition the Government now intends to reform the taxation of aviation to send better environmental signals and ensure aviation makes a greater contribution to covering its environmental costs. Therefore from 1 November 2009, the Government proposes to replace APD with a duty payable per plane rather than per passenger, and will begin a consultation shortly.

## Quality of data

### **Carbon dioxide and other greenhouse gas emissions**

Member States must provide the Commission with data on their own performance in order to assess progress towards the Kyoto target. There are uncertainties associated with estimates in a given year; however trends over time are likely to be much more reliable. For more information on these uncertainties see the Defra website at:

<http://www.defra.gov.uk/environment/statistics/globalatmos/kf/gakf05.htm>

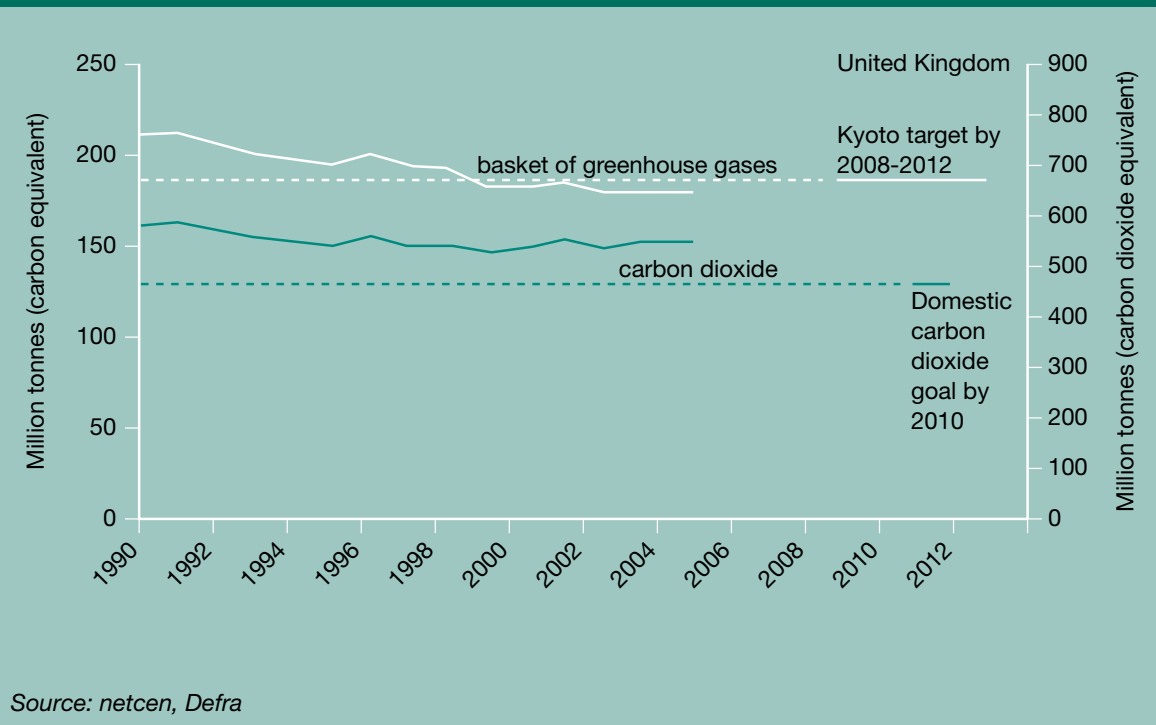
### **Fuel efficiency of vehicles**

DVLA and SMMT records are of a very high quality and provide a very accurate statistical record.

### **Carbon content of fuel**

The carbon content of petrol and diesel (which is known) is an inherent property of the fuel and remains largely static over time. The potential lifecycle carbon savings from switching petrol and diesel for biofuels has been the subject of much study to increase its accuracy.

Figure 7a: Emissions of greenhouse gases: 1990-2005



## Chapter 8

### Efficiency

#### SR2004 target

The SR2004 Efficiency target to achieve annual efficiency gains of 2.5 per cent against the Departmental Expenditure Limit is not a PSA target.

#### Performance indicator

Efficiencies are defined as:

- increased outputs/outcomes for the same inputs;
- constant outputs/outcomes for reduced inputs.

#### Progress

**Status: 2006-07 trajectory target for the SR2004 (Gershon) Efficiency Programme exceeded. The Department for Transport's Efficiency Programme is on course to deliver its March 2008 savings target of £785 million and its headcount reduction targets of 500 full-time equivalents from the Driver Vehicle and Licensing Agency (DVLA) and 200 from the central Department. Good progress is being made towards meeting our Lyons target to relocate 60 posts away from London by March 2010.**

DfT's Efficiency Programme will deliver the efficiency proposals developed by the Department as its contribution to Sir Peter Gershon's Review of Government Efficiency announced in SR2004. The Department's target is to realise total annual efficiency gains of at least £785 million by 2007-08, of which at least half will be cashable, releasing resources, wherever possible, to front-line activities.

Efficiency gains reported by the Department at 30 June 2007 are shown in the table below:

Directorate/Agency and initiative	Reported efficiency gains: June 2007 (£m)	Cashable element (£m)
DVO Group – efficiency and effectiveness	63.3	57.5
DVO Group – increase vehicle excise duty (VED) collected and increase in sale of marks income	5.0	5.0
Highways Agency – procurement of strategic roads	144.5	67.7
Local authorities – roads procurement	137.1	101.8
Local authorities – non-roads	106.4	98.6

Directorate/Agency and initiative	Reported efficiency gains: June 2007 (£m)	Cashable element (£m)
Transport for London	153.0	153.0
Central Department – headcount reduction	9.9	9.9
Central Department – minor programmes	63.1	15.2
<b>Totals</b>	<b>682.3</b>	<b>508.7</b>

Efficiency gains target for the end of 2007-08: £785 million of which at least £392.5 million should be cashable

Headcount reductions reported by the Department at the 30 June 2007 are shown in the table below:

Business Unit	Target: March 2008 (full-time equivalents)	Reported reductions (full-time equivalents)
Central Department	200	280*
DVLA	500	182

\*Includes a number of vacancies that the Department is intending to fill.

Progress against the Department's Lyons relocation targets at 30 June 2007 was as follows:

	Target for March 2008 (full-time equivalents)	Reported relocations: June 2007 (full-time equivalents)
Lyons relocation target	60	49

A further 11 posts have been identified for relocation to Hastings.

Efficiency gains reported by the Department at 30 September 2007 (Q2) were:

Directorate/Agency and initiative	Reported efficiency gains: October 2007 (£m)	Cashable element (£m)
DVO Group – efficiency and effectiveness	63.3	57.5
DVO Group – increase vehicle excise duty (VED) collected and increase in sale of marks income	5.0	5.0
Highways Agency – procurement of strategic roads	151.4	70.9
Local authorities – roads procurement	137.1	101.8
Local authorities – non-roads	133.3	125.5
Transport for London	180	180
Central Department – headcount reduction	9.9	9.9
Central Department – minor programmes	63.1	15.2
<b>Totals</b>	<b>743.1</b>	<b>565.8</b>

Efficiency gains target for the end of 2007-08: £785 million of which at least £392.5 million should be cashable

Headcount reductions reported by the Department at 30 September 2007 (Q2) are shown in the table below:

Business Unit	Target: March 2008 (full-time equivalents)	Reported reductions (full-time equivalents)
Central Department	200	291*
DVLA	500	88**

\*Includes a number of vacancies that the Department is intending to fill.

\*\*This figure includes a substantial number of seasonal casual staff who will be removed from the DVLA over the remainder of the year.

Progress against the Department's Lyons relocation targets at **30 September 2007 (Q2)** was as follows:

	Target for March 2008 (full-time equivalents)	Reported relocations: October 2007 (full-time equivalents)
Lyons relocation target	60	49

The Department's Efficiency Technical Note (ETN), published on our website, sets out how the wider efficiency programme will be taken forward across the SR2004 period and how efficiency gains will be measured and validated.

### Quality of data

The collection of data, monitoring of progress and quality assurance is carried out in accordance with the reporting requirements of HM Treasury. Every workstream claiming efficiency gains has agreed a quality measure with the HM Treasury Efficiency Team and they are obliged to confirm in each quarterly report that quality of service has been maintained against this standard.

### Recent achievements

Examples of recent achievements from the Department's Efficiency Programme include:

The continued **shift to e-channels** being pursued by the former DVO Group agencies. For example by the end of July 2007, take-up of online vehicle tax disc sales had increased to 37 per cent, while by August 2007, 67 per cent of all practical driving tests were booked online.

The **Highways Agency** has continued actively to encourage local authorities to collaborate in the field of roads procurement. For example, in July 2007, 10 local authorities in the Midlands signed a collaboration agreement, facilitated by the Highways Agency, which will focus on regional procurement and the use of framework agreements.

## Appendix

### Other related documents

The documents listed in this section set out the Department's commitments to delivering results and achieving best value for money. They are a complement to this report.

### The DfT Annual Report 2007 (Cm 7095)

The DfT Annual report tells Parliament how the Department has spent its money and what it plans to do in the future. It describes our policies and programmes and outlines what we propose to fund in 2007-08. The Report includes information about the progress and performance against our PSA targets for the period 2006-07.

### DfT's 2006-07 Resource Accounts

The Autumn Performance Report complements the operating and financial review (OFR) section of DfT's 2006-07 Resource Accounts, which were published on 11 July 2007.

The OFR sets out:

- summary of progress against all DfT objectives;
- the funding of DfT;
- an explanation of variations between estimates and outturn; and
- provisions and investments generally.

### The Spending Review 2004

The Government's Spending Review 2004 *New Public Spending Plans 2005-2008* (Cm 6237) was published in July 2004. It takes forward the Government's objective of a strong economy and a fair society with stability, security and opportunity for all. It sets out spending plans for the next three years and the further improvements in public services that are planned.

As part of the comprehensive spending review in 1998, each department entered into a Public Service Agreement (PSA). This identified its aims and objectives and the targets it was committed to achieve with the resources available to it during the three financial years from April 1999. Revised PSAs were agreed in subsequent Spending Reviews in 2000, 2002 and 2004. The Department for Transport's PSA for 2004-05 was set in Spending Review 2002. A new PSA for the period 2005-08 arising from the Spending Review 2004 came into effect from April 2005.



## **The Future of Transport: a network for 2030**

This White Paper (Cm 6234), published in July 2004, looks at the factors that will shape travel and our transport networks over the next 30 years. It sets out how the Government will respond to those pressures, safeguarding our economic and social well-being and our environment.

## **The Departmental Investment Strategy**

This is a summary of the Department's Investment Strategy published in May 2005. It sets out investment plans for the period covered by the Spending Review 2004 (2005 to 2008).



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