The Future of Transport

a network for 2030

July 2004
Department for Transport

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by Command of Her Majesty
July 2004

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Scope of this White Paper

This White Paper extends to Wales and Scotland in so far as it covers our UK policy responsibilities for regulation of aviation and shipping, some aspects of road traffic regulation such as vehicle licensing, rail services in Wales and cross-border rail services in Scotland. It also covers marine, air and rail safety.

It does not cover roads in Wales and Scotland, transport funding programmes administered by the devolved administrations, or transport services which operate solely within Wales or Scotland.

Its proposals do not extend to Northern Ireland.
Foreword by the Prime Minister

Good transport is essential for a successful economy and society. It provides access to jobs, services and schools, gets goods to the shops and allows us to make the most of our free time. Yet our transport system has suffered from decades of under-investment. We are working hard to reverse this damage and to deliver the environmentally sustainable, reliable and safe transport system this country needs.

There has already been progress. Increased investment is starting to make a difference. Over 100 road schemes have been completed. The M25 is being widened. Bus use is increasing year on year for the first time in decades. More people are using trains than at any time since the 1960s. Our first high speed rail line is open. The West Coast Main Line upgrade will shortly cut journey times between London, Birmingham, Manchester and Glasgow. New light rail schemes are open in Nottingham and Tyne & Wear.

But as everyone who travels in this country knows, there is huge room for improvement. This document sets out our vision for transport for the next 30 years with a funding commitment, at record levels, until 2015. The challenge we are setting ourselves is a tough one, but we will move even further and faster if we can.

Our strategy takes a balanced approach. Where it makes economic sense, and is realistic environmentally, we will provide additional transport capacity. We want to see Crossrail in London, road widening and bypasses to tackle the worst areas of congestion, better bus services in our urban and rural areas and many other improvements.

But we also recognise that we cannot simply build our way out of the problems we face. It would be environmentally irresponsible – and would not work. So we must make our existing transport networks work more efficiently and in a more environmentally friendly way. Some plans are in place such as tax benefits for the least polluting vehicles, traffic officers to clear motorways quickly, new traffic control centres, better information for motorists, and simplifying the rail industry.

We will need to go further to deliver faster, greener and more reliable journeys, especially in urban areas. If we do nothing, traffic and congestion will continue to grow, with more delays, higher costs and greater damage to our health and environment. London has demonstrated the potential of charging. There has been a big reduction in congestion as people consider alternatives including sharing a car, using different routes and taking public transport. We will offer local authorities
prepared to introduce congestion charges greater control over bus services. This is part of a wider commitment to give more influence over transport to local and regional decision makers.

We must also prepare now for the long term. Over the next 30 years, the demand for travel will continue to grow. A report by transport experts, published today, says that national road charging may be feasible from 2014. This could cut congestion dramatically, while reducing carbon emissions. The key is how, not how much, motorists pay for road use. We will do the work necessary to allow the hard decisions to be taken nearer the time.

Over coming decades the need to tackle climate change will become even more urgent than is apparent today. So we will step up work with partners in business, and around the world, to develop cleaner, greener transport, and reduce reliance on fossil fuels. Progress towards these goals is an important element of our commitment to tackling climate change, reflected in a Government target now shared by the Department for Transport.

There is no quick fix to Britain’s transport challenges. The long-term solution lies in the sustained programme of investment and innovation started under this administration and the courage to continue to take difficult decisions. That is what this strategy sets out.

Rt Hon Tony Blair MP
Prime Minister
Preface by the Secretary of State

This White Paper looks at the factors that will shape travel, and our transport networks, over the next 30 years. And it sets out how the Government will respond to those pressures, safeguarding our economic and social well being and our environment.

The challenge we face is compounded by decades of under-investment in our transport infrastructure. Successive Governments have failed to devote sufficient resources to maintaining and modernising our transport network. Meanwhile, ageing and over-stressed networks have been asked to cope with levels of travel never anticipated when they were designed.

The 10 Year Plan for transport, published in July 2000, began to set this to rights. It marked the beginning of a more strategic approach to transport. And it delivered a long term Government commitment to sustained increases in transport spending, ending stop-start funding and short term planning.

The Plan is delivering new capacity on our road network, with over 80 schemes in the targeted programme of major projects, including the widening of the M1 and M25. We have invested in the rail network, delivering projects such as the Channel Tunnel Rail Link and the West Coast Main Line upgrade, while renewing 800 miles of track last year. And we have increased total Government capital support for local authorities from £650 million in 2000-01 to £1.9 billion in 2004-05.

With the publication of *The Future of Air Transport* last year, we have also set a strategic framework for the development of aviation over the next 30 years. This White Paper takes the opportunity to extend an equivalent long term framework across the rest of transport. It sets out how we will respond to the challenges we face. And it sets out how we will reshape the challenges we face – we must be smarter than predict and provide, managing people’s need to travel and respecting our environment.
The strategy is built around three key themes.

- Sustained investment over the long term. The spending review settlement honours this Government’s commitment to deliver sustained improvements to transport networks. It raises planned spending over the next three years from £10.4 billion this year to over £12.8 billion by 2007–08. And that higher level of spending will grow in real terms (by 2.25 per cent each year) through to 2015. Meanwhile, the other reforms we are putting in place will ensure that each pound of investment works harder for the British taxpayer.

- Improvements in transport management. We will reorganise the rail industry to improve performance, drive down costs and get better value from public spending. We will legislate to put in place a structure where Government sets the strategy and controls public expenditure. Better traffic management will ease congestion of our road network. And we will lock in the benefits of new capacity, introducing some tolling and High Occupancy Vehicle Lanes where they make sense.

- Planning ahead. We cannot build our way out of the problems we face. Government will lead the debate on road pricing, working with stakeholders to establish and explain how and when pricing might provide the reliability and standards road users want. We are also committed to sharing decision-making with regional and local stakeholders to ensure that transport decisions are taken alongside those for housing and economic growth.

Pressures on the transport budget have grown considerably over recent years. The spending settlement addresses these pressures in two ways. First, with more money. But it also sets in hand measures that bring costs back under control and ensures that we use the resources we have smarter and better.

We will promote better decision-making by publishing long term guidelines for the level of spending on transport within each region. This will make more transparent investment choices at national, regional and local levels.

We will give our delivery partners incentives to develop and deploy smarter, innovative, local and regional transport strategies. We will work alongside forward looking authorities and areas, to help put in place packages of measures which tackle these problems. A new Transport Innovation Fund will support the costs of such packages. It will support innovative mechanisms which raise new funds locally. And it will ensure that the contribution some regional and local schemes can make to our productivity is reflected in their funding.

The Government’s commitment to sustained real terms public spending increases for transport builds on the previous commitment, providing both additional funding over the remainder of the original 10 Year Plan period and extending our commitment to increased funding for transport to 2015. This sustained programme will do much to address the backlog of under-investment inherited from previous Governments.
However, we do not underestimate the scale of the challenge. Transport investment is a high priority for the UK to support economic growth and provide decent and reliable journeys. We will therefore work with all interested parties to see how we can move further and faster. In doing so, we will need to be satisfied about affordability; that costs have been brought under control; and that the necessary improvements have been made in efficiency and value for money.

This strategy not only outlines expenditure plans to 2015, but also sets out our longer term aspirations for the next 30 years. It reaffirms the Government’s determination to provide the investment and leadership that will deliver lasting change.

Rt Hon Alistair Darling MP
Secretary of State for Transport
Transport is vital to the economy and the way we live. Decisions that we take now will have an impact for decades to come. It is essential that we take a long term view.

The challenge

1. The ability to travel offers all of us very real benefits and extending mobility is important in building an inclusive society. The transport system helps to underpin the international competitiveness of the economy. But mobility comes at a cost, whether financial, social or environmental. We need to ensure that we can benefit from mobility and access while minimising the impact on other people and the environment, now and in the future.

2. The UK is the fourth largest economy in the world and the economy is growing. This benefits all of us. However, experience suggests that as the economy grows, people’s need and desire to travel, for business or leisure, will also increase. As people become better off they can afford to travel further and more often. We need to recognise this, and the pressures it can create, and plan ahead to get the best out of our transport system without damaging our overall quality of life.

3. We also need to take into account the ways in which travel is changing. People today are becoming more accustomed to travelling further. Where once people lived and worked in the same place they now often commute long distances to work, some by choice and some because of circumstances beyond their control, such as shortages of affordable housing near their place of work.

4. Demographic changes and choices about where to live will continue to have a significant effect. If current trends continue, over the next 20 to 30 years the population will continue to grow and people will generally be living longer. And people are living in smaller households, are less tied to the location of their jobs and more willing to travel further in exchange for a better lifestyle. And as the population increases and we become better off, so our demand for goods grows. Our transport strategy has to recognise that demand for travel will increase in the future.

5. All of these challenges are compounded by decades of under-investment. Transport requires long term planning. We need to anticipate and manage the pressures that we will face over the next 20 to 30 years.
A transport network for 2030

6. We need a transport network that can meet the challenges of a growing economy and the increasing demand for travel, but can also achieve our environmental objectives. This means coherent transport networks with:

- the road network providing a more reliable and freer-flowing service for both personal travel and freight, with people able to make informed choices about how and when they travel;
- the rail network providing a fast, reliable and efficient service, particularly for interurban journeys and commuting into large urban areas;
- bus services that are reliable, flexible, convenient and tailored to local needs;
- making walking and cycling a real alternative for local trips; and
- ports and airports providing improved international and domestic links.
The strategy

7. Our strategy builds on the progress that has already been made since the implementation of the 10 Year Plan for transport. It extends our investment plans to 2014-15. We need to anticipate and manage the pressures that we will face over the next 20 to 30 years.

8. We must manage the growing demand for transport. While additional infrastructure will be necessary, simply providing ever more capacity on our roads and railways, ports and airports is not the answer in the long term. The damage to our environment, landscape, towns and cities and our quality of life would be unacceptable. The strategy sets the policy framework and provides more information and better choices for local authorities, businesses and individuals.

9. The strategy builds on the progress that has already been made since the implementation of the 10 Year Plan for transport. Our investment plans have been extended out to 2014-15 but the strategy also looks even further ahead, at the challenges we face over the next 20 to 30 years and where we want to be. This reflects the approach taken in the Air Transport White Paper.1

10. Our strategy is built around three central themes.

● First, **sustained investment** over the long term. The spending review settlement honours this Government’s commitment to deliver sustained improvements to transport networks. Spending by the Department for Transport will rise by an annual average of 4.5 per cent in real terms between 2005-06 and 2007-08. This includes an additional £1.7 billion transport reform package for the railways, over and above 10 Year Plan provision. 10 Year Plan spending has also been increased by £0.5 billion each year from 2006-07. This higher level of spending will then grow in real terms (by 2.25 per cent each year) through to 2015. Meanwhile, the other reforms we are putting in place will ensure that each pound of investment works harder for the British taxpayer.

● Secondly, **improvements in transport management**. We are reorganising the rail industry to improve performance, drive down costs and get better value from public spending. To put our plans into effect, we will legislate to put in place a structure where Government sets the strategy and controls public expenditure. Better traffic management will ease congestion on our road network. Where it makes sense, economically and environmentally, we will add capacity to our road network. Where we do so, we will take steps to ensure that the benefits are locked in, and that the design is sympathetic to the environment. Options we are exploring include, for example, measures such as tolling on new roads and the introduction of carpooling (High Occupancy Vehicle) lanes, where these make sense. We are also encouraging local authorities to procure bus services through Quality Contracts, where this is linked to a wider strategy including bold measures to reduce congestion, or modification of rail services.

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1 *The Future of Air Transport, Cm 6046, December 2003. Also available for download at www.dft.gov.uk/aviation/whitepaper*
And thirdly, planning ahead. The long term trends in travel are evident to all. We cannot build our way out of the problems we face on our road networks. And doing nothing is not an option. So Government will lead the debate on road pricing. We will work with stakeholders to establish how and when pricing might provide the reliability and standards road users want. And we will work to ensure that the choices we face, together with their full costs and benefits, are well understood. We are also committed to sharing decision-making with regional and local stakeholders, and to ensure that regional and local planning is based on a shared view of priorities, deliverability and affordability. And at all levels of Government – national, local or regional – we will ensure that transport decisions are taken alongside decisions on liveability, sustainable communities and other policy areas.

11. Underlining these themes, and an important underlying objective of our strategy, is balancing the need to travel with the need to improve quality of life. This means seeking solutions that meet long term economic, social and environmental goals. Achieving this objective will clearly contribute to the objectives of the UK sustainable development strategy. For example, we are working hard to deliver improvements in design and technology to improve air quality and reduce greenhouse gas emissions; and we will ensure that the wider impacts of future developments are reflected in appropriate appraisal methodologies.

12. The strategy charts a course over the next 30 years, founded on the following.

Road networks enhanced by:

- new capacity where it is needed, assuming that any environmental and social costs are justified;
- locking in the benefits of new capacity through various measures including some tolling and carpool lanes where appropriate;
- Government leading the debate on road pricing and its capacity to lead to better choices for motorists;
- better management, exploiting the potential of new technology to avoid problems and deal with them rapidly if they occur; and
- using new technology to keep people informed both before and during their journey.

Railways where:

- Government sets the strategy, working with the industry to get the costs under control and with the Office of Rail Regulation ensuring that it pays the proper price for what it is buying;
- the structure of the industry is improved, with clear lines of responsibility that focus the industry on delivering for its customers;

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2 The development of The Future of Transport has been informed by detailed modelling and analysis. Further technical details will be published in the autumn alongside a sustainable development appraisal.
● there is a single point of accountability for performance to improve standards across the industry; and

● local and regional stakeholders are involved in decisions on the balance between rail and other forms of transport.

Local travel enhanced through:

● freer flowing local roads delivered through measures such as congestion charging;

● more, and more reliable buses enjoying more road space;

● demand responsive bus services that provide accessibility in areas that cannot support conventional services;

● looking at ways to make services more accessible so that people have a real choice about when and how they travel;

● promoting the use of school travel plans, workplace travel plans and personalised journey planning to encourage people to consider alternatives to using their cars; and

● creating a culture and improved quality of local environment so that cycling and walking are seen as an attractive alternative to car travel for short journeys, particularly for children.

A balanced approach to aviation:

● working with all those involved to implement the conclusions of the Air Transport White Paper;

● ensuring that, over time, aviation meets its external costs; and

● ensuring that the impact on environment and communities is minimised, with appropriate mitigation and compensation measures put in place.

Reflected in our shipping policy:

● reviewing the policy framework for ports development by late 2005; and

● working with the European Union and global bodies to maintain high quality in the shipping industry.

Sustainable freight transport that:

● focuses on approaches which offer the best outcomes for our economy, society and the environment.
Supported by effective decision making that:

- gives local and regional stakeholders more influence over transport investment in their area, including the rail network;
- ensures that choices on transport are made alongside other decisions that have an impact on transport, particularly housing and regeneration, at the national, regional and local level; and
- ensures the social, economic and environmental costs and benefits are fully recognized when decisions are taken using the New Approach to Appraisal and our developing value for money analysis.

While improving safety and security though:

- new technologies that can reduce the risk of an accident;
- promoting safer vehicles that protect both passengers and pedestrians;
- informing drivers about the risks of dangerous driving and the legal penalties; and
- co-ordinating security measures at the international level, including making the most of new security technologies.

And respecting the environment:

- there will continue to be a strong presumption against schemes that would significantly affect environmentally sensitive sites or important species habitats or landscapes;
- by keeping the environmental impacts of new and existing transport infrastructure to a minimum, ensuring that mitigation measures are implemented to a high standard;
- working across government to ensure that we can deliver carbon savings in line with our domestic and international commitments and reduce the impact of other emissions which pollute the environment;
- reducing the impact of all forms of transport, including encouraging the development, introduction and take-up of new vehicle technologies and fuels;
- ensuring that the noise impacts of transport are reduced and mitigated;
- making progress towards the inclusion of aviation in the European Union emissions trading scheme a priority during our presidency in 2005; and
- by investing in public transport to provide alternatives to the car.
13. We face real challenges over the next 30 years. These measures lay the foundations of a strategy that rises to those challenges.

**THE SPENDING REVIEW 2004 (SR04)**

We are committed to providing a stable, long term financial framework within which to plan. Consistent with this, the spending plans set out in Annex A identify the resources available to support our strategy over the next three years, and to 2014–15.

The Interim Review,3 published by the ORR in December 2003, revealed the true costs of the legacy of under-investment in the railways. A step change increase in maintenance and renewals expenditure has been provided to deal with this legacy. The review also demonstrated the need to get costs in the industry under control. It called on Network Rail to increase efficiency by over 30 per cent, the equivalent of around £1.5 billion a year.

It will take time to do this. So, over the next three years extra short term funding has been provided to support the rail industry as it works to bring costs under control.

Additional public spending is also being provided for strategic road schemes and we have also found resources, from within existing provision, to support the provision of motorway traffic managers, not catered for under original 10 Year Plan spending.

The plans for local authorities will allow continuing investment in major projects. A separate fund to support transport schemes in growth areas is being established. This makes a start on developing a Community Infrastructure Fund.

**Efficiency and value for money**

The Government is committed to getting the most out of planned increases in spending over the next 10 years. The Rail Regulator and Sir Peter Gershon’s reviews of spending have identified a number of measures to greatly improve efficiency. And the Department has developed, and will continue to improve, appraisal techniques that ensure that only projects offering the best value for money secure public funding. See the text box ‘Making informed decisions – appraising transport schemes’ in Chapter 9.

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MAKING RESOURCES WORK HARDER

Pressures on the transport budget are growing, driven both by increasing costs and growing demand. We should not just react to these pressures with more public spending. We must also bring costs back under control and make the resources we have work smarter and better.

This requires action on two fronts.

- First, we must make **better trade-offs across different modes of transport, and across the parallel agendas of regeneration and housing.** Some major road and rail investments are of such national significance that they should continue to be decided centrally. But, below this national strategic level, we can promote better decision-making by publishing guidelines for the level of spending on transport within each region. This would make more transparent the choices that national, regional and local partners have in each region between investment by the Highways Agency, the major investments of local authorities and investment in regional railways and public transport subsidy. We intend to publish guideline budgets for English regions, following consultation, in Budget 2005.

- Second, we want to **give our delivery partners incentives to develop and deploy coherent, innovative, local and regional transport strategies** that rise to the challenges set out in this document. We know how local travel and traffic patterns can be influenced to the benefit of everyone. But these policies involve change for individuals – in finding new ways or times to make the journeys they have to make. We want to work alongside forward looking authorities and areas, to help put in place packages of measures which tackle these problems. We also want to make sure that the contribution that some regional and local schemes make to our national productivity is recognised in national funding decisions. We will therefore establish a new Transport Innovation Fund, to support the costs of such packages – which will include road pricing, modal shift, and better bus services. And we will also support innovative mechanisms which raise new funds locally. Mechanisms for deciding on allocations from this Fund will be published alongside regional guideline budgets in Budget 2005.
The challenge:
demand for travel and historic under-investment
The challenge:

demand for travel and historic under-investment

1.1 We are travelling more. And the way we are travelling is changing. The challenges we face flow from:

- economic growth resulting in an increasing demand for travel;
- past planning policies and demographic changes driving a trend towards longer journeys;
- the growth of car travel; and
- the implications of population changes.

1.2 These challenges are compounded by historic under-investment in our transport networks.

A growing economy

1.3 The growth in travel is closely associated with people becoming better off. As we become more prosperous we choose to travel more. And in a thriving economy, businesses move more goods and people across our networks (see chart). Demand for travel will continue to grow. However, the link between traffic growth and economic growth has weakened in recent years and we want to see this trend continue.
Increased mobility brings substantial economic and social advantages, which we must support. But it can also result in increasing congestion on our roads and overcrowding on our rail network. Unless we invest in the transport system, we risk slower and more unreliable journeys which will cause frustration and damage to the economy and the environment.

Travelling further

People take advantage of good transport networks to live further away from their jobs, accepting longer commuting distances in exchange for other advantages, such as allowing their children to stay at the same school. More people remain in the same place even if they change jobs, rather than move nearer to where they work.

Past planning policies have added to the challenges presented by increasing mobility. Shopping trips used to be made predominately to the town centre. Now many trips are made to out-of-town developments that draw shoppers from a wide area. Better land-use planning is helping to reverse this trend, bringing decisions about transport to the forefront of decisions about the pattern and location of housing, services and shopping can help to create sustainable communities. Building sustainable communities takes time and it will present particular challenges for our transport network. It is essential that planning and transport policies are closely co-ordinated to produce more sustainable patterns of development and travel.

How people travel

An increasing proportion of journeys are by car. Up from 79 per cent of the total distance travelled in 1980 to 85 per cent in 2002. The shift towards car journeys has provided huge benefits for many people, opening up new opportunities. Women in particular are now more likely to have a driving licence and access to a car. Part of the reason for this increase in car use is that cars are more affordable as people become better off. Improvements in production techniques and improved fuel efficiency have
contributed to a fall in the relative cost of motoring and so has brought cars within reach of a far wider range of the population.

1.8 People choose the car for many journeys because it allows them to travel direct from one place to another in comfort. But travelling by car has an impact on others. While we have some of the safest roads in the world, cars are still a more dangerous way to travel than public transport. They also have an impact on the environment and congestion. So we need to encourage those with cars to consider other forms of transport, particularly for shorter journeys.

1.9 We expect to see further growth in car ownership and use over the next 30 years. The car provides many benefits, but the challenge is to ensure that people have other options, including good quality public transport and the opportunity to walk or cycle.

**Demographic changes**

1.10 By 2025, the population of Great Britain is forecast to increase by 8 per cent – over 4.5 million extra people. And there have been dramatic improvements in life expectancy over the last century as a result of better health care, environmental improvements and healthier lifestyles. Someone born this year can expect to live around 30 years longer than someone born a century ago, and this trend is likely to continue over the next 20 to 30 years. This means that the proportion of older people in the country will increase. We need to plan for this to ensure our transport systems and services meet the needs of older people.

1.11 Many older people will continue to drive and we will support them in retaining safe and independent mobility through our support of mobility centres. In addition many older people are likely to become increasingly dependent on public transport and it is important that this is accessible, reliable and affordable, and that people feel safe and secure while they are using it.
Impact on the environment

1.12 Climate change is a major challenge. In the UK, transport is currently estimated to produce a quarter of total UK emissions of CO₂, the main driver of climate change. Cost-effective measures to reduce emissions from transport are therefore very important if the UK is to meet its climate change objectives. The Government is committed to taking the lead in tackling climate change, and to putting the UK on a path to reducing CO₂ emissions by around 60 per cent from current levels by 2050.

1.13 Emissions from road transport

Some 80 per cent of CO₂ emissions from the transport sector come from road transport. Reducing carbon dioxide emissions from cars and lorries is essential. Although CO₂ emissions from new cars and other vehicles have gone down over the last few decades, overall levels of emissions from road transport have stayed fairly constant as people use their cars more and choose larger, more powerful, vehicles. We have to do more. Our ultimate objective is vehicles that contribute almost no CO₂ to the atmosphere. This is a long-term aim. There is much that can be done in the interim through new fuel and vehicle technologies and we will continue to look for other cost-effective ways to reduce carbon emissions.

1.14 Emissions from other forms of transport, particularly aviation, also affect climate change. The aviation industry needs to take its share of responsibility for tackling the problem. As with cars, fuel efficiency gains will contribute to reducing carbon dioxide emissions from aircraft. Over time we need to ensure that aviation meets its external costs. As a first stage, we want to include aviation in a European emissions trading scheme.

1.15 Road transport is also responsible for a significant proportion of the pollutants that affect air quality and which impact on people's health. And the impact on some
communities can be disproportionate. However, new vehicles are much cleaner than those of a decade or so ago. A new car today produces 20 times less emissions than an equivalent vehicle in the mid-1980s. Over the last decade emissions of the worst pollutants – oxides of nitrogen and particles – from road transport have fallen by 50 per cent despite traffic growth. Our projections suggest that this trend will continue.

Laying new track beds

**Historic under-investment**

1.16 We have a legacy of under-investment in transport. The core of our railway network was established well over a hundred years ago. Most of our motorways were built 30 or 40 years ago. Successive governments have devoted insufficient resources to upgrading and modernising the transport system, while travel on our road and rail networks has increased to levels that were never anticipated when they were built.

1.17 Ageing and overstressed networks cost more to maintain. In the 1990s British Rail estimated that 500 miles of track needed to be replaced each year in order to prevent any decline in the network’s condition. But in the lead-up to privatisation only 300 miles of track were replaced each year. After privatisation this fell to 200 miles. To tackle this we put in place sustained investment over a long period. And last year over 800 miles of track were renewed.

1.18 These challenges are deep-rooted and daunting. But in the face of them, there is much that we have already achieved.
Major ports, airports and railways in Great Britain
What we have achieved
What we have achieved

The publication of the 10 Year Plan for transport, in July 2000, marked the beginning of a more strategic approach to transport. We have subsequently taken the unprecedented step of setting out a strategic framework for the development of airport capacity over the next 30 years.

2.1 The Plan provided an investment framework over a 10-year period to 2010-11. The sustained investment and long term view was unprecedented. It marked the end of stop-start funding and short term planning which had blighted transport in previous decades.

2.2 With this additional investment we have made real progress over the last few years.

We have improved the road system by:

- investing in new capacity with 18 major strategic road schemes completed since 2002, plus the widening of the A2/M2 and the M6 Toll, and five major local road schemes completed since 2000. Plus major investment to tackle the worst bottlenecks, with 97 of the 100 trunk road improvements announced in June 2000 completed;
- tackling congestion by introducing trained officers to get traffic moving again on strategic roads, providing new powers for local authorities to keep the traffic on their roads moving;
- developing new systems to provide information for road users and network managers, to allow smarter decision making;
- reducing the impact of major roadworks on traffic flow;
- improving the response to winter weather;
- promoting better ways of travelling through initiatives such as workplace and school travel plans and marketing to encourage people to choose alternatives to their cars for some journeys;
- providing advice and information to help older and disabled drivers identify their needs and, where possible, to continue to drive safely, through the Department’s Mobility Advice and Vehicle Information Service and through funding mobility centres throughout England; and
making it easier for people to conduct business with government, such as booking a driving test, by exploiting technology to improve customer service.

**TRANSPORT DIRECT – A NEW SERVICE FOR TRAVELLERS**

Transport Direct will be a comprehensive, user-friendly travel information service. It will provide travellers with integrated travel planning and provides links to internet retailers and ticketing services. The service will be formally launched later this year.

The initial service will cover travel by car, train, coach, bus, tram, taxi and foot, with air being added in late 2004. Transport Direct will remove barriers to travel information by offering a one-stop shop. It can offer information on different forms of transport, helping travellers to make better-informed travel decisions.

The Government has developed Transport Direct in conjunction with the transport industry using existing data sources and journey planning systems. It is based on locational information to enable journeys to be planned between home addresses and amenities or places of interest. This enables Transport Direct to be concerned with the reasons for travelling rather than the means of travel. The initial service is based on the internet. The initial service will be expanded to enable access via digital television, mobile devices and kiosks.

We have reduced the impact of transport on the environment by:

- working with the industry and the European Union to ensure that emissions of air pollutants and carbon dioxide from new cars have continually decreased;
- introducing tax and grant incentives to encourage people to switch to cleaner vehicles;
- turning down proposals for roads and other developments where the cost to the environment was judged to be too high; and
- providing research, development, standards and demonstration funding for new technologies.

Our railway system has been improved by:

- investing in the network with projects such as the Channel Tunnel Rail Link and the upgrade of the West Coast Main Line. And last year over 800 miles of track were renewed;
- over 1,500 new railway vehicles being introduced in the last two and a half years as part of the biggest replacement programme for rolling stock ever seen in this country;
- four new light rail lines have already opened and the Public Private Partnership (PPP) will inject massive investment into the London Underground network;
beginning to deal with the legacy of privatisation through the creation of Network Rail to replace Railtrack; and

- a commitment to modernising the power supply south of the Thames.

We have improved local transport by:

- significantly increasing investment – total Government capital support has risen from £650 million in 2000-01 to £1.9 billion in 2004-05;
- introducing Local Transport Plans to give local authorities greater certainty about future funding and more flexibility over decisions;
- devolving decisions for transport to the Mayor in London and the devolved administrations;
- supporting bus use with improved infrastructure. Outside London, over 1,200 kilometres of bus priority schemes were completed last year, helping to make buses a more attractive alternative;
- improving access by requiring all new public transport to be accessible to people who have mobility difficulties, including wheelchair users, and by ensuring that all older and disabled people can travel for half-price fares on their local bus services;
- supporting community transport services, which provide a vital lifeline for many people, by making flexibly routed services easier to register and extending Bus Service Operator Grant to cover these services;
- improving information on public transport services, for example by increasing the availability of real time information;
- using land use planning to ensure that, where possible, jobs, shops and services are located where they are accessible by walking, cycling and public transport;
- reversing the long-term decline in bus use;
- publishing *Walking and Cycling: an action plan*, a collection of practical actions and good practice studies to support and encourage more walking and cycling; and
- funding thousands of schemes through local authorities to make cycling and walking easier, safer and more attractive across the country.

We have improved the framework for aviation and shipping by:

- publishing the *Future of Air Transport* White Paper. This took the major step of setting a strategic framework for the development of aviation over the next 30 years, planning ahead for the pressures that we know we will face in the future;

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1 Department for Transport, June 2004. Available at www.dft.gov.uk
● ensuring the best possible use is made of existing runways. Also supporting an additional runway at Stansted and, providing the environmental concerns can be met, an additional runway at Heathrow. And the safeguarding of land at Gatwick for a new runway in case conditions attached to a new Heathrow runway cannot be met;

● supporting a new runway at Birmingham and the safeguarding of land for one at Edinburgh and other developments at airports across the country;

● supporting the shipping industry to ensure that the UK retains a leading role; and

● developing a more business friendly approach, resulting in a trebling in size of the UK-registered fleet since 1997.

We have contributed to improvements in the freight industry by:

● promoting measures to help the industry improve its efficiency, reducing unnecessary lorry movements;

● introducing taxation policies to reduce the environmental impact of freight; and

● developing policies that offer the best outcomes for our economy, society, and environment, rather than aiming to promote one form of transport over another.

We have promoted measures to improve safety and security by:

● setting out, in our road safety strategy, *Tomorrow’s Roads – Safer for Everyone,* a coherent framework for significantly improving road safety;

● achieving a 22 per cent reduction in people killed and seriously injured on Britain’s roads in the last six years;

● securing vehicle safety improvements through negotiation with other governments and with the vehicle manufacturing industry;

● making our streets safer for cyclists and pedestrians by promoting safer road designs and by supporting road safety training for children;

● completing the Train Protection and Warning System programme to improve safety by preventing trains overrunning red signals;

● improving personal safety on all modes of transport by working with transport operators, local authorities, the police and Crime and Disorder Reduction Partnerships to reduce and prevent crime on our transport system; and

● taking the initiative in the European Union and working closely with others to respond to the terrorist threat, and to ensure that our transport systems and the people using them and working on them are properly protected.

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*2 Department for Transport, March 2004. Available at [www.dft.gov.uk](http://www.dft.gov.uk)*
Roads: smarter travel
Our goal is a road network that provides a more reliable and freer-flowing system for motorists, other road users and businesses, where travellers can make informed choices about how and when they travel, and so minimise the adverse impact of road traffic on the environment and other people.

The challenge

3.1 For most people, most of the time, the road network functions well. So car ownership remains an attractive personal choice, giving us access to employment, shops and leisure facilities. Our roads also provide the backbone for bus services, which carry 65 per cent of all public transport passengers. And they are central to our freight industry, carrying 81 per cent of goods moved by weight.

3.2 There are many places, especially in peak hours, where road capacity and the pattern of road use results in slow and unreliable journeys. The road network experiences different pressures at different times. For example the chart opposite illustrates how school travel patterns can affect journey times and speeds on the A14.
3.3 These factors have a significant impact on:

- individuals, through frustration and the consequences of unreliable journey times;
- businesses, through the cost of lost time as their employees or goods are caught in traffic; and
- the environment, with traffic caught in congestion causing more air pollution and CO₂ emissions.

3.4 And, in spite of our excellent safety record, every year some 3,500 people still die in road accidents.

Where we want to be

3.5 Looking ahead 30 years we need to be in a position where:

- we continue to improve safety;
- we identify, fund, and deliver promptly additional road capacity where this is justified – balancing the needs of motorists and other road users with wider concerns about the impact on the environment, including the landscape;
- we get ever greater performance out of the road network through improved management;
- we facilitate smarter individual choices about the trips we need to make, giving people alternatives to using their car, particularly for short journeys; and
- support and promote these choices by ensuring that new ways of paying for road use are developed so they become practical options.
What we have achieved

Safety

3.6 Britain’s roads are among the safest in the world. Total deaths and serious injuries on the road network were down by 22 per cent in 2003 compared to the average for 1994-98. The number of children killed or seriously injured is down by 40 per cent over the same period. Further details are in Chapter 11.

Capacity

3.7 We are adding capacity to the road network, largely by widening roads which already exist (see box). Decisions on capacity have reflected our environmental objectives. For example, proposals submitted by Suffolk County Council for a western bypass of Sudbury demonstrated transport benefits and provided relief to Sudbury by removing through traffic from the town, but the benefits were outweighed by the adverse environmental impacts of the scheme. We therefore rejected the proposal and advised the local authority to consider alternatives. And in the West Midlands, we rejected proposals for bypasses around Stourbridge and Wolverhampton in July 2003. These new roads would have run through open countryside and would have had a significant adverse effect on the landscape.

3.8 We are also speeding up delivery of the roads programme. The Highways Agency has undertaken a series of major changes in the way major road schemes are developed. These are focused on:

- improving the design, costing and practicality of road schemes by appointing the contractors when the preferred route is announced;
- faster, quality-driven, procurement practices;
- better and earlier engagement with the public and other stakeholders; and
- improved team-working within the Agency and faster responses to public inquiries.

3.9 These measures have already improved the Agency’s capacity to cut substantially the time needed to deliver individual improvements, as well as improving design, reducing construction problems, and increasing certainty about costs. The Highways Agency will be sharing its experience of delivering major road schemes with local highway authorities, to improve the delivery of local road schemes.
INVESTING IN THE ROAD NETWORK

Over the past six years we have made real progress in developing a programme which will deliver significant improvements to both the strategic and local road networks.

The Highways Agency has a programme of major projects\(^1\) which include:

- widening of the M25 – six schemes;
- widening and improvement of the M1 – four schemes; and
- the A14 connecting the East Coast ports with the Midlands – three schemes.

The Highways Agency has completed 20 major schemes since 2002, plus the M6 Toll, which is now producing improved traffic flows on the strategic road network around Birmingham.

The Highways Agency is also taking forward a programme of smaller schemes which will help to make best use of the strategic road network by tackling local bottlenecks, improving junctions and addressing safety issues.

In all its work the Highways Agency pursues designs which respect the environment using both proven approaches and new innovation, such as grassed drainage channels to help make road drainage more sustainable.

We have also developed a programme of improvements to the local road network delivered by local highway authorities. Since 2000, we have given provisional or full acceptance to 79 schemes including 28 bypasses, of which 27 have been completed and opened to traffic. Fifteen schemes are currently under construction.

3.10 We do not want to lose the benefits of this extra capacity, so we have started to consider how best to implement demand management policies – see Managing Our Roads.\(^2\) The results of the Feasibility Study on Road Pricing established at that time are summarised later in this chapter, together with plans for taking this further forward.

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1. Those costing more than £5 million each. Known as the Targeted Programme of Improvements.
Strategic roads in England

This map has been produced by DfT’s GIS Unit. This map is based upon Ordnance Survey material with permission of Ordnance Survey on behalf of the Controller of Her Majesty’s Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Department for Transport 100020237 2004 gisu040510yyp10
Network management

3.11 We have also made progress in improving the day by day, hour by hour management of the road network. For our strategic roads the Highways Agency has:

- begun to deploy traffic officers to work alongside the police to get traffic moving again as soon as it is safe to do so after incidents. Seven regional control centres, jointly staffed by the Highways Agency and the police, will support this work;
- improved its response to winter weather conditions, with further improvements being readied for next winter;
- improved management of traffic where there are roadworks; and
- invested in new systems to collect and process data on traffic flows, turning it into useful information for motorists – before they begin a journey, and during a journey to warn of conditions ahead.

3.12 In parallel we have brought forward a series of initiatives to improve the way local highways authorities manage their road networks. The Traffic Management Bill:

- places a network management duty on local authorities with each authority required to appoint a traffic manager;
- gives local authorities greater control over when and where utility companies carry out street works, including a new regime of permits, to minimise disruption;
- gives local authorities outside London more scope to take over enforcement of driving and parking offences from the police; and
- gives Transport for London a stronger strategic role in London.

Smarter choices

3.13 School travel plans, workplace travel plans and personalised journey planning have helped prompt people to consider, and take up, alternatives to the routine use of their own car, especially for journeys at peak hours.

3.14 New research has been published in parallel with this White Paper.3 The findings illustrate the significant impact these measures can have on traffic.

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3 Smarter choices: changing the way we travel Department of Transport, July 2004. Available for download at www.dft.gov.uk
Compared to the cost of investing in new infrastructure, such schemes also offer significant value for money for the taxpayer. As a result, we will continue to promote this approach by:

- ensuring that every school in England has a travel plan by 2010;
- providing free consultancy advice for organisations creating workplace travel plans until at least 2006. We will focus this advice on workplace, tourism and leisure sites where our research tells us it is most effective;
- making sure that the public sector leads by example. All Government departments have been set a target of reducing car commuting to their workplaces by 5 per cent by 2006; and
- supporting local authorities in building schemes like these into their Local Transport Plans.

<table>
<thead>
<tr>
<th>Workplace travel plans – produced by employers and aimed at reducing car use for travel to work and travel for business.</th>
<th>Workplace travel plans can reduce commuter car driving by between 10 per cent and 30 per cent at a cost to the local authority of £2 to £4 per head.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School travel plans – a series of practical steps to improve the safety of children and therefore make walking, cycling or public transport a more attractive option.</td>
<td>Reduced school run traffic by between 8 to 15 per cent, with some high-performing schools achieving reductions over 20 per cent.</td>
</tr>
<tr>
<td>Individualised marketing – which applies private sector marketing techniques to encourage people to use alternatives to cars.</td>
<td>Pilots delivered reductions in car use of between 7 and 15 per cent in urban areas and 2 to 6 per cent in rural and smaller urban areas. Costs for large-scale implementation likely to be less than £20 per head.</td>
</tr>
<tr>
<td>Public transport information and marketing – raising the profile of buses and other public transport in local communities.</td>
<td>Budgets for such work of £60,000 to £300,000 a year have helped deliver city-wide increases in bus use of between 1.5 per cent and 5 per cent, when combined with other improvements.</td>
</tr>
</tbody>
</table>
3.16 We have already started working with the largest authorities to develop targets for the spread of schemes to promote smarter choices and for their impact on the use of cars, buses, cycling and walking for local journeys (see Chapter 6 for more details on walking and cycling). New guidance will also require local authorities to assess the potential complementary impact of such measures as part of making an economic case for any major transport scheme.

3.17 Other measures can also help to support smarter choices. For instance carpool (or High Vehicle Occupancy) lanes can help encourage people to share a car by creating dedicated lanes which will be reserved for vehicles carrying two or more people. We will announce the site selected for a pilot scheme later this year. And we want to encourage local authorities to review priorities and reallocate space in town centres to encourage walking, improve access and the pedestrian environment in town centres.

Technology
3.18 We are making good use of developments in technology to support our objectives to inform road users of choices before they travel, to keep them informed while they travel, and to target the efforts of traffic managers. The motoring industry is also improving engines, increasing energy efficiency and reducing emissions.

**CLEANER CARS**

New cars today are far cleaner than they were a decade ago. They emit less carbon and fewer pollutants. They are also far more energy efficient – this benefits the motorist and the environment.

There is a wide range of prospective new technologies and fuels including hydrogen fuel cell technology and also hybrid (internal combustion and electric) technology which could be a stepping stone to fuel cell transportation. More details on this, and other ways that cars will be cleaner in the future, are in Chapter 10.

We want to continue to encourage the development, introduction and take-up of new vehicle technologies and fuels and ensure that UK industry takes full advantage of the opportunities this offers, making this country a world leader in this field.

3.19 We have also embarked on a radical modernisation programme of registration and inspection services for road users, to make them more customer-focused, accessible and efficient. All of this will be backed up by enforcement that ensures that only those who meet the required standards, and who register, insure and tax their vehicles, are permitted on the roads.
ENSURING ROAD-USERS MEET THEIR OBLIGATIONS TO OTHERS

All drivers and vehicle owners must meet their legal obligations to tax and insure their vehicle. The minority who don’t comply impose extra costs on law-abiding road users, through higher premiums and taxes.

In the past it has been too easy for a minority to evade their responsibilities. Little data was available to the police and other enforcement bodies. And action could usually only be taken if offenders happened to be spotted on the road. The Government – working with the police and others – has started to tackle this long-standing problem in new ways.

SERVICES FOR ROAD USERS

For more and more of us, the web is a key way to access information and services of all kinds. On-line vehicle tax renewal is a new service, already available to some motorists, and available at any time. Instead of putting the onus on the vehicle owner to prove that the car is insured and MOT’d, the system will itself check with insurance and MOT databases. And instead of payment by cash or cheque only, it will become possible to pay by card or by direct debit. The new service started to roll out in February 2004 and, over the next couple of years, it will be extended to more and more motorists.

We will also improve the integration between the different services we offer motorists. This will allow us to offer new, more innovative, services. For instance, it should be possible to tell us once about a change of address rather than telling each agency separately. It should be possible to give vehicle owners greater advance notice – perhaps by text message or e-mail – of forthcoming due dates for vehicle tests, insurance or tax.

Not only will such changes improve services to customers, they will also ensure that the information which underpins a wide range of broader services – from traffic enforcement on the roads, to bus-lane management, local congestion charging and action to tackle abandoned vehicles – is accurate and can be used effectively.

Driving licences can be made far more secure and less easily forged than at present. The Government is currently exploring proposals to include the driving licence as part of a far more secure ‘family’ of identity cards, helping to tackle the serious problems of impersonation and identity theft.
For vehicle owners – commercial and private – one of the annual obligations is to have their lorry, bus, van, car or bike tested under the MOT scheme or its equivalent for large commercial vehicles. This involves a significant investment of time and money – especially for commercial operators. We will explore ways of maintaining and improving standards while minimising the impact on vehicle owners.

A central MOT database – due to be rolled out from 2004–05 – will help us be more pro-active in identifying and following up vehicles which have not been tested.

Greater use of the insurance industry’s Motorists Insurance Database will help us be tougher on insurance evasion, helping us to identify and crack down on insurance cheats.

The essence of a new approach will be greater use of intelligence to assess risk, then focusing inspection and enforcement work on the areas where the risk is greatest. This is already happening with road-side checks of heavy goods vehicles.

New technology also offers the opportunity to identify vehicles more effectively, helping enforce current licensing and taxation obligations. Potentially, these technologies could eventually change the very nature of vehicle testing, reducing – or even eliminating – the need for physical checks.

**What we are going to do next**

3.20 Policies to promote smarter choices and better network management, together with well-targeted additional capacity, will make a difference. But looking further ahead, they will not be enough on their own to prevent congestion spreading to longer periods each day, and to more roads, increasing the suffering of road-users, business and our wider society. The chart overleaf illustrates how total traffic, and therefore pressure on the road network, would continue to grow.
3.21 The projected increase is unacceptable. No-one gains from increasing levels of congestion. As well as being frustrating for those caught in queues, it is exacting a growing economic cost. Time spent in jams is not available for other activities and adds problems to business of unpredictability and increased duration to journeys.

3.22 If we are to make a step change in the quality of service provided to road users, we need – in addition to the policies already in place – to revisit the way we pay for using the road network. We are already used to paying for using telephones in ways which reflect the demand on the telephone network – more when it is busy, less at other times. And with that principle established, companies are able to offer a variety of packages to suit individuals’ patterns of use. Looking ahead, the key strategic choice for road users is between:

- service levels which continually deteriorate (since we cannot build our way out of congestion);
- new ways of paying for road use, which incentivise smarter individual choices about when and how we travel. We know there are acceptable alternatives for some people from the research described in paragraph 3.14, and just relatively few people changing behaviour in response to pricing makes a substantial difference to congestion.

3.23 There is a need for a mature discussion as to which approach we take. The Government view is that the costs of inaction or unrestricted road-building are too high for society. The time has come seriously to consider the role that could be played by some form of road pricing policy.

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4 These projections are based on the policy measures and spending plans set out in the original 10 Year Plan for transport.
3.24 At its simplest, this could involve making new capacity available only in return for a charge. This is an approach taken in many other European countries. And the M6 Toll road has shown that many motorists here are also willing to pay extra for more reliable journeys. Although this approach could not be applied widely, there is some scope for new tolled roads:

- we recently announced our intention to assess whether this would be an alternative to widening the M6 north of Birmingham. Instead of adding lanes to the current motorway, an alternative would be to construct a parallel road, and toll its access. This could give drivers more choice; and

- additional tolled capacity in urban areas is far more difficult, given the pressures on land. But there are examples elsewhere in the world, such as the tunnels at Versailles, where tolled new capacity has been introduced successfully in an urban environment.

3.25 But we will not address the long term risk of higher congestion just by adding new capacity, even if it is tolled. And it will not resolve the problems on our current road network. We need to consider seriously the case for a different way of paying for our current road network.
Charging for current capacity

3.26 As a first step, we established a study of the practical feasibility of road pricing, involving key stakeholders including road user and environmental groups. The report is published in parallel with this strategy.\(^5\) It recognises that a different form of road pricing could play an important part – alongside complementary policies – in addressing the challenges that we face over the next 30 years. It considered what a national road pricing scheme might look like and whether or not it would work.

3.27 The study concluded that local government would have to be involved in any national scheme which also aims to tackle congestion. On this basis, the study looked at the practicalities involved in implementing a scheme in which:

- central government designed and operated a national distance charge, based on systems fitted in all cars, following international negotiation on standards, with a common back office and a consequential reduction in other current motoring taxes; and
- there was the facility for local variation in the distance charge – up and down – to reflect congested and uncongested conditions and other external costs.

3.28 The option to vary the charge would not apply to all roads. Typically it would apply in larger urban areas (but potentially in other places where traffic volume is a problem, such as national parks). As such, it would be important for the relevant local authority or authorities to be fully involved in the decisions on when and on which roads the distance charge should be varied, and on the adequacy and political acceptability of the alternative arrangements for those encouraged out of their cars. Decisions would also be needed for relevant stretches of the strategic network, but since much congestion here is, in practice, related to nearby urban areas, there may be ways to link these decisions with related urban pricing.

3.29 Having defined a national scheme in this way, the report assessed its feasibility. The report concludes that such a national pricing scheme:

- is becoming technically feasible, and certainly will be in the medium term (10 to 15 years). This is based on the market-led development of in-vehicle satellite navigation equipment and the development of standards at the EU level. In practice there may be other technical options;

\(^5\) Feasibility Study of Road Pricing in the UK: a report to the Secretary of State, Department for Transport, July 2004. The report can be downloaded at www.dft.gov.uk/roads/roadpricing
would cost a lot to run, but the net revenue stream could be used in a number of ways. For example, to reduce existing motoring taxes, to reduce other taxes, to fund additional spending on road capacity, public transport and other public spending or for a combination of these;

- would lock in the benefits of other measures to tackle congestion;

- subject to further work, could meet the objectives that the Government set when commissioning the study;

- needs a sufficient level of public acceptability. Trust and confidence in the viability and delivery of any national road pricing scheme, including the use made of the revenue, are central;

- needs a greater knowledge at the local level of road use and road users;

- would be a massive and complex task requiring concerted action and co-operation at all levels of government over a number of years; and

- in the meantime, a number of congestion charging schemes at the more local level would amount to a trajectory towards a national road pricing system, leaving open choices to be made along the way.

3.30 The report made a series of recommendations to the Government on the back of this analysis (see box).

RECOMMENDATIONS FROM PRICING STUDY

The conclusions of the Road Pricing Feasibility Study note that the decision on whether road pricing should be pursued is one for central government, and recommend that if it wished to proceed, there would be key actions for central government to take.

- Inform and lead a national debate developing better understanding of what the change would mean and how it might be achieved in practice, with research into how it would affect people and businesses.

- As part of this work, to develop proposals on how receipts from road users would be governed, managed and accounted for, and how motoring taxes would be dealt with on the introduction of any road user charging system.

- Engage with other tiers of government and incentivise more practical research and experiments, building on from the M6 Toll road and the London congestion charge, to turn the discussion on road pricing from the abstract to the practical.

- Engage actively in the development of vehicle technology standards at an international level.

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6 The objectives of the study were to deliver a more efficient approach to the structure of transport pricing; to be fair, respect privacy, and promote social inclusion and accessibility; to deliver higher economic growth and productivity for all regions of the UK; and to deliver environmental benefits.
3.31 We welcome this report. In response to the recommendations we commit to:

- **inform the public** – beginning with this White Paper – about what road pricing is and how it might work, and undertake the further research recommended, so that people can engage with a clear proposition, not just an abstract concept;

- **lead a debate** on what would make such pricing acceptable to motorists;

- **seek to build a public consensus** around the objectives of road pricing, and how to use the revenues;

- **work alongside forward looking authorities and areas**, to help them put in place packages of measures which tackle local congestion problems. Resources from the new Transport Innovation Fund will be available to support packages which combine road pricing, modal shift, and better bus services (see Chapter 5); and

- **begin a process** which would lead to international standards for in-car equipment, taking account of current, market-led developments.

3.32 We will publish a full response to the feasibility study, with further details on how we intend to take these actions forward in due course.
Measuring progress

3.33 There was a number of shortcomings to the way we previously measured congestion, since the national target based on time lost per vehicle kilometre did not reflect motorists’ experience of driving. We have been developing an improved set of indicators to reflect what road users say they want from the road network. These include measures of delay, severity (time spent below a threshold speed), and reliability of journey times. We are developing congestion ratings for key routes, reflecting their performance against these indicators. We will publish baseline data over the next six months and will set targets for individual routes in consultation with regional and local stakeholders, as described in Chapter 9. We will publish new targets by July 2005.

Conclusion

3.34 Building on the achievements to date, this is a strategy that can and will deliver a road network that provides a reliable, intelligent, interactive and freer-flowing system for motorists and business which has less impact on people and the environment.
Rail:
transforming our railways
Rail:

transforming our railways

The railways are a vital part of the country's transport infrastructure, carrying a large proportion of travellers and freight on many of the country's busiest routes. As the economy grows there is increasing demand for travel, and the railways will play an important role in meeting this demand, providing an alternative to travelling by car.

The challenge

4.1 Successive governments have failed to ensure that sufficient investment has been made in the rail network on a consistent basis. And where major projects have been taken forward, they have often been subject to false economies – for example the electrification of the East Coast Main Line, where lightweight structures have proved vulnerable to high winds. The 10 Year Plan has provided substantially increased funding for the industry, but a legacy of under-investment remains, which will take time to address.
4.2 The privatisation of the rail industry in the early 1990s assumed that private sector innovation and discipline would drive down the railway’s subsidy requirement and drive up the quality of service. In part this has been borne out – demand for both passenger and freight services has risen since privatisation. But it proved entirely incorrect in relation to the operation of the infrastructure. Railtrack’s engineering work was outsourced to maintenance companies that were given responsibility not only for maintenance and renewals, but also for the specification and inspection of their own work. This led to Railtrack’s knowledge of the state of its assets diminishing and to a maintenance strategy that saw the condition of the track deteriorate rapidly.

4.3 The accident at Hatfield in October 2000 exposed the extent of this deterioration. And the widespread speed restrictions that followed caused a steep decline in reliability. The reaction to Hatfield also undermined public perceptions of safety on the network.

4.4 In response, Railtrack increased the level of maintenance and renewal work, but this generated a steep increase in costs. This, combined with the separate loss of cost control on the West Coast Main Line project, contributed to a worsening financial situation which led, eventually, to the company’s entry into administration. Network Rail, a company limited by guarantee which operates in the wider interest and which is accountable to the rail industry through its members, has now taken over responsibility for the rail network and has made some progress in addressing the problems of the past.

4.5 Rail is now carrying record numbers of passengers, its safety levels are improving, its customer focus has got better, and, in the aftermath of the accident at Hatfield, reliability is slowly recovering.

4.6 The picture of growth in passenger numbers and improving levels of service is similar on London Underground and light rail.

![Rail and light rail patronage in Great Britain](image-url)
4.7 The challenge for Government is to ensure that these trends continue and accelerate, and to create an industry fit for the next 30 years.

Where we want to be

4.8 The rail industry must get its costs under control and live within the available budget. The 10 Year Plan significantly increased investment, but this money must be spent efficiently. The industry still has to deliver real and challenging efficiency gains in order to provide value for money from the increased levels of investment.

4.9 This means managing projects better. It means eliminating waste and reducing unit costs – through better procurement and planning. And it means taking a long hard look at where costs arise and whether they can be justified, and making careful trade-offs based on robust information when decisions are taken on procurement.

4.10 Reliability must also be improved. The rail industry must serve its customers and this is their number one concern. Unless passengers continue to use the railways, investment cannot be justified.

4.11 We must concentrate investment and effort where it delivers most benefit. This will mean taking decisions based on an improved understanding of the network. And it will mean giving local and regional stakeholders, who best understand the needs of their areas, the opportunity and incentives to make sensible choices between different forms of transport, helping build balanced public transport networks for their communities.

4.12 Finally, the complex and over-bureaucratic structure introduced at the time of privatisation, with too many overlapping responsibilities, no clear control of strategy and no single point of accountability for performance, must be reformed. This structure has allowed money to be wasted, and new initiatives to fail. A new structure must be put in place which ends the confusion of responsibilities and enables the industry to work together to deliver clearly defined goals.

What we have achieved

4.13 These challenges are great, but they are not insurmountable. They can all be solved through better management, strong leadership, and through all parts of the industry working together.
GETTING ON WITH DELIVERY

Last year the rail industry:

● renewed over 800 miles of track; and
● completed the Train Protection and Warning System programme to improve safety by preventing trains overrunning red signals.

At present the rail industry is:

● building a major new line (the Channel Tunnel Rail Link);
● upgrading one of the three main rail arteries (the West Coast Main Line);
● modernising the power supply south of the Thames; and
● replacing all of the slam door rolling stock on the network.

Local authorities have also been bringing forward new light rail systems. New lines have opened, including:

● the Croydon Tramlink;
● the Sunderland extension to the Tyne and Wear Metro;
● the Eccles extension to Manchester Metrolink; and
● the Nottingham Express Transit.

And on the London Underground, Public Private Partnership (PPP) has been put in place. Under the PPP, private sector companies have been awarded long term contracts to modernise and maintain the infrastructure of the Tube. This will inject massive investment into the Tube network, focusing on structural renewal and service improvements. Under the contracts:

● new or refurbished trains will be running on all lines by 2020;
● 80 per cent of the track will have been replaced;
● 249 stations will be improved and modernised;
● Delays on lines should be reduced, with estimated improvements on the Metropolitan, Circle and Bakerloo Lines of 30 per cent;
● Capacity of the system will be increased by 12 per cent by 2012.

Outside the PPP, other improvements to London Underground infrastructure are also being undertaken in partnership with the private sector. New communications and power systems will be provided in the next few years. And Transport for London has also introduced the Oyster Card smart ticketing system across London. This allows people to travel on the Underground, buses and the Docklands Light Railway as well as some parts of the rail network. Nearly 1.4 million cards have been issued since its launch in 2003.
Costs

4.14 As part of its commitment to the Office of Rail Regulation (ORR), Network Rail will improve efficiency by 31 per cent. The company has a wide range of initiatives to deliver these savings, including bringing maintenance back in house and streamlining its organisation. There are also opportunities to secure savings through the franchising process.

Safety

4.15 The rail industry’s safety record is good and is improving.

Significant train incidents from 1975 to 2002-03*

*Data prior to 1991 relates to significant train incidents per calendar year. From 1991-92 onwards this information has been collected in relation to financial years.
Performance

4.16 Delays and cancellations are a key concern to anyone who regularly uses our rail network. In the aftermath of the tragedy at Hatfield performance dropped to an all-time low. Since then it has steadily recovered. But progress to date has been slow. We need to accelerate the rate of improvement.

Public Performance Measure
Moving annual average, 1 April 1998 to 31 March 2004

4.17 Overcrowding also causes concern for rail passengers. The problem can be particularly acute in London and the South East. Despite the increase in passenger numbers, overcrowding levels in the morning and evening peaks on the London commuter network have decreased from a high point of 3.6 per cent in 2000 to 2.9 per cent in 2003. New train carriages are helping to tackle this. Over 1,500 new railway vehicles have been introduced over the last two and a half years.

London Underground

4.18 Nearly a billion passenger journeys are made on London Underground every year with three million passenger journeys every working day and some 500 trains operating during the peak hours.

4.19 It is a large and complex transport network with a high level of integration and a frequent service. It needs a unified operational command in order to work effectively as a system. But to maintain the network it also needs the efficient management provided by the private sector. The Public Private Partnership, supported by the Government’s unprecedented commitment to grant funding for the Underground (amounting, on average, to more than £1 billion a year for the first 7½ years of the PPP) provides this.
Light rail

While light rail use has increased significantly over the last few years, the picture for individual schemes is mixed. Some have been very successful in attracting passengers. The Docklands Light Railway now carries 46 million passengers a year, and is showing double-digit patronage growth. Manchester Metrolink has attracted so many passengers that it often operates at, and sometimes above, capacity. However, other schemes have not been so successful. The number of passengers on Sheffield Supertram, Croydon Tramlink and Midland Metro remains significantly below the levels forecast. We need to use this experience to improve the assessment and evaluation of schemes in the future.

What we are going to do next

The railways

The Railways White Paper\(^1\) outlines a new structure for the industry, aimed at tackling the challenges the railways face. It has been developed in consultation with key industry and regional players. The diagram below shows how it will affect passenger services.

A new structure for the rail industry

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\(^1\) The Future of Rail, CM 6233, Department for Transport, July 2004. Available at www.dft.gov.uk/railways/whitepaper
4.22 This new structure will be based on six key changes.

- **The Government will take charge of setting the strategy for the railways**

  It must be for Ministers, accountable to Parliament and the electorate, to set the national strategy for the railways, but in the current industry structure this is not the case. Under the new arrangements, the Government will set the level of public expenditure, and take the strategic decisions on what this should buy. This means that the SRA will be wound up, and its strategic responsibilities and financial obligations will pass to the Secretary of State. There will continue to be a crucial role for the independent economic regulator, who will protect the rights of investors and customers and ensure the Government pays the proper price for what it is buying. New regulatory and contractual arrangements will be put in place between Network Rail and the Government, to run alongside, and provide the context for, the franchise contracts with train companies. Combined with more robust information, this will enable the Government to act as a strong client to the private sector industry, protecting the interests of taxpayers and fare payers alike.

- **Network Rail will be given clear responsibility for operating the network and for its performance**

  With no one organisation clearly in charge, improvements in reliability have been sluggish, and the railway has not delivered the performance that passengers expect. The changes outlined in the Railways White Paper will give Network Rail a strengthened role as operator of the network, with overall responsibility for its performance. Government will set out what Network Rail is expected to deliver for the public money it receives, and on that basis Network Rail will lead industry planning, set timetables and direct service recovery. Too often under the current system, companies have been able to pass the buck for poor performance. Under the new structure, Network Rail will be held accountable for ensuring that the network delivers a reliable service for its customers through an agreement with the Government.

- **Track and train companies will work more closely together**

  The new structure will deliver more efficient working between Network Rail and the train companies at the front line, bringing track and train closer together operationally. The roles and responsibilities of each part of the industry will be clarified through new local agreements, and their incentives brought into line with one another. The number of franchises will be reduced and they will be aligned more closely with Network Rail’s regional structure. The industry has made it clear that it is committed to ensuring that these new arrangements drive more effective working between Network Rail and the train companies in the interests of passengers. They will replace the current confrontational relationship with one based on aligned interests – and will create the scope for even closer working in future where all parties agree to it.
● There will be an increased role for the Scottish Executive, the Welsh Assembly Government and the London Mayor, and more local decision-making in England

Central government is not always best placed to take decisions on the transport needs of different communities. In future, the devolved administrations will take on increased responsibilities for passenger services and, where appropriate, infrastructure. In England, the Passenger Transport Authorities (which manage transport provision in some of the main metropolitan areas) will be able to buy additional services, and to transfer funding between rail and other transport modes. Transport for London will also have an increased role with regard to rail services in the capital. And the Government will promote the role of Community Rail Partnerships in improving the management of local branch lines.

● The Office of Rail Regulation will cover safety, performance and cost

Bringing regulation of all aspects of the rail industry – safety, reliability and efficiency – together under a single public regulator will streamline the regulatory system, reduce bureaucracy, and ensure that these issues are looked at as a whole, and not in isolation from one another. This means responsibility for safety regulation will pass from the Health and Safety Executive to the Office of Rail Regulation, and will remain independent of Government and the industry.

● A better deal for freight will enable the industry and its customers to invest for the long term

Because of the high up-front investment costs for rail freight, businesses using these services need to be sure about their access to the network. But this has to be balanced with the fact that freight users only pay for the cost of operating their services and not for the costs of the underlying infrastructure. Freight operators will be given greater certainty about their rights on the national network, and a group of key routes will be identified on which freight will enjoy and pay for more assured rights of access.

Over the longer term

4.23 The conclusions of the rail review are about more than creating new bodies, or change for its own sake. They focus on putting in place a clearer, simpler structure which will enable the different parts of the industry to deliver together for their customers.

4.24 Further new lines for London, airport links and other improvements may also be needed to cope with increased demand in the future. New rail projects need to be considered in the light of the overall transport budget, and the extent to which other sources of funding can be harnessed. We will ensure that such projects represent good value for money and are properly managed and specified so that they are delivered on time and to budget. Consistent with the enhanced roles for local and regional bodies on rail, and the partnership approach underlying the creation of the Transport Innovation Fund, local and regional bodies will be given a greater role in specifying and funding such future rail projects. This will include the ability to specify and fund minor enhancements without excessive bureaucracy or central control.
Regional and local dialogue

4.25 While central Government will have overall control of our rail network, regional and local players need to have the means to influence services in their own areas. Rail may not always be the most cost-effective or appropriate transport solution. Rail should be considered alongside other forms of transport, including bus and light rail, to provide a coherent solution to local issues that delivers the best service for the lowest cost. We believe that decisions are often best taken at a local level, and will ensure that an effective system is put in place. We will give local players an incentive to invest or find savings.

Safety

4.26 Rail safety must remain a high priority for the industry. High management and operational standards will be critical in this area but new technology may also have a role to play, in particular, when a proven and viable system is available. One new system currently being trialled is the European Rail Traffic Management System (ERTMS), which has the potential to increase network capacity and also improve safety by harnessing new technology.

New technologies

4.27 We will also consider the use of new technologies to improve rail services. For instance, hydrogen may be more suitable as a fuel for trains than cars. Fuel cells are more efficient when they are bigger, and the rail refuelling infrastructure would be simpler than that required for road vehicles.

CROSSRAIL

Investing in the capacity of London’s transport system is vital to maintaining its pre-eminence as a world class capital and business centre. The case for Crossrail is strong and will only strengthen further as demand on the capital’s existing transport networks grows.

That is why Government intends to seek the appropriate powers for its construction through a Hybrid Bill at the earliest opportunity.

The Montague Report makes clear the funding challenge that Crossrail represents. This still needs further work. Department for Transport and the Treasury will work with the Mayor and the London business and finance community to find a funding solution that is equitable to all parties. This will include consulting on appropriate alternative funding mechanisms.
Light rail

4.28 We need to learn from our experience so that light rail solutions are pursued where they are most appropriate, to deliver local authorities’ wider transport strategies. Local authorities need to look at what works best in their particular circumstances. Light rail can work best for routes with the highest traffic and passenger flows. Bus options are likely to offer the most cost-effective solutions on most corridors.

4.29 Proposals for new light rail schemes require rigorous assessment. Authorities need to reassure themselves of the realism of forecasts of passenger numbers, and ensure that they are taking appropriate measures to attract people to use the new services. For example, schemes can be enhanced by better integration with other forms of transport – through integrated ticketing and bus Quality Contracts, and provision of park and ride facilities and complementary parking policies. The involvement of local transport planners and practitioners in the heavy rail system will also facilitate better integration and sensible decisions on the balance of funding between different forms of transport.

4.30 We are also working with promoters to explore ways to make light rail solutions more affordable. A number of promoters are developing alternative procurement approaches, with a sharing of the revenue risks and in some cases separation of infrastructure procurement from operations. And there may be scope for cost efficiencies through making more use of common design approaches and more tailored safety standards for light rail schemes.

Conclusion

4.31 Railways are a vital part of the country’s transport infrastructure, carrying a large proportion of travellers and freight. The new structure we are putting in place for our national networks:

● is based on the key principle of partnership between the public and private sectors; and

● recognises rail’s status as a public service, specified by the Government and delivered by the private sector.

4.32 It will provide a stable foundation for a reliable, safe and efficient rail industry fit for the next 30 years. Supported by light rail, where it offers best value, underground and metro services, our rail networks will continue to play a central role in meeting travellers’ and businesses’ needs.
Buses:

better services, easier access
Buses:

better services, easier access

Buses are the main form of public transport. We need bus networks that provide flexible and convenient services tailored to local needs, offering a reliable way to travel to and from jobs, schools, shops and other services. This is crucial for people without access to a car and providing genuine choice for those who do.

The challenge

5.1 Nearly two thirds of all public transport journeys in England are by bus. In many areas, and for many journeys, they are the only public transport alternative to using a car. Buses are a powerful tool in tackling the problems caused by congestion, allowing more people to make the same journey while generating less traffic. Buses are flexible too – they can be deployed quickly in response to changing demand. And unlike rail or metro systems, buses do not require substantial infrastructure so can rapidly boost the supply of public transport.

5.2 Over the last century increasing access to cars, particularly for traditional bus users such as older people and women, has contributed to a decline in bus patronage. The historic decline was reinforced by planning policies which dispersed travel patterns, making bus services more expensive to provide. Many out of town business parks and shopping centres are far easier to get to by car.

5.3 In rural communities, the bus is an essential service, particularly for those without access to a car. However, rural areas have often been poorly served as providing a regular bus service can be prohibitively expensive in areas where the population is widely spread out.

5.4 We recognise the valuable role buses can play in improving public transport and we will work with local government and the bus industry to make this happen. Increased investment in bus services and changes to the way our towns and cities are planned are beginning to reverse the decline in bus patronage.
5.5 In 2002-03 the number of local bus passenger journeys in England increased by 3 per cent to 3.9 billion trips. But there was significant variation between areas. In London, with its unique type of network, growth was particularly strong at around 8 per cent. Significant growth was also achieved in some shire counties (Norfolk, Lincolnshire), centres of heritage (Cambridge, Oxford, York) and other towns and cities (Brighton, Nottingham, Telford, Corby). The challenge is to repeat this success in more areas.

**DELIVERING BETTER BUS SERVICES**

A number of areas outside London have made significant improvements to their bus services. Some of the success stories include the following.

- In **Leicestershire** a new Quality Bus Corridor improvement between Leicester, Loughborough and Shepshed attracted 26 per cent more passengers in its first year. The Star Trak partnership between Leicester City Council, Leicestershire County Council, Arriva Midlands, First, Kinchbus and Trent Barton provides real-time bus information for over 30 routes at bus stops, on the internet or by text message to a mobile phone.

- In **Cambridge** the county council, in partnership with the city council and bus operators, has implemented measures to produce significant increases in patronage. Successful corridor improvements, incorporating stretches of bus priority linked to park and ride sites, and traffic restraint measures in the city centre, for example rising bollards, helped to produce an overall 7 per cent increase in patronage last year.

- In **Brighton and Hove** partnership between the local authority and Brighton & Hove Buses has seen a wide range of measures to improve services. These include the introduction of CCTV, a simplified flat fare system and a colour-coded network of core routes with frequent services. These have
Where we want to be

5.6 We need to make better use of buses to help reduce congestion and tackle social exclusion. Buses need to be attractive enough for motorists to choose them over the car for some trips. And they also need to provide mobility for people who do not have access to other forms of transport. Our bus services must be:

- **punctual** – which means giving buses priority in congested locations and using more pre-paid ticketing to speed boarding;
- **good value** – for the traveller and the taxpayer;
- **frequent and reliable** – with up-to-date travel information that is easy to obtain;
- **seamless** – with good integration of bus services and other travel networks;

been supported by infrastructure improvements including bus priority and new shelters. A joint council/operator vehicle location scheme provides bus priority at traffic signals and information for real-time passenger information displays. These and other measures have provided a momentum that has seen bus use in the city grow by 50 per cent over the last 10 years.

- **In Lincolnshire** the county council has made impressive use of Rural Bus Challenge and Rural Bus Subsidy Grant, to establish the InterConnect network of inter-urban services. These are linked to flexible feeder services giving the more remote rural communities across the county access to Lincoln and the market towns. Patronage increases across the different InterConnect corridors range from 40 to 140 per cent over a two to four year period.

- **In Telford and Wrekin** the local authority, in partnership with the local bus operator, effectively re-designed the local bus network to meet the needs of the travelling public. The Wrekin Connect services link dispersed rural communities with the urban network. Taken together, these measures have helped to boost bus usage across the borough by 14 per cent since 1999.

- **In Oxfordshire** a taxi-bus servicing the railway station in Bicester was introduced in 2002. The need for this service stemmed from the problems of restricted parking at Bicester North station and conventional bus services’ lack of integration with the rail network timetable. It features eight routes, with one vehicle on each, serving four urban housing estates and four surrounding villages. Covering both rural and urban areas, the urban service carries nearly 1,100 passengers a week and the rural one just over 210. In the first 18 months there was a 250 per cent increase in passengers.
● **safe** – both when travelling on the bus and when walking to and from the bus stop; and

● **clean, comfortable and attractive** – with well-designed and maintained buses.

**5.7** Improved bus services must be at the heart of Local Transport Plans designed to improve access to jobs and services, particularly for those most in need. They will be key to reducing congestion and pollution and are safer than travelling by car. In some urban areas we want to see radical improvements in bus services coupled with measures to reduce congestion, such as congestion charging. And buses should be seen as an alternative to rail services in some areas.

### What we have achieved

**5.8** Outside London bus services are largely provided by the private sector with operators able to provide competing services to meet demand in an area. We have provided significant increases in funding over recent years for improvements in services and for local authorities to provide infrastructure such as bus lanes and other bus priority schemes. Local authorities delivered over 300 bus schemes in 2002-03.

**5.9** In London, the public sector has control over the level of bus services provided. Transport for London (TfL), reporting to the Mayor, purchases services from commercial operators, having specified the fares and service levels it wishes to provide. TfL takes the revenue risk, plans the routes, and specifies and monitors service quality. It is also responsible for ticketing and information. Every year 20 per cent of the whole bus network is re-tendered, with around a half of the network subject to some level of review each year.

**5.10** The Mayor has chosen to subsidise bus fares and to provide higher frequencies and 24 hour services, delivering a 30 per cent increase in patronage since 2000. However, enhanced services and real-term fare reductions have come at a cost. The net operating costs of London's buses have risen from £88 million in 2000-01 to £562 million in 2003-04, and the public subsidy per bus journey in London is higher than elsewhere.

**5.11** Across the whole of the country:

- the Bus Partnership Forum is bringing bus operators and transport authorities together to share best practice and build productive working relationships. Initiatives include limiting timetable changes to increase stability, helping operators produce joint ticketing and taking forward new ways of improving punctuality;

- bus operators have invested in new vehicles, in particular new low-floor buses, supported by Government funding through the Bus Service Operators Grant. Some 29 per cent of full-size buses are now accessible to wheelchair users, and all new regulated buses have to meet minimum accessibility requirements;

- we are promoting the development and uptake of clean, fuel-efficient buses;
40 per cent of the English national fleet now has real-time information equipment, helping operators to run reliable services. The technology is also increasingly being used to tell passengers when the next bus will arrive; and

- we are supporting the development of national standards for smartcards. These can simplify ticketing, allowing passengers to use one smartcard on different buses, trams and trains.

**INTER-URBAN COACHES**

Just as buses are central to an integrated transport strategy locally, coaches make a vital contribution to travel between towns and cities. The coach is an increasingly feasible option for commuters as well as an affordable longer distance choice for many people who would not otherwise be able to take days out, visit friends or take holidays.

Since deregulation in 1980, decisions on matters such as the extent of services, routes covered and fare levels have been a matter for the companies themselves. This allows them to respond to passenger demand. The resulting flexibility means that coaches can compete effectively with rail, giving passengers a cheaper though often more time-consuming option for inter-urban travel.

This is especially the case when coaches are able to provide a convenient link between city centres or airports where rail provision is limited. We have asked the South East region to look at pilot proposals for the introduction of inter-urban coach services. We have also proposed that they continue to encourage ways of giving greater priority to coaches on the national road network following the successful introduction of a dedicated lane on the M4 Spur to Heathrow. Through the Local Transport Plan process we are encouraging transport providers to improve interchanges, including coach stations and terminals.

We have also provided grant funding for operators to offer half-fare concessions to older and disabled passengers on coach services. Over two million journeys were made under the scheme in its first year.

**What we are going to do next**

5.12 We must realise the full potential of buses to improve local transport provision in towns, cities and rural areas across the country. The Government’s role is to provide the right framework for local transport authorities and operators to deliver better services. Working within this framework, authorities must adopt the right approach for local circumstances.

5.13 Most areas will be best served by continuing with the current partnership arrangements but we want some local authorities to consider more radical options. We want to encourage greater scope for local transport authorities to determine
routes, fares, quality standards and frequency of services in specified circumstances as part of an integrated transport plan. Our plans to develop the potential of Quality Contracts involve:

- supporting authorities that want to improve bus services alongside congestion reducing measures such as congestion charging schemes. We will use the Transport Innovation Fund to support cities that wish to implement a combined package of bus enhancement measures, probably through a Quality Contract, and measures to reduce congestion;

- providing an easier route to Quality Contracts for those Passenger Transport Authorities prepared to consider using buses instead of under-used rail services where this is value for money; and

- using a power in the Transport Act 2000 to reduce the minimum period between making and implementing a scheme from the current 21 months to six months for all local authorities considering a Quality Contract.

**Better partnership**

5.14 Constructive partnership working between local authorities and bus companies has made a real difference, leading to innovation, higher investment and better services in a number of areas. We are confident that partnership can deliver attractive bus services in many more places if those involved rise to the challenge. We plan to develop guidance on Statutory Quality Partnerships based on the experience of the first schemes.

5.15 We also intend to make the existing legislative framework better by:

- enabling Passenger Transport Executives to purchase buses for lease to operators, as other local transport authorities already can; and

- ensuring the enforcement of punctuality and fair competition do not unintentionally work against the interests of passengers. This will involve working with the Traffic Commissioners and the Office of Fair Trading.

5.16 We will ensure the dissemination of best practice across local authorities currently engaged in socially necessary tendering and for future Quality Contracts by developing and rolling out a procurement best practice framework. This will help local authorities to procure the most efficient and effective bus services and achieve maximum value for money.
QUALITY CONTRACTS AND THE BUS SUBSIDY REVIEW

Quality Contracts, introduced in the Transport Act 2000, allow local transport authorities to determine the routes, fares, quality standards and frequency of bus services in specified areas, where it is the only practicable way for them to implement their bus strategies. They could be suitable as part of a strategy that includes rail replacement and measures to reduce congestion. We will issue guidance to help local authorities and bus operators assess whether Quality Contracts are appropriate in their area. We have already issued a draft of this guidance for consultation.

In addition, following a previous consultation, we intend to streamline the statutory procedure by reducing the minimum period between making and implementing a scheme from the current 21 months to six months. Our guidance will make clear that use of the minimum period will only be appropriate for schemes with a limited impact on bus operators.

The Bus Service Operators’ Grant (BSOG) is currently paid to all operators of local bus services available to the general public. It reimburses most of the fuel duty paid by operators (100 per cent for new cleaner fuels). We have considered a number of options for replacing or modifying BSOG, such as relating subsidies to the number of passengers carried or to the distance travelled. We concluded that the benefits to be gained from any change are not certain enough to justify the costs and disruption at a time when we want operators to focus all their energy on improving services for passengers.

For those routes that are procured under a Quality Contract, we shall no longer pay BSOG, but instead transfer a parallel sum to the local authority for procurement of bus services. We shall also consult Transport for London on implementing this change for the existing franchised service in London.

We will review the case for a further round of funding for Kickstart projects, aimed at pump-priming patronage growth, in light of progress with the 18 pilots already being funded. We will retain Rural Bus Subsidy Grant beyond April 2006 to give continuing support to local authorities in promoting rural accessibility. We do not propose any changes to concessionary fares entitlement but will look at streamlining the administration of reimbursement to bus operators, so as to reduce bureaucracy.
Bus and rail

5.17 We intend to give Passenger Transport Authorities the ability to choose whether to channel subsidy towards rail or other forms of public transport. In some cases, buses might provide both a better service and better value for money.

5.18 We recognise that Passenger Transport Authorities may not be willing to consider this unless they can be certain that bus routes, timings and fares will meet passenger needs and work well with the national timetable. We will amend the Transport Act 2000 to make it easier for Passenger Transport Authorities to introduce Quality Contracts as part of a strategy that includes modification of rail services.

5.19 Passenger Transport Authorities will be able to decide whether to take greater control of their bus routes and associated budgets by deciding which rail routes are best value and which would be more efficiently replaced by bus services.

Cities moving ahead

5.20 Enhanced bus services can make towns and cities better places to live and better places to travel. Local authorities already have powers under the Transport Act 2000 to introduce congestion charging and other forms of car restraint such as workplace parking levies. The Act also provides for Statutory Quality Partnerships and Quality Contracts to improve bus services. We want local authorities to use these powers to improve bus services in their area as part of a coherent overall transport strategy.

5.21 To support local authorities in making these choices we will consider providing additional funds through the Transport Innovation Fund for those who wish to design and implement bold projects that combine:

- radically enhanced bus services; and
- plans to tackle congestion through measures such as congestion charging schemes.

5.22 Where a scheme includes a Quality Contract, the local authority needs to demonstrate that this is the only practical way of delivering its bus strategy. An authority wishing to implement measures to reduce congestion without reducing accessibility may need a Quality Contract in order to guarantee a network of affordable, frequent, bus services. We shall amend our guidance on Quality Contracts to reflect this.
5.23 Passenger Transport Authorities are responsible for providing public transport, including buses, in some of the most congested urban areas outside London. Yet they do not have highway authority powers. Under the current Traffic Management Bill local authorities will need to consider how best to involve Passenger Transport Authorities to ensure the most efficient use of the network, both for the bus services and for other road users. We will emphasise in guidance the importance of metropolitan district councils working with Passenger Transport Authorities to give effect to their bus strategies. We shall keep the impact of this guidance under review. If necessary, we shall be prepared to consider other ways of giving Passenger Transport Authorities a greater say over facilities for buses on specified core routes within the metropolitan areas.

Demand-responsive transport and services in rural areas

5.24 Local bus services can be expensive to run, particularly during evenings and weekends, and it is often not possible to operate rural and off-peak services on a profit-making basis. Local authorities can choose to subsidise services that are required for social inclusion or accessibility reasons if they cannot be provided on a commercial basis, by providing them under contract.

5.25 More flexible, demand-responsive services can provide the same, or better, levels of service while using fewer vehicles and drivers. They can provide more personalised travel, which can be ‘door to door’, and they do not need to run when there is no demand. The term ‘demand-responsive’ covers a wide range of different services, from scheduled bus services that can detour from their regular route to pick up people who have phoned in advance, to ‘many to many’ services which have no scheduled stopping points at all. It can involve services for specific groups, such as dial-a-ride services for older or disabled people.

5.26 To support the establishment of these services we have:

- issued guidance\(^1\) which sets out what the current legislation allows, provides advice on how to register a service and gives examples of good practice;
- introduced changes to the legislation in February this year to make it easier to register a service with routes and timing that vary with demand, making it possible, for the first time, to register local bus services that are pre-booked and offer a door to door service. Thirty demand responsive services have been registered since the new regulations were introduced;
- made demand-responsive services eligible for BSOG and extended the Rural Bus Subsidy Grant, which helps improve accessibility in rural areas, to include demand responsive and taxi-based services; and
- increased local authorities’ and operators’ awareness of these schemes through road shows around the country.

5.27 We will continue to encourage local authorities and operators to make use of demand responsive schemes in areas not well-served by conventional bus services. Some authorities have achieved real benefits in rural areas through bringing education, health and social services transport together with scheduled and community services. We will review the regulatory framework and continue to work across government to ensure that the community transport sector can contribute more in future.

London

5.28 Buses will continue to play a key role in London’s complex public transport mix. Transport for London (TfL) has a number of initiatives planned or underway, including:

- continued investment in bus priority measures;
- the use of smart cards to facilitate cashless buses; and
- bus transit systems with new articulated buses and a considerable proportion of segregated bus lanes.

5.29 It will of course remain for the Mayor to decide on investment levels and fares, in the light of his available resources.

BUSES IN LONDON

London benefits from one of the most extensive urban bus networks in the world – over 6,875 buses carrying up to 5.9 million passengers on over 700 routes on weekdays. London accounts for nearly 40 per cent of all bus use in England. The number of passengers is at its highest level since 1969 with over 1.7 billion journeys in 2003-04.

Bus use in London has increased by 30 per cent since 2000, and is up by 11 per cent in the last year alone. There has been an 18 per cent increase in the average number of passengers per bus over the last four years.

London buses are:

- more reliable, with excess waiting times at bus stops down 29 per cent since 2000;
- more accessible – 89 per cent of the bus fleet is now accessible to modern wheelchairs, up from 35 per cent in 2000; and
- safer – 60 per cent of the bus fleet has CCTV cameras installed.

TfL was able to procure additional bus services for central London rapidly prior to the introduction of the congestion charge. The charge has reduced road congestion by 32 per cent, resulting in improved bus performance and increased passenger numbers.
Conclusion

5.30 We are reversing the long decline in bus patronage. In the right circumstances, with the necessary commitment and support, bus use can be increased dramatically, with consequent reductions in congestion and social exclusion. In our new strategy buses will play a bigger role in tackling congestion in urban areas, as well as complementing or replacing rail journeys where Passenger Transport Authorities judge they offer best value for money.

5.31 For those authorities who develop bold schemes to deliver these objectives, we are encouraging the use of Quality Contracts. For less densely populated areas our strategy rests on accessibility planning and flexibility. Overall, by encouraging partnership, providing financial support and the right regulatory framework, we will enable buses to play a much bigger part in an improved transport system.
Walking and cycling: 
a positive choice
Walking and cycling: a positive choice

Walking and cycling offer a healthy and enjoyable alternative, particularly for short trips. We want to encourage more people to choose to walk and cycle more often.

The challenge

6.1 Over the last decade the average distance travelled both on foot and by bike has remained fairly constant. There is huge potential for levels of walking and cycling to increase. More than 40 per cent of trips are under two miles and a quarter of car journeys are less than two miles. While there will always be some short trips for which a car is the most convenient choice (carrying heavy shopping, for example), many of these short journeys could be done on foot or by bike.

6.2 We know that concerns about safety deter many people from choosing to cycle or walk. We want to build on the success of our traffic management and other road safety programmes so that people are safer, and feel safer, whether on a bike or on foot. We also need to make sure that the quality of our walking environment is reassuring and attractive, especially for elderly and other mobility impaired groups.

Where we want to be

6.3 Our aim for the next 20 to 30 years is to increase walking and cycling. We want to make it a more convenient, attractive and realistic choice for many more short journeys, especially those to work and school. Because being active is especially important for children, we want to train them to walk and cycle in safety and confidence. This will:

- help to reduce car use and help to tackle social inclusion, making towns and cities safer and more pleasant places to live;
- help to reduce congestion and improve air quality; and
increase levels of physical activity and improve public health. Moderate physical activity such as walking and cycling helps reduce obesity, heart disease, stroke, cancer and diabetes.

What we have achieved

6.4 The funding we have provided for local authorities has paid for thousands of small-scale schemes to encourage walking and cycling, such as crossings, pedestrian areas, cycle lanes or advanced stop signs. It has also funded schemes to tackle road safety hazards which were discouraging people from walking or cycling. For example, local authorities reported that they delivered more than 6,000 kilometres of new cycle routes between 2001–02 and 2003–04.

6.5 But assessments have confirmed that the quality of facilities has been uneven and promotion of them generally poor. We have identified gaps in provision, and targeted the local action in areas such as marketing, facilities and land use planning.

6.6 In June 2004, we published Walking and Cycling: an action plan, a collection of practical actions and good practice studies to support and encourage more walking and cycling. There are many examples of towns, schools, voluntary organisations and businesses that have used different combinations of facilities, marketing and promotion to achieve higher levels of walking and cycling.

What we are going to do next

6.7 We need to ensure that we get the best out of our investment in walking and cycling through a combination of local action planning, strong marketing, sharing good practice and national demonstration projects. We will do this by:

● moving away from the ‘one size fits all’ national target and towards working closely with individual local authorities to put in place sharper, more focused, local plans and targets for cycling and walking;

● working with the voluntary sector to maximise their contribution to increasing walking and cycling levels;

● helping to fund demonstration projects to illustrate how much can be achieved through the energetic marketing of walking, cycling and public transport to those groups that have been identified as most likely to benefit from alternative travel choices;

● working on an extensive programme of research and promotion to improve street design, which will lead to better designed local roads, with the focus on meeting the needs of local people and creating a more attractive walking environment in both residential and shopping areas. This will include encouraging local authorities to review priorities and reallocate road space to benefit pedestrians, and promoting Home Zones, which are residential streets designed primarily for the local community rather than for traffic. By April 2006 we will have directly funded more than 50 Home Zones around England;
encouraging children to walk and cycle through school travel plans, which we will roll out to every school in England by 2010. We are providing £40 million for improvements in facilities at schools, including bike racks, lockers and showers, and we will support the piloting of ‘Bike It’, a scheme intended to accelerate the uptake of cycling and create a culture of cycling in schools through training, bike parking and safer routes;

● working with others to link the existing National Cycle Network to schools to provide safer routes; and

● improving safety for children as pedestrians, with initiatives such as the Kerbcraft project, which trains volunteers from disadvantaged communities to teach children aged five to seven practical roadside skills.

6.8 We have selected three towns to take part in a £10 million initiative to assess and demonstrate the potential to transform levels of walking and cycling, as well as bus use. Over the next five years Worcester, Darlington, and Peterborough will be putting in place new facilities for walking and cycling, improved public information, as well as travel planning and behavioural change programmes. The aim is to achieve radical increases in levels of walking, cycling, and public transport use across all three towns. Each believes that it can reduce traffic by between 7.5 per cent and 10 per cent over five years, with many of these journeys transferring to foot or bike. We will share the lessons from this with other transport authorities.

Conclusion

6.9 The Government is committed to encouraging more people to choose to walk and cycle more often. The strategy outlined here will give transport authorities the funding and information that they need to deliver real improvements.
Aviation and shipping: delivering sustainable growth
Aviation and shipping: delivering sustainable growth

Aviation and shipping provide a vital connection to the wider world for both passengers and freight, as well as complementing land-based transport within the UK. They raise key strategic challenges in their own right, but also have a direct impact on policies for our other transport networks. We want to support the continued success of the UK in the global economy by facilitating the free movement of people and goods in and out of the country by air or sea, while minimising the effects on the communities around our major ports and airports and on the environment.

The challenge

Aviation

7.1 Aviation is an increasingly important form of transport, both for international travel and for long-distance journeys within the UK. As with other forms of transport, it is economic prosperity that is the primary driver of increasing demand. Advances in technology, competition and cost efficiencies have reinforced this trend. This has resulted in a five-fold increase in air travel over the last 30 years, with half the population now flying at least once a year.

7.2 This substantial growth in air travel has increased accessibility and opportunities for many people and is important to our economic growth, both nationally and in the regions. Demand is expected to continue growing – to between two and three times current levels over the next 30 years. The challenge is to balance the benefits – for people and the economy – of providing for this growing demand against the environmental impacts, both local and global.

7.3 The availability of sufficient airport capacity has the potential to become an important constraint on future growth across the UK without adequate and timely investment. Many airports in the UK are becoming increasingly congested as they attempt to cope with rising passenger numbers. In some cases, the capacity of terminals and runways is at, or near, saturation point.

7.4 The speed of delivery that air freight can offer is an increasingly important factor for many modern businesses, especially where just-in-time practices and high value commodities are concerned. The Air Transport White Paper expressed the Government’s wish to accommodate the anticipated growth in the demand for air
freight, subject to the satisfactory resolution of environmental concerns, especially in respect of night noise. Major airports such as Heathrow, Gatwick and Manchester will be at the forefront of growth in the “bellyhold” market. Airports such as Stansted, Edinburgh and particularly Nottingham East Midlands are also likely to attract significant volumes of freight-only aircraft.

7.5 The pressure for additional airport capacity needs to be balanced with the environmental impacts of air travel and the associated infrastructure needed to support it.

Shipping

7.6 Some 95 per cent by tonnage of the UK’s international trade still travels by sea. Our geography, as an island amidst major shipping routes, coupled with our maritime history, put us in a strong position amongst world shipping nations. But the UK has to work hard to maintain its prominent role.

7.7 Shipping’s strengths are in freight rather than in passenger travel. The passenger market is declining, even allowing for growth in the cruise sector, but total freight tonnage at UK ports has increased by 13 per cent in the past decade. The greatest growth is in container traffic – up 60 per cent over the past decade. And economies of scale, in both the ships themselves and in making best use of onward rail transport, mean that this traffic is increasingly concentrated. Some 75 per cent moves through just four ports, all in south-eastern England. It is here that the pressure on surface networks is also greatest. As in aviation, we face the challenge of responding to the pressures on port capacity, taking account of both the environmental impacts and the costs to UK business if direct deep-sea container services are lost to continental ports. Where there is a clear need we will support sustainable port development.

Where we want to be

7.8 We want to contribute to regional and national prosperity by facilitating the free movement of people and goods in and out of the country by air or sea. This will mean maximising the benefits of growth in aviation and shipping while responding to the challenges that this presents. Our starting point is to make best use of our existing airports and ports capacity. Where new capacity is needed we will aim to minimise the effects on the communities around our major airports and ports and on the environment.
Flows of tonnage through major ports in Great Britain, 2003

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What we have achieved

Aviation

7.9  *The Future of Air Transport*, published in December 2003, endorses a balanced approach. It recognises the importance of aviation to our national and regional economies, and seeks to reduce or minimise the impacts of airports on those who live nearby and on the natural environment. And it sets a goal of ensuring that, over time, aviation pays its external costs. It does not itself authorise or preclude any particular development but sets out a policy framework against which interested parties can plan ahead and which will inform and guide decisions on future planning applications.

Shipping

7.10  Shipping is a global industry. We focus on managing and mitigating the risks from shipping through co-operation at three levels: with our immediate neighbours in north west Europe, with our European Union partners more widely, and most importantly, in the International Maritime Organisation. Regulation led by governments only goes so far, so we actively engage with the industry so that it leads in raising standards. Our programmes for Quality Shipping and delivering the highest security standards have further enhanced the reputation of UK shipping. We have been particularly successful in boosting the UK-registered fleet. Our more business-friendly approach, including the introduction of the tonnage tax in 2000, has led to a trebling in size of the fleet since 1997.

7.11  The market has already brought forward a number of proposals for container port expansion which are being considered through the planning system in the coming year. We have already determined that the proposed development at Dibden Bay, near Southampton, should not proceed, and the potential environmental impact was an important factor in that decision.
7.12 Should other ports be given permission to expand, we expect promoters to contribute to the costs of surface access improvements required to service new developments.

What we are going to do next

Aviation

7.13 The Air Transport White Paper concludes that the first priority is to make best possible use of the existing runways. It also supports the provision of two new runways in the South East in the period to 2030 – the first at Stansted (2011-12) and the second at Heathrow (2015-20) provided strict environmental limits can be met. Land at Gatwick will be safeguarded for a new runway in case conditions attached to a new Heathrow runway cannot be met.

7.14 The White Paper also supports development at other airports including a new runway at Birmingham, around 2016, subject to appropriate environmental controls. It supports safeguarding land at Edinburgh for a new runway around 2020. And it supports additional terminal and airside development to make maximum use of existing runway infrastructure at a number of the larger regional airports, and additional terminal capacity at many of them.

7.15 We expect the airport operator to move quickly to develop the detailed design for a new runway and associated development at Stansted, working closely with local communities, airport users and all relevant agencies. At Heathrow we are working with stakeholders to consider how the conditions for further development (limits on air quality and noise and improvements in public transport access) can be met in a way that makes best use of the airport’s two existing runways and enables the addition of a third runway as soon as practicable after a new runway at Stansted.

Environment

7.16 We will work to ensure that aviation meets its external costs, including its environmental and health costs. The aviation industry has a responsibility to reduce its impacts under the ‘polluter pays’ principle. The biggest impact in monetary terms is aviation’s contribution to climate change and a solution to that end is set out in the Air Transport White Paper. We expect the aviation industry and international bodies to address the problem seriously, responding creatively to the common challenge of global warming.
Passengers at major airports in Great Britain, 2003

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7.17 Well-designed economic incentives are an important mechanism for delivering the Government’s environmental objectives, including those for aviation. Potential economic instruments include environmental charges, taxes and trading schemes. These measures use price signals to drive improvements, and can help to encourage the development and use of environmentally beneficial technology. Economic instruments can help ensure that aviation bears the external costs it imposes on society.¹ Any such instruments must be legally robust and deliver real environmental improvements.

7.18 There is a range of other environmental factors associated with aviation which are more difficult to quantify in monetary terms. The White Paper sets out specific proposals for the development of new economic instruments. Measures available include noise and emissions-related landing charges, ‘en route’ charges to address specific pollutants, and emissions trading.

7.19 Emissions trading is emerging as a key instrument in the drive to reduce greenhouse gas emissions. It gives companies the flexibility to meet emission reduction targets by reducing emissions or by buying allowances from the market, thereby combining environmental effectiveness with economic efficiency. It delivers real environmental benefits. We want to see aviation included in the European Union emissions trading scheme in 2008 or as soon as possible thereafter. We will make progress towards this a priority during our presidency of the European Union in 2005. We also reserve the right to act unilaterally or bilaterally with like-minded partners if progress towards tackling aviation greenhouse gas emissions at an international level proves too slow. Finally, we will monitor progress in bringing forward blight and noise mitigation schemes at airports.

Surface access

7.20 The Government made clear in the Air Transport White Paper that airports are part of our national infrastructure and need to be planned and developed in that context. Transport delivery agencies, regional bodies, local authorities and the devolved administrations will need to take account of likely future airport development when they are drawing up their transport plans. However, we expect airport operators to share our goal of increasing the proportion of passengers travelling to airports by public transport. This can help reduce road congestion, air pollution and other environmental impacts. Operators will need to include adequate provision for surface access measures in their future proposals for airport expansion.

7.21 Further development of Stansted airport will be supported by improvements to the M25, M11 and A120 that have already been announced. Surface access to Heathrow, and in particular the scope for enhancing public transport, is an important component of the work to examine the prospects for expanding the airport whilst meeting environmental objectives.

¹ In March 2003, the Department for Transport and HM Treasury published a report Aviation and the Environment: using economic instruments which provided estimates of monetary values of external costs relating to climate change, local air quality and noise.
7.22 Elsewhere, airport operators will also be expected to work closely with the Department for Transport and its agencies, the devolved administrations, transport providers and relevant regional and local bodies to bring forward surface access improvements needed to support future development.

7.23 The White Paper sets out our approach to the contribution we expect airport operators to make to the costs of up-grading or enhancing road, rail or other transport networks and services to cope with additional passengers travelling to and from growing airports. Public funding for specific schemes will need to be considered on a case-by-case basis, having regard to the relevant value for money and broader spending priorities. But airport operators should engage with potential funding partners as soon as the schemes that are needed to take forward their development plans are clear.

Shipping and ports

7.24 Shipping strategy is inevitably heavily influenced by global market trends. We will make every effort – not least through maintaining and increasing our skills base – to ensure that our shipping industry remains a major player globally to support the success of the UK economy. The UK will continue to work proactively in the International Maritime Organisation (IMO) and the European Union for more targeted and effective regulation. We will maintain our lead role in pressing for the highest standards of security in ports and onboard ships.

7.25 We will facilitate the use of electronic aids to navigation, complementing traditional aids where necessary, and building on the General Lighthouse Authorities’ own vision statement for 2020. Increasing reliance on GPS has already led to major changes in the provision and operation of aids to navigation. Further new navigation systems are now coming on stream, such as Automatic Identification of Ships (AIS), and, by around 2010, Europe’s Galileo satellite navigation programme, in which the UK is committed to playing a full role.

7.26 We shall also encourage UK business to exploit opportunities for greater diversification in short-sea roll-on, roll-off (ro-ro) capacity, reducing the need for long connecting road or rail journeys. This will mean active involvement in European programmes for short-sea shipping, although we shall resist any public funding for shipping services as opposed to infrastructure.
Environment

7.27 Although shipping is often recognised as a sustainable and relatively environmentally friendly form of transport, it is important that efforts are made to reduce the negative impacts it can have on the environment. The UK has played an active part in developing measures to protect the maritime environment, in the forum of the IMO and within the European Community. These measures address a wide range of issues, including ballast water, anti-fouling coatings, atmospheric emissions and an international oil pollution compensation regime. We are currently writing the legislation that will enable the UK to ratify the agreement of annex VI of the MARPOL Convention, which will regulate emissions of sulphur oxides and nitrogen oxides from shipping.

Port development

7.28 By autumn 2005 we expect to have taken decisions on the outstanding proposals for major container port development. At that point we will take stock of how the ports industry is set to meet the country’s overall needs in the longer term. We will therefore review our policy framework to keep track of wider changes affecting ports and to ensure we continue to have the right basis for their sustainable development. The review will clarify the Government’s role in the ports sector, and address key issues such as:

- how we should respond to forecast global growth in shipping traffic by providing new port capacity;
- how the pressures on capacity are set to vary at the aggregate national level across key sub-sectors such as containers and ro-ro, and the ease with which such pressures might be addressed; and
- how to ensure that the road and rail improvements needed to serve future major port developments are brought on stream effectively.

7.29 We will also update the Project Appraisal Framework for Ports,2 published in 2003, in the light of experience so far.

Conclusion

7.30 The Government is committed to strong aviation and shipping industries playing their part in our economic prosperity while ensuring that the impact on the environment and local communities is minimised. This strategy will provide the framework within which this can be achieved.

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2 Project Appraisal Framework for Ports, Department for Transport, April 2003, available for download at www.dft.gov.uk
Freight:

moving goods more efficiently
Freight:

moving goods more efficiently

Efficient freight transport is essential to our economy and to our prosperity. In turn, economic growth increases demand for goods and therefore for their transportation – locally, nationally and internationally. Goods need to be moved freely, reliably and efficiently, while minimising the impact on safety, the environment and other transport users.

The challenge

8.1 With continuing economic growth, and a projected growth in both population and households, our demand for goods is likely to increase over the next 20 to 30 years. This will lead to increased demand for the movement of goods. Although the freight transport industry will continue to respond with more efficient ways of operating, the challenge will be to accommodate this demand in a way that is acceptable to society.
Where we want to be

8.2 The Government’s key aims for the freight industry are to facilitate the continuing development of a competitive and efficient freight sector, while reducing the impact that moving freight has on congestion and the environment.

8.3 We need reliable routes for moving goods to consumers and businesses. We need proportionate regulation and enforcement which protects society without stifling business, and a continuing partnership with industry to exploit the potential for more efficient logistics.

8.4 Where Government helps fund more sustainable transport practices, we need to ensure best value for money. We intend to start assessing modal shift programmes alongside other options, such as encouraging more efficient road-based operations. This could mean a change to the current allocation of resources between these programmes.

What we have achieved

8.5 Our policies have focused on:

- measures to tackle road congestion which benefit all road users (see Chapter 3);
- taxation policies that encourage more environmentally-friendly operations, such as lower vehicle excise duty for hauliers who meet higher emission standards;
- regulation where necessary to minimise safety and environmental risks from road freight transport in particular. Much of this regulation is set at the European level;
- Promoting best practice, training and other measures to help the transport industry improve its efficiency and reduce negative impacts;
- active engagement with the rail freight industry to promote freight on rail, supported by targeted investment;
8.6 These measures are establishing a sound framework within which the industry can improve the efficiency of its operations. British logistics companies are world leaders. Specific interventions, both nationally and through the European Union, have significantly improved the environmental performance of road freight transport, especially in relation to local pollutants. Our research and best practice programmes have identified many examples of good operational practice which not only provide cost savings for the businesses concerned but also offer safety and environmental benefits. And modal shift policies have succeeded in taking lorries off the roads.

What we are going to do next

8.7 For many years freight policy has tended to consider the individual forms of transport separately. We signalled a move away from this approach in our 1999 document Sustainable Distribution: a strategy, and will continue in that direction.

8.8 Businesses see freight transport as just one part of an overall logistics operation which also considers where goods are sourced and stored. Businesses have different logistics models and it is Government’s role to provide a policy which complements their decisions while minimising the negative impacts of freight movement on safety, the environment and congestion. The Government’s policies should not be guided by attachment to particular forms of transport, but by the approach that offers the best value for money to deliver the best outcomes for our economy, society and the environment.

8.9 Our strategy to achieve more sustainable distribution of goods comprises the following elements.

- Access to infrastructure – the measures described in Chapter 3 to benefit road users and improve journey reliability will help freight transport as well as private motorists. Rail freight operators will be given greater certainty about their rights on the existing network, and a group of key rail routes will be identified on which freight will enjoy and pay for more assured rights of access.

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National and international regulation – we will continue to regulate where necessary to minimise the impacts of road freight transport in particular on safety and the environment. In international negotiations we will seek to ensure that any new regulation is proportionate. We will also streamline domestic regulation, and will take forward our plans to introduce less bureaucratic arrangements for operator licensing.

Local and regional regulation – we will encourage local authorities to consider how their various regulatory powers that relate to freight transport (traffic and parking regulations, night-time bans, planning powers and the use of planning conditions) can be co-ordinated to make life easier for businesses while protecting the interests of local people. Freight policy also needs to be considered by regional bodies and we will encourage them to think strategically about freight, especially in the context of regional strategies on transport, housing and spatial development.

Enforcement – regulation needs to be enforced with fairness, transparency, proportionality and speed. We will take forward our proposals to introduce a graduated fixed-penalty scheme for road traffic infringements, and a deposit scheme to ensure offending overseas hauliers do not escape penalties as is often the case now. We will seek the necessary enabling powers when parliamentary time allows.

Best practice – we will continue our programme of best practice research and dissemination. This will cover all forms of freight transport but, as road transport dominates, the scope for efficiencies is clearly greatest here. In the past few years we have helped take best practice directly to operators. In the future we will look for this to be done on an increasingly commercial basis.

Modal-shift programmes – rail and water. We will continue to encourage freight traffic to be shifted from road to rail or water where this makes sense, and where appropriate we will offer financial support.

Taxation of the haulage industry – we are pressing ahead to deliver lorry road user charging by 2007-08. A new distance-based charge which will apply to all lorries using UK roads. This will ensure that all hauliers make a fair contribution towards the costs of using the UK road network.
Technologies such as satellite tracking and Radio Frequency Identification chips provide information about the location of the vehicle or its cargo. This allows freight operators to be more efficient – reducing mileage, operational costs and fuel consumption. The industry will drive the uptake of these technologies, but we will carry out research and promote best practice where appropriate. And we will be examining the scope for freely accessible electronic information about the road network, such as speed limits or height and width restrictions, to allow better journey planning and safer driving.

Getting best value for money

8.10 Through our financial interventions we seek to mitigate the impact of freight transport on safety, congestion and the environment. In the past we have run separate programmes to support transfer of freight traffic to rail and water, and to support more efficient operating practices for road haulage. These are all different ways of achieving similar objectives. For example, lorry miles can be saved by transferring traffic to other modes and by using lorry fleets more efficiently. Pollution can be reduced by moving goods by rail or water, and by training lorry drivers to drive in a more fuel-efficient way.

8.11 We need to use limited resources to best effect. We will therefore be moving towards prioritisation of funds from these programmes according to the benefits of individual projects. We are developing a range of freight indicators to ensure that our policies are working. This will help to establish the impact of our policies and to identify where further action may be justified.

Conclusion

8.12 The Government is committed to supporting industry by helping to ensure that goods can be moved freely, reliably and efficiently. The strategy outlined in this document will provide a framework within which the freight industry can continue to underpin our economic prosperity.
Making choices locally and regionally
Making choices locally and regionally

We have choices nationally, regionally and locally when we make decisions about the planning, delivery and management of our transport networks. We need to make smarter choices, ensuring that they are made at the right level and with the participation of other stakeholders.

The challenge

9.1 Decisions taken at the national, regional or local level, such as investing in a bypass, supporting a rail route or improving bus services, influence the choices that people can make on how and when to travel, where to live and work, and the markets that businesses operate in. The challenge is to ensure that transport decisions are not viewed in isolation. They need to be:

- clearly linked to other decisions, such as the location of new housing and of new employment sites;
- integrated between different forms of transport;
- informed by the best possible evidence; and
- prioritised and targeted to where investment will have the greatest benefit.

9.2 We need to make the right choices at the appropriate level. As far as possible, decisions should be made at the local level, close to those whose lives they will affect. But this needs to be balanced with the impact at the regional and national level, and with the benefits that can be gained from taking advantage of economies of scale.

9.3 Underpinning all of this is the need to get best value for taxpayers and fare-payers. There will be choices to be made on both the level of investment and amount of public subsidy which are desirable and affordable, and on where those resources should be targeted.
EXPLOITING THE POTENTIAL OF NEW TECHNOLOGY

Over the last century technological innovations have revolutionised the way that people travel. These changes will continue over the coming decades. Though private industry will provide most of these changes, Government does have an important role to play, and the choices we make will influence the technologies that are developed and used. Our strategy is to exploit technology by acting:

- as **enabler** – by promoting innovation. As a country, we are well placed to be at the forefront of transport technology innovation;
- as **promoter** – by aligning policy and technology development, driving technology improvements through policy changes – for instance, improving vehicle fuels through standard setting; and
- as **researcher** – by anticipating the future, developing our understanding of long term risk to inform policy making and procurement, and building better information sources.

Where we want to be

9.4 We will improve the current arrangements for making decisions on transport. Central to this will be giving regional and local bodies more influence to ensure that transport services can be tailored to local needs and preferences. Currently their influence is largely limited to investments by local authorities. This will be progressively extended, initially to regional priorities for some strategic road schemes, and potentially to decisions on regional railways.

What we have achieved

9.5 We have already devolved responsibility for many transport decisions.

9.6 In London we have devolved responsibility to the Mayor. This allows the Mayor to exploit economies of scale, prioritise major investment decisions across different modes of transport – without reference to central government – and move towards integrated ticketing, pricing and travel information.
DEVOLVED DECISION MAKING IN LONDON

The Mayor has extensive responsibility for transport in London, including both strategic policy and day to day management. Under the Greater London Authority Act 1999, the Mayor is required to develop and implement a transport strategy for London, in consultation with the Greater London Assembly and the 33 London boroughs. Through Transport for London (TfL) the Mayor has direct responsibility for London Underground, buses, taxis, the strategic road network, light rail and river services. Boroughs remain responsible for local roads. Rail services are currently outside the Mayor’s direct control but the Government wants to see greater responsibility for commuter rail delegated to the Mayor.

Transport for London came together from 15 separate predecessor organisations and has allowed the creation of an integrated transport strategy for London.

TfL has an annual budget of nearly £5 billion derived from fare revenue, central government grants, congestion charge income and council tax precept. The Government’s grant to TfL doubled between 2000–01 and 2004–05 to over £2 billion a year. Improvements delivered as a result of the extra resources and better planning include:

- a 31 per cent increase in bus patronage since 1999 – the highest number since the 1960s;
- bus mileage higher than at any time since 1959 and over 2,600 new buses in service;
- stable long term funding for the Tube through the PPP, which over the next 16 years will result in improved journey times, a more reliable service and cleaner and more attractive stations and trains;
- a world leading congestion charge scheme which has reduced traffic in central London by 16 per cent and congestion by 32 per cent – made possible by a significant increase in bus capacity;
- smart ticketing (Oyster Card) which allows travellers a choice of payment options for journeys by public transport; and
- the London Traffic Control Centre – which is manned by the police and TfL personnel, monitoring traffic and co-ordinating responses to congestion.

London is the only major city in the world to have achieved a shift away from car use. Over the last four years public transport usage has increased by more than 16 per cent, whereas car travel has decreased by 4 per cent.
Regional Spatial Strategies, which link together policies and priorities for housing, transport, the environment and economic regeneration, are being strengthened. We have worked closely with regional partners in identifying the key strategic investment required to deliver housing and employment growth in the Thames Gateway and other growth areas (see boxed text above).

The Government has already committed more than £600 million to transport projects in the Thames Gateway and over £2.1 billion in the other growth areas as well funding separately the Channel Tunnel Rail Link and the West Coast Main Line Upgrade, which will also benefit the growth areas. We have created a new Community Infrastructure Fund to provide an extra £200 million over the spending review period. This will support additional transport infrastructure specifically required to facilitate the housing plans in the sustainable communities growth areas. Outside this fund, further projects will be considered, alongside other priorities, as part of the Government’s usual process for considering transport schemes.

The Barker Review of housing supply recommend a further step change in the provision of housing, especially in areas of high demand. This would put home ownership back within reach of those with moderate incomes in areas of high demand and tackle a problem which could otherwise hinder macro-economic stability. The Government accepts the need for more provision, and is currently taking forward the issues raised in the report, including the implications for transport infrastructure.

### HOUSING GROWTH – THAMES GATEWAY AND THE OTHER GROWTH AREAS

The Government’s Sustainable Communities Plan, published in February 2003, set out our position on housing growth and the important role transport must play in facilitating sustainable growth. The plan identified the Thames Gateway and three other ‘growth areas’, Ashford, Milton Keynes-South Midlands and London-Stansted-Cambridge-Peterborough. Alongside London, these areas have the potential to provide an additional 200,000 homes above current planning targets.

1 Sustainable Communities: building for the future, Office of the Deputy Prime Minister, February 2003, available from the ODPM web site at www.communities.odpm.gov.uk

In our new guidance on Local Transport Plans we are asking local authorities to address the key issues of accessibility, congestion, road safety and air quality. Accessibility planning will be a key element of the next Local Transport Plans, helping to ensure that people, particularly those from disadvantaged groups and communities, are able to access the jobs and services that they need. This is not just about improving transport, but involves co-ordinating decisions on transport, land-use planning and service delivery to maximise accessibility.

We have also made significant progress in developing effective ways of assessing transport schemes\(^3\) (see box below).

### MAKING INFORMED DECISIONS – APPRAISING TRANSPORT SCHEMES

The New Approach to Appraisal (NATA) is a process that explores the potential for different solutions to transport problems. The choice of a preferred option takes into account a wide range of factors reflecting the Government’s five objectives for transport: environment, safety, economy, accessibility and integration. Results are summarised in an Appraisal Summary Table (AST) that is presented to Ministers to inform their decisions. We are continuously improving our appraisal methodology in the light of evidence to ensure that we measure social, environmental and economic impacts as accurately as possible. Further information on NATA can be found on the Department’s Transport Analysis Guidance web site at www.webtag.org.uk.

In addition to the monetised impacts, presented in a benefit/cost ratio (BCR), the AST also takes into account impacts which are difficult to present in monetary terms. The combination of both allows an assessment to be made of the proposal’s value for money (VfM).

As part of continuing work to maximise the effectiveness of investment in transport, we are developing and sharing our analysis of relative VfM in transport appraisal and decision making. The objective is to give scheme promoters and decision makers a shared understanding of the opportunity cost of different investment choices and the VfM considerations that will influence Ministerial decisions on public spending.

When allocating resources, Ministers have to prioritise. Value for money is an important consideration. However, it is only one of a number of key factors, including the appropriate balance of investment across the country, deliverability, and wider objectives.

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\(^3\) In addition, all transport plans and programmes are screened to see if the Strategic Environmental Assessment Directive 2001/42/EC applies or whether an alternative environmental assessment is appropriate.
What we are going to do next

Regional choices

9.11 The key at the regional and sub-regional level is to provide a financial framework that will help the regions come to informed views on strategic choices and investment priorities. Decisions about planning for new housing, large regeneration schemes, and the associated transport, need to look well beyond the short term. We will begin to provide indicative funding guidelines for beyond the Spending Review period of three years for components of Departmental programmes that support regional development.

9.12 Such guidelines will separately identify long term indicative budgets within key programmes, potentially including those relating to:

- Regional Development Agencies;
- housing; and
- transport of regional significance.

9.13 For transport, this might initially cover budgets for:

- the larger schemes taken forward by local authorities; and
- schemes on the strategic road network which are of principally regional or sub-regional importance rather than of national significance.

9.14 Consideration will also need to be given to extending the budgets to cover buses and regional railways.

9.15 Having established such guidelines, the Government would invite key regional and local stakeholders to help shape an integrated programme. This would support a far more rigorous assessment of the costs and benefits of different options in each region over the longer term.

9.16 Guideline budgets would be indicative and would not be a guarantee of funding. The regular Spending Reviews would remain the basis for budgeting. As the process developed, the Government would take account of regional and local stakeholder views at each subsequent Spending Review and reflect these in the disposition of funds across different elements of the transport programme.

9.17 It will be important to consider to what extent greater flexibility might be introduced into these budgets over time. The aim should be to move towards deriving bottom up targets reflecting regional choices. For example, such choices might include a decision in any one region to prioritise reductions in the levels of congestion on key routes, the numbers of new houses to be built, or economic growth.

9.18 We will be working up the details of such an approach. Subject to consultation, we intend to publish indicative guideline budgets for the English regions in Budget 2005.
Local choices

9.19 The Government is committed to continuing to fund local transport directly through block allocations to local authorities. In addition, we will establish a new Transport Innovation Fund to complement this approach by providing a contribution to projects and initiatives, across all forms of transport in England, that deliver significant wider productivity gains or which promote innovative approaches. We will consult on the operation of the new fund with a view to making initial allocations in the next three-year Spending Review, which is due to take place in 2006.

9.20 We have been working with local authorities to develop shared priorities for transport. These cover improving accessibility and public transport while reducing congestion, and improving air quality and safety. These each need to be seen as part of the wider local agendas to promote social inclusion, environmental protection and economic growth.

9.21 We will also be providing guideline allocations for smaller schemes to give local authorities a framework for their next local transport plans. These will be published in the autumn.

9.22 We have published more detailed guidance on the process and timetable for the next round of Local Transport Plans in parallel with this strategy.

Rail

9.23 The new rail structure will allow decisions on the provision of rail services to be taken at a more local level where that is appropriate. The Welsh Assembly Government will take on more direct responsibility for passenger services. The Scottish Executive will directly manage the ScotRail franchise, and may take an extended role with regards to infrastructure in Scotland. In England, Passenger Transport Authorities in the main metropolitan areas will be given the right to buy increased services, and flexibility to transfer funding between rail and other modes of transport. Transport for London will also have an increased role in specifying services in the capital. And finally, we will promote the role of Community Rail Partnerships in improving the management of local branch lines.
Departmental reform

9.24 To support the changes in policy and delivery outlined in this document the central Department for Transport will change as described below.

DEPARTMENTAL REFORM

The Department for Transport plans to make its headquarters smaller and more flexible to become more tightly focused on business priorities. It needs staff with the skills and experience for the job and with systems that ensure the right people are in the right place at the right time.

Staff skills and numbers

The Department currently plans to close about 10 per cent of posts in central London and expects to shed another 10 per cent in the medium term as a result of efficiency initiatives. Because of changes in the way technology is used, the profile will also change with relatively fewer support staff. A number of key senior professionals have been recruited into the central Department and professional capacity is being enhanced across the organisation.

Flexibility

Key to the future of the Department is a move away from traditional, fixed management structures at the centre. It needs to continue to get better at focussing on priorities and better at matching people, and the skills and experience they bring, to the tasks that need to be done. It will move much more towards flexible, project based working. A framework for deploying staff flexibly is being piloted with the intention of rolling it out in 2005.

Business planning and management

The Department’s business plan focuses on the delivery of key targets and objectives. Project and programme management techniques are being used increasingly to handle work in a structured way.

Conclusion

9.25 Central Government will improve arrangements for making its decisions on transport. Our strategy will strengthen this by giving regional and local stakeholders more influence, building on the principles emerging from the Government’s review of devolved decision making\(^4\). And we will ensure that decisions on transport are informed by the best possible evidence and that they are made alongside other decisions – such as the location of housing – at the national, regional and local level.

\(^4\) Devolving Decision Making: meeting the regional economic challenge: increasing regional and local flexibility, March 2004, HMT, ODPM, DTI.
Protecting the environment
The Millennium footbridge and cycleway linking Gateshead and Newcastle

The Millennium footbridge and cycleway linking Gateshead and Newcastle

Good transport is central to a prosperous economy, facilitating better access and greater mobility. But we must balance the increasing demand for travel against our goal of protecting the environment effectively and improving the quality of life for everyone – whether they are travelling or not.

The challenge

10.1 We have one of the richest and most diverse natural and built environments in the world. It makes a significant contribution in its own right to our national economy and to our quality of life. However, the negative impacts of transport on the environment affect all of us. These include emissions of greenhouse gases, air pollutants, noise, and damage to both the natural and built environments.
Dealing with the environmental pressures caused by the increasing demand for travel will mean striking the right balance between our environmental, economic, and social objectives now, and into the future. All three are key pillars of the UK’s Strategy for Sustainable Development.1

Climate change

Climate change is the most important challenge we face as a global community. The Energy White Paper2 reaffirmed our commitment to the Kyoto Protocol, and to our target to reduce UK greenhouse gas emissions by 12.5 per cent, from 1990 levels, by 2008-12. We remain committed to our own, more challenging, national goal of a 20 per cent reduction in emissions of the main greenhouse gas, carbon dioxide (CO₂), by 2010 and to putting the UK on a path to reduce total carbon dioxide emissions by some 60 per cent by 2050, with real progress by 2020.

Transport is currently responsible for about a quarter of total UK CO₂ emissions. This figure excludes international aviation as there is currently no international agreement on ways of allocating such emissions. In the short term, emissions of carbon from road transport are expected to grow by about 10 per cent from 2000 levels by 2010.3 This is because increased levels of traffic will offset improvements in fuel efficiency. Emissions from other sectors are due to fall in the same time period, so transport’s share of total emissions is likely to increase substantially. The trends change after 2010. Slower traffic growth and continued fuel efficiency improvements are expected to produce a fall in road traffic CO₂ emissions of around 5 per cent between 2010 and 2015, with further falls thereafter.

If UK aviation is defined as all domestic services plus all international departures from the UK4, then the aviation sector currently contributes about 5.5 per cent of the UK’s CO₂ emissions but, because of radiative forcing5, 11 per cent of total UK climate change impact. This raises transport’s current share of emissions to a third of total emissions. The future growth in air travel could mean that the aviation sector contributes about 33 per cent of total UK climate change impact by 20506, assuming all other sectors meet the targets set out in the Energy White Paper. For this reason, we are committed to ensuring that the aviation sector takes its share of responsibility for tackling this problem.

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1 The Strategy is currently being reviewed and a new UK Sustainable Development Strategy document is due for launch in spring 2005.
3 The surface transport figures come from DTI’s energy projections.
4 International aviation emissions do not currently count in the national inventories of greenhouse gas emissions as there is no international agreement yet on ways of allocating such emissions.
5 Radiative forcing results from the specific effects of aircraft emissions at altitude.
6 From DfT paper, Aviation and Global Warming which includes both domestic and international aviation. The forecasts are based on an assumption of three new runways in the South East and do not reflect any impact of economic instruments - hence represent a slight over-estimation.
10.4 Transport is also the source of emissions of some of the other gases that contribute to climate change. These include methane and nitrous oxide, present in exhaust emissions, and also gaseous emissions from refrigerants used in air conditioning systems in cars. These gases all have high capacities to increase global warming and we will also consider how these emissions can be further reduced.

Air quality

10.5 Transport can also have an impact on air quality. Over the last decade air quality has improved significantly and our projections to 2015 suggest that these trends will continue. However, the downward trend in emissions of two of the pollutants, nitrogen dioxide (NO$_2$) and particles (PM$_{10}$), is likely to level off and could start rising again after 2015 unless further action is taken. And there are parts of the UK where levels of NO$_2$ and PM$_{10}$ remain above the limits set by the EU and in our Air Quality Strategy for 2010. These limits reflect the Government’s aim to protect people’s health and the environment. Our policies will help us to achieve the required improvements in many of these areas, but there will be a small number where, on the basis of current policies, levels will still be exceeded by 2010. If future road and air traffic flows exceed expectations, or emission control technologies fail to deliver anticipated reductions, the challenge we face will increase.

Where we want to be

10.6 Vehicles must continue to get cleaner, quieter and less harmful to the environment. The progress made over the last decade shows what can be achieved. This needs to continue in the future. We will ensure that technological progress goes hand in hand with better planning, better management and smarter ways of using our transport network.

10.7 Good quality transport infrastructure should complement or enhance the character of its local area, as do the Second Severn Crossing and the Millennium Bridge linking Newcastle and Gateshead. Transport schemes, such as bypasses round towns and villages, should improve the quality of life for local communities but need to be designed in ways that offer environmental gains, reduce community severance and improve air quality wherever possible.

What we have achieved

10.8 We have made considerable progress in reducing harmful emissions from new road vehicles, through the European Union adopting higher standards of manufacture, and implementing our Powering Future Vehicles strategy (see box).
In recent years, the fuel efficiency of new cars in the UK has been improving by around 1 to 2 per cent a year. This is good for the motorist, and good for the environment. Voluntary Agreements between the European Commission and the automotive industry commit car manufacturers to improve fuel efficiency of new cars sold in the EU by 25 per cent between 1995 and 2008–09.

**POWERING FUTURE VEHICLES STRATEGY**

We launched the Powering Future Vehicles Strategy in July 2002. The objectives of the strategy are to:

- promote the development, introduction and uptake of clean, low carbon vehicles and fuels; and
- ensure the full involvement of the UK automotive industry in the new technologies.

A number of measures are in place to achieve these objectives, including:

- fiscal and grant incentives for consumer and business take-up of cleaner, more efficient vehicles and fuels; and
- research, development and demonstration funding for new technologies, including the Ultra Low Carbon Car Challenge to develop ultra-efficient family vehicles, capable of mass production, and the Low Carbon Bus Programme to prove the in-service viability of efficient bus technologies.

It also sets challenging Government targets that by 2012:

- 10 per cent of new cars sold in the UK will be low-carbon vehicles, defined as 100 or fewer grams of CO₂ per km at the tailpipe (compared with the current new car average of 178gm); and
- 600 new buses joining the fleet yearly (around 20 per cent) will also be low-carbon.

10.9 In recent years, the fuel efficiency of new cars in the UK has been improving by around 1 to 2 per cent a year. This is good for the motorist, and good for the environment. Voluntary Agreements between the European Commission and the automotive industry commit car manufacturers to improve fuel efficiency of new cars sold in the EU by 25 per cent between 1995 and 2008–09.

**UK average CO₂ emissions from new cars**
10.10 We have also introduced a package of financial and tax incentives that is delivering cleaner vehicles and fuels. Company car tax and vehicle excise duty have been reformed and linked to vehicle CO₂ emissions. And TransportEnergy Grants are available for consumers and businesses towards the purchase cost of vehicles and pollution-reduction equipment.

10.11 We have introduced fuel duty differentials to promote new, cleaner fuels. This includes a fuel duty incentive for biodiesel, now guaranteed for three years. Sales of biodiesel are already some two million litres per month. This currently represents a very small percentage of total fuel sales, but one which is set to increase significantly over the next few years. And the same incentive will apply to bioethanol from January 2005, helping to support the development of the UK biofuels market (see text box).

TOWARDS A UK STRATEGY FOR BIOFUELS – PUBLIC CONSULTATION

Biofuels are liquid transport fuels produced for the most part from plant material or recycled vegetable oils. Because the crops used to make the fuel take in CO₂ when they grow, biofuels can help reduce the transport sector’s contribution to climate change. They also help conserve our reserves of fossil fuels and contribute to diversity and security of energy supply. Biodiesel is already available in some parts of the UK as a 5 per cent blend with conventional diesel, which allows it to be used in all standard diesel vehicles. Bioethanol (a petrol substitute) may become available in the UK from 2005, as a result of the fuel duty incentives we have introduced.

We recently launched a consultation on the UK’s plans for supporting biofuels in the transport sector, including our proposals for implementing the EU Biofuels Directive that came into force in May 2003. We are seeking views on the extent to which further support for biofuels is justified, and on what forms that further support might take. As part of this, we are seeking views on whether the UK should introduce a ‘renewable transport fuels obligation’ which would require the road transport fuel industry to source an increasing percentage of its fuel sales from renewable sources including biofuels.
10.12 Emissions of key air pollutants from road transport have been reduced by about 50 per cent over the last decade, despite increases in traffic, and should reduce by a further 25 per cent over the next decade. As the diagram below shows, this is largely due to a progressive tightening of European emissions standards, which have helped force improvements to vehicle engineering and design.

10.13 EU emissions standards for cars

Notes
1. Emissions of oxides of nitrogen and particulate matter remain generally higher for diesel vehicles than for petrol vehicles.
2. Until 1992 NOx limits for petrol and diesel cars were based on a combined limit for both NOx and Hydrocarbons.

10.14 We are also working to reduce harmful emissions from public transport. We have made up to £3 million of funding available to support demonstrations of up to 150 low carbon buses. These grants will help cover the additional initial costs of manufacturing, maintaining and operating such buses while the market is growing. We have also set a target in our Powering Future Vehicles Strategy (see text box) to ensure that, by 2012, at least 600 new buses coming into operation each year will be clean, low-carbon vehicles, with fuel efficiency about one third better than an average bus today.

10.15 Air travel is a large and growing source of CO₂ emissions and air pollution. Progress has been made on mitigating the impacts of air travel. The fuel efficiency of aircraft has been improving by around 1.7 per cent a year and today’s aircraft are typically 75 per cent quieter than jets in the 1960s. We are actively pursuing measures to tackle aviation’s greenhouse gas emissions with the incorporation of aviation into the EU emissions trading scheme a priority. We have been actively involved in International Civil Aviation Authority (ICAO) negotiations to agree more stringent standards for NOx emissions for new aircraft from 2008. And we will only support the development of a third runway at Heathrow if we can be confident that local air quality limits can be complied with. The Air Transport White Paper sets out what more we will be doing over the next 30 years.
10.16 Shipping is recognised as a sustainable, safe and relatively environmentally friendly mode of transport. Nonetheless, it is clear that further improvements can be made to reduce air and marine pollution emitted from ships.

What we are going to do next

Climate change

10.17 To ensure that transport makes its full contribution to reducing CO₂ emissions cost-effectively, we will need to broaden the debate on the:

- value we attach to the movement of people and goods;
- overall price of transport; and
- costs of reducing carbon emissions across all sectors of the economy.

10.18 Current evidence suggests that the most cost effective ways of reducing total CO₂ emissions from the transport sector are measures affecting the cost of fuel, the cost of energy inefficient vehicles, or the efficiency of road haulage. When the Government’s Energy White Paper was published, illustrative figures showed that other transport options tended to be less cost effective than carbon-saving measures in other sectors – including, for example, domestic energy efficiency. The review of the Climate Change Programme later this year will re-examine the evidence and consider how carbon savings can best be delivered both from transport and across other sectors.

10.19 If the UK is to achieve the deep cuts in carbon emissions from the transport sector that may be necessary to help us meet our long-term goals to reduce CO₂ emissions, we are likely to have to move beyond today’s vehicle and fuel technologies to radically different alternatives. These might include vehicles powered by hydrogen fuel cells, or fuels produced entirely from energy crops or other forms of biomass.

HYDROGEN

In the longer term, it is possible that hydrogen will play a key role in delivering clean, low carbon transport. If used in highly efficient fuel cell vehicles, the only emission from the tailpipe is pure water. Hydrogen can be generated from a wide variety of different sources, which could reduce reliance on imports of mineral oil. If produced using renewable electricity such as that from wind and waves, or from biomass material such as crops or organic wastes, hydrogen fuel cell vehicles offer the prospect of zero-carbon, pollution-free motoring. This would mean improved local air quality and reduced impacts on climate change, with the additional benefits of improved diversity and security of energy supply.

The Government has already put in place a number of measures to support the development of hydrogen fuel cell vehicles. We are supporting research into fuel cells, and funding the trialling of hydrogen-powered vehicles. We have also pledged to exempt hydrogen from fuel duty for a limited period in the future to encourage its early development and uptake.
These technologies could, potentially, deliver huge reductions in emissions of carbon from the transport sector in the long term. In theory, significant use of renewably produced hydrogen or biofuels as transport fuels could reduce carbon emissions from the transport sector to near-zero levels by 2050.\footnote{Liquid biofuels and renewable hydrogen to 2050, Department for Transport, July 2004. The report is available for download at www.dti.gov.uk/energy/sepvr/futuretransport.shtml} In practice, however, there are a large number of technical and economic hurdles that would need to be overcome before this could happen. The costs of delivering these new technologies are likely to be significant. And the technologies are not yet proven at a commercial scale.

CUTE hydrogen bus

Clean Urban Transport for Europe (CUTE) is an EU project for the demonstration of hydrogen fuel cell bus fleets in major cities across Europe. The project is mainly EU-funded, but we have also provided significant funding through the TransportEnergy New Vehicle Technology Fund.

London is one of the cities taking part, and three buses entered service in January 2004 for the start of a two-year trial. The buses operate on a public route in central London. They offer a very smooth, quiet and comfortable ride and, to date, they have proved very successful, with some passengers even letting standard diesel buses go by in order to wait for a fuel cell bus.

Data will be collected on the buses’ performance under London operating conditions. This will feed into a final report on the overall project.
We have been considering these and other questions since the publication of the Energy White Paper last year, and we will be publishing an assessment of the long term impacts of renewable hydrogen and biofuels on the UK’s wider energy policies as a follow-up to this White Paper. The assessment addresses key questions such as how much hydrogen or biomass would be needed to power the whole of UK road transport and how it might be produced. We are committed to facilitating the development of these and other promising alternative technologies, as a potentially cost effective way of achieving carbon savings from road transport in the future.

Although the prospect of a transport system powered substantially by biofuels or hydrogen is some years away, we will introduce measures in the short term to put ourselves on the path to a low carbon transport system, including:

- funding research, design and demonstration projects for low carbon vehicles (such as the New Vehicle Technology Fund);
- ensuring that the right tax incentives are in place to encourage the early uptake of new vehicles and fuel technologies;
- pressing the European Commission to finalise a new round of Voluntary Agreements on new car fuel efficiency with the automotive industry;
- promoting more widespread development and use of biofuels (see text box);
- providing people with the choice to use public transport or other alternatives to the car, and encouraging a change in travel behaviour – for example, through measures such as travel planning;
- taking forward measures that improve the management and use of the road network, including exploring the use of carpool lanes and the potential of road pricing;
- introducing new measures to support the development of an efficient and cost effective freight logistics sector as part of our sustainable distribution strategy;
- working towards the introduction of a UK new car CO\textsubscript{2} labelling scheme, drawing on advice from the Low Carbon Vehicle Partnership;
- supporting the intent of a proposed European Regulation to minimise the release of fluorinated gases used in car air-conditioning systems; and
- considering the scope for including surface transport in the European Union Emissions Trading Scheme.
10.23 As outlined in the Air Transport White Paper, we are actively pursuing the inclusion of intra-EU aviation in the EU Emissions Trading Scheme and will make this a priority for the UK presidency of the EU in 2005. We are also pressing for the development and implementation, through the ICAO, of a well-designed international emissions trading regime. We will also continue to explore the scope for the use of other economic instruments to tackle aviation emissions.8

10.24 It will also be important that airports, airlines and air traffic controllers adopt working practices that minimise their impact on climate change and continue to invest in the research and development of new technologies. We have endorsed a target adopted by the Advisory Council on Aeronautics Research in Europe which outlines a 50 per cent reduction in CO₂ emissions from new aircraft by 2020.

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8 Building on the work in the March 2003 report Aviation and the Environment: using economic instruments, joint DfT and HMT publication.
Air quality

10.25 We will work towards meeting the European limits of key air pollutants. The feasibility study on road pricing (described in Chapter 3) suggests that improving air quality could, in some circumstances, be a factor in the design of any road pricing scheme.

10.26 Many transport policies, outlined above, which aim to reduce congestion or CO₂ emissions, will also help improve air quality. At a national scale we will also:

● work with our European partners to develop tighter standards for both vehicles and fuels;

● increase public awareness and improve driver training, for example for truck drivers, which can help reduce emissions;

● facilitate the preparation of Airport Surface Access Strategies to be reflected in Regional Transport Strategies; and

● co-ordinate national and international work to identify technological and operational means to control emissions at airports.

10.27 Some improvements, for example to local air quality hot spots, can only be delivered locally. To that end, we will work closely with local authorities to ensure that:

● Air Quality Action Plans are properly integrated into second-round Local Transport Plans in areas where transport has a significant impact on the local air quality;

● they promote better traffic management, which can help to reduce emissions by keeping traffic moving, in the next round of Local Transport Plans;

● air quality comes to the fore in discussions on delivering shared priorities with local authorities; and

● there are more local targets on air quality.

THE CHANGING CLIMATE: IMPACT ON TRANSPORT

Earlier in 2004 the Department for Transport concluded a far reaching review of the impact of climate change on transport. We now have a good idea of what our climate will be like in 2020 and beyond. Whilst we are actively promoting global action to reduce the impact we have on the climate, it is inevitable that there will be some change. The study concluded that the main impacts of these changes on the transport sector are likely to be increased flooding during winter and more extreme heat in summer. In response, we are now taking forward a number of the report’s recommendations, ensuring that these are consistent with the Foresight Flood and Coastal Project, published earlier this year by the Office of Science and Technology.
New development

10.28 The 1998 Integrated Transport White Paper set out the Government’s commitment to a presumption against transport schemes that damage landscapes, townscapes, biodiversity and the aquatic environment. This strategy reaffirms that commitment.

SOLAR POWERED HIGHWAY INFRASTRUCTURE

The Highways Agency has launched a pilot project on the M27 which will test the use of solar panels as the source of power for lights and gantries on England’s motorways. The solar panels will be fixed on the south facing noise reduction fences. The performance of the panels in all weathers will be assessed over the next year with a view to expanding the programme if it is successful.

10.29 In designing and constructing new projects we will work with statutory bodies and others to ensure that:

● there continues to be a strong presumption against schemes that would significantly affect environmentally sensitive sites, or important species or habitats;

● the impact of schemes on the environment and communities is monitored;

● design standards take account of environmental concerns and the impacts of any new development are kept to a minimum, with mitigation measures implemented to a high standard;

● poor planning does not sever communities;

● the amount of greenfield land taken for development is kept to a minimum;

● biodiversity is respected and, wherever possible, enhanced, in our planning, decision making, delivery and network management processes;
● the marine environment in coastal waters is protected from shipping;
● all groundwater and surface waters are protected by controlling pollution from sources such as roads and airport runways; and
● noise impacts from transport are reduced and mitigated, for example around airports.

Conclusion

10.30 This document reaffirms our commitment to a measured and balanced approach ensuring that transport delivers the economic and social benefits that underpin our prosperity and welfare, and makes a positive contribution towards our environmental objectives. More needs to be done to reduce and mitigate the environmental impact of travel and we will continue to look for new solutions and actions that deliver improvements.
Safety and security:
protecting people and networks
Safety and security:
protecting people and networks

We want to ensure that people are safe and secure when they use our transport system, whether they are catching a bus, taking a plane, a ferry or a cruise ship, waiting at a train station, parking their car or walking into town.

The challenge

Safety

11.1 The risk of a fatal accident on any form of transport is low. Even on the most dangerous types of transport, there are less than 120 fatalities for every billion kilometres travelled. The relative risk varies depending on how people choose to travel; these figures show that public transport is safer than personal motorised forms of transport such as cars, and motorbikes have the highest risk of fatalities.

Passenger fatalities across transport modes

11.2 The majority of deaths and serious injuries from transport occur on our roads. Safety on Britain’s roads has been improving for many years, and they are now among the safest in the world. However, we cannot be complacent. We have set ourselves the objective of reducing 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. We will make it our priority to improve road safety for children in disadvantaged communities, where accident levels are relatively high.

11.3 Rail is a very safe mode of travel and is getting safer. In 2000-01 there were only 17 passenger fatalities across a network which carries one billion passengers a year. Far more people (256 in 2000-01) are killed trespassing on the railways, including vandals and suicides.

Security

11.4 The tragic attacks in the USA in September 2001 and, more recently, in Madrid in March 2004, have changed forever the context for transport security around the world. Security is likely to remain a major factor in the development of our transport systems for the foreseeable future. Our challenge is to develop security regimes that manage the risk to an acceptable level and meet our international obligations in a way that does not place unreasonable costs on operators and the travelling public.

Where we want to be

11.5 Looking ahead 30 years, we need to be in a position where we have significantly improved the safety of our transport networks for both travellers and for the people who work on them. This will mean:

● capitalising on the potential for new technologies to reduce the risk and severity of accidents on all modes of transport;

● better education and training for drivers, cyclists and pedestrians to ensure all road users are aware of the risks and know how to use the roads safely;

● better, more targeted enforcement for the minority who break the law and put others at risk;

● promoting better street design to make our roads safer and more pleasant environments for all road users, including children;

● improving personal safety on our transport networks by reducing crime and vandalism; and

● working with industry and with international partners to maintain and improve safety standards both in the UK and abroad.
Safety
What we have achieved

Road safety

11.6 Our road safety strategy *Tomorrow’s Roads – safer for everyone* (March 2000)\(^1\) set the framework for significantly improving road safety. At its heart is a focus on improving the following four areas.

- **Education** – We are committed to reducing excessive and inappropriate speed. Our road safety campaigns have a key role to play here. We are also supporting safety training for other road users, including children and cyclists.

![Safe cycling: a healthy option for the school run](image)

- **Enforcement** – We have improved our enforcement measures to ensure that those who break the law and place others at risk are identified and punished. And we are making sure that penalties are appropriate, raising the maximum penalty for causing death by dangerous driving from 10 to 14 years imprisonment.

- **Engineering** – Safety schemes funded by local authorities have had a significant impact on road safety. These schemes have included improvements to junctions, better facilities for pedestrians and cyclists, and redesigning roads to reduce traffic speeds and increase driver’s awareness of pedestrians.

\(^1\) *Tomorrow’s Roads – safer for everyone*, Department for Transport, March 2000, available from the Department’s web site at www.dft.gov.uk
Vehicle technology and standards – We work closely with other countries and with industry to deliver continual improvements to vehicle safety. Technologies such as anti-lock braking and airbags have reduced the risk and severity of accidents. We also want to ensure that motorists can make informed choices when they buy their car, and we are striving to expand the work of the Euro NCAP organisation in providing consumers with information on the safety rating of vehicles.

11.7 The first three year review of our road safety strategy, published in April 2004, concluded that we are on track to meet all our challenging casualty reduction targets. Compared to the average figures for 1994 to 1998, the 2003 figures for deaths and serious injuries show a 22 per cent reduction. And for the most vulnerable road users, children, they show a 40 per cent reduction. However, there are still on average 10 fatalities on British roads each day. Almost half of these are car occupants and 20 per cent are motorcyclists.

Rail safety

11.8 The British Transport Police Authority was established on 1 July, 2004 to maintain a police force for the railways. The new authority, which is modelled on Home Office local police authorities, will enhance the status and public accountability of the British Transport Police (BTP). BTP works closely with the rail industry and emergency services across the country.

Personal security

11.9 We have produced guidance on improving personal security in the pedestrian environment, reducing graffiti and other environmental nuisance on and around public transport systems. The Secure Stations Scheme has established national best practice on security standards and provides accreditation at stations that have implemented good security measures.

11.10 In London, the Mayor and the Metropolitan Police have set up a joint intelligence unit to ensure public and staff feel safe on the buses. The unit targets antisocial behaviour and more serious crimes on buses and around bus stops, as well as enforcing bus lanes and laws relating to taxis and private hire vehicles.

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2 Tomorrow’s Roads – safer for everyone: the first three year review, Department for Transport, April 2004, available from the Department’s web site at www.dft.gov.uk
Aviation and maritime safety

11.11 We have made a major contribution to setting up the European Aviation Safety Agency, which will maintain high safety standards across Europe. And we have also pursued an active policy of inspecting foreign aircraft visiting UK airports, and published details of airlines that we have refused permission to operate services to the UK for safety reasons.

11.12 In shipping, safety is best secured by quality shipping operators flying the flags of reputable shipping registers. Our aim is to drive out sub-standard shipping, which the Organisation for Economic Co-operation and Development (OECD) says enjoys a 15 per cent economic advantage over well-run ships by cutting safety corners. At the European level we are working within the European Maritime Safety Agency.

What we are going to do next

Road safety

11.13 We are keen to develop a deeper understanding of the underlying causes of fatal accidents, and we are working closely with the police and local authorities to find ways of accessing data more quickly. And we will continue to use this information to help and inform all road users through publicity and education.

11.14 We are also working with the motorcycling industry, user groups, the police and others through the Advisory Group on Motorcycling to address motorcycle safety and to better integrate motorcycling into our transport strategy. The Advisory Group will publish the results of this work later this year and their recommendations will inform the development of a national strategy for motorcycling.
We will introduce provisions at the next legislative opportunity to enable roadside breath testing results to be used as evidence in court. We will also make it a requirement that all those disqualified for two years or more retake the driving test. This will apply to all repeat drink-drive offenders.

Driving is an important life skill and we will help and support drivers to help themselves. We believe that there should be a greater role for measures that help to improve drivers’ abilities and make them more aware of how they can be safer drivers. We will support the national scheme to provide driver training schemes as an alternative for minor offences. We are also working with the police to develop best practice for speed awareness schemes for first-time offences by speeding drivers.

**THINK! ROAD SAFETY PUBLICITY CAMPAIGN**

The THINK! campaign was launched in 2000 to raise awareness of road safety. Successes to date include:

- an increase in the proportion of motorists who find it 'unacceptable' to 'highly unacceptable' to drive at 40mph in a 30mph area (76 per cent in 2003, up from 60 per cent in 1998);
- the highest ever level of young drivers disagreeing strongly with the statement “It is safe to drive after two drinks” (67 per cent); and
- nearly universal awareness (96 per cent in February 2004) of the new mobile phones legislation, which came in to force in December 2003.

**Future priorities**

In 2004–05 we will launch campaigns to:

- raise awareness of the dangers of driving after even one drink;
- encourage motorists to slow down, with the long term aim of making speeding as anti-social as drink driving;
- use innovative child and teen road safety publicity to educate new generations about road safety; and
- encourage motorists not to drive tired, to switch off their mobiles before driving off, and recognise the dangers of drug driving.
We completed a review of road traffic offences for bad driving in January 2004. It looked at ways of improving and updating the law on serious driving offences, particularly where death or serious injury results. We will be consulting on these proposals this summer, to inform any necessary changes in legislation.

There will also be a role for infrastructure improvements. To improve safety for pedestrians, cyclists and horse-riders, the Highways Agency has identified over 1,000 crossing sites on the strategic road network where improvements to safety are sought. Improvements will be incorporated in the Highways Agency’s programmes where possible. Many other major schemes in the Highways Agency’s programmes, such as bypasses which divert traffic away from communities, will also improve safety.

**Technological advances**

We will continue to work with other governments and manufacturers to harness new and emerging technologies to improve safety. For example, new EU Regulations on pedestrian protection will require all new car models to have softer fronts from October 2005, and this requirement will be extended to all new cars, including existing models, from 2012. These improvements to car design could reduce pedestrian fatalities by up to 10 per cent and reduce serious injuries to pedestrians by 20 per cent.

We are promoting the development of intelligent transport systems (combinations of computers, databases, maps and sensors) for both vehicles and infrastructure. These systems work as extra eyes and ears for drivers and help to reduce the incidence and severity of accidents.

The insurance industry already encourages good driver behaviour by charging lower premiums to drivers who have a good safety record. But by monitoring how often, where, and when cars are driven, usage-based insurance schemes have the potential to encourage safer driving and bring car ownership within reach of many good drivers who would otherwise find premiums prohibitive. For example, Norwich Union is currently piloting a usage-based insurance scheme using global positioning system (GPS) technology, which we will follow with interest.
**Galileo**

Galileo will be Europe’s own global navigation satellite system, providing a highly accurate, guaranteed global positioning service under civilian control. It will be accurate to one metre, which is unprecedented for a publicly available system.

Galileo will:

- provide the accuracy needed where safety is paramount, guiding ships, running trains, and landing aircraft, even in extreme conditions;
- support much improved search and rescue services, to identify within metres the location of planes, ships, or people in distress; and
- extend and improve car navigation aids, car theft protection, and fleet monitoring systems that depend on GPS technology.

The Government, with the British National Space Centre, is investing €90 million in the Galileo project.

**Railway safety**

11.22 The railways have a good and improving record on safety. But there is a strong consensus from inside and outside the industry that the current safety framework could be improved.

11.23 The Government will legislate to transfer all aspects of health and safety regulation from the Health and Safety Commission and the Health and Safety Executive to the independent Office of Rail Regulation. The Government remains committed to the principle that safety regulation should be independent of government and the industry, and this will continue to be the case following this transfer of responsibility. The transfer will simplify the regulatory structure and provide a fresh start to encourage cultural change across the rail industry. It will enable the development of an independent regulator with specialist economic and safety rail expertise and allow decisions which touch on both economic and safety regulation to be brought together.

11.24 The Government’s view is that there are also a number of areas where the industry itself needs to take action. It is in everyone’s interest that there is strong safety leadership by the industry and so should consider with the Office of Rail Regulation how best to achieve this. Train operators and Network Rail need to continue their work to move from following standards unquestioningly, to a safety system based on risk analysis.
11.25 Personal security is a major concern to many passengers and the Government confirms its support for the British Transport Police continuing in its role as a specialist police force. No change is proposed for the Rail Accident Investigation Branch, which is being established as the independent rail accident investigator.

**Personal security**

11.26 We will continue to raise the profile of crime and the fear of crime as issues which need to be addressed through effective partnership working. We will, for example, publish guidance on the links between bus crime and other crimes, and on the range of staffing options to promote personal security across the whole journey.

**Aviation and maritime safety**

11.27 We will ensure that the European Aviation Safety Agency (EASA) delivers an efficient, high quality safety regime as the European Common Aviation Area gradually expands. The UK Civil Aviation Authority will collaborate with EASA and will continue to provide effective oversight of UK airlines. We will work with the European Commission and the International Civil Aviation Organisation (ICAO) to ensure world-wide safety standards continue to improve. We will support the strengthening of ICAO’s auditing activities. We will agree concerted action if other countries fail to ensure the safety of their aviation.

11.28 The current emphasis in shipping is to put significant financial and human resources into responding to accidents. We want to shift that emphasis to identifying how best to stop situations developing through targeted education, advice and other initiatives. Shipping regulations continue to flow from the United Nations and the European Union. We will work internationally to influence safety requirements so that they are appropriate and proportionate and do not put British shipping at a commercial disadvantage.

**Transport security**

**What we have done**

11.29 Since 2001 we have worked closely with the international bodies that regulate transport security to ensure that standards world-wide reflect the changing nature of the international terrorist threat to transport systems. At the same time we have worked with colleagues in industry and Government to ensure that UK transport systems and the people using and working on them are properly protected.
The UK’s transport security regimes are among the most mature in the world, with well-developed legislation and systems. Nevertheless, the period since September 2001 has seen considerable enhancements. Underpinning this has been an enormous amount of activity to enhance international security standards, and a determination to develop closer working relationships with the UK control authorities (the police, immigration and customs). The launch of Multi-Agency Threat and Risk Assessment (MATRA) for airports in December 2003 was a major milestone in that process and we are looking to develop this approach for other types of transport.

The already robust UK aviation security programme has been further enhanced through, for example, the introduction of new secure cockpit doors on civil aircraft and by the capability to deploy armed police on aircraft should the need arise. We are also building a network of overseas-based regional aviation security liaison officers to advise UK airlines and local transport security authorities on aviation security issues.

In the maritime industry we have taken a leading role internationally in establishing and implementing new International Maritime Organisation standards for passenger, cargo shipping and ports, which came into force in July this year.

On the railways, we have reviewed the UK’s National Railway Security Programme and established a programme of regular inspections of the mainline network. In the light of the attacks in Madrid we have been working closely with the industry and the police to identify and develop measures to enhance security on the railways, building on the existing regime. And we have reviewed the Channel Tunnel security programme to ensure it remains appropriate, holding regular meetings with French officials to maintain high security standards in the UK and France.

In July 2003 we formalised London Underground’s security regime through security instructions under the Railways Act 1993. Since then we have established a compliance and enforcement regime. Since the Madrid attacks we have been working closely with the industry and the police to ensure our railway and Underground security arrangements remain appropriate.

Following the 11 September attacks the UK took the lead internationally in reviewing the security of dangerous goods in transport. As a result, new United Nations-approved security standards were agreed, which the UK and other states must adopt.

In essence, the agreed measures set down basic security provisions for the transport of dangerous goods, covering their consignment, site security, storage and the training of those involved. The new security measures will become law from 1 July 2005. In the interim, the UK introduced a code of practice for the security of dangerous goods by road in January 2004. This comprises practicable and proportionate security measures. Its implementation will enhance the security of dangerous goods on the UK’s roads, and thus reduce their vulnerability to a terrorist attack. A similar code for rail will be introduced in August 2004.
What we are going to do next

11.37 We, and the transport industries, must continue to meet the challenges of developing practicable, effective and proportionate security measures, and delivering secure transport systems that remain attractive and affordable for the travelling public.

11.38 This will be particularly challenging in parts of the transport industry that are essentially open in nature, such as the railways. Across all forms of transport we will focus on four key themes:

- the continuous development of domestic security programmes;
- driving up standards of transport security within Europe and worldwide;
- investment in research and development to ensure that the staff responsible for security benefit from the most appropriate recruitment and training procedures, and are supported by the best available technology; and
- compliance monitoring with enforcement action to ensure that the industries meet the required standards.

11.39 The transport industry should cover the cost of delivering transport security regimes. The Government’s role will be to provide funding for research and development, for law enforcement and for intelligence services and to continue to work with industry and with international partners to develop and enforce security standards.

11.40 Perhaps the strongest single weapon in the fight against transport-related terrorism is the vigilance of staff and passengers. We would therefore encourage everyone working in, or travelling on, our transport system to maintain vigilance and to report any activity that appears suspicious.

11.41 There can never be any absolute guarantees where security is concerned, but through our close working relationships with colleagues overseas, the police, the Security Service, and with the transport industries, we will continue to make every effort to keep the UK’s transport system safe.

Conclusion

11.42 The Government is committed to ensuring that people are safe and secure when they travel. The strategy outlined in this document will foster the delivery of safety measures and security regimes that manage any threat to a level acceptable to us all.
Annexes
We have honoured our commitment to deliver sustained investment in transport.

Total public spending by the Department for Transport over the three years of the spending review will exceed £37 billion. This includes an additional £1.7 billion to meet immediate pressures and £0.5 billion annual uplift to the 10 Year Plan from 2006-07 onwards.

Public spending on transport is forecast to rise in line with the expected growth in the economy to 2015.

These spending plans underpin the targets we have set for transport, set out in Annex B.

The Government will ensure that the resources being made available deliver the greatest possible benefits.

We will make better trade-offs across different modes of transport, and across the parallel agendas of regeneration and housing. We intend to publish guideline budgets for English regions, following consultation, in Budget 2005. These budgets will allow national, regional and local stakeholders to reach a shared position on funding priorities and objectives.
We will give delivery partners incentives to develop and deploy coherent, innovative, local and regional transport strategies that rise to the challenges set out in this document. We will establish a new Transport Innovation Fund, to support the costs of innovative and coherent transport measures – which will include road pricing, modal shift, and better bus services. And we will also support innovative mechanisms which raise new funds locally. Mechanisms for deciding on allocations from this Fund will be published alongside regional guideline budgets in Budget 2005 with a view to making the first allocations in 2006.

Transport spending, 1994-95 to 2014-15

Notes:
1 Figures from 1994-95 to 2000-01 are those published in Transport 2010: The 10 Year Plan, amended to include the Driver, Vehicle and Operator agencies and the Maritime and Coastguard Agency and to reflect the transfer of responsibility for Scottish rail services to the Scottish Executive.

2 Figures from 2001-02 to 2010-11 are those published in Delivering Better Transport: Progress Report, amended to include spending on the Driver, Vehicle and Operator agencies and the Maritime and Coastguard Agency and to reflect the transfer of responsibility for Scottish rail services to the Scottish Executive. Figures for years after 2010-11 include an annual inflation uplift.


4 Transport Innovation Fund – the above graph illustrates the way in which the new Transport Innovation Fund would be established within the Department for Transport spending plans to 2014-15. Details of the operation and size of the new fund will be announced alongside Budget 2005.
Annex B

Department for Transport
Public Service Agreements

Departmental Public Service Agreements link the allocation of public expenditure to published targets with the aim of delivering modern, responsive public services. This White Paper will deliver or contribute to the achievement of the following targets in the Department for Transport's Public Service Agreement.

Aim
The Department's aim is transport that works for everyone.

Objectives and performance targets

- **Objective I**: Support the economy through the provision of efficient and reliable inter-regional transport systems by making better use of the 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.

  1. The Department is developing better measures of inter-urban congestion and will publish a new target by July 2005. The Department will also publish annual long term projections of congestion.

  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.

  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.

  4. The Department is developing better measures of urban congestion and will publish a new target by July 2005. The Department will also publish annual long term projections of congestion.

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

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 with the Department for Environment, Food and Rural Affairs.

7. 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 the Department for Environment, Food and Rural Affairs and the Department of Trade and Industry.

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

AIS  Automatic Identification of Ships
AST  Appraisal summary table
BCR  Benefit/cost ratio
BSOG Bus Service Operator's Grant
BTP  British Transport Police
CAA  Civil Aviation Authority
CIF  Community Infrastructure Fund
CO₂  Carbon dioxide
CUTE Clean Urban Transport for Europe
DBFO Design, Build, Finance, Operate
Defra Department for Environment, Food and Rural Affairs
DEL  Departmental Expenditure Limit
DfT  Department for Transport
DLR  Docklands Light Railway
DTI  Department of Trade and Industry
DVO  Driver, Vehicle and Operator Group
EASA European Aviation Safety Agency
ERTMS European Rail Traffic Management System
EU   European Union
Euro NCAP European New Car Assessment Programme
GDP  Gross domestic product
GLA  Greater London Assembly
GPS Global positioning system
HA Highways Agency
HMT Her Majesty’s Treasury
HSE Health and Safety Executive
ICAO International Civil Aviation Organisation
IMO International Maritime Organisation
IOC International Olympic Committee
LCN London Cycle Network
LTP Local Transport Plan
MARPOL Marine Pollution Convention
MATRA Multi-Agency Threat and Risk Assessment
NATA New Approach to Appraisal
NO$_2$ Nitrogen dioxide
NO$_x$ Oxides of nitrogen
ODPM Office of the Deputy Prime Minister
OECD Organisation for Economic Co-operation and Development
ORR Office of Rail Regulation
PM$_{10}$ Particulate matter which passes through a size-selective inlet with a 50 per cent efficiency cut-off at 10µm aerodynamic diameter
PPP Public private partnership
PSA Public Service Agreement
PTE Passenger transport executive
Ro-ro ‘Roll-on, roll-off’ shipping
RPP Rail Passenger Partnership
SRA Strategic Rail Authority
STOP Safer Travel on Buses and Coaches Panel
TfL Transport for London
VfM Value for money
Acknowledgements

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Data sources:

This document includes data sourced from the Department for Transport, its agencies, and the following organisations:

- Civil Aviation Authority
- Department for Environment, Food and Rural Affairs
- Health and Safety Executive
- Office of National Statistics
- Society of Motor Manufacturers
- Strategic Rail Authority
- Trafficmaster
- Transport for London

Map definitions:

Major ports, airports and railways in Great Britain shows railways, airports with customs facilities, and the top 28 ports for tonnage.

Strategic roads in England shows the Highways Agency (HA) Strategic Road Network.

Flows of tonnage through major ports in Great Britain, 2003 shows ports with annual cargo volumes of around, or over, 1 million tonnes.

Passengers at major airports in Great Britain, 2003 shows airports in Great Britain that handle over 1 million passengers a year.