The Future of Urban Transport

Ministerial foreword

Cities make a vital contribution to the success of the country. But their success depends on an efficient, sustainable urban transport system.

I am therefore very pleased to introduce the work which has been led by the Prime Minister’s Strategy Unit and the Department for Transport to explore exactly how transport contributes to city success. The analysis demonstrates how much good work has been done over the last ten years, both as a result of central Government policies and initiatives, and through the hard work of local authorities and their partners. But the report also shows the extent of the challenges which remain, to plan transport which not only contributes to sustainable city economies but to the health and well-being of our people.

If we are to secure urban transport which supports successful cities and improves quality of life and place much remains to be done. I believe it is vital that leaders and decision makers at all levels have a shared agenda and vision for the future of urban transport. This document sets out the government’s view of what that might be. I look forward to discussing it with city leaders and other key stakeholders, in the expectation that they will improve any areas that need it, and then share and implement a bold future.

Sadiq Khan
1. Introduction and Summary

The Cabinet Office Strategy Unit, DfT and a number of other Government Departments have worked together in recent months to consider how transport can best support the success of our urban areas. The analysis, which is being published alongside this paper, has important implications for decision makers at all levels of government. This paper both provides a summary of the conclusions set out in more detail in the analysis and builds on it to offer a vision for the future of urban transport.

Firstly the paper highlights why our cities and large towns are so important and why effective transport systems are essential to making them successful. It considers how these transport systems affect different areas – economy, health and urban environment - both negatively and positively and proposes solutions which can produce positive outcomes to all of them: triple win outcomes.

The paper then puts forward a vision of urban transport that envisages enhanced mobility through a wider choice of journey, reduced congestion, better health and enjoyable urban spaces. The steps already taken towards this vision are recognised: for example the flexible legislative and policy framework available to local authorities.

The further steps required to fully achieve the vision, including shared strategies and local leadership, are set out and lay the foundation of the challenge ahead.

2. Why transport matters in our cities and large towns

Cities matter

Attractive, vibrant and sustainable cities are vitally important to people and to businesses throughout England. Over 80% of the population live in cities or
towns\textsuperscript{1}, and the lives of these people are daily affected by the jobs, shops and facilities available to them, by the quality of the urban environment, and by how far the city offers a safe and friendly community. The large Metropolitan cities are particularly important drivers of economic growth, nearly 40\% of national income is estimated to be generated in these areas\textsuperscript{2}. Both the economic benefit and the impact of a city on the local environment and community may spread well beyond its bounds.

The Government has recognised the importance of cities to the national economy, and the importance of transport to the achievement of success, through a series of initiatives and reports. “State of the English Cities” was published in 2006 and included a wealth of research on the progress and performance of English cities. In 2007 the review of Sub-National Economic Development and Regeneration reiterated the importance of our major cities to the national economy.

The Government has encouraged cities to join together to form Multi-Area Agreements, and has selected two major cities, Leeds and Manchester, as ‘Pilot City Regions’ to take forward discussions on how to improve the contribution of these cities to a successful and sustainable economy. These initiatives encourage groups of local authorities in city regions to identify shared strategic goals and work together with central government to deliver them. The Government has introduced legislation to offer a strengthened yet flexible framework for taking forward these discussions.

\textit{Effective transport is critical to city success}

The Department for Transport has strongly supported these initiatives, recognising that good transport is vital to how cities work. If people cannot travel easily within a city they may miss opportunities to access employment, education, health, cultural and recreation facilities, or they may simply find it difficult to meet each other socially. Their choices may be restricted, they may waste time, and they may suffer frustration and stress in travelling.

Employers in cities depend on effective transport for their workforce, their supply chains and their customers. The ease with which goods can be transported between suppliers, to retail centres and to homes affects both their price to customers and often the financial success of manufacturing and retail businesses. When the business community are asked how cities could be improved, transport links are their highest concern:

\textsuperscript{1} relates to all urban areas with population greater than 10,000

\textsuperscript{2} London and the Metropolitan Districts
Sir Rod Eddington’s report in 2006, jointly commissioned by the Chancellor of the Exchequer and the Secretary of State for Transport, on the long-term links between transport and the UK’s economic productivity, growth and stability, emphasised the importance of both transport links within cities and the links between urban centres as key drivers to the national economy.

In response to these and other reports, the Department for Transport has taken a number of steps to support cities and urban transport. First, it has provided significant increases in funding streams, with capital funding for local transport now about three times the level it was in 1997.

The Department has also provided much more scope for leaders of cities, regions and local partnerships to decide how available funding is to be spent.

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3 UK Cities Monitor 2008
Almost all local transport capital funding is now included in regional funding allocations – so that local authorities (acting collectively) can recommend the distribution of funds to best support their overall strategies, and the balance between major projects and smaller interventions. Cities and local authorities themselves are almost completely free to decide how to spend available funds to meet their own priorities. What we do ask is that they do that within a clear strategy set out in their Local Transport Plan, and then deliver.

The Government has also provided new powers under the Local Transport Act 2008 for local authorities to work with bus operators and improve services. The Act gives cities a range of powers to improve the quality of bus services, including provisions intended to make bus quality contracts schemes a more realistic option for local authorities.

Powers are also available to restructure the local governance of transport, and to enhance the alignment of transport strategy and delivery with other functions. Integrated Transport Authorities have been given sole responsibility for preparing and delivering Local Transport Plans in our largest cities outside London. But cities are free to propose a wide range of changes to their governance to improve leadership and the strategy and delivery of transport services.

*But the impact of transport on the success of cities is complex*

Transport’s contribution to city success, however, remains complex and challenging. Many of the trends over the last thirty years are positive, with steadily increasing income allowing more families to own a car and enabling people to travel further and often more cheaply without needing to spend more time on their journeys. Businesses have benefited too with deeper job markets and better connectivity allowing them to access new customers. The wider opportunities which these trends have allowed have particularly benefitted sections of the community who previously suffered relative disadvantage: women, the elderly and the less wealthy for example.

However in many of our cities and elsewhere our increased prosperity, including the additional opportunities to travel by car, has created undesirable side effects. People have not only chosen to travel further, but to use their cars for journeys which they might previously have made on foot, on a bicycle or by public transport. Although nearly 40% of all trips are still under two miles, there has been a long term significant decline in the proportion of trips made through walking or cycling, accompanied by an increasing proportion by car:
On average, the proportion of distance travelled in English cities which takes place in private cars is now higher than in many other European cities.

Car miles as a percentage of distance travelled by all motorised modes

The private car undeniably has a key role to play in urban transport but the negative impacts of over-reliance on cars are felt in many ways. The congestion which occurs when demand for roadspace exceeds supply has traditionally been the prime focus for transport professionals, and the economic consequences of congestion are well documented. But the effects of the transport choices we make go much wider than the delays and unreliability suffered by road users. Increased car use has been damaging for the health of those who live and work in cities, through growing levels of

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4 National Transport Survey (DfT)

5 CfIT (2006) European Best Practice Update
obesity, lack of exercise and pollutants in the air we breathe, as well as a continuing (if reduced) toll from road accidents. The way in which transport is planned is critical to our ability to enjoy the urban environment around us and to the easy access of neighbouring areas. Over the long term, the way in which we plan and undertake travel, especially in cities, will be vital to our efforts to tackle climate change.

The published analysis suggests that the measurable costs to society of poor air quality and road accidents in urban areas are each similar to those of congestion. The costs of physical inactivity and obesity – whose prevalence is influenced by how people choose to travel – are also shown to be of a similar magnitude in urban areas. In addition, though less easy to measure, the planning of transport and choices we make can significantly affect the quality of urban space – by which we mean whether people enjoy and want to be there, or not. And the long term environment will be seriously affected by continuing carbon emissions.

The impacts of current transport planning in urban areas are described in more detail in the following chapter.
3. The impacts of urban transport on cities and towns

The impacts of transport on the success of cities are widespread but not always obvious. This chapter discusses the evidence found in the Strategy Unit/DfT’s analysis on how transport can help or hinder the achievement of the outcomes we are all seeking. The following chapters discuss what government and cities have been doing to counter the negative impacts and what more we might do.

Transport and the economy

Transport has both positive and negative impacts on the prosperity of cities. Both businesses and individuals have benefitted from reductions in the costs of travel and shorter or more reliable journey times. For business this leads to improved productivity, increased trade, deeper labour markets and much more efficient logistics. For individuals it results in more choice, better access to services and better prices.

Transport can help or hinder economic prosperity in three main ways:

- Connectivity, or the ease with which the transport network provides access between places. Good connectivity is vital to the future economic growth of urban areas, with one study estimating that a 10% reduction in travel time can increase productivity by 0.4%-1.1%.

- Congestion. The marginal cost of congestion in large urban areas on the busiest routes is over £2 per km. Average delay due to congestion is forecast to rise by some 35% by 2025.

- Accessibility. Poor connectivity in urban areas limits access of people to jobs and public services, and the access of businesses to people and customers.

It should not be forgotten that transport is itself an important part of the economy, with nearly 2 million people directly employed in transport related businesses. Transport also takes up a significant proportion of land in urban areas.

Increased car use leads to congestion on the roads and a falling market for public transport, increasing the costs of support to the public sector and potentially the prices to passengers, as well as delaying journeys. Bus use in all our cities outside London and Manchester has continued to decline:

6 Eddington Transport Study (2006)
The potential effects of increased congestion on bus use can lead to a vicious downward spiral for the industry with secondary impacts felt heavily by businesses and the community.

**Although difficult to calculate, it is estimated that the total cost of excess delays in urban areas is of the order of £10.9 billion a year.**

**Transport and Health**

Transport affects our health through its capacity to be the cause of accidents, through its effects on air quality and noise levels and through its potential to reduce our physical activity.

**Road safety**

The majority of accidents causing deaths or serious injuries in England occur on urban roads.

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Breakdown of KSI casualties in 2007 by road type\(^8\)

![Pie chart showing breakdown of KSI casualties in 2007 by road type: 62% Motorway, 34% Urban, 4% Rural.]

Those involved are disproportionately young, male or from areas of high deprivation.

**It is estimated that the cost to the community of urban road accidents is about £8.7 billion each year.**

**Air Quality**

There is strong evidence that current levels of air pollution are damaging to health both in the short and long term. The effects on our respiratory and cardio-vascular systems are estimated to lead to 12-24,000 premature deaths per annum. Air pollution from man-made particulates alone is estimated to reduce overall life expectancy by 7-8 months per person and costs the UK as a whole up to £20 billion per year.

Local emissions have been falling since 1990 as a result, for example, of improved standards for vehicles. But in urban areas transport is still the most significant contributor to emissions of particulate matter and Nitrogen dioxide.

The estimated health cost of particulate pollution in urban areas is between £4.5 billion and £10.6 billion per annum.

Transport also affects health because of its noise (see below). From a health perspective though the sound from urban transport does not reach the intensities needed to damage hearing, there is increasing evidence that it is associated with annoyance, sleep disturbance, raised blood pressure and a small increase in the risk of coronary heart disease.

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\(^8\) Road Casualties Great Britain: 2007 – DfT (2008)
Physical inactivity and obesity

Two thirds of the adult population do not meet recommended activity levels. Obesity is rising rapidly, with 30% of children and 60% of adults defined as either overweight or obese in 2007.

![Change in BMI status for adults (>16yrs) in England 1997-2007](image)

Even minimal adherence to current recommendations for physical activity would lead to a 20-30% reduction in risk of all causes of death. The preventative and therapeutic effect of physical activity is strongest for coronary heart disease, type 2 diabetes, osteoporosis and colon cancer. The largest health impacts are seen when inactive people become moderately active.

Walking and cycling at moderate intensity provide ideal ways of achieving the recommended levels of activity. The recommended levels of activity are not high: they can be achieved by walking for 40 minutes on most days, or by cycling for 140 minutes per week. These exercise times do not have to be taken in a single block: a ten-minute walk four times a day is all that is needed.

Physical inactivity is conservatively estimated to cost the economy £9.8 billion per annum. This does not include the cost of obesity, which also represents a significant cost to the economy. Greater use of active

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travel modes such as walking and cycling could potentially reduce these costs substantially.

Transport and the environment

Public space

The physical environment contributes constantly to our quality of life, and in urban areas transport is one of the most important factors. Many surveys demonstrate how much people care about clean streets, as well as levels of traffic and public transport. But many of the comments which people make are negative, and there is also evidence that lower socio-economic groups, and people living in deprived areas or on main roads are much more likely to describe their local area as shabby.

Although figures are hard to come by, there is evidence that improvements in the quality of the urban environment through, for example, pedestrianisation and good design, can have benefits for the urban economy, for health and for community pride and confidence. Good design can also encourage walking and cycling, through for example the provision of cycle networks, cycle parking and well lit streets.

The potential to achieve such benefits suggest that improvements to the way in which transport impacts on urban space may be very cost-effective.

Noise

The noise generated by transport has been shown in numerous studies to have the potential of causing significant disturbance and annoyance. Furthermore, some studies are now showing links between long term exposure to traffic noise and adverse health effects. Studies based on the relationships between road traffic noise levels and house prices suggest that the annoyance costs associated with noise are worth around at least £3 – 5 billion in England, most of which will occur in urban areas. The impact of noise on health (discussed above) may increase these costs further.

Climate Change

Low Carbon Transport: A Greener Future, published in July 2009, sets out the scale of the challenge to the transport sector, and a strategy for achieving our obligations and targets. The strategy sets out the importance of cities and regions playing their full part in influencing the choices made by people and businesses to encourage travel by more carbon-friendly modes.

10 The Strategy Unit analysis did not consider carbon emissions in detail, because much work was being undertaken separately.
Carbon emissions from transport in the largest cities and conurbations are estimated at 25% of the total emitted from road transport, with an economic cost of between £1.2 billion and £3.7 billion per annum in 2009. These costs are expected to rise sharply in future years as the cost of meeting CO2 targets increase.

Urban transport networks, and inter-urban connections, will also need to be resilient and adaptable to the climate change, even with the reduction of emissions to which we are committed.

**Summary**

The evidence collected by the Strategy Unit and supplemented by DfT analysis is summarised in the following table:

**Comparison of the wider cost per annum of transport in English urban areas (£ billion, 2009 prices and values)**

<table>
<thead>
<tr>
<th>Cost category</th>
<th>Geographical definition of urban area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ITAs plus London</td>
</tr>
<tr>
<td>Excess delays (2009)</td>
<td>£7.6 billion</td>
</tr>
<tr>
<td>Accidents (2008)</td>
<td>£5.1 billion</td>
</tr>
<tr>
<td>Poor air quality (2005)</td>
<td>Not currently available</td>
</tr>
<tr>
<td>Physical inactivity (1998)</td>
<td>£4.9 billion</td>
</tr>
<tr>
<td>Greenhouse gas emissions (2003)</td>
<td>Not currently available</td>
</tr>
<tr>
<td>Noise – amenity (2008)</td>
<td>Not currently available</td>
</tr>
</tbody>
</table>

The evidence shows that the measurable costs of urban transport of congestion, road accidents and poor air quality are each in the region of about £10 billion per annum. Transport policy can also make a positive impact to reducing the £10 billion cost of physical inactivity and obesity. In addition transport has a very large impact on whether we enjoy living.

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11 Figures in parenthesis state the year in which the impacts were measured or forecast.
or working in, or visiting, cities and towns. And finally, transport in cities represents one of the biggest contributors to carbon emissions, which will affect the lives of generations to come.
4 Triple win solutions: the choices we must make

The previous chapter has described how transport in cities can in practice create a number of negative impacts, but also opportunities. Much good work has already been undertaken by both central and local government, for example:

- The Department for Transport has worked with ten of our largest cities to agree targets for reducing congestion on the main arteries carrying traffic;
- The Department has provided nearly £100million to encourage cycling in towns and cities;
- The Department has published a Carbon Reduction Strategy, emphasising the importance of reducing carbon in cities;
- The Department for Health has published “Healthy Weight, Healthy Lives” which demonstrates how walking and cycling may contribute to the reduction of obesity;
- The Department’s “Manual for Streets” won an RTPI award for its guidance on residential street design.

But the discussion in the previous chapter suggests much more could be done to make our cities attractive, healthy and successful. In particular we need to recognise that while individual initiatives may be highly effective in meeting specific identified challenges, the real gains come from an approach which recognises that apparently different problems, and their potential solutions, are often inter-connected. The challenge for decision makers at all levels is to find ways of improving the outcomes for economy, health, and urban environment simultaneously: a “triple win” outcome.

Triple win solutions do exist

For once, such solutions do exist – and they do not even have to be hugely expensive. Interventions that increase cycling, walking and the use of public transport in our cities have the potential to do all of these things.

There are many examples from continental Europe and elsewhere which show what can be achieved when a critical mass of people start cycling. For example, a quarter of all trips in the Netherlands are by bicycle compared to 1.5% in Britain; and walking levels are also markedly higher.

In comparison to Great Britain some other European countries have a much higher proportion of trips made by bicycle
**Estimated share of journeys (trips) made by bicycle**

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>The Netherlands</td>
<td>26%</td>
</tr>
<tr>
<td>Denmark</td>
<td>19%</td>
</tr>
<tr>
<td>Germany</td>
<td>10%</td>
</tr>
<tr>
<td>Austria</td>
<td>9%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>9%</td>
</tr>
<tr>
<td>Belgium</td>
<td>8%</td>
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<tr>
<td>Sweden</td>
<td>7%</td>
</tr>
<tr>
<td>France</td>
<td>5%</td>
</tr>
<tr>
<td>Italy</td>
<td>5%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3%</td>
</tr>
<tr>
<td>Ireland</td>
<td>3%</td>
</tr>
<tr>
<td>Great Britain</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Kilometres walked per person per year (2000)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Kilometres (2000)</th>
</tr>
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<tbody>
<tr>
<td>Denmark</td>
<td>400</td>
</tr>
<tr>
<td>Austria</td>
<td>400</td>
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<tr>
<td>Italy</td>
<td>400</td>
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<tr>
<td>France</td>
<td>400</td>
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<tr>
<td>Greece</td>
<td>400</td>
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<td>Finland</td>
<td>400</td>
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<td>Sweden</td>
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<td>Belgium</td>
<td>400</td>
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<tr>
<td>Netherlands</td>
<td>400</td>
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<tr>
<td>Germany</td>
<td>400</td>
</tr>
<tr>
<td>Ireland</td>
<td>350</td>
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<tr>
<td>Spain</td>
<td>300</td>
</tr>
<tr>
<td>UK</td>
<td>300</td>
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<tr>
<td>Portugal</td>
<td>300</td>
</tr>
<tr>
<td>EU15</td>
<td>300</td>
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</tbody>
</table>

12 Cycling

How then do we achieve similar results in England? Some English cities – for example Oxford and Cambridge – have shown what can be achieved, and it is beginning to happen in London.

But although many of the findings in the preceding chapter are not new, implementation in English cities has generally been slow. This chapter considers the policy tools and Guidance which are available and the barriers to delivery.

**Effective policy tools**

New Local Transport Plan guidance – issued in July – has given cities and local authorities significantly more flexibility and freedom to decide what is right for their areas. The Guidance emphasises the need to identify priorities and consider a wide range of tools to tackle the problems, including close alignment with those delivering other services.

The problems which will need consideration for all urban areas if a triple win is to be secured include how to use scarce land resources most effectively, how best to manage roads and streets, and how to secure modal shift.

*Transport and land use*

Better alignment of spatial planning with transport has the potential to significantly affect the demand for, and patterns of, travel over the longer term. Travel patterns are not only influenced by the transport network, but by the location and choice of destinations where people and goods need to travel. They are also influenced by the ease with which people can change modes, for example how easy it is to park a bicycle at a railway station. A number of studies and examples from abroad have shown how spatial planning could play a much more central role in affecting travel demand and balancing the needs of different users of urban land, including transport users.
Groningen: Spatial planning here has focussed on creating a compact city allowing many activities to be easily accessed by bicycle. This has created a city where 78% of the inhabitants live, and 90% of all jobs are located, within a radius of 3 km from the city centre – almost all major buildings are within a 5 km radius of the city centre. Through the planning system the municipal authorities have, over time, created a low-scale inner city as a central point for a mixture of residential, retail and employment activities.

New York: PlaNYC - a design for the sustainability of New York City over the next twenty-five years - set the goal of creating or enhancing a landscaped open public space in every community. The city's transport department and partners have developed or are currently constructing 21 such areas. In addition, the transport department established the New York City Plaza Program which gives local communities the opportunity to compete for new sites.

Copenhagen: Since the first street pedestrianisation in 1962, Copenhagen has pioneered city space improvements. It has employed a range of measures to develop an urban realm that is supportive of walking, including the introduction of car-free zones and the development of public spaces, such as public squares and urban strollways.


Securing the benefits in English urban areas requires leadership with a strong and consistent long term vision for the future of the area. Where a city is covered by a number of different planning authorities this requires close working and collaboration between them.

Spatial planning policies may also help to achieve objectives such as carbon reduction by encouraging the spread of travel planning or encouraging the provision of infrastructure to support more carbon friendly vehicles. Achieving this requires joint working between those involved in transport and those preparing land use plans. This is not necessarily straightforward particularly where the functions lie in different local authorities. Alignment is unlikely to happen without strong leadership and encouragement.
The Commission for Integrated Transport have recently published guidance, *Planning for Sustainable Travel*\(^{14}\), designed to help transport and land use planners to work together.

**Managing roads and streets**

Roads and streets in urban areas often have competing functions. They act as a conduit for traffic of all kinds and they are places in their own right – especially important for residential streets and high streets.

If not well managed, these competing demands can exacerbate congestion, discourage walking and cycling, and create low quality places.

There is rarely a simple trade off between vehicles and other users. But although the “movement” and “place” functions of urban streets and roads are considered now to some extent, they still tend too often to be addressed separately, often by highways engineers and urban planners working in different parts of a local authority, or even in different authorities. Consideration of “movement” is also too often focussed on motorised traffic, leaving the needs of cyclists and pedestrians unheeded. Those planning and managing roads need also to work closely with those managing footpaths, cycle routes and other Public Rights of Way.

**Systematically establishing the “movement” and “place” functions of the local network and considering how conflicts between different functions can be reduced could radically improve outcomes for both drivers and other road users.**

Street design and consideration of “streetscape” are key to the creation of an environment which people can enjoy. Good quality design, including attention to the needs and preferences of different street users, can be used to reduce accidents, create areas for people to socialise and encourage walking, cycling and use of public transport. There is also evidence that good streetscape can encourage visitors to an area.

Although there have been many previous reports recommending improvement in street design, and international examples demonstrate the scope for practical improvements, progress in English cities has been slow, and there are still too many places where a lack of attention to the competing demands for roadspace has led to both continuing high congestion and also unattractive public spaces. Road and street design needs to take into account and balance the needs of all users, and be based on evidence of their needs. Up to now walking, for example, has tended to be neglected in the planning of streets, but there are now better tools available for measuring pedestrian movements. The benefits to some traffic of time savings and improved

\(^{14}\) [www.plan4sustainabletravel.org](http://www.plan4sustainabletravel.org)
reliability need to be balanced against the possibility that traffic speeds may be a deterrent to walking and cycling and may also impact on a neighbourhood’s sense of community.

DfT has worked with DCLG and other partners to publish Manual for Streets, which provides excellent guidance particularly on the design of residential streets. A companion document, Manual for Streets 2: wider application of the principles, is in preparation which is intended to fill the design guidance gap between the Manual for Streets and the Design Manual for Roads and Bridges, which is the design standard for trunk roads and motorways but tends to be applied more widely. Manual for Streets 2 will provide design guidance for a wide range street and road types, including high streets and town and city centres, with the aim of improving standards of highway design, and ensuring that our streets and roads are attractive, encourage cycling, walking and social interaction and serve all social groups.

But such guidance is unlikely to be effective without consideration of streetscape being seen as a priority by urban authorities, and without a willingness of those responsible for traffic management and those responsible for the urban environment and planning to work together closely. These cross-cutting issues can present challenges for the leadership of authorities.

Reducing congestion on urban roads will remain an important goal, not only for the economy but for health and for the environment. Given constraints on urban space, the provision of new roads or vehicle lanes will seldom be an option in cities, and evidence suggests that such new capacity can in any case rapidly release suppressed demand, making it still more difficult to encourage public transport, walking and cycling.

The Strategy Unit analysis identifies six alternative types of intervention which are available to policy-makers:

- Increasing the private costs of car use, either by central taxation or through local measures such as road pricing or parking charges;
- Reducing the demand for car travel, particularly by making other modes more attractive;
- Restricting traffic through regulation;
- Better management of the existing road network to increase its capacity, for example through parking restrictions or more efficient signal timings;
- Better management of temporary reductions in road space caused by roadworks or accidents;
- Improving information about journey times and routes.
Central London and other cities internationally such as Stockholm have shown the role that congestion charging can play as part of a comprehensive strategy. On the other hand, the TIF referendum in Manchester showed a clear majority there against paying for road use even in return for much improved public transport and lower congestion.

**For cities with high levels of congestion that want to support sustainable economic growth without introducing congestion charging, it is essential that the full range of other policy tools is considered.**

The demand for car travel, for example, can be reduced by introducing a package of sustainable travel measures such as promoting walking and cycling, work based travel plans, car clubs/sharing schemes, marketing and communication campaigns. Such measures need to be well targeted and the benefits must be “locked in” to avoid road space being taken up by new demand. Early indications from the three DfT funded Sustainable Travel Towns show that this approach can achieve a 7 – 9% reduction in car use of those targeted, as well as significant increases in public transport and cycling. These measures also have positive effects for health, the quality of urban space and carbon emissions.

Different forms of traffic management can also be highly effective in reducing congestion. DfT has made available to our largest cities new sources of data about journey times and delay to help them understand the unique patterns and causes of congestion in different areas. The Department has also implemented the Traffic Management Act 2004 which provides local authorities with a range of new tools to manage congestion and improve traffic flow – including new powers to control unnecessary disruption from works in the street, and more flexible powers to tackle bad parking. The Act has also given local authorities a new statutory duty – the Network Management Duty - to take action to improve traffic flows for all road users, and they have designated Traffic Managers who are responsible for delivering the Duty. The evidence shows that local authorities have already improved the way they manage their networks, but much remains to be done.

Once understood, cities can consider proven responses to congestion, ranging from city-region-wide traffic management (so that traffic lights are well co-ordinated and timings optimised in real-time), to a comprehensive approach for managing freight delivery and light vans.

Much more could be done to develop and utilise many of these measures in different cities and towns, and many will have positive impacts not only on the economy but on health, urban space and carbon emissions

**Securing Modal Shift**

There is much evidence of the substantial scope to achieve a modal shift by providing more choice for transport users by encouraging active travel and improving public transport. Despite the acknowledgment by policy makers of the benefits of such changes over many years, and increased investment by
central Government, there are still barriers to delivery. It is clear that we need to learn from international examples, to target interventions much more systematically and to sustain those interventions over time if they are to have the triple win effects we are seeking. For example, many cities are increasing the confidence and road skills of children and adults cycling through cycle training. We need to continue with these efforts, and make it available to more people, especially children. The forthcoming Active Travel Strategy will set out proposals to achieve much more widespread shift to cycling and walking.

**Improving bus services** too is likely to be a cost effective way to encourage modal shift and increase city transport capacity. Modern and reliable services can offer a credible alternative to the car helping to reduce congestion. Improving the bus system can also improve local air quality and enhance accessibility to public services for the most excluded.

The Government has provided new policy tools and increased investment to local authorities to support bus networks, but analysis of the underlying drivers of demand suggests that reversing the downward trend in patronage in cities will require authorities to take decisive action to make the most of the powers available. There are a number of possible tools to influence demand, not only relating to the quality and extent of services, but to wider interventions. Bus users, for example, care about the environment and safety of areas where they wait for buses, about the availability of information and about the ease and efficiency of ticketing arrangements. There are several good examples where bus use has dramatically increased as a result of a package of improvements, ranging from the introduction of bus lanes to priority signals, smart ticketing and enforcement of parking restrictions.

### There are examples of increased bus use in cities despite a fall in the number of bus journeys made within Metropolitan Areas

- Oxfordshire: bus journeys starting in Oxfordshire increased by 1.6% between 2001/02 and 2005/06 but the county has the highest number of journeys per head for a shire county
- York: bus use increased by 45% during LTP1 (2001/02 to 2005/06)
- Cambridgeshire: bus use increased by 21% in the county between 2001/02 to 2005/06 and 40% increase in patronage on radial routes in Cambridge. This was attributable to (amongst other things) the delivery of ten bus priority schemes, strong partnership with the main bus operator, and a major investment in Park and Ride
The choices

The benefits and choices which have been spread to so many households as a result of the availability of motor vehicles are real, and for many journeys, especially for those that are not into the centre of cities, cars are likely to remain an attractive choice. Private cars have brought a significant benefit to society and they will remain a central part of our future transport system. However, we must also recognise the side-effects that continually increasing car use has in our major towns and cities.

The Eddington Study estimated that if left unchecked, the cost of congestion to England’s businesses alone could amount to £10 billion per annum by 2025, with an increase in the value of lost time to other travellers of £12 billion per annum. The analysis has shown that this figure must be seen alongside similar costs for road safety, air quality and obesity. We must face up to the risk that these disbenefits could all too easily develop into a downward spiral, further reducing the attractiveness of cities themselves, and of cycling, walking and public transport within them.

Better utilisation of the tools described above will help, but past experience shows that individual initiatives and incremental change are unlikely to be enough to produce the triple win benefits which could be achieved. If people and businesses are to be able to move and trade freely and efficiently, with the negative side-effects of transport reduced, we need to recognise and tackle the various challenges simultaneously.

So we need a new and shared vision for the way we travel which helps to secure healthy, prosperous towns and cities where people and businesses want to be. That means finding solutions which work to achieve all our goals, and which give people a genuine choice as to how they travel.
5 Our vision for the future

Much good work has been and continues to be done at the local level. This paper though offers a new strategic vision for the future of urban transport. We trust that local authority leaders and other stakeholders will endorse that vision and work together with Government to achieve it. The vision is that people and businesses benefit from:

- enhanced mobility through a wider choice of journey;
- reduced congestion and increased journey time reliability,
- better health as a result of improved safety and much greater levels of walking and cycling; and
- streets and public spaces which are enjoyable places to be, where exposure to harmful emissions is reduced, and where quality of life is transformed; and
- a reduced threat from climate change.

The analysis which has been published has shown that this is a practical and achievable vision – not a matter simply of aspiration.

Achieving this shared vision in all our cities and urban areas requires leadership, constructive partnership and a continuing dialogue between central and local Government and others with a stake in the future of urban transport.

Sharing the Vision

Central Government has offered a vision, and provided the evidence base to demonstrate the vision is achievable and worthwhile. It has put in place a flexible legislative and policy framework with many policy tools available to local authorities. It has provided substantial levels of funding and a wide range of advice on research and good practice. But only individual cities themselves can know what exactly is right for their areas, and can undertake the sustained effort which is required to achieve a triple win.

This in itself is not new: as the 2006 local government White Paper set out, it is for local leaders to shape their cities, support their businesses, and improve the quality of life for their residents. Delivery of the vision depends on local leadership.

Local leadership needs to agree a more detailed vision for individual cities and urban areas, which cannot be just about transport but needs to have
regard to the wider goals which transport helps cities to meet – sustainable economic, environmental and social prosperity. Leadership must then be responsible for driving delivery and ensuring that officers and partners are energised to deliver the triple win gains which are available. The preparation of new Local Transport Strategies and Implementation Plans, which need to be in place by April 2011, is a crucial opportunity to make progress; as are the new powers on governance.

The studies which some of our major cities will be undertaking under the Delivering a Sustainable Transport Strategy programme will also be an opportunity to develop and assess a wide range of options for achievement.

Guidance on these DaSTS studies and that on Local Transport Plans has made clear that plans and proposals for investment must be considered against their ability to make progress on all five of the Department’s goals – economic development, climate change, safety, security and health, quality of life and equality of opportunity. It is not sufficient to identify an initiative which mitigates one problem without also considering its effects more widely.

**Shared Strategies**

As shown in the previous chapter, there is strong evidence to suggest that transport strategy needs to be integrated with other strategies particularly on economic development and land use planning, including policies to reduce carbon and increase resilience to impacts of climate change. The Government has consistently sought to encourage integration. At regional level, regions have been free since 2005 to advise on the overall strategic balance of funding between transport, housing and economic development, and measures in the new Local Democracy, Economic Development and Construction Bill will provide for a single Regional Strategy in each region. At the level of individual cities and local authorities, government departments have worked together to support the development of city region strategies. Guidance on Transport governance reform, Local Transport Plans, Local Area Agreements and Multi Area Agreements has consistently pressed the need for authorities to work together, especially in the former metropolitan areas where different authorities are responsible for different areas of transport, and for land use, environment and economic development.

Some cities have already made significant gains, both in setting a vision and in collaborative working towards delivery. Some smaller cities such as Tees Valley, Brighton and York have already built up a strong track record, while some larger cities have also made progress. As announced in Budget 2009, the Government is working with Manchester and Leeds as pathfinder cities to showcase how better decision making and stronger planning and delivery can be achieved towards a common vision.

**Changing to Achieve**

But the analysis found that progress in most English city regions had been slow. In some of our larger cities, there is still little sense that authorities are
working together to achieve a clearly articulated common vision for how transport can work to transform the success of the city.

Part of the challenge for our largest cities outside London is that different bodies are responsible for public transport, spatial planning, and the road network. The powers to reform transport governance are available to help tackle this problem, but no city has yet put forward a firm proposal to Government. The Government wants to see proposals that give:

- effective alignment between decision making on transport and decisions on other areas of policy such as land use, economic development and wider regeneration, which could be achieved through institutional mechanisms or strong partnership working.

- robust and streamlined decision making arrangements which allow necessary decisions to be taken on complex and difficult issues in a timely and transparent manner. This requires a clear focus on accountability and responsibility of decisions on behalf of a city region, with proper safeguards to ensure that decisions command the assent and support of the affected stakeholders, whilst avoiding lowest common denominator decision-making.

- a real enhancement of delivery capability and capacity by taking a coherent and integrated approach to managing currently fragmented transport planning and delivery skills and capacity. By maximising the effectiveness of existing resources efficiency savings can be redirected into enhanced capability and enable the provision of additional specialist skills.

- an examination and, if necessary, redress of any operational fragmentation, in particular on highways, traffic management and public transport to ensure greater alignment of policy interventions and maximise delivery efficiencies across public authorities involved, consistent with appropriate levels of subsidiarity.

- stronger internal challenge and assessment functions, allied to improved performance management, in order to ensure that urban areas are better equipped to take decisions in relation to future plans and interventions, maximise VfM, monitor impacts of interventions and safeguard public funds.

Without the willingness to work together to achieve and deliver a long term vision for urban transport, cities are unlikely to achieve their full potential. Without this sense of purpose, we will continue to see sub-optimal outcomes, not just for transport, but for the economy, for people’s quality of life and health and for carbon as well.
6 Next Steps

There are huge opportunities for well planned and delivered transport to transform the success of our cities. But progress to achieve the gains is still too slow.

This is not primarily a matter of money: funding for local transport has been at an all time high in recent years. Nor has the analysis identified any serious deficiencies in the policy framework or the tools available to authorities.

The barriers are more subtle. Although a range of partnerships have developed, few have yet provided sufficient incentivisation or drive to overcome fragmentation of responsibilities and the different perspectives of the various professional groups who are involved in delivery. Nor has championship within authorities of the needs of walkers and cyclists been strong. Skills within authorities have not always been sufficient to assess and balance the various needs.

We need change, and effective local change depends on the leadership of local areas. However, real improvements will not be delivered without a shared agenda between central and local government, together with vision and drive from the top. It is vital that leaders and decision makers at all levels have a shared agenda and vision for the future of urban transport.

The Government looks forward to hearing the response of city authorities to the analysis which has been done and to working closely with them to secure the best possible future for urban transport.