SCOTLAND'S NATIONAL transport STRATEGY

smarter scotland
SCOTTISH EXECUTIVE

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Foreword

Growing Scotland's economy is the first priority of this Government. Scotland aspires to be a world-class country where people want to live, business can thrive and visitors are keen to return. We want Scotland to be a strong player in the global economic market, increasingly productive and ready to respond to new challenges, with thriving cities and rural economies.

Transport is an essential part of economic activity. Infrastructure, roads, rail, airports and ports - and the businesses that use these assets - are all vital components of Scotland's economy. Transport has a significant and positive contribution to make to economic growth, and to the prosperity and quality of life of Scottish people.

Our key challenge is to develop Scotland's transport infrastructure and services in innovative ways that anticipate future needs and challenges, while recognising at the outset there is a carbon imprint to transport spending. The Stern Report, "The Economic Impacts of Climate Change", clearly demonstrated the need to take strong early action to confront the threat posed by climate change and the Scottish Government remains committed to playing its part in tackling this threat, and preserving our environment for the generations to come.

This strategy maps out the long-term future for transport in Scotland for the first time. I want to see a transport system fit for the 21st century, one that meets the needs of everyone in Scotland, providing them with integrated, modern, reliable and environmentally efficient transport choices. Passengers and business deserve nothing less. Alongside that vision, the strategy outlines the long-term objectives, priorities and plans to make it a reality.

There are 3 key issues that will make a fundamental difference towards delivering a world class transport system:

- Improved journey times and connections - making it quicker, easier and more reliable for passengers to travel between our towns and cities and across our global markets.
- Reduced emissions - making sure that Scotland takes a lead in the future of sustainable transport.
- Improved quality, accessibility and affordability - ensuring everyone across Scotland has high quality public transport choices.

I look forward to working in partnership with local authorities, regional transport partnerships and transport operators to achieve our vision for transport in Scotland, securing the delivery of a transport system that meets the needs of passengers, businesses and the environment alike.

Tavish Scott MSP
Transport Minister


Except
buses, taxis
and cycles
22
BATTERSBY
TRAFA

Chapter 1

Scotland's Transport Needs

1. Scotland aspires to be a world-class country where people want to live, business can thrive and to which visitors want to travel. We want Scotland to be a strong player in the global economic market, increasingly productive and able to respond well to new challenges, with thriving cities and rural economies and where disadvantaged communities also benefit from economic growth. We want Scotland to be a strong, healthy and just society and to have an environment which provides conditions for the improving health and well-being of people in Scotland. We want Scotland to reduce its global environmental and climate impact through sustainable development.

2. This context is described through this Government's existing policy and strategy documents which all have an influence on the development of the National Transport Strategy. These include the *Framework for Economic Development in Scotland,*[1] *A Smart, Successful Scotland,*[2] *Changing Our Ways: Scotland's Climate Change Programme,*[3] *the Air Quality Strategy for England, Scotland, Wales and Northern Ireland,*[4] *the National Planning Framework for Scotland,*[5] *People and Place – Regeneration Policy Statement,*[6] *Choosing Our Future: Scottish Sustainable Development Strategy,*[7] *Not in Education, Employment or Training,*[8] *Let's Make Scotland More Active: A Strategy for Physical Activity*[9], *Scottish Tourism: The Next Decade – A Tourism Framework for Change,*[10] *Scotland's Culture: Scottish Executive Response to the Cultural Review*[11] *and the forthcoming Stragegy for Scotland with an Ageing Population.*

3. Against the background of the vision for Scotland in 2025, our vision and objectives for transport in Scotland were set out in the 2004 Transport White Paper *Scotland's Transport Future.*[12]

4. The White Paper set out some bold ambitions for transport. Much has already been achieved. We have created new structures across Scotland which are already delivering benefits for the people of Scotland. The Government agency, *Transport Scotland* has been set up to deliver our major road and rail schemes and to deliver the national concessionary fare scheme. Seven regional transport partnerships (RTPs) have been established across Scotland to focus on the strategic approach to transport across their regions. These create the framework within which the delivery of transport can flourish.

5. Our vision is of "an accessible Scotland with safe, integrated and reliable transport that supports economic growth, provides opportunities for all and is easy to use; a transport system that meets everyone's needs, respects our environment and contributes to health; services recognised internationally for quality, technology and innovation, and for effective and well-maintained networks; a culture where fewer short journeys are made by car, where we favour public transport, walking and cycling because they are safe and sustainable, where transport providers and planners respond to the changing needs of businesses, communities and users, and where one ticket will get you anywhere" *Scotland's Transport Future 2004*.

6. We set five high level objectives for transport in *Scotland's Transport Future*. They are to:

   - Promote economic growth by building, enhancing managing and maintaining transport services, infrastructure and networks to maximise their efficiency;
   - Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network;
   - Protect our environment and improve health by building and investing in public transport and other types of efficient and sustainable transport which minimise emissions and consumption of resources and energy;
   - Improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, drivers, passengers and staff; and
   - Improve integration by making journey planning and ticketing easier and working to ensure smooth connection between different forms of transport.

7. We believe the vision and high level objectives remain the right direction of travel. Your responses to our consultation demonstrate that this view is widely shared. Having shared agreement on where we want to get to is a huge step forward.

You told us... that it was important that there should be some continuity between the 2004 White Paper and Scotland's National Transport Strategy. You suggested that it was unnecessary to have both a vision and objectives in addition to goals and principles and that these could be simplified. We agree and will therefore focus on maintaining the consistency from the vision and objectives described in the 2004 White Paper and will drop the goals and principles, focusing rather on the strategic outcomes that will be achieved by delivering our high level objectives.

You told us... that the 5 high level objectives are appropriate and should be retained. Some of you wanted to prioritise these objectives, with promoting economic growth as the primary objective, whilst others wanted to rephrase the economic growth objective to focus on sustainable economic growth. A number of you wanted to add new objectives for improving health and tackling climate change. Many of you were content with the current focus of the objectives, as long as specific attention was given to issues of health improvement, social inclusion and emissions within the strategy.

8. We recognise that potential tensions exist between these high level objectives such as promoting economic growth while protecting our environment. However, we place great emphasis on ensuring synergy is achieved. Through our consultation this view was often polarised into language illustrating a view that we had to choose between the economy and the environment. We do not think this polarisation is right. In line with our Sustainable Development Strategy, our Framework for Economic Development and Scotland's Climate Change Programme we support sustainable development, which brings together the economy, the environment and social inclusion. Sustainable development principles will form the basis of our approach to this strategy.

9. The strategy will outline how Scotland can turn our shared vision into reality. It will outline what we as the Scottish Government will do to help position Scotland for the future and how we will work with our partners to enable them to play their part in turning the vision into reality.

10. There are 3 key strategic outcomes that we must focus on to achieve this vision. They are to:

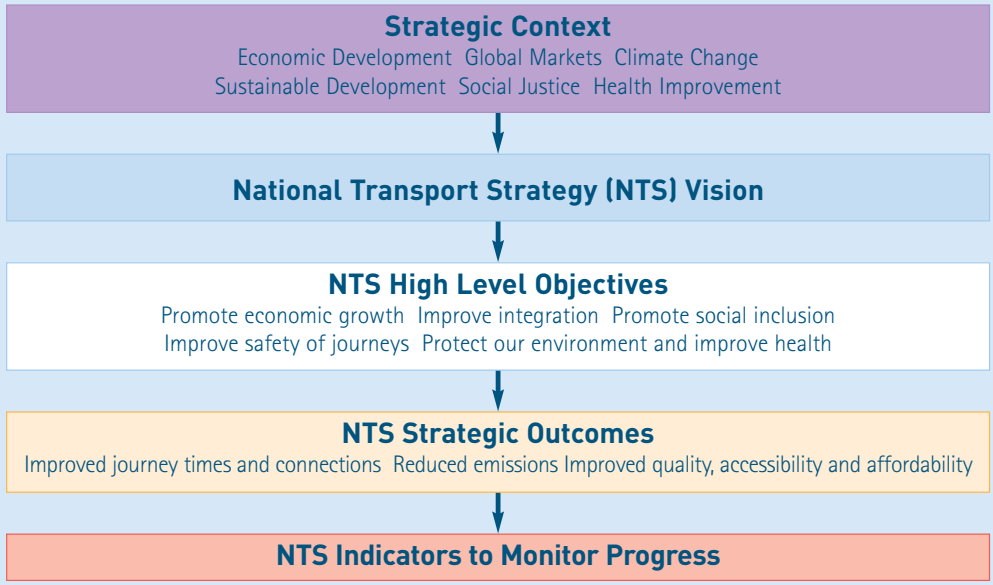
    - **Improve journey times and connections**, to tackle congestion and the lack of integration and connections in transport which impact on our high level objectives for economic growth, social inclusion, integration and safety;
    - **Reduce emissions**, to tackle the issues of climate change, air quality and health improvement which impact on our high level objective for protecting the environment and improving health; and
    - **Improve quality, accessibility and affordability**, to give people a choice of public transport, where availability means better quality transport services and value for money or an alternative to the car.

11. These strategic outcomes will have wider benefits and will contribute to the delivery of a number of other key priorities including health improvement, social inclusion and regeneration. Tackling congestion, integrating services and infrastructure, improving connections and accessibility will all encourage individuals to make different choices about their preferred method of travel and enable individuals to become more economically active. As well as reducing emissions, policies to increase active travel and better integrate transport with services will contribute to increased physical activity and improved health.

12. These strategic outcomes will set the context for transport policy making and inform decision making for the next 20 years for the Executive and our key partners. They should become the guiding principles when developing strategy and prioritising resources. We recognise that this strategy cannot cover everything. However, through our strategic outcomes we want to give a clear focus on the major challenges that need to be addressed in order to make the biggest difference to achieving our vision for Scotland in 2025.

Figure 1: Strategic Context to NTS

Number One Priority: Growing Scotland's Economy



13. This does not mean that any one single project, or policy, which increases emissions or does not improve journey times cannot go ahead. It means that, in the round, this strategy will help us over the next 20 years demonstrate measurable progress on all three strategic outcomes.

14. Regional transport partnerships, local authorities and transport businesses will be key partners in delivering these strategic outcomes. We can change transport in Scotland for the better by working together to deliver national, regional and local strategies that integrate with each other. As regional transport partnerships mature and evolve they will take on further functions and strengthen the regional capacity to plan and deliver services.

15. This strategy sets out the direction of travel that flows from the strategic context as illustrated in figure 1.

16. To support this strategy we are also producing documents to illustrate in more detail our approach to rail, freight and buses. *Scotland's Railways*[13] and our *Freight Action Plan*[14] and *Bus Action Plan*[15] will be published alongside Scotland's National Transport Strategy.

17. In the following chapters we will:

    - Set out the challenge for transport against each of these strategic outcomes, the progress that has been made and what still needs to be addressed;
    - Identify what we, as the Scottish Government will do, what we will encourage others to do and how we will work with our stakeholders to move forward; and
    - Outline how we intend to implement and monitor the strategy.


FAST


HELMS

Chapter 2

Key Challenges

18. This chapter presents current trends and projections for the future of the transport sector in Scotland. It then takes each of the three strategic outcomes in turn and sets out:

- where we are now;
- where we are going if current trends continue;
- progress in these areas to date; and
- the key challenges we will face.

Key trends

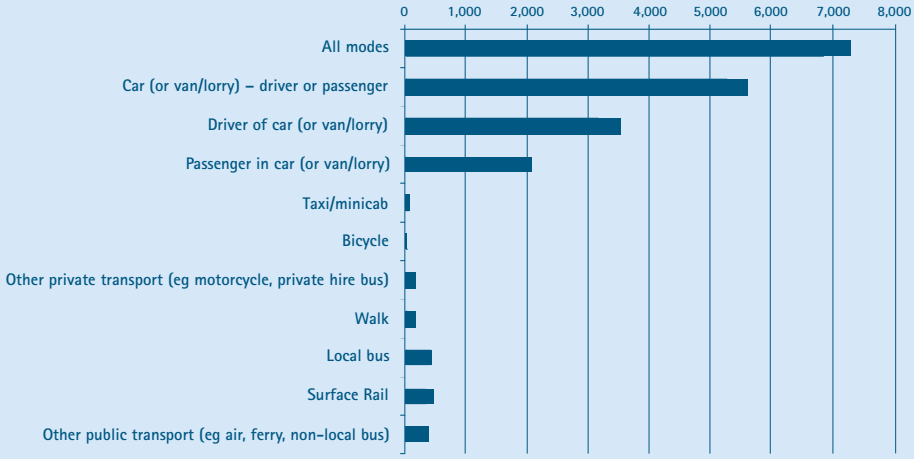
19. We are travelling more than we have done in the past. Our growing economy and changing society have led to changes in the journeys we make and the way in which we travel. The estimated average distance travelled per person per year increased by 59% between 1985/86 and 2004/05 although there was little change in the total time spent travelling, which has averaged around 350 hours per person per year.[16]

20. We are travelling more by car in comparison with other modes. The private car is by far the dominant mode of transport for people in Scotland – shown in figure 2 – and has become increasingly important over time. In 2004/05, 23% of journeys of under a mile and 57% of journeys of between one and two miles were undertaken by car.[17] In 2005, over two thirds of commuters travelled to work by car and over a fifth of pupils travelled to school by car.[18] The vast majority of visitors to Scotland travel by car.

21. This increased reliance on cars is mirrored by a reduction in other forms of transport such as walking and cycling. These forms of sustainable transport have been falling in recent years and as figure 2 shows now make a very small contribution to the overall journey.

22. We are travelling more by plane. One of the most significant changes in transport in recent years has been a dramatic growth in air travel. This reflects the availability of cheaper fares and greater choice in flights. Between 1970 and 2005, there was an eight-fold increase in passenger numbers.[19]

Figure 2: Average distance (miles) travelled by Scottish residents (within GB) per person per year (2003-2004).



Source: Updated versions of Scottish Transport Statistics tables

23. These trends are expected to continue. Air travel is predicted to rise by 150%[20] between 2004 and 2030. Latest forecasts suggest road traffic in Scotland will grow by 12% between 2005 and 2010 and by 22% between 2005 and 2015.[21] However, we note that in 2005 the total volume of traffic was more or less the same as in 2004.

24. There have been recoveries in numbers using public transport. Buses are the dominant form of public transport in terms of journey numbers (479 million local bus passenger journeys in 2004-05 compared with almost 73 million passenger journeys on rail)[22]. Bus passenger numbers have fallen considerably since a peak of over 1,000 million per year in the 1960s, but there have been rises in six of the last seven years. Similarly, rail passenger figures fell between the 1960s and the mid nineties but have been rising since and are now comparable to the mid 1960s figure.[23]

What is behind these trends?

25. It is important to realise why these trends are occurring. The natural growth in trade that accompanies increased globalisation and economic growth has itself created more demands for transport services and this inevitably has occurred in the context of limited infrastructure capacity. International trade has become more important for Scotland and other advanced economies. Tourism contributed around £4 billion to the Scottish economy in 2001[24] and overseas visitor numbers are increasing. The rise in real incomes associated with economic growth are also responsible for increasing demand for personal travel and the ever increasing levels of car ownership that are being witnessed. Changes in land use patterns and lifestyles have also made a significant contribution to the trends presented above – for example with the rise in long distance commuting and out-of-town shopping centres.

26. Whilst these changes have led to considerable benefits, they also have generated costs, most notably congestion, environmental damage and impacts on quality of life. The fact that transport users do not pay the full costs they impose on society (e.g. in terms of emissions, noise and air quality) is another factor driving the trends sets out above. If transport users paid a price that was a truer reflection of the full costs of transport, this would reduce the demand for transport and/or help create more sustainable transport decisions.

27. The world is not static and the long term trend would seem to be for continued economic expansion. Transport has an important role to play in ensuring that Scotland can realise the full opportunities afforded by increased globalisation but fundamental changes are required if the advantages this brings are not to be overshadowed by the potential drawbacks. Our approach to dealing with these issues is outlined in later chapters.

Journey times and Connections

Where are we now?

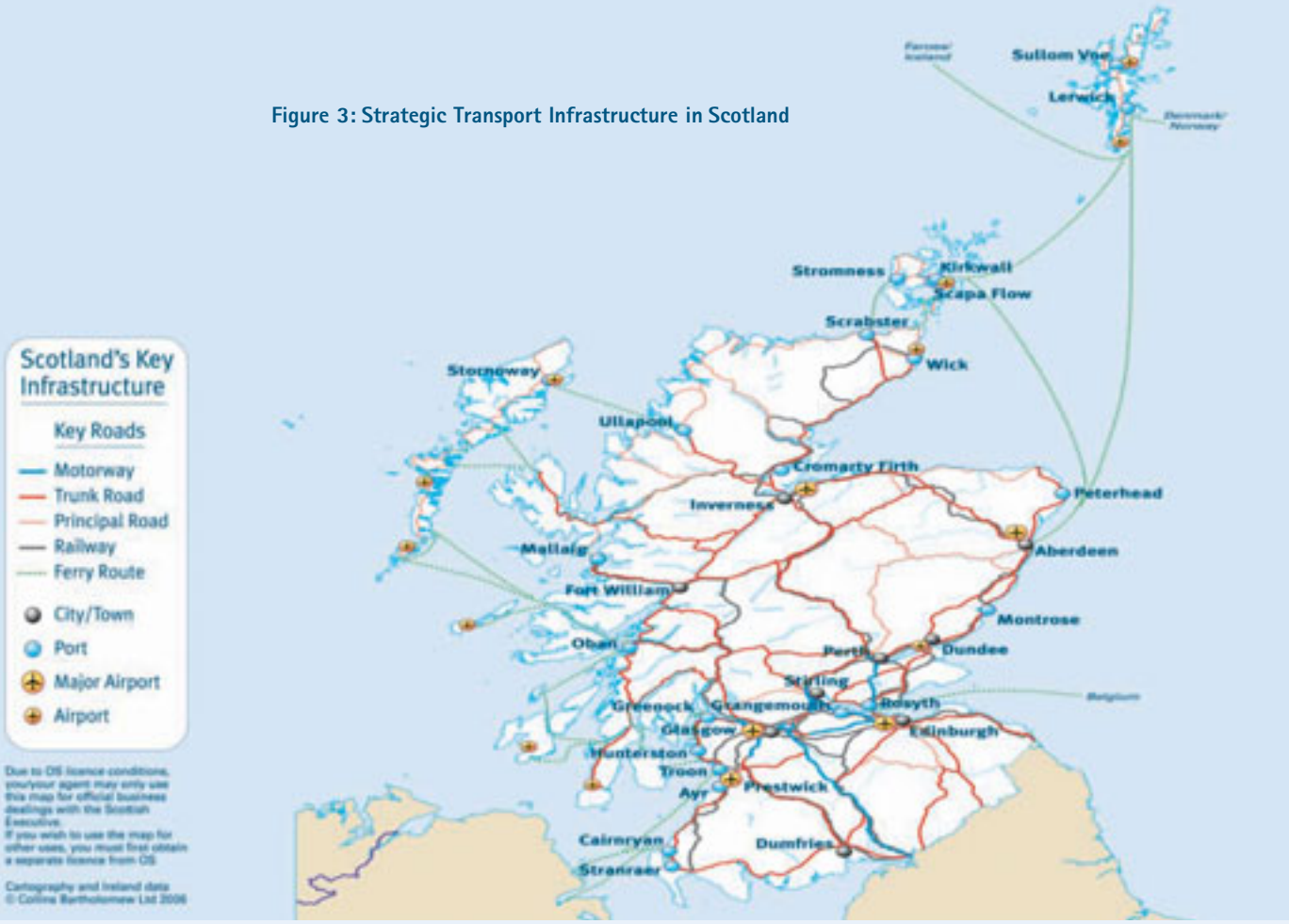
28. The impact of transport on the economy is a hugely complex subject. The Framework for Economic Development in Scotland states: "An efficient transport infrastructure is an essential feature of a competitive economy. Located at the periphery of Europe, Scottish industry requires access to fast and efficient transport services in order to remain competitive."

29. The transport sector, i.e. logistics, haulage, rail, air, bus and ferry services, contributes directly to the Scottish economy and, like any other sector, changes in employment and output will have impacts on the rest of the economy, both directly and indirectly. Unlike many other sectors, transport has additional economic benefits by impacting on the productivity of the economy as a whole. However, the linkages between transport and wider economic activity are highly complex as transport has an effect on land and labour markets as well as on the location and productivity of firms.[25]

30. Since the Standing Advisory Committee on Trunk Road Assessment (SACTRA) reported on Transport and the Economy at the end of the 1990s,[26] there have been significant developments in the understanding of this key relationship. Of particular relevance is how transport improvements may aid agglomeration effects (the process whereby the concentration of industries in specific locations allows firms to lower costs and take advantage of specialised labour and business services).

31. Figure 3 shows the extent of the strategic transport infrastructure in Scotland and figure 4 shows the level of transport activity in Scotland.

Figure 3: Strategic Transport Infrastructure in Scotland



32. The movement of freight is critical to our economy and all of our transport infrastructure plays a role in this. For example, ports are key to the logistics chain by providing the interface between land and sea and the infrastructure to support cargo movement by sea.

33. The Scottish Government's *Freight Action Plan*[27] considers the current baseline and key trends which will affect the movement of freight in Scotland. These trends include globalisation, changes to the Scottish economy (including stronger and new export markets for food and drink, and growth in on-line retailing), and changing customer demands and distribution networks.

34. Congestion and the reliability of journey times are increasing problems in Scotland. In 2005, 11% of car drivers' journeys were reported as delayed by congestion, with this figure rising to nearly a quarter of journeys undertaken in weekday rush hours.[28] On Scotland's trunk roads, 8 of the 44 routes monitored experienced serious or severe congestion for more than one hour per day.[29]

35. Congestion increases travel times and makes it difficult to predict how long journeys will take. Reliability and punctuality of public transport are important for both existing users and in order to encourage new users. Longer and unpredictable journey times, for cars, freight and public transport users, have significant economic impacts (both from higher direct costs of transport and the cost to businesses of a loss of competitiveness), cause higher levels of emissions impairing both local and global air quality and are frustrating to all.

36. In terms of safety, whilst road traffic has increased year on year, there has been an ongoing decline in the number of road accidents and casualty numbers. The number of children killed or seriously injured has shown a particular decrease in recent years.

37. Despite these achievements, there are still a significant number of people injured in road accidents in Scotland, presenting an ongoing cost to our society. The cost of road accidents in Scotland was estimated at £1,399 million for 2004.[30]

Figure 4: Transport Activity in Scotland

Road	2.5 million 55 thousand 43 billion 166 million	Vehicles (2005) Kilometres of road (2005) Vehicle-km per annum (2005) Tonnes road freight lifted in Scotland per annum (2005)
Bus	357 million 140 million 477 million	Local bus service kilometres per year (2005-06) Non-local bus service kilometres per year (2004-05) Local bus passenger journeys (boardings) per year (2005-06)
Rail	2.7 thousand 73 million 2.35 billion 10.9 million	Km rail routes (passengers and goods) (2005-06) Rail passengers per annum (2004-05) ScotRail passenger km per annum (2005-06) Tonnes rail freight lifted in Scotland per annum (2004-05)
Airports	16 24 million 75 thousand	With more than 5,000 passengers per year (including 4 with more than 1 million passengers per year) Terminal passengers per annum (2005) Tonnes air freight per annum (2005)
Sea ports	10 110 million	Major ports (handling over 1m tones cargo per annum) Tonnes inward and outward traffic (2004)
Ferry services	10 million	Passengers per annum (2005) (including CalMac, Northlink and Western Ferries, Orkney and Shetland intra-island services, services between Scotland and Ireland and the Rosyth to Zeebrugge service)
Cycling	25	Miles travelled per person per year by bicyle (2004/05)
Walking	169	Miles travelled per person per year (2004/05)

Source: Main Transport Trends and updated versions of Scottish Transport Statistics tables

Progress

38. Scotland's connections are improving. The number of international destinations accessible direct from Scottish airports more than doubled between 1999 and 2005, rising from 32 to 71.[31] National and international ferry links provide services to over 10 million passengers annually as well as supporting the movement of freight. Connections by sea have increased over the last few years. Since the introduction of Superfast's Rosyth-Zeebrugge ferry service in 2002, over 700,000 passengers have travelled on the service as well as 136,000 freight units.[32] The ferry service has demonstrated both very high quality and reliability over the period, winning Superfast several prestigious awards. The service has also boosted the tourism sector, with each visitor to Scotland spending an average £600 per visit.[33]We are investing very substantially in a range of major road and rail enhancements to make our networks better than ever. Our plans to 2012 are already set out in our Infrastructure Investment Plan and the forthcoming Strategic Transport Projects Review will consider future priorities.

39. We have targets in place for a 40% reduction in fatal and serious road accident casualties (50% for children) by 2010, compared with the average for 1994-98. These targets have now been met, however it is essential that the current rate of decline is maintained therefore we will consider setting more stringent targets for the remainder of this period. Relative to its population, Scotland has fewer road deaths than the overall EU average.

Key challenges

40. The ability to undertake journeys between locations in Scotland and beyond Scotland is essential for individuals, for business and for tourists. A well functioning transport system has huge benefits in terms of efficiency, choice and convenience. But if current road traffic trends continue, there will be significant ongoing impacts for Scotland.

41. As road traffic levels increase, congestion may become more of a problem in Scotland, with longer delays where there are existing problems, and congestion occurring where traffic currently flows freely. As parts of the road network reach capacity, it becomes less resilient to shocks, such as accidents and road works, which in turn increase problems of congestion.

Figure 5: Greenhouse Gas Emissions from transport in Scotland (KtCarbon)

	Kt Carbon							% change
	1990	1995	2000	2001	2002	2003	2004	1990-2004
Road Transport	2507	2553	2678	2675	2760	2770	2792	11
Domestic Civil Aviation	51	49	69	76	77	76	79	56
Railways	68	65	80	77	69	74	78	14
Other[34]	403	342	281	225	221	290	281	-30
Scotland Total	3029	3009	3108	3054	3127	3210	3230	7

Source: National Atmospheric Emissions Inventory

42. The freight sector will continue to face challenges. The role of ports and improvements to their inland road and rail links will be vital in supporting the projected changes in the movement of freight. The movement of freight contributes to congestion; we need to encourage more freight to transfer onto rail and water, which has environmental benefits as well as removing traffic from our roads.

43. Although we expect road safety to carry on improving, accidents and casualties will continue to be a substantial cost to both our economy and our society. We need to continue to improve safety for all forms of transport. In particular, safety needs to be improved in areas where we are currently not making any progress.

44. Over the next 20 years, traffic levels and numbers of air passengers are forecast to increase year on year. If current economic, globalisation and tourism trends are sustained, the ability of our economy to prosper will depend on continuing improvements to journey times and connections within Scotland, to the rest of the UK and the rest of the world.

Emissions

Where are we now?

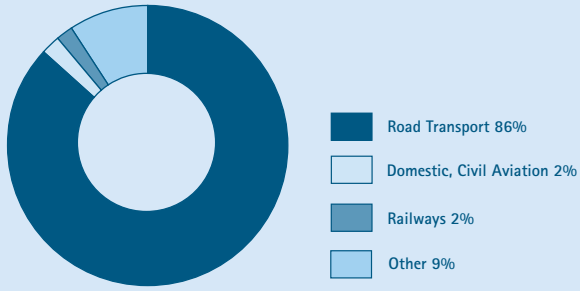
45. Net emissions of greenhouse gases (including Land Use, Land Use Change and Forestry category (LULUCF)) in Scotland in 2004 were 14.6 million tonnes of carbon equivalent (MtC). The transport sector was the second largest contributing sector behind energy supply, contributing 22% of emissions[35].

46. Between 1990 and 2004, emissions from the transport sector increased from 3.0 to 3.2 MtC, an increase of 7%. This contrasts with a decline in emissions from every other sector in Scotland except the residential sector.

47. Figures 5 and 6 show total emissions from a selection of transport modes. Road transport remains by far the biggest source of emissions from the transport sector, accounting for 86% in 2004. Emissions from domestic aviation are included and, whilst they account for a small proportion (2%) of emissions from transport, the level has grown significantly in recent years, increasing by over 50% between 1990 and 2004. There is still no agreement for the allocation of emissions to national totals from international aviation and shipping. (See annex B for information on the calculation of emissions from road transport.)

48. *Air quality* in Scotland is generally good and significant progress has been made to reduce emissions in recent years. Emissions of key air pollutants from road transport have fallen by about 50% over the last decade, despite increases in traffic, and are set to reduce by a further 25% or so over the next decade. This is mainly as a result of progressively tighter vehicle and emission and

Figure 5: Greenhouse Gas Emissions by the Transport Sector in Scotland, 2004



fuel standards agreed at a European level and set in UK regulations. However, while vehicle technology and fuels are cleaner than in the past, increasing numbers of vehicles on the roads have led to the increased likelihood of congestion with associated hotspots of poor air quality and associated impacts on health.

Progress

49. The Scottish and UK Governments are committed to reducing the impact of travel on the environment. Because of our increasing levels of travel, particularly in high carbon modes such as car and aviation greenhouse gas emissions from transport are rising at a time when emissions from most other sectors are falling. Whilst average new car fuel efficiency has improved by over 10% since 1997, increases in the level of travel have offset these benefits and emissions from the sector have continued to rise.

50. Scotland's Climate Change Programme recognises that reducing emissions from the transport sector is a significant task and, together with the UK Programme, sets out a range of existing and new transport measures which are expected to generate significant carbon savings.

51. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland has at its core standards and objectives which local authorities are charged with working towards. Where review and assessment work indicates that any objective is unlikely to be met by the required date, the authority concerned must declare an Air Quality Management Area (AQMA) and draw up an action plan outlining how it intends to tackle the issues identified.

52. AQMAs were initially declared and action plans developed in respect of traffic-related NO^2 emissions in Aberdeen, Edinburgh and Glasgow. Further transport-related AQMAs have since been established in Bishopbriggs, Paisley, Dundee, Perth and three sites in North Lanarkshire. The relevant local authorities are required to develop air quality action plans for these areas setting out the measures they intend to put in place to help achieve the air quality objectives. All other Scottish local authorities are either achieving the relevant air quality objectives or will do so without the need to declare an AQMA.

53. The Scottish and UK Governments are in the process of reviewing the Air Quality Strategy. The revised Strategy will offer a package of transport measures which will help reduce exposure of air pollutants for everyone.

54. The Air Quality Strategy sits alongside similar EU legislation on air quality. Such legislation places obligations on Scotland and the rest of the UK to meet limit values for certain air pollutants by prescribed dates. The non-achievement of such obligations would lead to infraction proceedings being taken by the European Commission, thus making it essential that the National Transport Strategy recognises the role it has to play in helping to deliver better air quality.

Key challenges

55. We recognise that present trends in transport are not sustainable in the long term. The key challenge of this Strategy is to accept and then tackle the link between economic activity and rising transport demand in creating a sustainable Scotland. Increasing public acceptability of some of the instruments that we know to be the most effective in reducing emissions is a related challenge. We do not, in any way, underestimate this challenge.

Quality, Accessibility and Affordability

Where are we now?

56. High quality, safe, affordable public transport provides the ability to access employment, education and health services and cultural, sporting and leisure activities. However, access to public transport can vary widely depending on where we live, our age, our income and a range of other factors.

57. Passenger satisfaction with our public transport services is high. 85% of Scotrail passengers were either satisfied or commented that it was good when asked their opinion of their overall journey.[36] In 2005 overall passenger satisfaction on buses in Scotland was 87%.[37] Passenger numbers on both rail and bus have been increasing in recent years, whilst at the same time, rail and bus fares have risen compared to the cost of motoring.

58. In 2005, 85% of all households said they were within six minutes walk away from a bus stop. However, access to public transport varies considerably within Scotland, 1% or less of those in rural areas and remote small towns had access to a regular bus service (at least one bus every 13 minutes) compared with 44% in large urban areas.[38] Many communities in the Highlands and Islands are reliant on lifeline air and ferry services.

59. Access to affordable high quality public transport is particularly important for certain groups. For those seeking to get into education, training or employment, access is particularly vital to enable them to become and remain more economically active. Accessibility problems can be more significant for those whose mobility is restricted, such as older or disabled people, or those with young children. Recent research has found that disabled people are 50% less likely on any given day to travel than those who are able bodied.[39] It also found that many disabled adults have difficulty travelling and that the considerable majority of disabled adults would like to travel more than they currently do.

60. Access to transport can be a particular challenge for those living in disadvantaged communities. In 2003, 60% of people living in the 15% most deprived areas of Scotland had no access to a car for private use (compared to 27% in the rest of Scotland)[40] these are people more likely to walk or travel by public transport, with buses being the most commonly-used mode.

61. In comparison with private vehicles, safety records on public transport are very good.[41] Whilst there are concerns regarding security on public transport and the extent of anti-social behaviour, overall passenger satisfaction on buses is high, at 87%.[42] Moreover, 86% of passengers feel safe and secure on the bus.[43] However, over a fifth of adults say they would feel "not particularly safe" or "not safe at all" travelling by bus in the evening[44] and over two-thirds (70%) of those using buses have experienced anti-social behaviour.

Progress

62. We are working to improve affordability and quality of public transport in Scotland. Uptake of the new concessionary fares national entitlement card for older and disabled people has been higher than expected with an uptake of over 930,000 cards compared to a forecast of 830,000. We are committed to a national scheme of bus, rail and ferry concessionary travel for young people. There has been an encouraging rise in bus passenger numbers in six of the last seven years.[45]

63. Accessibility to our remote and island communities has improved. The introduction of the Air Discount Scheme has reduced fares, thereby improving access, for those living in remote communities in the Highlands and Islands. Passenger numbers through HIAL airports have seen significant increases with five years of consecutive growth to 2005, and on our lifeline ferry services passengers have increased by 12% between 1999 and 2005.[46]

64. The Tourism Framework for Change sets out work being taken forward in relation to public transport for visitors to Scotland. Research into the travel behaviour of visitors to Scotland is near completion and this will help inform future work in this area. Some tour operators report that visitors to Scotland sometimes find public transport unattractive, for example because of lack of facilities such as luggage racks and bike storage. More research needs to be done on visitors' perceptions of transport in Scotland and how it affects their experience, and we will take this forward.

Key challenges

65. Despite the progress to date, there are still many communities and individuals in Scotland who cannot access high quality, affordable public transport. Transport can be a significant contributor to their social exclusion and acts against individuals becoming economically active and communities having benefits from regeneration through, for example, access to work routes and access to sporting and cultural activities.

66. Although some public transport may be available, this does not necessarily mean that individuals can reach the locations they need to at convenient times, or that they can afford to use the services, or that they are confident to travel by public transport in the knowledge that they will enjoy a high quality journey.

67. Looking forward, Scotland can expect to see fewer people in the younger age groups and more older people (particularly aged 75 and over). The percentage of the population who are of working age is projected to decline.[47] Although, in the future, we expect high percentages of older people to hold driving licences, an ageing population will lead to particular accessibility challenges.

68. The country is facing a huge health challenge from chronic diseases such as obesity. Obesity prevalance is soaring in Scotland and it is now estimated that around 60% of the adult population and 33% of children are either over-weight or obese. It is therefore critical to recognise the significant impact that sustainable transport can play in preventing and mediating many forms of chronic disease. [48]

69. Safety and security on public transport is important for existing users and encouraging more people to use buses and trains. Anti-social behaviour is perceived to be increasing in terms of both its frequency and seriousness. Reducing levels of and the perception of anti-social behaviour on public transport is an important challenge.

70. All of these issues present major challenges over the next 20 years. The following chapters will outline what we will do, with our stakeholders, to address these challenges.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Chapter 3

Improved Journey Times and Connections

Summary Message

71. To enhance Scotland's global competitiveness and to enable Scotland's economy to maximise its productivity, Scotland needs to ensure that it has a well-connected, sustainable transport network, which offers fast and reliable journey times for both passengers and for businesses needing to transport freight. Transport needs to support major Scottish industries such as tourism, biotechnology, oil and gas, the forest industries, the food and drink sector and financial services. It needs to be easier for visitors, commuters and businesses to connect to global markets and move within and between our major urban centres of economic activity. It is important to attracting and enabling major cultural and sporting events in Scotland, such as the Glasgow 2014 bid for the Commonwealth Games. Transport can help unlock the economic and regeneration potential of particular places. It can connect people in regeneration areas such as our priority areas of the Clyde Corridor, Ayrshire and Inverclyde to economic opportunity enabling more people to become economically active. It can also ensure connections for people who live and work in more remote and rural areas. This chapter will look at how to improve journey times, make them more reliable, improve connections and tackle congestion in Scotland.

Overview

72. The **key challenges** we face are how to tackle the critical issue of congestion on key corridors and the strategic pinch points in our road and rail networks: how to make journey times more reliable and how to ensure the infrastructure supports economic activity, providing connections to key markets and locations, providing access to work and education and access for visitors. We need to ensure Scotland is well-connected to maximise the potential of globalisation. We need to tackle the congestion problems in many of our cities and towns, including those caused by the School Run which also lead to inactive lifestyles for our children and road accidents which cause deaths and injuries and contribute to problems of congestion and unreliable journey times.

73. Growing the economy remains the devolved Scottish Government's number one priority. But this is not at any cost. Scotland must grow in a way that is sustainable and meets the core principles outlined in our Sustainable Development Strategy.

You told us... that you would welcome confirmation that growing the economy remains a priority while recognising that this must be about securing sustainable economic growth. You suggested that congestion was obstructive due to longer and, importantly, unreliable journey times and creating reliable journey times was often viewed as a greater priority than reducing journey times. You also commented that air quality problems were a key factor in addressing congestion in towns and cities.

74. The **outcome** we want to achieve is to improve journey times, make them more reliable and to enhance connections. We cannot aim to improve journey times across all modes. Indeed, this would be unrealistic and unnecessary in some cases. However, where economic benefits can be derived we will seek to improve or maintain journey times for key modes of transport and key users.

75. The **broader benefits** that will accrue from this will include improved economic growth, greater productivity, improved air quality and improved health through enabling more active travel.

76. To **measure progress** against this outcome we will report on a range of monitoring indicators in reviews of the strategy. These indicators will include:

- Congestion – through the existing measure of time lost on trunk roads due to congestion (or other causes) and, if appropriate, through the development of new measures (see box on traffic growth);
- No. of international routes from Scottish airports;
- ScotRail passenger kilometres; and
- Rail punctuality.

77. In addition, we will continue to deliver against our current targets and publish annually detailed road casualty figures. Current targets for 2010 are for a 40% reduction in road deaths and serious injuries (50% for children) and a 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.[49] These targets have now been met, however it is essential that the current rate of decline is maintained therefore we will consider setting more stringent targets for the remainder of this period.

Delivering improved journey times and connections – What we will do

Enhance Scotland's strategic transport network

78. Our strategic networks are particularly important for connecting our cities, connecting our towns with cities and bringing people and goods to those cities. They are also critical for providing key routes into our wider regions, including the Highlands and Islands, to our regeneration areas, to England and global markets to contribute to the accessibility of Scotland as a whole through road, rail and ports connections. This means the strategic networks have a particular role in providing for the longer intercity and inter-region journeys. They are critical for commuters and visitors alike. Our tourism industry depends on people travelling to Scotland and people travelling around Scotland. Our National Transport Strategy and the Strategic Transport Projects Review will continue to improve Scotland's competitiveness in the international tourist market.

79. Much has already been done to develop and improve Scotland's strategic transport network with the completion of the M77 motorway, the launch of a new high quality Scotrail franchise in 2004,

provision of additional trains and completion of the Larkhall Milngavie rail link in 2005. We are committed to delivering through our existing infrastructure plan to 2012 a significant number of key transport projects such as completion of the motorway network with work on the M74, M8 and M80, provision of a second crossing at Kincardine Bridge, construction of the Aberdeen Western Peripheral route, the Stirling Alloa Kincardine rail link, the Edinburgh and Glasgow Airport rail links, the Airdrie-Bathgate rail link, the Borders rail link, redevelopment of Waverley Station and Edinburgh trams which will enhance the strategic transport network. We will ensure that the strategic and economic role of ports is included in considering improvements in road and rail infrastructure, for example in key national and international ferry and cargo links and transport corridors.

80. There is a real tension between wanting our strategic networks both to contribute to economic growth and social cohesion in Scotland, through providing better connections and faster journey times, and at the same time, minimising the impact on the environment of the emissions associated with increased travel. In particular we do not believe that it is realistic to expect reduced emissions from the trunk road network without compromising our economic growth and accessibility objectives. However, we will continue to explore ways in which the environmental impact of the trunk road network can be minimised both during design and construction, and in the subsequent maintenance during its life.

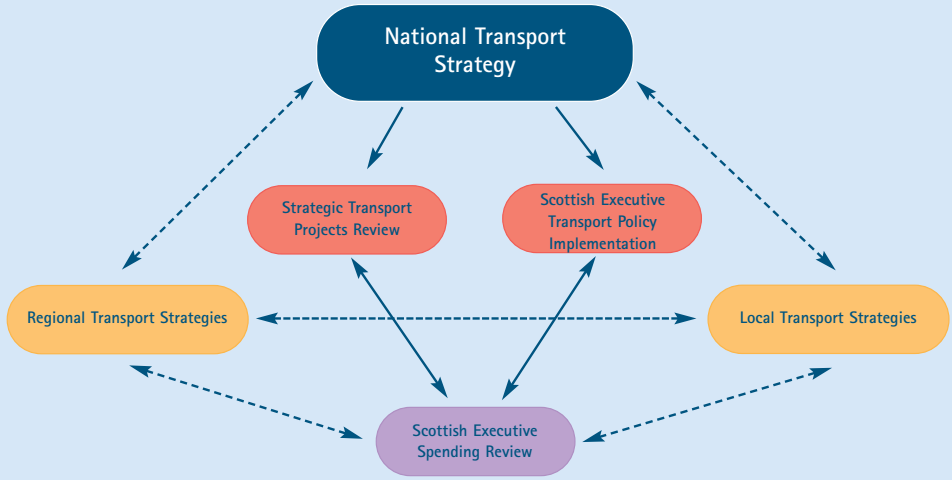
81. We will focus on improving journey times for rail on intercity journeys, to make rail competitive with journey times by car and will focus on making the best use of our urban rail networks for commuting into Glasgow and Edinburgh city centres in particular, but also across Scotland.

82. For trunk roads we want to focus on provision of reliable journey times in the face of anticipated traffic growth, tackling congestion where it affects journey time reliability, through maintaining reliable and safe networks, targeted capacity enhancement and managing demand for the network. The specific measures that we will take are detailed in the rest of this chapter.

83. Our strategic focus for our networks will be followed through in two ways:

- The Strategic Transport Projects Review (STPR) in its consideration of key corridors in the context of this National Transport Strategy, can provide an evidence base for the types of journeys on each corridor, and can provide a basis for a review of whether and where our networks need to be updated.
- The National Planning Framework should incorporate and reinforce this definition of the role of the strategic transport networks, setting a framework within which additions and changes to both the rail and trunk road network can be assessed, and ensuring thorough integration of transport and the planning process.

Figure 7: NTS: Linkages



84. The STPR will not take place in isolation from other spending plans or other policy priorities such as regeneration. All future spending plans of the Scottish Government are determined in detail through the existing Spending Review process. This will provide the opportunity to review the balance of capital and revenue expenditure and will look at the balance of investment across modes to deliver our strategy.

85. Figure 7 illustrates therefore the connection between the NTS, the Spending Review and the Regional and Local Transport Strategies. This NTS sets the strategic direction for investment, but specific details both in terms of policy and the STPR will be set by the level of funding agreed through the Spending Review process. This in turn will influence and be influenced by the strategic outcomes at a regional and local level. Spending patterns, for example, directly to regional transport partnerships and local authorities or via Grant Aided Expenditure (GAE), will continue to be determined through the Spending Review process, directed towards the key strategic outcomes of the strategy.

Enhance connections with our global markets by air and sea

Air

86. *A Smart, Successful Scotland* has a vision for Scotland with sustained productivity growth, competitiveness and prosperity. It envisages Scotland as a globally connected European nation. While air links with the rest of the United Kingdom have been traditionally good, the lack of direct air routes to the United States and European destinations was seen to stifle economic growth in Scotland. To remain competitive in international markets it is important to ensure that Scotland has direct air access. We established the Air Route Development Fund in November 2002 to meet the clear objectives of better business connections, encouraging inward investment and better access for inbound tourists.

87. The Air Route Development Fund has contributed to a dramatic improvement in Scotland's direct air network by providing landing charge discounts for up to three years for new routes which can demonstrate that they will deliver Fund objectives for business and tourism. Funding has also been provided for key domestic routes to Inverness, Aberdeen and Stornoway. There are currently 31 routes operating under the scheme and 3 routes which were initially supported by the scheme are now operating without subsidy.

88. It is recognised that the Scottish market cannot sustain the level of service provision at airports in south east England. The Fund's objective, however, as far as is possible, is for Scotland to have an air network which is viable in the long term and which meets the needs of Scottish business, encourages inward investment and provides easier access to Scotland for tourists and we will continue to support the development of new direct air routes which meet these aims. The

You told us... that you wanted the NTS to set the context and framework within which the STPR should take place. The issue of the balance of funding between capital and revenue and between different modes and geographies was also raised in the consultation. Many of you said that these should be strategically considered as part of the next Spending Review in the context of the STPR.

You told us... that you wanted to see more direct routes to mainland Europe and the enhancement of rail access to key airports such as Edinburgh and Glasgow. Your opinions were divided on the merits of the Air Route Development Fund with most business responses highlighting the benefits of direct air travel and responses from environmental bodies suggesting that encouraging any form of air travel was unsustainable.

development of more direct international air services will also reduce the need for travellers to use connecting flights through airports in the south-east of England. We will continue to investigate the feasibility of high speed rail to England as an alternative to domestic flights.

89. The UK Government's Air Transport White Paper, The Future of Air Transport,[50] provides a strategic framework for the development of air transport up to 2030. The Scottish Government concurs with the UK Government that simply building more and more capacity to meet the demand is not a sustainable way forward and that instead, a balanced approach is required which:

- Recognises the importance of air travel to our national and regional economic prosperity and reflects the social and other benefits that affordable air travel brings;
- Seeks, however, to reduce and minimise the impact of airports on the environment;
- Ensures, over time, that the price of air travel reflects its environmental and social impacts;
- Makes the best use of existing capacity where possible;
- Respects the rights and interests of those affected by airport development and provides greater certainty for all concerned in the planning of future airport capacity, while being sufficiently flexible to recognise and adapt to the uncertainties inherent in long-term planning.

90. Taking all of these considerations into account, the White Paper encourages growth at Scotland's airports, including the development of new direct routes which reduce the need for connecting through the congested airports in south east England. For Scotland its main conclusions are that:

- Land should be safeguarded for terminal development and an additional runway at Edinburgh Airport;
- Substantial terminal development at Glasgow Airport is supported, and should be safeguarded;
- Measures should be considered to ensure that the possibility of providing an additional runway at Glasgow Airport during the period of the White Paper should be safeguarded;
- The development of a new Central Scotland airport was not supported;
- Terminal and other facilities should be developed to support growth at Glasgow, Prestwick, Aberdeen and Dundee;
- There may also be a need for runway developments at Aberdeen and Inverness; and
- There will be a need for enhancements at some of the smaller airports in the Highlands and Islands.

91. We will continue to work closely with the UK Government on the implementation of the White Paper in Scotland, taking into account the need to consider any potential air emissions and environmental noise impacts.

Scotland's Ports

92. An effective road and rail infrastructure to support national and international connections by sea is essential to ensure that the critical role of ports in supporting and contributing to Scotland's business and economic health is fully realised. Ports are a key sector, not only in terms of cargo movements and related services within and outwith Scotland and the ferry industry, but also in relation to tourism, including the cruise liner and leisure craft sectors. Future areas of possible development are international transhipment, feeder services and short sea shipping. The ports sector needs to be able to thrive and exploit these potential opportunities in a balanced but competitive market. To ensure that this happens, we will evaluate the infrastructure serving our ports, key national and international ferry routes in the Strategic Transport Projects Review and we will, through our Freight Action Plan consider ways to enhance international freight networks.

93. We will continue to support UK and international ferry routes including routes to Northern Ireland, Ireland, mainland Europe and beyond. Where possible we will work with the enterprise networks and VisitScotland to support specific international routes.

Enhance connections with the rest of Great Britain and on to global markets

94. Cross-border connections through the trunk road and rail networks are essential for Scotland's economic productivity. Rail and road links help to move freight across the country keeping shops and other services running and are vital for businesses to move goods from production to market. They are also key to the tourism industry in the light of the fact that the vast majority of Scotland's tourists are from Scotland and the rest of the UK.

95. We will drive forward the delivery of the current £3 billion capital investment programme of improvements to both the trunk road and rail networks and we will continue to ensure that Scotland's trunk road and rail network are managed efficiently, effectively and economically. Through the Strategic Transport Projects Review we will review the effectiveness of key strategic transport corridors including those to airports, ports and the border to the south with England, linked to the spatial priorities for housing, regeneration and planning identified in the National Planning Framework.

Evidence Base: The links between transport and productivity were investigated in recent research for the Department for Transport.[51] One possible link is through agglomeration effects in urban areas. Transport improvements can contribute in two main ways. The first is that by improving links between firms, the effective density of the city cluster rises. The second is that by relaxing constraints on access to the centre of the city, overall city employment is increased.

96. We will work with DfT to improve journey times and frequency of rail services to key destinations such as London, Manchester, Leeds and Birmingham and work with the Highways Agency on the maintenance and reliability of our key cross-border routes.

97. Responsibility for cross-border rail services is reserved to the Secretary of State for Transport, however we liaise closely over matters affecting Scotland, including examining the potential value of high speed rail links to London and on to Europe. We are committed to investigating the feasibility and value for money of a high speed rail link between Scotland and London and will work closely with the UK Government on this issue.

Improve journey times between, and within, our major centres of economic growth

98. We recognise that enhancing connections and improving journey times between and within our major centres of economic growth is vital. This is not about specific routes but also reflects our desire to improve the interface between different modes of transport making the whole journey experience easier and more reliable thereby encouraging more people to use public transport.

99. For **rail** we intend to focus on reducing intercity journey times to make rail competitive with journey times by car and making best use of our urban rail networks for commuting into Glasgow and Edinburgh city centres particularly. The key strengths of the rail network are that it supports economic activity in our major urban areas, through enabling commuting from a wide labour market area, it provides quality inter-urban links, provides a critical link in the power generation supply chain through movement of large volumes of coal and addresses peripherality by providing access to more remote communities for residents and tourists.

100. We will work with the Office of Rail Regulation to ensure that Network Rail delivers an efficient and effective rail network. We will plan for growth – demand for passenger services and rail freight is forecast to increase by a third over the next 20 years. Our plan will be to focus on enhancements to meet this planned growth and to offer services that are fast, reliable and regular for example, we recognise the importance to the business community of continuing to improve the service between Edinburgh and Glasgow. Our approach to achieve this is set out in more detail in *Scotland's Railways*. The Strategic Transport Projects Review will determine the priority improvements for rail alongside those for other modes.

101. For **Buses**, our aim is to ensure that the infrastructure and incentives are in place so that bus operators improve services to hold on to current passengers and achieve modal shift from cars. Buses provide high occupancy sustainable mass transport, promoting economic growth and social inclusion. Buses are the principal, most frequently used and most widely available mode of public transport. They are flexible and new services can be developed and introduced very quickly where demand is identified. They are also particularly important in rural areas. Our priority is to encourage the bus market to continue to improve services to attract passengers and, where required, improve bus journey times.

102. We are publishing a *Bus Action Plan* as part of the National Transport Strategy. It will help to ensure that there is a step change in planning, partnership and the policy framework for buses and provide fresh impetus to the contribution that buses make to growing the economy and supporting communities.

103. Infrastructure measures on local and trunk roads are key to improving bus journey times. These include on-road demand management measures (bus priority measures, bus lanes on key arterial corridors, park and ride, traffic management systems and Bus Rapid Transit on segregated sections of roadway). We will actively support regional transport partnerships and local authorities through our significant investment in them. RTPs are receiving £70 million between 2006-08 from the Executive, including £10 million for bus-related investment with local authorities receiving GAE funding of £56 million between 2006-08 for supported services and £730 million for local roads in the same period.

104. Bus priority measures can often be introduced without affecting car users. However, where road space is limited, bus priority measures such as bus lanes may reduce the road space available for car users. RTPs and local authorities should introduce bus lanes and other bus priority measures which reduce the space available to car users wherever this is justified. Modal shift from car to bus is achieved by use of carrot and stick – carrot in the form of improved bus services in terms of frequency, quality of vehicle and speed and stick in the form of restrictions on car use.

105. For **trunk roads** we want to focus on provision of reliable journey times in the face of anticipated traffic growth and tackling congestion where it affects journey time reliability, through:

- **maintaining reliable and safe networks;**
- **targeted capacity enhancement; and**
- **managing demand for the network.**

106. On some routes we may prioritise improvements for all or certain users, such as buses or multiple occupancy vehicles, to reduce their optimum journey time as well as improve reliability.

107. **Maintaining reliable and safe trunk and local road networks** is key to achieving reliable journey times. Efficient maintenance of the performance and condition of our strategic networks needs sufficient investment to sustain our infrastructure for the long term. Robust asset management plans have a key role in delivering appropriate maintenance regimes. We are currently developing a Trunk Road Asset Management Plan to ensure that the trunk road network, an asset valued at over £12 billion, continues to be maintained effectively. The STPR will identify the extent to which a programme of targeted structural investment is required to safeguard the structural integrity of the network and maintain its value, safety and serviceability.

108. Local authorities have a duty under the Roads (Scotland) Act 1984 to manage and maintain local roads in their area and duties under the Road Traffic Regulation Act 1984 to secure expeditious, convenient and safe movement of traffic. The Transport (Scotland) Act 2005 contains provision to improve theco-ordination, planning and quality of road works and in turn, increase the efficiency of the road network. It establishes a Scottish Road Works Commissioner to monitor the quality of all roads works at a national level, to drive and promote improvements and to impose penalties for poor performance. New and enhanced duties are placed on road works authorities and undertakers to co-ordinate and plan their works via the Scottish Road Works Register.

109. We will continue to fund local road maintenance through GAE and will encourage transport authorities to spend this allocation on maintaining local roads at an appropriate standard, including rural roads affected by timber production and other primary industries.

110. **Targeted capacity enhancement** is about making the best use of the network. Specific trunk road enhancements such as, for example. provision of additional lanes or strategically important bypasses, will be considered as part of the multi-modal STPR, however, we will also support a range of other measures to enhance the capacity of the network, including:

- Continue to support Traffic Scotland and Freight Scotland in using a wide range of Intelligent Transport Systems (ITS) technologies to improve journey time reliability, reduce disruption caused by incidents and road works, minimise the effects of congestion and improve safety and security for travellers.
- Roll out the Traffic Scotland strategy to ensure a consistent level of service for monitoring, controlling and informing traffic on the whole of the trunk road network.

You told us... that you recognised the importance of demand management measures and the fact that there needs to be a balance between ensuring improved access and achieving modal shift from cars to public transport. You also acknowledged that demand management measures do not work best in isolation but as part of a package of interventions. You recognised that parking policy and park and ride were key and already being successful but that more could be done.

Evidence Base: Whilst an increasing amount of research and literature is emerging with respect to tackling congestion (including the potential for economic instruments such as road pricing and the benefits of 'packages of measures'), less evidence is available on the full costs of congestion, particularly in a Scottish context. We are currently undertaking research looking at the costs of congestion and how to measure them. The first stage of this work involves an international literature review of the costs of congestion and a review of currently available information on levels of congestion in Scotland.

- Procure a new Integrated Transport Management Control Centre and establish a Transport Network Knowledge Management database to allow better management of the whole transport network.
- Explore the possibility of increasing the use of ramp metering, electronic speed control and Active Traffic Management to improve traffic flow in congested areas.
- Encourage greater partnership working between Transport Scotland and local authorities on trunk and local roads issues, with a longer term view to exploring options for a partnership approach to trunk and local roads contract management and intelligent information systems.
- Publish a report on traffic levels and congestion on the most congested parts of the Trunk Road Network.

111. **Managing demand on the network** has a vital role to play in ensuring more reliable journey times and reducing congestion.

112. We are already doing a great deal in Scotland to manage demand on the network and we will continue to support this activity. This includes:

- Encouraging regional transport partnerships to create a network of innovative parking and park and choose facilities at suitable sites near our towns and cities and at key interchange hubs catering for all forms of transport and ensuring they introduce bus priority measures on key corridors;
- Encouraging local authorities to take forward decriminalised parking enforcement and to enhance their parking policies to manage demand;
- Encouraging regional transport partnerships and local authorities to provide safer cycle facilities as part of the urban realm, at key transport interchanges, as part of new developments and at key public buildings;
- Assessing the benefits of and piloting demand management measures that promote modal shift, journey time reliability and reduced journey times for key users;
- Developing further evidence about freight movement across Scotland in order to establish whether there are potential benefits to be gained by developing strategic freight hubs and removing night-time curfews on freight as part of our *Freight Action Plan*. The sustainable movement of freight is vital to supporting a vibrant and growing economy; and
- Supporting local authorities to take forward road user charging schemes.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Tackling traffic growth

The growth of road traffic levels is unsustainable in the longer term – it is already resulting in a range of problems that affect our economy, our environment and our quality of life. Most of us are aware of these problems, but our car use continues to rise. Cars provide enormous advantages to those who have them, and they will continue to play a critical role. But we are going to have to use cars far more responsibly – this will require us both to understand the true cost of motoring, and to have genuine alternatives.

The aspirational target to stabilise road traffic volumes at 2001 levels by 2021 was re-iterated in the 2004 White Paper *Scotland's Transport Future*. Research published in 2006 *The Evaluation and Review of Local Authority Road Traffic Reduction Targets*[52] concludes that there is little requirement for a national road traffic reduction target, and that such a target would be meaningful only for small sections of Scotland. The consultation for the National Transport Strategy has illustrated that there is no consensus on continuing to retain the target – in general environmental groups support retaining the target. Other consultees suggest that the target should be replaced with targets focussing on environmental issues and congestion, and still others say the target is unrealistic and not underpinned by analysis. A recurring theme is that the target may not be appropriate in rural areas.

In considering whether to retain the target, we need to be clear about the outcomes we are trying to achieve. Some of these outcomes are local in nature, and therefore require locally based solutions, and some are national. Some are suited for a target based approach, and others are not. Traffic stabilisation, at a national level could 'hide' a number of regional or local problems. In addition, there are a number of complexities around the definition and measuring of the target.

Given these circumstances, we think it appropriate to take a more sophisticated approach. We will retain the aspirational target to stabilise road traffic volumes at 2001 levels by 2021 and will continue to **publish** national **traffic** figures annually to ensure we understand and can address the big picture. However, we will also disentangle the problems to ensure we **focus on meaningful outcomes**. These will include emissions, congestion, and how many people are choosing walking and cycling as an alternative to the car. These outcomes are expressed throughout the strategy – emissions (chapter 4), elements of congestion (chapter 3) and health (chapters 3, 4 and 5). Where appropriate, we will be considering targets for these problems – our research on congestion for example, will set the groundwork for considering how we measure and tackle congestion in the future, and how we assess whether we have been successful. Chapter 4 also outlines our approach to carbon measurement and reduction. We will introduce a carbon balance sheet. Transport must play a significant role in delivering the objectives of *Scotland's Climate Change Programme*.

Case Study: Stockholm introduced a congestion tax trial where owners of Swedish registered vehicles had to pay a charge when they crossed a control point (inward or outward). Costs varied by time of day, on weekdays between 0630 and 1829. Average daily payment is 25 Kroner - about £1.92 (maximum daily is 60 K- about £4.62). Trial ran from 3 January 2006 to 31 July 2006.

- Up to 22% less traffic has resulted; 30-50% decrease in queue times;
- 10-14% decrease in CO2;
- 13% decrease in PM10;
- Estimated that there will be 20-25 fewer early deaths in Stockholm as a result of cleaner air; and
- Scheme could also prevent 40-70 personal injury accidents per year.

About 500 million Kroner (£38.5 million) has been raised while the budget for the trial was 2.926 billion Kroner (£225 million). So the trial itself (7 months) was not an economic success but it is estimated the scheme would payback in four years.

A referendum took place on 17 September 2006 and the end result from all boroughs in the City of Stockholm was 51.3% yes; 45.5% no; 2% blank; and 1.2% invalid. 14 other municipalities in the county of Stockholm also held referendums and the results as well as further details on the effects of the trial can be found at http://www.stockholmforsoket.se.

Importantly, we will also ensure that the mechanisms are in place for local authorities and RTPs to reduce the wider impacts of traffic on communities. As well as traffic stabilisation in badly affected areas, we should think about local traffic reduction. Where urban areas are congested, the only way to provide more space for sustainable transport modes is to take road space away from private cars, either permanently or on a 'shift' basis. Evidence from a number of European cities shows that this reallocation does not result in further traffic chaos - traffic that was previously in the vicinity 'disappears' or 'evaporates'. As a result, the urban environment becomes more liveable. In these car free or car reduced spaces, pedestrians and cyclists enjoy a cleaner, quieter and safer environment – and bus users have a higher quality service.

Taking capacity away from the local private road user would be a major decision for authorities to take. However, there is a wealth of experience which illustrates how successful such schemes can be, if undertaken in an incremental manner in close cooperation with the communities involved. One of the biggest challenges is meeting the concerns of retailers and small businesses. Case studies illustrate that these concerns can be managed and tend to prove unfounded. Successful European examples of traffic reduction schemes include Copenhagen, Cambridge, and Wolverhampton.

113. In the context of the National Transport Strategy we believe that more could be done to **manage demand on the road network through Road Pricing**. The Executive is committed to using Road Pricing as a mechanism to address traffic impacts, both in terms of continuing to work with the UK Government in developing UK policy and utilising our own devolved powers. This means using our existing legislation and potentially enhancing it in the future.

114. Therefore we intend in the future to:

- Continue to support local authorities and RTPs who wish to take forward road user charging in a local or regional context. We intend to re-develop our Integrated Transport Initiative (ITI) guidance and streamline the process for potential transport authorities to take forward charging schemes;
- Work with RTPs to consider taking forward a road pricing pilot in a medium sized urban area to consider how a road pricing scheme might work in a Scottish context;
- Take forward a communications strategy on road pricing in Scotland to encourage constructive debate around the problems traffic growth and congestion are causing and how road pricing might have a role in addressing these problems;
- Develop policy guidance to allow Transport Scotland to consider applicability and feasibility of tolling or charging at the appraisal stage for all new or enhanced strategic road infrastructure;
- Undertake technical studies at pinch points and problem corridors in order to assess whether pricing is appropriate for the trunk road network on existing infrastructure;
- Investigate funding options that would encourage innovation in tackling congestion on the local road network across Scotland;

Evidence Base: Research[53] has shown that in areas where 20 mph zones with traffic calming measures have been introduced, injury accidents have fallen by 60%, child pedestrian accidents by 70% and child cyclist accidents by 48%.

You told us... that we must not be complacent about our record on safety and we must continue to fund Road Safety Scotland and 20mph zones around schools.

Evidence Base: Research plays a vital role in understanding road safety issues and suggesting appropriate interventions. We work closely with Road Safety Scotland to ensure that our evidence base is continually evolving in the right direction and place great importance on the exchange of knowledge with other key partners. In 2005, the Executive published its Plan to Improve Road Safety: Good Practice Guidelines[54] aimed at enabling local authorities to adopt best practice to help cut casualties across the whole of Scotland. Our road safety evidence base is extensive and we will continue to develop it.

- Publish the 2006 toll impact review of the Tay and Forth road bridges; and
- Continue to work with the UK Government on proposals for a UK-based road pricing scheme.

115. We will abolish road tolling across the whole of Scotland, when road user pricing is introduced.

Reduce congestion in towns and cities caused by the School Run

116. Walking is the nearest activity to perfect exercise, most people can do it and it costs nothing. Yet between 1985/86 and 2003/04, the average distance travelled by foot has fallen by 30%.[55] By investing in better infrastructure links between community facilities such as health centres, transport hubs and schools, we believe that cycling and walking as travel options are realistic alternatives to using the car for journeys to work, school and for leisure purposes.

117. The 'School Run' brings 21% of children to school every day, adding to congestion and air pollution. There are many reasons for parents driving their children to school, including real issues about safety and perception of safety, as well as issues of convenience and speed. In addition, while children living a certain distance from their local catchment school are entitled to free school transport, the entitlement does not apply to those attending another school as the result of a placing request - the journeys required for those attending schools outwith their catchment areas can add to congestion related to the school run. We would not wish in anyway to constrain parents' statutory right to exercise choice about about which school their children attend. However, a factor which we would hope they take into account in making that choice is the environmental impact of the journey, where the pupil is not eligible for free school transport. We want to add to our existing knowledge base to provide a better understanding of these issues in order to tackle the congestion caused by the school run and to improve the health of our children by encouraging them to walk and cycle to school.

118. We will invest £10 million in the next two years to develop innovative and sustainable alternative ways of getting to and from school. We will achieve this by improving access and safety through building more cycle/walking paths, by introducing more 20mph zones and/or vehicle free zones around schools, encouraging more 'walking buses' and 'walk once a week' initiatives, and through continued support to School Travel Co-ordinators in developing travel plans for each school in Scotland. We believe that this will bring benefits not only for congestion, but also for the health and safety of our children.

Improving the safety of journeys

Encourage the setting of more appropriate and consistent speed limits on local roads

119. The GB Road Safety Strategy: Tomorrow's Roads - Safer for Everyone[56] included a commitment to update the guidance to local authorities on the setting of local speed limits. The updated guidance was issued in August 2006. The guidance is aimed at achieving more appropriate and more


School
20
When lights flash

Case Study: A commitment by pupils, teachers, parents and local authority to work together has enabled Torbain Primary School in Kirkcaldy to deliver walking, cycling and safety improvements following the implementation of a Safer Routes to School Plan. Questionnaires, class interviews and surveys, traffic speed monitoring and an analysis of crash statistics were all undertaken. An impressive response rate of 73 per cent among parents was achieved as questionnaires were given out at parents' evening, with a request for them to be completed that night. The research work pointed to a number of problems:

- Congestion outside the school was made worse by inconsiderate parking
- A third of the 600 pupils wanted to cycle to school
- Most parents wanted their children to walk to school and said they would do if the routes were improved
- Parents and children already walking to school felt their routes were safe

Immediate objectives of the plan were to solve the school gate congestion problems by introducing a new park and walk scheme, promoting existing footways as safer routes, constructing five new footway links, installing four new Zebra crossings and implementing "no waiting" and enforceable "school keep clear" road markings. These measures have now been implemented.

consistent speed limits across the country, leading to greater understanding of and compliance with speed limits and reductions in road accidents involving inappropriate or excessive speed. Local authorities have been asked to review, by 2011, the speed limits on all A and B class roads in their area in accordance with the new guidance.

Continue to support the introduction of 20mph zones around schools

120. Scotland is already at the leading edge of introducing 20mph zones around schools. Currently two thirds of Scottish schools are covered by 20mph zones. Our ambition is that by 2008 all Scottish schools will be covered by a properly enforced 20mph zone where this is appropriate. We have already committed to spending £50 million between 2003 and 2008 on the introduction of 20mph speed limits around schools, Safer Routes to Schools projects and Home Zones and will continue to promote and support this.

Fund Road Safety Education and Marketing Initiatives

121. The Scottish Government currently funds Road Safety Scotland to produce road safety education resources and publicity messages, for example 'Crash Magnets' a road safety education resource for upper secondary school pupils, focusing on attitudes to driving behaviour, which links to the Scottish curriculum. We also support the Children's Traffic Club in Scotland to ensure the availability of free road safety training for all 3 and 4 year old children, fund pilot child pedestrian training schemes for 5 and 6 year olds in selected local authorities to support the Royal Society for the Prevention of Accidents' programme of road safety activities in Scotland. These initiatives have contributed to reducing the numbers of accidents across Scotland. We will continue to support these key initiatives.

122. We want to go further. We will support initiatives targeting children from disadvantaged areas and raise awareness of road safety issues for groups for whom English is not their first language. We will also look at ways of reducing accidents on rural roads.

Target safety improvements for motorcyclists

123. The most recent transport statistics demonstrate that although Scotland has made significant improvements to the numbers of people killed or injured through accidents, the one area where numbers are increasing is for motorcyclists. We believe that this is an issue that needs to be addressed. Research published in 2004[57] provided information about the extent of motorcyclist accidents, while a second study,[58] published in June 2006, provided an insight into attitudes to risk taking by motorcyclists. We will look at ways of improving motorcyclist safety in the light of these studies and will continue to liaise with the motorcycling community.

Case Study: Road Safety Scotland has developed "Crash Magnets" a road safety education resource for upper secondary school pupils, which links to the Scottish curriculum. It focuses primarily on attitudes to driving behaviour, as research has shown that such attitudes are largely formed before people get behind the wheel.

The programme comprises a DVD with 5 programmes which covers topics including peer influence, distraction, the cruise culture, speed, drink and drug driving and the law. Additional teaching materials, stretching to 10 lessons, are available from the "Crash Magnets" toolbox. The DVD informs discussion and stimulates debate exploring current trends and recent events in an up-beat way. The resource acknowledges the attraction and benefits of driving, while encouraging young people to become responsible road users and drivers.

Evidence Base: Research[59] has shown that child pedestrians in the lowest socio-economic group are more than 4 times as likely to be killed as those in the highest socio-economic group. It also identified significant differences in pedestrian casualty rates for children from ethnic minorities.

Our Key Commitments

- Delivery of the current capital investment programme of improvement to both the trunk road and rail networks to 2012.
- Take forward the STPR based on the key strategic outcomes for Scotland's National Transport Strategy.
- Publish *Scotland's Railways.*
- Work with the UK Government to investigate the potential value of high speed rail links to London and on to Europe.
- Publish a Trunk Road Asset Management Plan.
- Publish our *Freight Action Plan.*
- Investigate funding options that would encourage innovation in tackling congestion on the local road network across Scotland.
- Publish our *Bus Action Plan.*
- Publish the 2006 toll impact review of the Tay and Forth Road bridges.
- Continue to work with the UK Government on proposals for a UK based road pricing scheme.
- Invest £10 million in the next two years to tackle congestion from the School Run.
- Work with local authorities to ensure that, where appropriate, all Scottish schools are covered by a 20mph zone by 2008.
- Develop initiatives targeting children from disadvantaged areas who are at greater risk of injury in road accidents.


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Chapter 4

Reduced Emissions

Summary Message

124. Our vision demonstrates that we want a transport system that respects Scotland's environment and contributes to health improvement. Delivering carbon savings is not the only environmental and health issue for Scotland's National Transport Strategy to consider, but we do believe it is the most important one to get right.

125. A range of transport measures have already been identified to counteract the growing trend in transport emissions and these are being taken forward across the EU, UK and Scotland. The Scottish Government, however, wants and needs to do more.

126. This chapter describes the measures that are already in place and presents the carbon savings these policies are expected to generate. It then sets out the additional measures and approach we will adopt to deliver further carbon savings.

Overview

127. The **key challenge** for transport is to break the link between economic growth, increased traffic and increased emissions. This challenge has been met in other sectors and now needs to be addressed in the transport sector.

128. Delivering carbon savings is a central feature of Scotland's National Transport Strategy. Our vision outlines our desire to increase the proportion of short journeys made on foot and on bicycles which has the effect of reducing carbon emissions, improving air quality, reducing congestion, and contributing to the achievement of a healthier Scotland.

129. The UK and Scottish Climate Change Programmes already identify a number of policies (reserved and devolved) that are being taken forward across the UK to reduce carbon emissions. This includes a number of existing transport measures that were introduced as part of the 2000 UK Climate Change Programme and new measures introduced in the revised Programme.

130. These **existing transport measures** are expected to generate **annual savings of 500 kilo tonnes of carbon by 2010** (see figure 8) and greater reductions thereafter.[60] These existing measures are not expected to reduce the overall level of emissions from transport but rather to offset the growth in transport emissions that is expected to occur between 2004 and 2010.

131. In addition to this, we are also considering a number of new complementary measures and enhancement of existing measures to generate further carbon savings. Further work will be required to determine the final carbon savings contributions from these policies and we intend to complete this work following the launch of the strategy and once spending plans have been agreed.

132. The **outcome** we want to achieve is to reduce emissions as a means of protecting our environment and improving health.

133. The **broader benefits** that will accrue from this will include protecting our environment, improved health, improved air quality, reduced noise and a lower number of accidents.

134. To **measure progress** against this outcome we will report on a range of monitoring indicators in reviews of the Strategy. These indicators will include:

- carbon emissions from the transport sector;
- tonnes of carbon saved; and
- average distance walked and cycled per person per year.

You told us... there was an insufficient quantitative analysis to inform our Strategic Environmental Assessment (SEA) Environmental Report. We recognise that our data needs enhanced.

Evidence Base: Research[61] commissioned for the National Transport Strategy reviewed the transport measures that are most likely to satisfy economic development objectives, without unsustainable increases in transport activity and emissions. Policies are ranked in terms of their impact (high and medium) relative to each other and are grouped according to whether the timetable for their implementation is short (0-3 years i.e. a relatively quick hit), mid-term (3-10 years) or long-term (over 10 years). This work has informed policy choices for the National Transport Strategy, many of which are described in further detail later.

135. In addition to the commitment given above, we also intend to present a 'carbon balance sheet' for transport in future reviews of the NTS. This will present the impact of all Scottish transport policies and projects that are expected to have a significant impact on carbon, whether positive or negative. This recognises the need to do more than simply focus on the positive contribution transport will be making without showing how this relates to the negative impact of other Scottish transport policies and projects. Our aim will be to show that the Scottish Government - through its own actions - is continually reducing the overall impact of Scottish transport measures.

136. A significant amount of additional analysis and modelling is required to present such a balance sheet but this will provide the tools required to mainstream carbon considerations into all transport policies and projects and to closely monitor and evaluate the overall impact of Scottish transport measures on carbon. It will also give us the evidence required to identify the most effective policies and to continually build on policies presented in this Chapter.

Delivering reduced emissions – What we will do

137. Our commitments in this Chapter are split into two main areas. Firstly we highlight those existing policies (reserved and devolved) which we will continue to support. Secondly we highlight policies which are either new policies or existing policies to which we intend to give enhanced support to deliver further carbon savings.

Existing policies which we intend to continue to support

138. Figure 8 presents the carbon savings that are expected in Scotland as a result of the transport policies introduced as part of the 2000 UK Climate Change Programme and the new measures introduced in the recently revised UKCCP (2006). The majority of these measures are reserved, although many of the Wider Transport Measures (which in Scotland are set out in the White Paper, Scotland's Transport Future, 2004) are devolved. It has been assumed that the Scottish policy impact will be roughly proportional to the Scottish share of the UK population (8%).

139. Some of these policies have been in place for some time (eg EU Voluntary Agreement, Company Car Tax, wider Transport Measures including sustainable distribution, SMART measures and land-use planning) and are already delivering significant carbon savings in Scotland, as detailed above. Two additional transport measures - the Renewable Transport Fuel Obligation Scheme (RTFO) and future EU level voluntary agreement with Car Manufacturers – are included as part of the revised UK and Scottish Climate Change Programmes (2006). All of these policies are expected to generate further carbon savings over the time period covered by the NTS. We intend to continue to support these existing transport policies.

Figure 8: Reserved and Devolved Existing Transport Policies – Scotland Carbon Impacts

Policy	Reserved or Devolved?	Annual carbon savings (KtC) in 2010
In UK CCP 2000		
Voluntary Agreement Package (company car, vehicle excise duty, voluntary agreements)	Reserved	190
Fuel Duty Escalator (1993-1999)	Reserved	150
Wider Transport Measures (including sustainable distribution)[64]	Devolved	70
New in UK CCP/SCCP 2006		
Renewable Transport Fuel Obligation Scheme (RTFO)	Reserved	130
Future EU level voluntary agreement with car manufacturers to reduce CO2 emissions from new cars	Reserved	8
TOTAL		**548**

Enhancements of existing policies and new policies which we intend to support to generate further carbon savings

140. We want to go further than we currently do. We want to provide further support for a range of existing policies and to support new policies to deliver further carbon savings. The key policies which we intend to support are outlined below:

Work with UK Government to deliver the biofuels target by 2010 and beyond

141. The Scottish Government already works closely with the UK Government in meeting the Renewable Transport Fuel Obligation Sheme of 5% biofuel in use by 2010 and appropriate targets beyond this. We recognise, however, that there are genuine concerns about the production of biofuels in relation to biodiversity and sustainable rural development. We will therefore work with DfT, and other government departments, as it develops its carbon and environmental assurance schemes. We will also work with DfT on mechanisms to establish carbon saving targets as part of the RTFO Scheme, once systems have been established. This is likely to be a complex process which will involve the measurement, reporting and verification of greenhouse gas emissions from UK and international production.

142. Of course biofuels are only one alternative source of future transport fuels and others may be on the horizon. Electric vehicles are already available and their evolution is taking major leaps forward, as are dual-fuel vehicles, and hydrogen cell buses are already on trial in London. The UK Energy Review also signalled the Transport Innovation Strategy, in close collaboration with the National Institute of Energy Technologies, to explore new prospects such as second generation biofuels and hydrogen and the Executive will seek to work with DfT in this regard.

143. The Scottish Government will continue to take a keen interest in Scottish, UK and international development in the field of hydrogen cells for transport and will develop and promote a Scottish infrastructure as and when technology and economies mature.

144. We will continue to work with DfT, the Low Carbon Vehicle Partnership and other key stakeholders in the field of powering future vehicles. We will also work with our key stakeholders in Scotland to develop and promote the trials of alternative fuel vehicles in Scotland.

Promote and encourage new vehicle technologies

145. Promoting new vehicle technologies has an important role to play in reducing carbon emissions and air pollution from transport and tackling the high demand for energy in transport. Vehicle standards are not devolved to Scottish Ministers, however, we can and will do what is within the devolved competence of the Scottish Government to encourage the uptake of new vehicles which have lower emissions. The Executive already takes a keen interest in the UK's work on the Powering Future Vehicles Strategy (PFVS) and will continue to do so, participating in the Low Carbon Vehicle Partnership to encourage market change in low carbon vehicles.

146. The Voluntary Agreements between the European Commission and car manufacturers are designed to reduce carbon emissions from new cars by improving fuel efficiency. We are encouraged by this work and would like to see this continue. In addition, we would like to explore devolved measures that we could use to encourage the uptake of cleaner, low carbon vehicles. For example, working with the regional transport partnerships and local authorities to consider the potential of using parking policy to encourage cleaner vehicles. Alongside this we will continue to fund the Refuelling and Infrastructure Grant Programme within Scotland to help improve the network of refuelling and recharging stations for cleaner fuels (ie not petrol and diesel).

147. We recognise however that new vehicles are only part of the market. In addition, we will explore the possibility of introducing a rolling programme of Fleet Vehicle Health Checks for private and public fleets to ensure the continual improvement of fuel and vehicle efficiencies. We are also exploring the feasibility of providing additional funding e.g. European Structural Funds, for local authorities to help them improve the environmental performance of their existing vehicle fleet.

148. Motorcycles are already subject to EC emissions limits and through their reduced energy needs and ability to make progress in congested conditions they can make a positive contribution to reduced carbon emissions and fuel consumption.

149. For rail we can aim to reduce emissions primarily through a gradual shift from diesel to electric, linked to sustained energy production, that will overall make our transport system less fossil fuel dependent in the long term and by encouraging more people to choose rail over car.

150. The Executive is committed to working with RTPs, LAs and operators to reduce emissions from buses. While there are a number of mechanisms available that could be used as levers, none of them are simple. We will, therefore, be reviewing the effectiveness of these mechanisms, including the SE bus subsidy regime, to consider whether a new approach or more co-ordinated approach is required.

Promote better synergies between transport and land use planning to minimise the environmental impacts of transport networks and to contribute to health improvement

151. Planning for Transport, Scottish Planning Policy (SPP) 17,[65] was published in 2005 and sets out how development plans should allocate land for new development in the knowledge of the capacity of the transport network and, where necessary, demonstrating where new transport infrastructure is required to service development. In dealing with planning applications, a system is promoted whereby each application contains details of the likely transport impacts and the proposed means of mitigating those impacts through design, investment or sustainable travel plans.

152. Assessing planning applications according to the guidance should also prioritise access on foot, by bicycle, by public transport and lastly by car in order to encourage sustainable modes of transport. New housing developments, supermarkets and businesses should be designed to encourage walking or cycling over local networks to local facilities rather than making car trips the mode of choice. Explicit links should be made to railway stations, bus corridors and other transport interchanges to maximise the opportunity for use of public transport. There is also a regime of maximum parking standards now established to constrain car trips at destinations. These requirements can have a significant impact on the amount of physical activity that individuals undertake, encouraging them to walk and cycle where possible and planning these activities into the early stages of the design work, leading ultimately to improved health.

153. SPP 17 is now an established core tool for promoting sustainable travel both by reducing the need to travel and in encouraging travel by sustainable modes. This not only impacts on the strategic outcome of reducing carbon emissions from transport and improving air quality but also contributes significantly to improving the health of Scotland's population by those involved in key planning decisions taking account of walking, cycling and public transport in those decisions.

154. We support the continued application of SPP17 and to enhance its application we will encourage key stakeholders to work together – Transport Scotland, local authorities, RTPs, developers, transport operators and major employers. We will monitor the effectiveness of SPP17 to ensure that it contributes to sustainable planning and transport outcomes. We will also encourage local authorities to pursue sustainable transport commitments by private developers where they are not implemented in new developments.

155. On a longer term basis, we would want to see all those involved in transport and land use planning having a shared understanding of each other's contributions and how to maximise joint working to achieve sustainable land use planning. We will explore the opportunities to promote education and training for all disciplines to achieve common objectives and ensure that a step change is achieved.

Evidence Base: SMART measures tackle both congestion and climate change at the same time and the evidence[64] suggests they are highly cost effective, particularly when implemented in conjunction with complementary 'hard' transport measures. An evaluation[65] of a series of soft measures that had been implemented in areas within the UK found that on average, every £1 spent on well-designed soft measures could bring about £10 of benefit in reduced congestion alone, more in the most congested areas. This study suggests that one of the soft measures – teleworking – accounts for around 40% of the overall reductions estimated by 2010. This is based on a UK wide figure of 7.4% of working adults teleworking to some extent, however the Scottish figure is estimated to be 13.5% so the benefits are potentially higher.

156. We think the focus on land use planning has broader benefits than only minimising the environmental impacts of transport, it will also maximise opportunities for improved access to services, improve opportunities for people to undertake physical activity as part of their travel thereby improving health, and support our high level objective to promote economic growth.

Actively promote SMART measures such as travel plans, and high quality travel information to encourage more sustainable travel

157. SMART measures are about encouraging travellers to use alternative, more sustainable modes of travel, raising awareness about the need to travel and providing alternative solutions to single occupancy car use for journeys. These measures typically include travel plans, public transport information, travel awareness campaigns, travel to school campaigns, car clubs, car sharing schemes, cycling and walking, car free housing zones and teleworking. These measures are targeted at encouraging people to change their behaviour. Public awareness campaigns are key to this.

158. SMART measures are dependent on a package of interventions in order to be successful. If they are implemented in isolation then as road traffic levels are reduced the extra road space created may act as an incentive for 'new' motorists to use the roads, thereby offsetting some of the initial benefits. To maximise the benefits of SMART measures they must be part of a wider strategy, and then benefits must be 'locked in'.

159. Progress to date in Scotland on introducing some SMART measures, such as sustainable travel plans, has been disappointing both in the public and private sector. In other areas, for example tele-working, Scotland is ahead of the UK. To get a clearer picture of the benefits of all the SMART measures in Scotland, we will be undertaking a Scottish specific appraisal of SMART measures before we commit to the exact programme of investment.

160. We do believe it is for the public sector to demonstrate leadership in sustainable travel plans and we will continue to work with the public sector to deliver this objective. We are already supporting regional transport partnerships to take a strategic approach to sustainable travel plans through funding Travel Plan Co-ordinators in every region with £1m being invested over the first 2 years. We are producing guidance for these co-ordinators. Through this investment and support package, we want all local authorities and major hospitals and health facilities to have operational travel plans by April 2008. We expect these travel plans to develop over time with increasingly successful results. In the medium term, the Scottish Executive will lead by example with its own sustainable travel plan operating across Scotland.

Case Study: Royal Bank of Scotland - Gogar

Gogarburn houses approximately 3,500 RBS employees, where they enjoy a variety of on-campus facilities including a Nursery, Health & Leisure Suite, a conference centre and business school. The office accommodation is arranged around a central "street" offering a range of retail outlets, including hairdresser, supermarket and pharmacy. Such facilities minimise the need for off-site journeys.

To inform the travel plan, a Sustainable Transport Access Study was undertaken. This revealed that only 21% of RBS staff had direct sustainable transport links to Gogarburn, and suggested a risk of high car dependency. To mitigate this, RBS worked closely with the City of Edinburgh Council and the major bus operators to increase the Sustainable Transport Access Zone to include 40% of staff by expanding the public bus network - including an RBS subsidy for non-profitable routes - and building facilities for buses to stop on site.

Car-sharing is actively encouraged and parking permits are needs-assessed. An annual appraisal considers where staff live in relation to public transport, their participation in car sharing, work/life balance issues and some elements of business need. Eligible vehicles are allocated a specific bay, to reduce car-park "cruising" and the associated fuel, congestion and emissions.

The Operational Travel Plan comprises:

- Excellent facilities for cyclists and motorcyclists
- 7 new bus services stopping on site, and 10+ services stopping next to the Campus
- RBS Taxibuses to transport staff commuting by rail to South Gyle and Edinburgh Park stations, as well as for journeys between Edinburgh sites and to the airport
- Interest-free loans for purchase of public transport season tickets and bicycles
- Needs-based parking criteria and on-line booking tool
- RBS Journeyshare software and priority parking for car sharers
- Up-to-date information via the Travel Information web-site and regular newsletter
- Regular Travel Clinics offering information and Personal Journey Planning
- Opportunities for flexi-working, including home-working and compressed hours
- The travel plan is controlled by a management system, is subject to annual audit and forms part of the ISO14001 accredited, Environmental Management System for Gogarburn.

Evidence Base: A number of pieces of research have considered the potential impacts on the environment of modal shift to cycling and walking. The findings vary, with one analysis[66] finding that if 20% of car trips of less than 5 miles were replaced by cycling/walking, there could be a fall of approximately 4.8% in car emissions. However, other research[67] has been less optimistic, finding that actions to encourage transfer from cars to walking and cycling could reduce the distance travelled by car by about 0.3% for walking and 0.4% for cycling, which would result in only around a 1% reduction in carbon emissions. This equates to around 30kT of carbon in Scotland.

161. To demonstrate our commitment to SMART measures, we intend to investigate a further integrated package of measures. These could include:

- Supporting travel awareness and marketing campaigns at a local level to promote SMART measures on all journeys, focusing especially on the commute to work, where currently two thirds of commuters travel by car, and other journeys under 5 miles.
- Funding, with LAs, RTPs and other key stakeholders, sustainable travel demonstration towns and villages across Scotland to reduce car use and promote cycling, walking, home zones, tele-working and pedestrianisation to test different approaches and share best practice.

162. These measures, once the appraisal has been completed, would be introduced alongside our other policies such as demand management measures for roads and investment in public transport to deliver the benefits.

Promote cycling and walking as sustainable forms of transport especially for short journeys

163. The Scottish Government has funded improvements for cycling and walking over a number of years. Currently we provide funding to:

- Cycling Scotland to raise the profile of cycling and encourage local authorities to develop cycling strategies as part of their Local Transport Strategies;
- Local authorities for developing cycling projects through Cycling, Walking and Safer Streets allocations and for School Travel Co-ordinator (STC) posts; and
- Sustrans to develop the National Cycle Network and improve links to schools, hospitals and the wider community. £9.5m has been provided to date and £8m over the next 2 years.

164. We recognise the important role that promoting cycling and walking can have both in reducing emissions, improving air quality and contributing to improved health by increasing physical activity levels. Within the Scottish Government itself, we have created a Sustainable Transport Team, bringing together for the first time, policy on cycling and walking with our wider sustainable transport agenda. We aim to further increase funding for cycling and walking overall and will place more emphasis on the promotion of them as sustainable forms of transport especially for short journeys - focusing on the safety, quality and location of routes, secure and practical facilities at departure and destination points including tenement blocks, transport hubs, public buildings and shopping centres, and the carriage of bicycles on public transport.

You told us... that the National Cycle target should be retained but that Scotland is unlikely to achieve the target. The National Cycling Strategy and Programme for Government target is to quadruple the average number of bicycle trips made between 1996 and 2012. The average annual number of journeys made by bicycle per person per year in Scotland has increased from 8 during 1995-97 to 9 during 2002-03. Our stakeholders recognise that the target is unachievable and should be revised in light of the NTS. We will take this forward in partnership with Cycling Scotland.

Case Study: In efforts to promote active travel by hospital staff, **Raigmore Hospital** supplemented funds from the Cycle Challenge Fund for the purchase of 11 secure cycle lockers, housing 22 bikes. These lockers have been extremely successful and there is now a waiting list for spaces. The secure cycle lockers and the outside stand which houses a further 42 bikes are always full to capacity. To enhance security, the stands and lockers are also covered by CCTV, reducing bike theft to only one in five years.

To further promote cycling, Raigmore have also created cycle lanes within the campus which link to the National Cycle Network, and a bike to work scheme was established providing staff with the opportunity to purchase bicycles from a local bicycle shop by paying a deposit of 10%, with the remaining balance being paid through an interest free deduction from their salary.

165. We will continue to support our existing programme and in addition will:

- Support local awareness campaigns highlighting the benefits of cycling targeted at school children, timed to maximise benefits of the school terms;
- Work with Cycling Scotland to explore the possibility of all schools running cycle training in playgrounds (where possible) for every child under 10 and on road training for every child over 10;
- Encourage all public bodies to meet Cycling Scotland's criteria to become a Cycle Friendly Employer by 2008;
- Support Sustrans to enable it to complete the National Cycle Network in Scotland and to promote the full network on the VisitScotland website;
- Fund Cycling Scotland to develop and manage Scotland's Bike It Week programme; and
- Encourage local authorities to undertake street audits to promote walking for shorter journeys.

Actively promote sustainable distribution strategies, aimed at enabling freight to use rail and sea as alternatives to road and reducing the environmental impact of freight traffic on roads

Increasing efficiency of road freight

166. Currently the Scottish Government funds a number of exemplar schemes aimed at improving the efficiency of the road freight sector in Scotland. These include Safe and Fuel Efficient Driving (SAFED) training. As the name suggests, this training is designed to encourage safer and more fuel efficient driving. It also benefits the environment by reducing harmful emissions into the atmosphere.

167. Two state-of-the-art truck simulators have been introduced and research has confirmed their applicability for training drivers across a range of simulated conditions. A freight specific website (www.freightscotland.org) has also been established to enhance delivery efficiency through improved route planning.

168. We will continue to work with the road haulage industry to seek ways to further improve its efficiency. In addition, there is potential to introduce SAFED training into the 'white van' sector. Further detail of our commitment is contained in our *Freight Action Plan*. We are also interested to explore whether the benefits of SAFED training could be extended to bus and/or coach drivers.

Evidence Base: To date c.1300 HGV drivers, or about 5% of the total HGV driver population, have undergone training. Evaluation of the driving improvements resulting from the training suggests potential annual savings of over £2.7 million in fuel costs; and the potential benefit to the environment is a reduction of 2.2KtC. If the industry extended SAFED training across the HGV sector, the potential savings could rise to about £57 million in financial terms and a reduction of 46KtC.[68]

Evidence Base: The Driving Standards Agency found that eco-driving training yields immediate results, with an 8.5% improvement in fuel efficiency for drivers on a set course after two hours of training. In Finland a pilot scheme is estimated to have saved 2.3kT carbon in 2005, whilst a better established scheme in the Netherlands is anticipated to save approximately 164kT carbon per year.[69]

Encouraging the transfer of freight from road to rail and water

169. We have already made considerable progress on encouraging the transfer of freight from road to rail and water, including Scotland's canal network, through our existing grant schemes of the Freight Facilities Grant, the Track Access Grant and the Waterborne Freight Grant. We will continue to support schemes such as these to enable modal shift.

170. We believe that there is still more to be achieved in relation to modal shift for freight and we intend to examine further through our *Freight Action Plan* what additional capacity there is for freight to move off the roads, linked to the development of potential multi-modal hubs across Scotland for movement of freight.

Eco-driving and car buying information

171. Eco-driving (driving more efficiently to reduce emissions and fuel consumption) can result in fuel savings with a resultant decrease in carbon emissions and economic benefits. We aim to expand this initiative on a much broader basis. This could include, for example, advice being provided through motoring organisations, fleet managers, hire and lease vehicle companies, public bodies, RTPs, Traffic Scotland and through general marketing campaigns.

172. Consumers generally do not connect their vehicle, size of engine and type of fuel to environmental issues. The environment tends to be low on the list of considerations of most car buyers, whether it be a new or second hand car. Whilst information on carbon emissions is now being displayed voluntarily on most new cars, consumers often do not understand the consequences of the various bands. The situation is even worse for second hand sales as emission labelling is not available and 75% of vehicles are bought second hand. We want to improve this situation to increase both environmental awareness and help consumers make more sustainable choices. We will work with partners such as DfT, the Low Carbon Vehicle Partnership and EST to work towards an easily understood system for new and second hand vehicles.

Undertake a Scottish specific appraisal of stricter adherence to national speed limits on trunk roads and motorways to identify potential environmental benefits, including carbon savings

173. A stricter adherence to national speed limits has potential safety benefits and could in addition deliver carbon benefits.

174. The overall speed limit framework including the setting of national limits for different road types, and which exceptions to the general limits can be applied, are the responsibility of the UK Government. Management and enforcement of the speed limit is a matter for local authorities, Transport Scotland and the police and currently compliance with the speed limit is sought through management of the network (speed limits, fixed-point speed cameras and more recently average speed cameras) and enforcement through cameras, fines, active police interventions and court proceedings. In recent years trialling has been introduced of average speed cameras. The SPECS average speed camera system is the first to be trialled in Scotland on sections of the M77 and A77 with a particularly high accident rate. Early indicators are that in its first year of operation, SPECS has achieved a significant reduction in average speeds, with relatively low levels of enforcement action. We will consider the possibilities for expanding the use of average speed camera systems on Scottish roads in future, taking account of their potential benefits for road safety, driver improvement, emission reduction and speed enforcement, as well as of future technological developments.

175. To develop the evidence base further, we are interested to undertake a Scottish specific appraisal of the potential costs, practicalities, benefits and disbenefits of a policy of stricter enforcement of speed limits, including the impacts on other Executive policies on road safety, and the opportunities that rapidly evolving technologies might afford.

Support moves towards aviation and surface transport emissions trading in the EU Emissions Trading Scheme

176. We recognise that both aviation and surface road transport contribute to transport emissions. The Scottish Government continues to support efforts at the UK level to promote an emissions trading scheme that includes aviation and surface road transport.

Evidence Base: Recent UK-wide research[70] suggests that a "lower, or merely better enforced, top speed limit is one of the most certain, equitable, cost effective and potentially popular routes to a lower carbon economy". This study argues that a strictly enforced 70mph speed limit would cut carbon emissions from UK road transport by nearly by 1Mt of carbon per annum. The study claims that a 60mph maximum limit would nearly double this reduction, reducing emissions by an average 1.88Mt of carbon per annum. The study also purports to find that better enforcement of the current 70mph maximum speed limit would prevent around 60 deaths and 270 serious injuries per year across the UK, calculates the associated cost saving of £120 million and that these figures would double with a 60mph maximum speed limit. Further consideration and analysis would be required to test whether and to what extent these claims could be substantiated and what the implications would be under Scottish-specific circumstances.

Our Key Commitments

- Work with UK Government to deliver the biofuels target by 2010 and beyond.
- Explore introducing a rolling programme Fleet Vehicle Health Checks.
- Develop travel awareness and marketing campaigns to promote SMART measures on all journeys, focusing especially on the commute to work.
- Support Sustrans to complete the National Cycle Network.
- Explore with key partners sustainable travel demonstration towns across Scotland to reduce car use and promote cycling and walking.
- Continue to fund the Scottish Road Haulage Modernisation Fund and to investigate extending this to vans and buses/coaches.
- Undertake a Scottish specific appraisal of the potential carbon savings of stricter adherence to national speed limits on trunk roads and motorways.


CORRAN
INVERNESS

Chapter 5

Improved Quality, Accessibility and Affordability

Summary Message

177. Scotland aspires to be a society which is socially inclusive, just and where everyone has the opportunity to contribute and participate in that society. That means ensuring that people have the opportunity to access education, training and employment as well as key services such as health, cultural, sporting and leisure activities.

178. Accessing services can be a challenge if you are one of the many people who live in remote or rural areas of Scotland, if you live in isolated and often deprived urban communities on the outskirts of towns or cities, if you have limited mobility through age or disability or if you are on a low income. Transport has a key contribution to make to ensure that Scotland becomes an inclusive and just society by providing high quality and affordable public transport which will enable access to key services and leisure and cultural opportunities. This chapter describes how we aim to improve the quality, safety and affordability of transport to give people a choice of public transport in order to improve social inclusion.

Overview

179. The challenge we face is how to improve the quality, accessibility and affordability of transport in order to improve access not only for our urban areas but also for rural Scotland, disadvantaged communities and people with limited mobility. High quality transport means ensuring services with appropriate routes to access services, appropriate levels of frequency of service, services which people are able to physically access, high quality transport information, simple and effective ticketing and services which are value for money. We also face the challenge of improving safety on public transport for travellers to ensure they have the confidence to use the services provided.

180. The **outcome** we want to achieve is improved quality, accessibility and affordability of public transport to enable better access, as a means of promoting social inclusion by connecting remote and disadvantaged communities, increasing the quality of the experience of the transport network for everyone including improving safety for passengers and staff travelling on public transport.

181. The **broader benefits** that will accrue from this will include sustainable economic growth, contributing to the improved health of Scotland's population through encouraging active travel and contributing to developing a socially just Scotland. Improved quality, accessibility and affordability will also have a significant broader benifit to the tourism industry who will benefit from both attracting visitors and getting repeat visitors by having improved access and a better journey experience getting to and travelling within Scotland.

182. To **measure progress** against this outcome we will report on a range of monitoring indicators in reviews of the Strategy. These indicators will include:

- Passenger numbers on buses, through lifeline airports and on lifeline ferries
- Satisfaction of bus and rail passengers
- Walking time to nearest bus stop and frequency of bus service at nearest bus stop (for urban and rural areas)
- Access to key services

Delivering improved quality, access and affordability – What we will do

Deliver the existing Concessionary Fares scheme for older and disabled people and introduce a new scheme for young people

183. The Scotland-wide free bus scheme for older and disabled people is a major achievement under which over one million older and disabled people can travel free on local buses and long distance scheduled coaches throughout Scotland at any time of day. This scheme has tackled a significant affordability issue for older and disabled people. The scheme which was introduced on 1 April 2006 has had an uptake of over 930,000 cards compared to a forecast of 830,000. The Scottish Government has committed £322million to the scheme over the next 2 years. The scheme demonstrates the success of partnership working that can be achieved across the public and private sector to deliver real transport improvements.

You told us... that ensuring better access for rural communities is vital. You said that accessibility affects everyone but you also said that people with mobility problems are 50% less likely on any given day to travel, leading to isolation. You asked us to consider more flexible and demand responsive transport to address social exclusion, recognising the benefits that Community Transport providers can bring, and to invest more in making transport infrastructure and information more accessible. You asked us to look to create greater integration in the planning and delivery of services to improve access to health and education.

184. We will, as part of a review of the scheme, give consideration to extending the free concessionary scheme for bus travel for older and disabled people to include flexible, demand responsive and Community Transport (CT) services. Whilst the current scheme fully implements our Partnership Agreement commitment, most CT services are not registered local services and their passengers are unable to benefit. It is recognised that an extension of the scheme to CT would require additional, and at this stage, unspecified resources. We will review the concessionary fares scheme after 2 years and look at the evidence for any changes to the scheme.

185. We are also committed to introducing a national concessionary travel scheme for young people by January 2007. The Executive recognises that the ability for young people to access public transport for work, education or social activity is important for both their development and independence. Affordability of transport and having public transport available to young people is a key factor in young people being able to participate in work, education, sporting and cultural activities. This commitment will allow young people greater choice not only in travel options but also greater economic and social opportunities.

Continue to support lifeline ferries and air services

186. We are committed to sustaining the viability of remote and fragile communities through ensuring access to lifeline air and ferry services.

187. We provide direct funding for air services which link the communities of Barra, Campbeltown and Tiree with Glasgow and also provide direct funding to Highlands and Islands Airport Limited (HIAL) for the maintenance and operation of 10 airports which facilitate lifeline air links, and the development of scheduled air services in conjunction with airlines. These activities play a key role in supporting economic growth, inward investment and inward migration in our peripheral communities throughout the Highlands and Islands.

188. We currently also provide support for ferry services to the Northern Isles and support the Clyde and Hebrides ferry services. In July this year Northlink Ferries Ltd. was awarded the new contract to provide essential lifeline ferry services to the Northern Isles. A public service contract for the Dunoon to Gourock route was tendered in late July and a separate tender for the main bundle of Clyde and Hebrides ferry service routes currently operated by Caledonian MacBrayne Ltd will be tendered later this year.

189. We are committed to maintaining lifeline ferry services and to ensuring that wherever technically and financially possible, ferry services are developed to improve access to vulnerable island and peninsular communities. Once the tendering of the Clyde and Hebrides ferry service has been completed in 2007 we will undertake a comprehensive review of lifeline ferry services to develop a long-term strategy for lifeline services to 2025. The review will include a detailed appraisal of routes to determine whether a better configuration could be developed in response to calls for new and faster connections serving these isolated communities and a review of fares structures as part of a broader review of the affordability of public transport.

Review the affordability of public transport

190. We are committed to ensuring that lifeline ferry services remain affordable, which is why for many years now we have restricted CalMac's fares increases in line with inflation, increasing our subsidy requirements in real terms as a result. However, CalMac's fares system is highly complex and we shall be considering, as part of our comprehensive review of ferry services, the scope for rationalisation of fares structures and whether through fares adjustments we could provide greater support for particularly vulnerable island communities.

191. Current fares policy for rail is set out in the First ScotRail Franchise Agreement, which was let by the Strategic Rail Authority and agreed with Scottish Ministers. As a consequence of the Railways Act 2005, Scottish Ministers now hold direct responsibility for future fares policy. The current fares structure is a mixture of regulated and unregulated fares. Scottish Ministers can restrict the permitted increase on regulated fares while unregulated fares are set by the operator. Scottish Ministers have no control over the levels of unregulated fares.

192. We wish the rail fares structure to be easily understood by passengers, to encourage people to travel by rail and to be competitive, where possible, with other modes. We are currently reviewing fares policy and will seek to develop a new policy which maximises opportunities to encourage modal shift to rail.

193. Buses are flexible, cost-effective high occupancy vehicles which carried 477 million passengers (2005-06) (Rail 73 million (2004-05), Air 24 million (2005)). Direct support for the Bus industry amounts to £62.6 million in 2006-07 (Rail £631 million, Air £41.6 million, Ferry £61.7 million). Subsidy per passenger journey amounts to £0.14 (Rail £9.15, Air £1.81).

You told us... that your main concern in relation to fares was not the absolute cost of fares but the relative difference between public and private transport. Many of you commented on the need to explain more fully to drivers the full cost of car use relative to public transport. Some of you were also concerned about the complicated nature of rail fares.

You told us... that we should do more to improve the passenger experience of bus services through encouraging quality contracts and quality partnerships.

You told us... Irregular and unreliable bus services are a big problem in some areas, particularly in rural parts of Scotland and in some urban areas. Many of you commented that there were too many providers competing for key routes to the detriment of other routes and stated that new, innovative models should be explored in Scotland.

194. The average fare paid across Scotland (excluding concessionary fare passengers) is currently about £1.20 per journey.[71] Due to the increase in car use (54% rise in trips since 1985-86),[72] bus passenger numbers have declined by 31% since 1985-86 and passenger receipts by 14% (real terms).[73] However, increases in congestion (it is estimated that the number of buses and operating costs have increased by at least 10% due to the effects of congestion) have contributed to a real terms increase in fares of 19%.[74]

195. We will review the funding arrangements for bus services in the round to ensure that they are adequate, fit for purpose and provide the synergy required to maximise opportunities to improve the provision of bus services; and that they are commensurate with the significance of buses as the principal form of public transport and with their potential to develop.

Promote the improvement of the quality of bus services

196. The current bus regime is market-led with light regulation by central and local government, and safety net arrangements to enable local government to intervene in the market where commercial services do not meet essential needs. The underlying principle is that private bus companies are best suited to seek out and develop market opportunities while at the same time driving down costs - which have reduced in real terms by around 50% over the last 20 years. Our consultation has shown that while over the larger part of Scotland the minimum requirements of frequency, reliability and affordability are being met, borne out by the overall satisfaction rating of 84-87% for bus services, significant concerns remain about the provision of rural services and the basic quality and reliability of transport planning, bus infrastructure and services.[75] Wider concerns have also been expressed about safety, congestion, overcrowding and late running.

197. The extent and quality of partnership working has also been raised as has the consistency in levels of compliance and enforcement of bus registrations. While there are many good examples of partnership working in Scotland, there remain concerns about the inconsistent nature of the quality and extent of bus services.

Evidence Base: In rural communities drivers spend a higher proportion of their income on motoring costs.[76] The inherent characteristics of rural areas, namely a low population density and dispersed settlement pattern results in demand which is not necessarily conducive to public transport with more flexible solutions such as Demand Responsive Transport being more appropriate.

You told us... that you recognised the importance of integration and of making journeys easier for passengers and freight. Visitors, commuters and businesses want to be able to plan their journey easily and quickly, buy a single through ticket, often on line, and be confident that the connections and journey times will be reliable. This means that we need high quality information, transport interchanges and effective integration of key services on routes. Freight users want to increase the choice of transport modes into their supply chain and need to be able to connect between road, rail and sea more seamlessly.

198. Our *Bus Action Plan* will help to ensure a step change in planning, partnership and the policy framework for bus services in order that buses can make the required contribution to growing the economy and supporting communities that we wish to see. We want to see regional transport partnerships and local authorities having explicit bus policies and targets, which include key economic and social aims. We will encourage these organisations to integrate their bus planning with planning for demand responsive transport and health service planning to ensure integration. We also want to see a step change in bus compliance enforcement by VOSA and the Traffic Commissioner, including targeted enforcement where there are problems.

199. A substantial investment is made by the Scottish Government in the bus industry. Our Bus Action Plan seeks to establish a higher return on that investment, driving up quality for the benefit of the millions of passengers who use the bus. It seeks to be alive to the different requirements of different parts of Scotland. While many of the fundamental challenges for the bus industry are the same across Scotland, in important respects there are also unique circumstances in different parts of the country. There is no one size fits all solution and solutions should be tailored to the specific problems faced.

200. A step change is required in bus service provision and infrastructure if bus services are to meet the needs of current bus users and to attract passengers from the car. Action is required to strengthen a range of policy and financial tools to help shift the quality of provision upwards across the industry. That means:

- Closer alignment between central government financing and quality on the ground;
- Strengthening Quality Partnerships so that they can cover more readily issues such as the frequency and punctuality of services;
- Simplifying the process to enable franchising (i.e. a quality contract) where that is seen to be an option by transport authorities; and
- Intensifying the regulation regime so that performance problems are addressed quickly and decisively.

201. Information is key to continue to grow passenger numbers. We want to see a nation wide review of the provision of bus information and will work with our stakeholders to achieve this.

202. We believe that more could be achieved through the pro-active use of Quality Contracts, Quality Partnerships and Punctuality Improvement Partnerships (intended primarily to tackle bottlenecks) to deliver better bus services. We will review the legislation on Quality Contracts and Partnerships to simplify the process to encourage transport authorities to use them. We will also work with DfT colleagues on the development of Quality Partnerships.

Evidence Base: Our review of DRT in Scotland (2006)[78] demonstrates that DRT plays an important and growing role in the spectrum of transport provision. The importance of community transport to the development of DRT is recognised with the suggestion that more secure and improved funding may be required to enable further contribution from this sector in the longer term.

Case Study: Demand Responsive Transport

Fife Council introduced several DRT services in rural areas of North East Fife from August 2004. The new services reflected residents' comments about the need for improved transport provision to local hub towns containing services and potential interchange opportunities.

One service introduced included the "Flexi Service 1" operating between Newburgh-Auchtermuchty-Ladybank-Cupar which used fully accessible low floor buses on a flexible local timetable enhancing travel opportunities between these settlements whilst also improving inter-village travel. Improvements to the quality and availability of information and infrastructure at bus stops were also integral aspects of the service.

The service has proven to be very popular with passenger numbers increasing from 2000 during the first four weeks of the service to an average of 3000 per four weeks from February 2005 onwards.

Improving quality, accessibility and affordability of services to, from and within remote and rural areas in Scotland

203. Many access and social inclusion issues apply equally in an urban or rural context. However, some issues are specific to rural areas.

204. We are committed to maintaining and improving access for rural Scotland. This involves ensuring a high quality public transport system as well as supporting the development of community transport solutions in local areas. We will continue to support and enhance the Rural Transport Fund, currently £8.7 million, which aims to improve social inclusion in rural areas through targeted schemes including the Rural Petrol Station Grants Scheme, Rural Community Transport Initiative and Rural Public Passenger Grant Scheme. Reviews of all three schemes have reported positive findings for the rural communities benefiting from each initiative.

205. We encourage regional transport partnerships and local authorities to consider flexible solutions when they are planning bus services. As part of the incentives to consider flexible services, we intend to amend the legislation on Bus Services Operators Grant (BSOG) to allow claims to be made in respect of fully flexible services, thereby removing the financial disincentive that currently exists. This will support the development of bus services generally but will have a particularly positive impact in rural areas.

206. The Air Discount Scheme aims to improve access for remote communities in the Highlands and Islands. We introduced the Air Discount Scheme in May 2006 which provides discounted air fares for anyone whose main residence is in Orkney, Shetland, Western Isles, Islay, Jura, Caithness and North-West Sutherland. The discount which is set at 40% of the core fare is available on air routes between the eligible areas and Aberdeen, Edinburgh, Glasgow and Inverness. We are committed to continuing the scheme until March 2008 and we will review its success in improving access in advance of that date.

207. Currently, the cost of fuel in rural areas is of concern. However, the cost of fuel is a matter reserved to the UK Government. Scottish Ministers have regular dialogue with Treasury Ministers and will continue to ensure that the Scottish interest on this issue is fully understood by the UK Government.

Improving the quality of journey information

208. We already provide travel information services through Transport Direct (a GB wide 'door-to-door' internet transport and information journey planner service covering public transport and car journey planning), Traveline Scotland (a telephone, internet and text based public transport journey planning service) and through Traffic Scotland (an internet service for traffic information). The

evidence suggests that making public transport information available to users does make a significant contribution to encouraging people to use public transport.[77]

209. These services are extremely successful already, however we believe that more could be achieved. We want to aim for the provision of a 24 hour/365 days a year integrated service which brings together all modes of transport so that users can use their preferred technology to access accurate information before and during their journey. This enhanced service will be of particular importance to visitors to Scotland both in pre-planning their journeys and using public transport to access visitor attractions and events. We want to explore adding cycling and walking into this information service and to extend the amount of real-time information that is available.

210. Transport authorities are required by legislation to determine what local bus information (including information about routes and timetabling) should be made available. We will review the progress that has been made across Scotland ensuring that information is appropriate to the needs of different groups, including commuters and visitors.

Promoting Integrated ticketing and higher quality transport interchanges to enhance the passenger journey

211. We recognise the importance of the journey experience to visitors as well as commuters. Having both simple ticketing and better integreated services and interchanges themselves is vital. There have already been successful local schemes for integrated ticketing in Scotland for example, Zonecard, PlusBus and OneTicket. We are also in the process of rolling out smart enabled ticketing machines to every bus operator in Scotland, creating a platform to develop new integrated ticketing initiatives. This will support the implementation of the concessionary travel scheme.

212. We want to go further. We have already started to develop an integrated ticketing strategy for Scotland which will be published in 2007 and which will outline how to secure seamless journeys between bus, ferry and/or rail journeys by different operators. We will explore the possibility of introducing an integrated ticketing pilot across all modes in partnership with a regional transport partnership or local authority. We intend to harness the new technology and equipment that is already being progressively installed through funding provided by the Scottish Government across the entire Scottish bus fleet to maximise the opportunity to deliver integrated ticketing. We intend to explore the possibility of extending this technology to ferries and trains. We believe this will make public transport more attractive to users and simpler to use. We will continue to push the boundaries of current technology to make pre-paid travel even easier for passengers e.g. by exploring mobile phone technology. This will also speed up boarding times for all bus users.

Case Study: Lothian Buses travel information leaflet: How to get to Edinburgh's Attractions by Bus

Lothian Buses have produced a new publication featuring a selection of places to visit by bus in Edinburgh, East Lothian and Midlothian which will prove useful to both locals and visitors, highlighting visitor attractions especially many lesser known ones outside the City Centre.

As well as information on each attraction there are details on the bus service to take and at which stop to get off, along with a handy map and some helpful tips for visitors on how to use Edinburgh's buses.

The brochure promotes bus travel by demonstrating how simple and convenient this can be and at the same time encourages visitors to venture further than the standard "tourist trail" to see and experience what else Edinburgh has to offer.

Public transport is important to the tourism industry, for example visitors to The Scottish Mining Museum in Newtongrange previously arrived mainly by car, this brochure highlights an alternative means of transport. Using public transport eases congestion in general by reducing the number of cars travelling to and from the city centre and also saves the effort and costs of parking. The attractions' telephone number and web address is provided so they can be contacted direct for further details.

The leaflet was distributed from Lothian Buses Travelshops, at featured visitor attractions, tourist informations centres throughout Scotland and Edinburgh city centre hotels. The publication has proved so popular that Lothian Buses hope to continue publication of this leaflet in the future. Other recent publications are "How to use Edinburgh's Buses" which has sections in five different languages – English, German, French, Spanish and Italian.

213. Transport interchanges must be of the highest quality, including airports, rail, bus and ferry interchanges. They must cater for all modes of transport including cycling and walking, be accessible for those with limited mobility and suitable for visitors and commuters alike. Integrated planning is central to this and regional transport partnerships will have a key role to play in promoting integration and improving key interchanges in their region. RTPs and local authorities should also consider flexible demand-responsive feeder services for key transport interchanges as a way of improving the quality of transport for the public.

214. We recognise the importance of improving the journey experience as a whole and look to transport operators to maximise the potential market oppertunity created by, for example, tourists and commuters.

Promote improvement of the overall accessibility of the transport network for older and disabled people and those with limited mobility

215. The Disability Discrimination Act 1995 (amended 2005) (DDA) sets out the requirements for transport operators, services and public bodies to make reasonable adjustments to ensure that their services and facilities are accessible for disabled people. Aircraft and shipping vessels are currently exempt from the requirements of the DDA, although voluntary guidance is in place. The DDA 2005 empowers the UK Government to lift the transport exemption but there is no timetable for this currently. Many airports and airlines within the European Union already make considerable efforts to assist disabled people, but since this assistance is not uniform the proposed EU regulation on the rights of disabled travellers in relation to air transport will ensure a consistent level of service across the EU.

216. Part 3 of the DDA applies to rail stations, ports and ferry terminals and requires operators to take reasonable steps to make adjustments for disabled people to access facilities. Considerable progress is already being made and we are supporting this effort through the Railways for All Accessibility Strategy for Great Britain. In addition all major transport rail infrastructure projects funded by Transport Scotland will take the issues of accessibility into account and will follow best practice. In terms of access to ferries, around £9m has been invested already by the Executive in piers and harbours since 2000 involving improvements to passenger access.

217. In May 2006, research on *Improved Public Transport for Disabled People*[79] was published which highlights that key inequalities still exist between disabled and non-disabled travellers and that a considerable majority of disabled people would like to travel more than they currently do. The barriers facing disabled people when travelling are numerous, ranging from negotiating the physical environment to personal safety issues to the need for reliable travel information through the whole journey. We know that the incidence of disability increases with age and therefore demographics suggest that difficulties with transport will affect a larger proportion of the population in the future.


We also go to The New

Case Study: The Patient Transport Service based in the Beatson Oncology Centre started in late March 2004. It was grant-funded (£414k over 2 years) and enabled its partners to run a small fleet of People Carriers to transport patients within the Greater Glasgow area. The main partners were Scottish Ambulance Service, Greater Easterhouse Development Company,[80] Big Lottery Fund, Beatson Oncology Centre and Greater Glasgow NHS.

The project aims were to reduce health inequalities by addressing a gap in transport services for cancer patients in Glasgow, improve cancer care and create job opportunities for individuals living in recognised disadvantaged areas throughout Glasgow. These were tackled through:

- Shorter and quicker journeys to and from hospital
- Improved rapport with drivers
- Enhanced reliability of hospital transport service
- Reduced waiting times

An independent evaluation of the service concluded that, **'The PTW services appear to be offering significantly enhanced comfort, driver interaction, and reduced journey times when compared with minibus patient transport services and better comfort and driver interaction when compared with volunteer car services.'** (DHC, April 2005). An estimated 4,000 patients were provided with quality and supportive transport to and from treatment centres over the two years of the project.

In terms of creating employment, recruited drivers who delivered the service were all previously long-term unemployed individuals and resident in social inclusion partnership areas throughout Glasgow. The drivers were given full professional training by the Scottish Ambulance Service and able to take advantage of promotion opportunities within the ambulance service. Twelve long-term unemployed individuals were initially recruited on fixed-term contracts. Eight have now attained full-time permanent positions as drivers and one has been promoted to Ambulance Care Assistant.

218. We would like to see duties for transport authorities and providers enforced and policed through the setting of targets that are clear and can be properly monitored. Such targets need to relate to measurable outcomes of transport initiatives rather than the provision of services. Contracts with transport operators should include specific relevant performance measures.

Investigate ways to improve high quality demand responsive transport to enhance access to health and education

219. Access to health and education is critical. Evidence from across Scotland seems to indicate that although access to health and education is generally good if you have private transport, access through public transport is more varied and can be problematic. This has the potential to become worse as healthcare services are re-located to key sites across a particular region.

220. We wish to address this issue directly as we want to see Scotland's National Transport Strategy as providing a focus to improve access to key services such as health and education. We will be requiring NHS Boards to consider transport implications in planning and designing services and we will expect to see a full transport impact assessment to have been carried out in considering new builds or significant changes to health services.

221. We believe that demand responsive transport (DRT) may provide some positive opportunities to create flexible services to meet this demand. This flexibility is particularly beneficial for those who find conventional public transport difficult to use and for services which have a low or fluctuating demand, such as in rural areas.

222. We intend to increase funding for DRT beyond the current pilots to enable an expansion of the flexible services available. However, we do not believe that funding is the most significant barrier. The real difference lies in having these services designed and delivered at the very local level.

223. We recognise that currently there is fragmented service provision at a local level. We need to ensure that at the local and regional level these services work together in the most efficient way possible. This requires improved co-ordination between these various services and the removal of current barriers which prevent more efficient integration.

224. We would like to see regional transport partnerships, local authorities and Health Boards working together to address these issues with a view to maximising the contribution of the investment being made in transport services across a region, including social work transport, local authority subsidised bus services, non-emergency patient transport and community transport.

225. We are interested to explore with RTPs, LAs and Health Boards what additional measures could be taken, including enhanced co-ordination of all non-scheduled services with the introduction of

Case Study: Bus services in Dundee

Bringing Confidence into Public Transport (BCPT)
Implemented between 2002 and 2005, this project has brought about a step change in the quality of bus infrastructure at major interchanges and in public transport information and its availability. Also, vehicles have been modernised and the main urban operator now has a 100% low floor fleet.

BCPT concentrates on providing high quality bus passenger facilities at the major interchanges - City Centre and Ninewells Hospital. The main features of the city centre interchanges are:

- Shallow bus bays with accessible kerbs;
- Bus shelters with leaf shaped roof using high quality materials and internal and external lighting;
- Real-time information, static information panels and audio information for the visually impaired;
- Acoustic absorbent panel to reduce noise pollution;
- DDA compliant shelters.

Smartbus has already seen all buses operating in the city fitted with CCTV, will expand high quality facilities city-wide by April 2006 and will provide:

- 300 bespoke high quality bus shelters (from a total of 920 stops within city) that will include real time information displays, good quality paper information and CCTV capability.
- 550 quality new bus poles each incorporating solar power to light good quality paper information.
- Accessible kerbing at all bus stops and shelters, scheduled for early 2006.
- Bus priority at all traffic signal junctions within Dundee.
- All stops to include 29 metre clearway markings

Outcomes

- 15 million passenger transport trips per annum made in Dundee (source - bus operators).
- Patronage increases of up to 9%

Regional Travel Dispatch Centres (TDCs) to co-ordinate all services in an area, including access to health, education and social work services. We are also interested to see the outcomes of the current bids to the Efficient Government Fund proposing integrated transport pilot projects.

Continue to promote safety for travellers and staff on public transport

226. Safety and the perception of safety for travellers and staff on public transport is key to encouraging more people to use public transport. Physical safety on public transport for passengers and staff is an issue for transport operators, involving the police as necessary. Physical safety while waiting for a bus, for example, is primarily a public order issue but transport authorities can play a role in making facilities as safe as possible.

227. To help reduce antisocial behaviour and violence within our towns and city centres, we want to see regional transport partnerships and local authorities work in partnership with the police and public transport operators in providing sufficient transport to allow individuals away from our towns and city centre locations particularly around closing time for licensed premises. The advantage of this work would be to help reduce antisocial behaviour.

228. To improve safety on buses, we would like to see regional transport partnerships and local authorities working in partnership with bus operators. Infrastructure developments should feature appropriate enhanced safety features such as well-lit bus stations/stops and CCTV. The Scottish Government has through its Public Transport Fund, invested heavily in implementing CCTV on buses and as part of the rail franchise, CCTV coverage at rail stations has been extended.

229. We recognise and welcome the approach of bus operators in investing heavily in a range of preventative measures in conjunction with the police, the Scottish Business Crime Centre and others. Measures include swab kits, panic alarms, free travel for police, use of safety screens and community initiatives. We also welcome the partnership working with the police which has led to dedicated posts in some police areas to tackle bus crime.

230. Research into anti-social behaviour on buses highlighted the need for close inter-agency working to implement a range of physical, preventative and diversionary approaches. We are also implementing, overseen by our Justice Department, the *Protecting Public Sector Workers - When the Customer isn't Right*[81] report and working with our partners on the rail network to ensure that the franchisee takes forward safety issues.

231. We believe that pro-active use of Quality Contracts and Quality Partnerships can make a difference to improving passenger safety. Enhanced safety features such as well-lit bus stations/stops and CCTV should feature in these.

Promote accessibility planning as a means of ensuring improved quality and affordability of transport at local and regional levels

232. Accessibility planning is about taking a holistic view of access for a particular region or area. It can be a helpful process in identifying gaps in transport provision, areas of poor integration and potential social exclusion. This kind of planning process is now an integral requirement of the second round of the English Local Transport Plans with the aims of ensuring that there is a clear process and responsibility for identifying groups or areas with accessibility problems. Transport authorities collect improved information on barriers to accessibility and the areas where accessibility is poorest and work in partnership with others to consider a wide range of solutions to accessibility problems.

233. We are supportive of the concept of accessibility planning and expect that this kind of planning process will feature within the development of both Regional and Local Transport Strategies. Here in Scotland, we believe however that the process should be owned by those developing the strategy locally and therefore we will not be making accessibility planning a compulsory requirement for regional transport partnerships or local authorities. We will continue to support both regional and local transport authorities to create a clear picture of the key issues and objectives for their own strategies and will support this through our liaison teams at the Executive, the existing RTS and LTS guidance and by making available relevant accessibility planning tools to those RTPs and local authorities who wish to use them.

You told us... that you are supportive of accessibility planning but responses were split over whether or not accessibility planning should be made compulsory or not. Most of you were interested to explore the concept further. There was also a call for improved access to cultural activities, particularly in the evenings and at weekends.

Our Key Commitments

- Introduce a national concessionary travel scheme for young people.
- Deliver our existing concessionary travel scheme for older and disabled people and review after 2 years.
- Support lifeline airports and air services.
- Undertake a review of ferry services with a view to developing a long-term strategy for lifeline services to 2025.
- Review the affordability of public transport in relation to ferry, rail and bus services.
- Publish our *Bus Action Plan* to strengthen a range of policy and financial tools to help achieve a step change in the quality of bus service provision across the industry.
- Amend the legislation on Bus Services Operators grant (BSOG) to allow claims to be made in respect of fully flexible services.
- Support the Air Discount Scheme.
- Explore introducing an integrated ticketing pilot across all modes in partnership with a regional transport partnership or local authority.
- Expand funding for DRT beyond the current pilots to enable an expansion of the flexible services available.
- Use Quality Contracts and Quality Partnerships to enhance safety on public transport.


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Chapter 6

Implementation and Review

Building consensus

234. The NTS needs to be implemented and monitored by a wide range of partners. Accordingly, we have built the NTS on the basis of wide-ranging stakeholder consultation, and a detailed report on all the stages of this consultation is being published alongside this strategy.

235. In developing the NTS we undertook a full Strategic Environmental Assessment on a voluntary basis and screened the document under the Race Impact Assessment arrangements. In addition, we met with a range of equality groups to discuss the impact of the NTS on different sectors of the population.

Funding the Strategy

236. We remain committed to our current capital investment plan to 2012 and will continue to deliver our present programme of infrastructure delivery, much of which is already underway. The National Transport Strategy will inform the Strategic Transport Projects Review which, in turn, will determine the next generation of major projects.

237. Funding for the strategy will come from a variety of sources, both in the public and private sector. We support partnership funding across public and private sector and will look carefully at the nature of the funding for each investment.

238. The amount of Government funding available to deliver the National Transport Strategy will be determined through the periodic Spending Review process. At the same time, this process will determine the balance between capital and operating expenditure. Account will also be taken of the demand for capital expenditure across the whole of the Executive. Following the publication of the strategy, and after the next Spending Review, a transport investment plan will be published. While this plan will set out in more detail the "mix" of our proposed expenditure between infrastructure and non-infrastructure investment, the overall size of the budget for transport will continue to be determined by successive Spending Reviews.

Implementing policy and legislation

239. Where we have determined that an issue requires legislative change, we will take that forward at the next available opportunity, which is unlikely to be before 2008.

240. Where we have identified policies as requiring further analysis before a decision can be taken, we will develop detailed plans showing our timescale for that analysis and will publish these separately. We will ensure that the findings of such analysis are fed into refreshes of the Strategy on a four-yearly basis.

241. As far as possible, for individual policies with a cost implication, we would hope to be able to find scope to begin implementation quickly, through savings elsewhere in the budget and particularly reallocation from policies which we have determined through this strategy have less of a priority. However, those with a high cost or a long lead time may take some time to become fully operational. Our monitoring work and our regular reports on the effectiveness of the NTS will show how we are working towards implementation of these longer-term aspirations.

Partnership Working

242. Delivering this strategy is not the job of any single individual or organisation. It requires partnership working between the public, private and third sector and between individuals who use transport and organisations that commission and provide transport. We will continue to work with all our partners to deliver the strategy at a Scottish, UK and international level.

243. The continuing development of close and effective working relationships between Transport Group, Transport Scotland, regional transport partnerships and the local authorities is critical to the successful delivery of a shared agenda for the improvement of transport by ensuring that transport policy in Scotland is properly co ordinated.

244. The **Scottish Parliament** will have a crucial role in holding Ministers to account on the delivery of this strategy, primarily through the Local Government and Transport Committee. Ministers will ensure that the Committee is kept informed of developments.

245. We will continue to listen to **users** of transport both directly and through their representative organisations as well as through our own statutory advisers, including the Public Transport Users Committee and the Mobility and Access Committee for Scotland.

246. In addition, we will explore options for securing independent research and advice setting up new mechanisms as required to bring different transport interests to the table, and learning from, for example, the Commission for Integrated Transport.

247. **Regional transport partnerships and local authorities** will have a particularly important role to play, ensuring that regional transport strategies are in line with and support the National Transport Strategy, while meeting regional needs and statutory requirements as set out in the Transport (Scotland) Act 2005 and delivering infrastructure projects. We look forward to seeing the regional and local strategies as they emerge over the coming months.

248. **Transport Scotland** too has a critical role in delivering our rail and road infrastructure programme and in delivering rail services in partnership with the public and private sector to implement the strategy. Transport Scotland will also lead on the vital work of the Strategic Transport Projects Review.

249. The **private sector** will continue to have a key role in providing funding and delivering transport services on the ground. We will ensure that the **Third sector** is given clear guidance where it is a key delivery agent for the National Transport Strategy, and that funding opportunities and opportunities for implementing innovative new ways of working, are clearly and consistently linked with the requirements of the NTS. Where **other public sector bodies**, particularly health boards, have a critical stake in the NTS, we will again work closely with them to ensure that they understand the strategy and can support its implementation.

250. It is essential that all involved in transport in Scotland at the national, regional and local level ensure that when developing policy or making decisions about service delivery full account has been taken of the six strands of equalities that the Scottish Government is committed to mainstreaming: race, disability, sex/gender, age, sexual orientation and faith or religious belief.

Monitoring and Reviewing the National Transport Strategy

251. We will put in place mechanisms to monitor and review progress of the strategy.

252. We will review the strategy every 4 years. Specifically we will consider whether the strategy will require amending, as Scottish Ministers' priorities, understanding of transport issues, available resources and other circumstances may have changed significantly in 4 years. We will also recommend, if required, specific revisions to the strategy taking account of experience and improved knowledge.

253. Reviews of the strategy will include open and accountable monitoring of progress against our strategic outcomes. This will be informed by the use of indicators, grouped around the outcomes. A small number of performance indicators are set out in this strategy. Data on most of these indicators is (or will be) published in Scottish Transport Statistics. We will develop and include further indicators in reviews of the strategy as appropriate.

Developing our evidence base for the NTS

254. A considerable amount of evidence and analysis has been drawn upon in developing our National Transport Strategy. As well as research conducted by academics and organisations across the UK and beyond, the NTS has been informed by work commissioned or undertaken by the Scottish Ministers both specifically for this purpose and as part of our ongoing research programme and analytical strategy.

255. Ongoing analytical work in transport will seek to address the gaps in the evidence base identified as part of the development of the NTS and will help inform the delivery of the strategy. Some of this work is identified within the chapters of this document. Future analytical work will contribute to the reviews of the NTS.

Annexes

Annex A – Glossary

Biofuel – a less polluting alternative to conventional mineral fuels such as petrol and diesel, offering both air quality and carbon savings benefits. Biofuels are made from biomass materials of either vegetable or animal origin. There are currently three main types of biofuels: biodiesel, bioethanol and biogas. Biodiesel can be blended with diesel and bioethanol can be blended with petrol. Any petrol or diesel car can run on low level blends. High blends of biofuel require specially adapted vehicles. Biogas is an alternative to natural compressed gas for gas-powered vehicles.

Demand Responsive Transport (DRT) – any form of transport where day to day service provision is influenced by the demands of users. All DRT operations can be defined in terms of the flexibility of the routes, the stopping points and service types. DRT can involve taxis/private hire vehicles, shared taxi/taxibus, community car schemes, non-emergency patient transport, 'joblink' services, ring-and ride, social services transport, education services transport, dial-a-ride, community buses, flexible public transport buses and many other related services.

Devolved – refers to powers which transferred to the Scottish Ministers/ Scottish Parliament under devolution. Every area not subject to an explicit reservation under Schedule 5 of the Scotland Act is devolved – broadly speaking, all Scotland-only matters such as justice, education, much of transport and health.

Grant Aided Expenditure – financial support from the devolved Scottish Government to local authorities or other bodies.

Local road – all roads in Scotland which are not motorways or trunk roads. These are managed by local authorities.

Network Rail – GB owner and operator of rail infrastructure, which as a result of the Railways Act 2005 is now specified and funded in Scotland by the new powers transferred to Scottish Ministers in the Act.

Regional transport partnership – statutory body (under Transport (Scotland) Act 2005) covering a given region with responsibility for preparation of regional transport strategy and other powers as agreed with constituent local authorities.

Reserved – refers to powers which were explicitly not devolved because they were made the subject of a reservation under Schedule 5 of the Scotland Act 1998. International, cross-border and UK-wide issues are generally reserved.

Scottish Executive – the Scottish Ministers comprising the First Minister, Ministers and the Scottish Law Officers (excluding junior Scottish Ministers). Also known as the Scottish Cabinet.

Scottish Parliament – the devolved legislature of Scotland.

Smart Measures – measures which encourage sustainable travel, typically travel plans, public transport information, travel awareness campaigns, travel to school campaigns, car clubs, car sharing schemes, car free housing zones and teleworking.

Spending Review – high level review of Government spending, conducted separately for the UK (including reserved functions) and for Scotland (covering devolved functions and also functions in reserved areas where functions have been transferred to Scottish Ministers). The UK review determines the total budget for Scotland, using a formula. The allocation of the Scottish total is a matter for Scottish Ministers and the Scottish Parliament.

Stern Report – report on the Economics of Climate Change published by HM Treasury. Available at http://www.hmtreasury.gov.uk/independant_reviews/stern_review_economics_climate_change/stern_review_report.cfm.

Strategic Environmental Assessment – a new requirement which extends the assessment of environmental impacts from individual projects to the wider perspective of public strategies, plans and programmes.

Strategic Transport Projects Review – forthcoming review of Scotland's future transport infrastructure and other major investment needs. The existing ten year investment plan will not be affected by the Strategic Transport Projects Review.

Ten year investment plan – the devolved Scottish Government's plans for transport infrastructure to approximately 2012, as set out in *Building a Better Scotland – Infrastructure Investment Plan: Investing in the Future of Scotland*.[82]

Travel plan – a package of measures that aims to promote more sustainable travel behaviour within an organisation.

Trunk road – the motorway and trunk road network provides the most important long distance links between Scotland's cities and major towns, the English trunk road network and the Irish ferry ports as well as providing gateway links to coastal destinations. The trunk road network is managed by Transport Scotland

VOSA – Vehicle and Operator Services Agency (an agency of the Department for Transport).

Annex B – Climate Change Data

Carbon Emissions Data
The emissions data quoted here are taken from the Inventory of Greenhouse Gases which is compiled by the National Environmental Technology Centre (Netcen). This is published annually for the UK overall and a separate disaggregated inventory is published covering each country within the UK. The Netcen inventories allocate emissions to each sector by source (eg emissions from a power station are allocated to the energy sector). The reporting methodology is in line with international requirements under the UNFCCC.

Carbon Dioxide Emissions from Road Transport
There are two different methods of estimating carbon emissions from road transport:

- Constrained emissions - the current method is based on UK fuel sales data with emissions apportioned to countries on the basis of vehicle kilometre travelled data.

- Unconstrained emissions - road transport emissions have also been estimated using vehicle kilometre and vehicle-type data, unconstrained to the UK total derived from fuel sales data.

For the purposes of UK reporting on greenhouse gas emissions under the Kyoto Protocol, the UK is required to use estimation and reporting methodologies for estimation of CO^2 emissions that comply with IPCC guidance. The recommended methodology for road transport is to estimate emissions on the basis of fuel sales data. This avoids the risk of double counting road transport CO^2 emissions across a group of countries, though the results using this method are inconsistent with trends revealed by the vehicle kilometre data.

The UK Climate Change Programme (UK CCP, 2006) and Scotland's Climate Change Programme (SCCP, 2006) report the constrained figures, as these follow the internationally recognised methodology. For consistency, the figures reported in the National Transport Strategy are also for constrained emissions.

However, the difference in estimated carbon emissions for Scotland using these two methods is significant. Information provided with the 2004 disaggregated inventory indicated that between 1990 and 2004, while constrained estimates of road transport emissions increased by 11%, unconstrained emissions increased by 21%. The inventories are subject to ongoing improvements in data collection and estimation techniques and work will continue with the aim of improving road transport emission estimates.

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