NESTRANS

Regional Transport Strategy 2006-2021
Issues and Objectives Report

July 2006

Context

The Role of a Regional Transport Strategy

1. The Transport (Scotland) Act 2005 created a series of statutory Regional Transport Partnerships throughout Scotland from 1 April 2006. The North East Transport Partnership (NESTRANS) covers the Aberdeen City and Aberdeenshire Council areas and carries on the work of the previous voluntary partnership of the same name which has existed since 2002.

2. In March 2006, the Scottish Executive issued "Guidance on Regional Transport Strategies", requiring partnerships to submit a Regional Transport Strategy (RTS) by 31 March 2007, for approval by Ministers.

3. The RTS should provide a vision and objectives for transport in the Region, analyse the current transport situation, set out a programme of activities, projects and interventions, inform the partnership's implementation and investment planning, make the case for any additional contributions, provide a steer for Local Transport Strategies and support the National Transport Strategy, including input to the Strategic Projects Review.

Link to Other Strategies

4. The RTS requires to provide a link between national and local policies by ensuring a long-term strategic vision for the region. It will demonstrate consistency with national guidance and relate to existing and developing policy in transport, land use, economic and community plans by building on plans by the Councils, partnerships and other organisations.

5. The Scottish Executive issued a draft National Transport Strategy (NTS) for public consultation in April 2006. The NTS will set out a national framework for transport for 20 years to 2026. Consultees are currently in the process of responding to the draft, but it provides a context within which the RTS can be developed. The draft NTS, along with the National Planning Framework set the national perspective for the Regional Transport Strategy.

6. North East Scotland Together (NEST) is the Structure Plan covering Aberdeen City and Shire. It was prepared jointly by Aberdeen City and Aberdeenshire Councils and approved by Scottish Ministers in December 2001. It provides a statutory planning framework for land use and development over the period to 2016, with appropriate backing for strategic transport schemes, including the proposed Aberdeen Western Peripheral Route. Local Plans covering the area will contribute to the land use elements of providing a planning framework which supports the objectives and indicates policies and proposals for transport across the region.

7. The regional economic forum for the area, ACSEF, has developed an economic growth strategy entitled Business 2010. The strategy outlines the ACSEF partners' shared vision and programme of action to ensure the continued prosperity and growth of the area to 2010 and beyond.

8. The two Councils and their partners have developed Community Plans, which provide a basis for community engagement in the region and indicate the priorities for the communities at a local level.

9. Both Aberdeen City and Aberdeenshire Councils approved Local Transport Strategies in December 2000 and submitted these to the Scottish Executive jointly, emphasising the complementary nature of these and the partnership working which exists in the

north east. Both Councils are currently in the process of preparing revised Local Transport Strategies covering the period 2006-09, which will contribute to the preparation of the RTS and intimate short-term actions and local actions which the individual Councils will take to further the development of transport across the North East.

The Modern Transport System

10. As a voluntary partnership, NESTRANS developed and adopted a Regional Strategy through to 2011. The Strategy was developed using the Scottish Executive's STAG methodology and was endorsed by Scottish Ministers in January 2003. The Strategy is known as the Modern Transport System (MTS), consisting of thirteen strands which is being developed and implemented in the period up to 2011. This includes elements which are already implemented (or currently being developed, such as enhancements to railway gauge to enable larger freight wagons), are committed such as the Western Peripheral Route or are still being promoted. Where these are yet to be committed, the RTS will consider their suitability within the context of the developing strategy and if appropriate, contain justification of their worth.

The Process of Preparation

11. NESTRANS has appointed consultants (Steer Davies Gleave) to help in the preparation of its RTS. This Issues and Objectives paper forms the first stage in working towards a draft Strategy by the end of the year and a finalised Strategy after public consultation to be submitted to the Scottish Executive by 31 March 2007. At the end of this document are a series of questions to give stakeholders an opportunity to contribute as to whether they support the vision, objectives and agree with the issues identified. This consultation will be channelled through the North East Transport Consultative Forum, consisting of over 100 stakeholders representing organisations across a wide spectrum of transport bodies, community and business organisations and environmental groups. Individual responses will be accepted, although it is emphasised that this stage is an early part of the process and full formal consultation with the public will form an important part of the development of the finalised RTS.

12. The questions also seek views on possible ways of dealing with these issues and forms the first step towards the next stage, the preparation of possible Schemes and Options. These will be sifted to provide a range of packages for testing, from which a recommended draft Strategy will be developed. The draft Strategy will be appraised using Scottish Executive appraisal methodologies and stakeholder and formal public consultation will follow before a finalised Strategy is prepared.

Current State of Transport in the North East

13. To understand the current issues and transport-related aspects within the North East, an analysis has been undertaken looking at existing state of transport in the region. Many of the trends and issues are national (or wider), but there are also particular challenges and opportunities for the North East. The key issues to be considered in developing a Regional Transport Strategy are highlighted in the section below and the following section considers trends and likely future challenges.

14. **Car ownership** in the North East is higher than the national average, and the rate of increase is slightly higher than the average for Scotland. Ownership is linked to the level and distribution of personal and household disposable incomes. The higher proportion of households with access to at least one car in the North East is at least partly explained by the relative strength of the regional economy. In both Aberdeen and Aberdeenshire, car ownership is higher than the average for Scotland as a whole. Although levels of car ownership in large cities are usually lower than this average, Aberdeen's level of car ownership may reflect factors such as a higher proportion of company cars (which would reflect the economic structure and the need in some sectors to have a car available during the working day) as well as higher average incomes. In the City and some Aberdeenshire towns, over 20% of households do not have access to a car. There are pockets of low car ownership (over 35%) in parts of Aberdeen, Peterhead, Fraserburgh and Banff.

15. **Car use** is not the same as car ownership: although in the UK there is a strong correlation, in continental Europe, car ownership is generally higher than in the UK, but car use is lower. One factor generally held to be important in this respect is the higher quality of public transport in most continental cities, which in larger centres often includes a rail based network giving access to a dense central employment area.

16. The problems of congestion, delays, uncertain travel times and lost productive time arise when too many cars (and other vehicles) are used at one time in a small area. However, all car use adds to greenhouse gas emissions. Half of motorists in the North East of Scotland use their car every day (55% in Aberdeenshire, 45% in Aberdeen City) compared to 42% nationally. The proportion of Household Survey respondents that drive every day remained relatively stable between 1999/2000 and 2003/2004.

17. Reliance on the car for the journey to work (in terms of modal share) is now greater in the North East than for Scotland as a whole. The proportion of journeys to work by car has risen steadily from 68% in 1999/2000 to 73% in 2003/2004, in contrast to the average for Scotland which remained static at around 68%. While use of the car has grown, in contrast, numbers travelling to work by bus have dropped relative to the national average. Only 8% of North East residents travelled to work by bus in 2003/2004, a slight fall from 10% in 1999/2000; and less than 1% travelled to work by train.

18. The MTS contains a range of schemes, including the WPR and other trunk road enhancements, that will increase the strategic road capacity in the North East and NESTRANS has been successful in advancing these projects towards implementation. There is a recognition that increasing network capacity can contribute towards reducing delays and increasing the North East's accessibility.

19. Measures that encourage reductions in car use are an integral part of the MTS and NESTRANS and its partners have been responsible for successfully developing and delivering a range of schemes and initiatives, including:

- ❖ Bus Improvements – Park & Ride, a Quality Partnership which has overseen improvements in the quality of buses, bus stops and Real Time Information, bus priorities, Demand Responsive Transport and integrated ticketing.
- ❖ Rail Enhancements – Initial phases towards a Crossrail service between Inverurie, Aberdeen and Stonehaven, and securing Scottish Executive commitment for the reopening of the Laurencekirk Station.
- ❖ Cycling and Walking – Pedestrian improvements throughout the region including Union Street, and enhancements to the cycle facilities across the North East.
- ❖ Travel Awareness – NESTRANS Travel Awareness Programme, the Sustainable Transport Grant, Car Share Website, establishing the Dyce TMO, and appointment of NESTRANS Travel Plan Officer.

20. There is still much work to be done to deliver all the measures in the MTS that will encourage more sustainable travel in the North East and it will be a key challenge for the RTS to build on the MTS's successes.

21. **Parking** is a factor in the marginal cost of using a car and parking policy and charges can be important in affecting car use. In the North East, free parking provided by employers is more prevalent than Scotland as a whole. Employer-provided parking can not at present be charged or taxed in order to increase travel costs to workers. This almost certainly limits the possible role of parking in managing travel to work demand for private transport, although its use in town centres where free on-street parking is used by commuters may have a marginal effect on mode choice. Maximum parking standards and the use of planning conditions to encourage Green Travel Plans will have a significant impact on travel to new developments and parking policy does impact on modal choice for other trips.

22. **Bus use** is low in the North East, even though in terms of walking time access to bus stops Aberdeen performs better than the average of large urban areas in Scotland, with 64% of residents within 3 minutes of a stop compared with 55% for all large urban areas in Scotland. However, the reverse is true in Aberdeenshire, with only 47% being within 3 minutes walk of a stop compared with 54% average in rural areas. In Aberdeen City, bus frequency is better than the average of large urban areas in Scotland, with 77% having a frequency of at least one bus every 26 minutes, compared with 72% in all large urban areas nationally. In Aberdeenshire only 14% have a frequency of up to 26 minutes and 77% have a frequency of up to 63 minutes, lower than the average of rural areas, at 24% and 89% respectively. Survey findings on views on bus services show a remarkable similarity across the North East, with more positive views than other areas with regard to running on time, frequency, meeting needs, personal safety/security and information (despite high levels of don't know responses regarding frequency of services). However, residents of both areas were more negative than their comparators with regard to interchange (integration) and value for money.

23. There appears to be a link between bus use in Aberdeenshire and access to bus services, service frequency, residents' actual knowledge of the services and perceptions about interchanging between bus and other modes, and about value for money. In Aberdeen, despite better access and frequency, bus use as measured by trips per person per week is below the large urban area average for Scotland; and compared with a rural benchmark, use in Aberdeenshire is lower and lack of knowledge of services greater.

24. NESTRANS through the MTS has supported measures to enhance the attractiveness of journeys by bus, with further improvements planned. Park & Ride sites are proposed to complement those at A90 Bridge of Don, A90 Ellon, and A944 Kingswells. The RTS will need address the future challenges if the relatively low levels of bus patronage are to be tackled beyond the life of the MTS.

25. Encouraging **rail passenger movements within the North East** will help reduce congestion levels and mitigate the impact of transport on the environment. Aberdeen Crossrail, a programme of incremental improvements, is currently being implemented with the ultimate goal of providing a frequent, cross-city rail service between Inverurie, Aberdeen and Stonehaven. There may also be potential to examine the opportunities for reopening closed lines in the North East to help remove some of the traffic demand from the arterial roads leading into the City.

26. In terms of **road safety**, the North East has an excellent casualty reduction rate compared with other cities and Scotland as a whole. The number of casualties in accidents dropped by 24.9% between a 1994-98 average to 2001-05. This road safety success is reflected in the proportion of pupils who walk to school in Aberdeen, which is well over 50% and is higher than the average for Scotland. However, there are still concerns relating to traffic accidents and casualty numbers, particularly fatal and serious injuries, which averaged over 250 per year between 2001 and 2005.

27. **Walking and cycling** has the potential to make a major contribution to encouraging mode shift away from the private car towards more sustainable methods of transport in the North East. Perceived exposure to road accidents can be a major barrier to those considering walking or cycling as an option for a journey.

28. The MTS identifies improvements to both the strategic pedestrian and cycling networks in the North East and NESTRANS has successfully supported the enhancement of these networks. The RTS will need to recognise the importance of these modes and will ensure that the infrastructure and **behavioural change** policies are in place to maximise the potential of these modes.

29. The existing MTS also fully recognises the important role that **travel awareness** can play in encouraging more sustainable forms of transport and NESTRANS has supported travel grants, travel plans, the car sharing web site, and general publicity on travel awareness issues. The RTS will need to build on this work and other initiatives such as Stepchange in order to fully realise the potential of investments in sustainable transport modes in the North East and beyond.

30. The North East depends to a greater degree than many regions on the ability of people to **travel in and out of the region** on business - not just the day and short stay business visitor but also for people working offshore. The North East also continues to have a manufacturing base which requires efficient movement of freight both outwards for finished and processed goods, and inwards for raw materials and semi-finished goods.

31. A number of issues have been identified which already affect the North East, and which could impose more constraints in future years if not addressed. These include rail journey times to and from the region, capacity limitations on the trunk road and motorway network, poor connectivity with Inverness, and potential constraints on air service development. Many of these issues have to be addressed through the National Transport Strategy or through other agencies. However, these constraints may also represent opportunities, for example to develop roll on-roll off ferry services and coastal shipping as alternatives to road and rail freight, and to develop air services to key business centres and a range of hubs.

32. **Aberdeen Airport** is a major asset in the region and provides important opportunities for the future development of the North East's transport system. The airport currently provides passenger services to many European destinations and has experienced higher rates of passenger growth over recent years compared to Edinburgh and Glasgow airports. It is also the World's busiest heliport. Aberdeen Airport has recently published an outline Master Plan that sets out ambitious plans for the airport's expansion.

33. NESTRANS is a member of the Aberdeen Airport Business Development Forum and is supporting the development of the airport to improve the connectivity of the North East to global markets for both passengers and goods. Recent changes include the removal of restrictions on the airport's operating hours, which gives the airport significantly more operational flexibility and current proposals for runway extensions. The MTS identifies a number of further proposals for the airport, including improving surface access, and it is essential that the RTS includes measures that will realise the full potential offered by the airport.

34. Road freight is by far the most important means of **freight transport** of goods within, to and from the North East. Movements within the North East are significant and account for 76% of all movements by volume. Much of this is high bulk low value materials such as animal feed, grain, aggregates and some building materials. The major destination regions outwith the North East are Strathclyde and Tayside, followed by Highlands. In volume terms trade with the rest of the UK is very small, under 5% of total volume.

35. The major issues faced by the road freight sector and its customers are costs, journey time reliability and the effects of the working time directive. Congestion anywhere in the road network is an important cost escalation factor because it makes journey times unpredictable both for goods being exported and for materials coming in. The need to allow contingency times, which can involve earlier and less efficient call off of production as well as the additional cost incurred by extending the period of use of a vehicle and driver, adds to business costs and makes the region less competitive as a location. Congestion in and around Aberdeen can be a constraint, along with bottlenecks further a field on the English motorways mainly south of the M62 and on approaches to the Humber and southern east coast ports.

36. Rail freight currently accounts for a relatively small proportion of freight transport in the North East, however, there is significant scope to increase the proportion of freight movement that is undertaken by rail. The North East Scotland Rail Freight Development Group has successfully addressed the loading gauge restrictions on the line between Elgin, Aberdeen and the Mossend terminal in Lanarkshire. These restrictions will be removed as part of a £4M project, which is funded by the Scottish Executive and will be completed by mid 2007. There are also issues relating to the modal interchange of freight. Plans are in place to help facilitate the interchange of freight between road and rail, however, a major challenge for the RTS will be to ensure that the opportunities to allow the interchange of freight between sea and rail are maximised.

37. Aberdeen Harbour has seen grown in recent years while overall tonnage through Scotland's east coast ports has declined. Despite a relatively small share of the market, both Aberdeen and Peterhead are well placed to benefit from growth in trade with the Baltic and Russia as the closest UK ports to these regions, and also to benefit from growth in traffic to Orkney and Shetland. Access issues are important for both ports: Peterhead will benefit from the WPR and dualling to Ellon while access at Aberdeen is affected by congestion in the immediate area of the harbour.

38. In addition to recognising the contribution that road, rail, and sea can make to freight moments the MTS fully appreciates the role that air can play in moving materials and goods. The RTS will need to build on this ambition to support the potential for moving freight via Aberdeen Airport is fully realised.

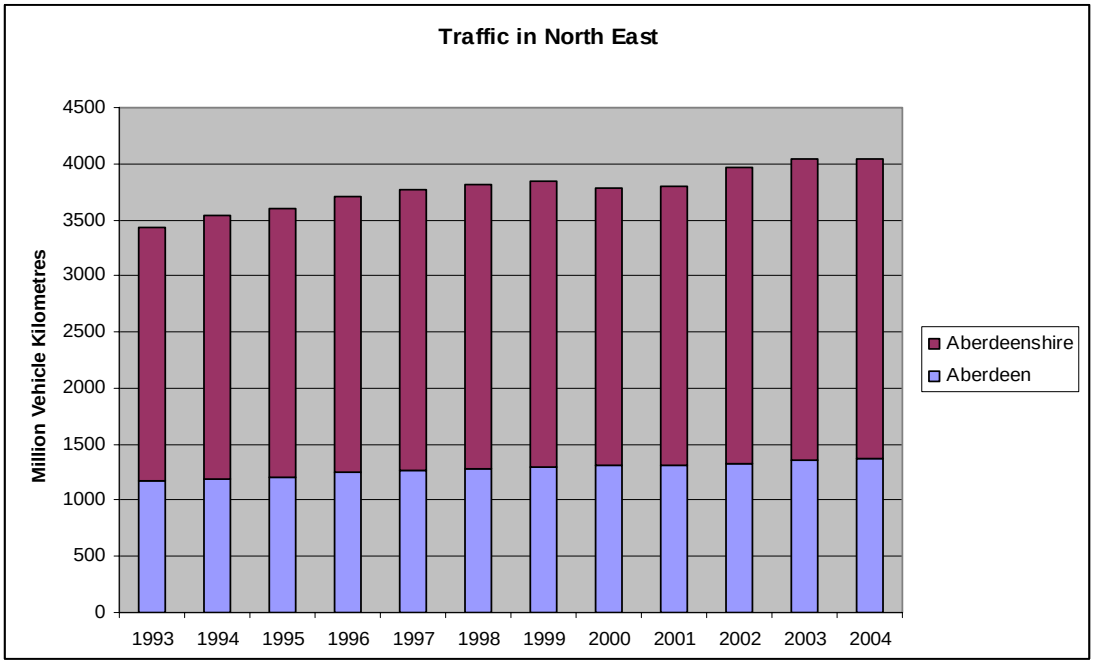
39. **Interchange** between different modes of transport is an important element in improving the attractiveness of public transport, walking and cycling. Across the NESTRANS area there has been investment in improving transport interchanges. With funding awarded in 2004 by the Scottish Executive, improved transport interchanges at Inverurie, Peterhead and Banchory, plus other locations across the area are being developed by Aberdeenshire Council and the Aberdeenshire Towns Partnership. In Aberdeen the City Council are taking forward a major urban realm programme involving the partial pedestrianisation of Union Street. The private sector led Union Square development at Guild Street will remodel the bus station and station forecourt, providing better facilities and easier interchange between bus and rail.

40. Other dimensions of transport interchange are integrated ticketing, such as Aberdeenshire Connect and the PlusBus scheme, helping people transfer between operators and modes of transport, and travel information systems such as Traveline, providing information on journeys and interchange between different forms of public transport.

Transport in the North East - The Future

Traffic Growth and Car Dependency

41. Traffic growth is closely related to three factors, namely demographic changes, growth in car ownership (which is related to income per head) and changes in the use of cars. Supporting these changes are influences such as changes in the relative costs of travel, changes in land use patterns, and wider social and lifestyle influences. The North East has a distinct economic structure with high income levels largely dependent on the oil and gas sector, whose principal outputs are currently in short supply and whose price variations can have a significant effect on the performance of the regional and national economies. Traffic has grown at an average rate of around 1.6% per year over the past decade, to just over four billion vehicle kilometres per annum in 2004. A continuation of such growth levels will exacerbate existing problems and contribute to further issues for the North East in future years.



42. Within the North East, projected population changes, reveal large differences between the GROS projections and regional forecasts prepared by the Councils. The latest regional forecast to 2016, produced in 2004, forecasts a decline from existing population of 437,810 of around 2,500 persons (this could comprise a loss from the City of 6,800 and an increase in Aberdeenshire of almost 4,300). There is also a trend towards decentralisation of population, resulting in a declining base within Aberdeen and a corresponding increase in numbers within Aberdeenshire. Demographic change with an ageing population and declining numbers of young people and people of working age are also forecast to continue. There are major uncertainties here, however, and strong performance in the energy sector combined with immigration and stronger service sector growth could lead to population growth or stabilisation rather than decline. Notwithstanding population change, there is an expectation that there will be some 16,000 more households in the region by 2021. There are clear trends towards smaller households, but also to more cars per household, so changes in household numbers and income growth would point to growth in car ownership overall.

43. Regional forecasts of employment show an overall decline of 4.7% through to 2021, from almost a quarter of a million jobs to nearer 230,000. Per capita income is expected to decline overall in high added value sectors so the North East could

experience below trend income growth, which would tend to damp down growth in car ownership relative to the UK as a whole.

44. Future traffic levels also depend on people's choices regarding how intensively to use their cars relative to other alternatives. There has been a degree of decoupling of income and traffic growth in the country as a whole, reflecting factors such as congestion, relative transport costs and policies to encourage the use of trains and buses. Similar measures in the North East will therefore tend to reinforce the above changes, and help to reduce the rate of growth of car use.

45. However, where people live and work strongly influences distances travelled and frequency of use for trips other than work trips. A study for the Scottish Executive found that "personal lifestyle choices and aspirations for greater mobility have led to dispersal of home, work, education, leisure and shopping locations. This has been reinforced by the relative costs of private car against public transport. This leads to car dependence, and increased vehicle distances and trips, particularly on the trunk road network for commuting trips. The provision of public transport enhancements on its own cannot resolve the issue".

46. Land use changes will also significantly affect the demand for transport, especially when looking ahead over a period of 15-20 years. The North East has a small number of large scale clustered developments of activity associated with the oil industry, and a number of out of city business and retail parks adjoining the principal road network. Many commuting trips using the strategic road network now have origins and destinations that are very dispersed, making it difficult to provide an efficient public transport service. There has been a trend for a proportion of the population (and especially those in the family formation life stage) to secure what is perceived to be better value housing in the rural areas, despite the need for longer commuting trips.

47. National projections of traffic predict traffic growth in the North East to outstrip other regions, in the do-nothing base case. This was based on earlier demographic and economic forecasts which were more optimistic than those presented above. Nonetheless, while population and employment factors suggest a dampening effect in traffic growth, growth in the numbers of households and the likelihood of lifestyle choices to exploit scope for greater mobility are likely to be at least as strong counter-forces.

Transport and Technology

48. Transport technology has tended to be evolutionary rather than revolutionary. Cars and buses have evolved slowly, and while there are better electric and hybrid cars, these have not yet become commonplace. Similarly although most of the Scottish rail technology has evolved with more comfortable and reliable rolling stock and more powerful freight locomotives; the principal move forward has been the introduction of tilting trains on the west coast main line.

49. The same picture is found with aircraft and ships, with gradual improvements in efficiency and performance rather than any single major leap forward. Although electrically powered vehicles and development of fuel cell technologies are feasible, it is difficult to see where any leap ahead might come in terms of vehicles. There will be further development of systems such as anti-collision devices and automatic controls for road vehicles but again these are likely to be evolutionary developments.

50. One potentially significant change that would be partly technological but mainly political would be a national road user charging scheme which linked the cost of road use to its impact upon congestion. Much of the technology exists but cost and consumer

resistance are the key determinants of when this will happen. It has potential to change levels and patterns of trip making which could be marginal or significant depending on levels of charging and whether revenues are used to fund local transport improvements.

51. A further major unknown is the cost of energy. While price hikes in the past have resulted in new supplies and more efficient use leading to price reductions, this time this seems less likely. Continued high oil prices would tend to work against diversification of the North East's economy by making other manufacturing less competitive while stimulating the oil and gas sector. It would also make living remote from employment and services less attractive.

52. Development of ICT is the other unknown factor which could affect demand for travel. Over the last 20 years ICT has been seen as a way of replacing the need to travel, but in reality people have tended to have more rather than less face to face contact. This is an area that could see revolutionary change and it would be brave to predict that past trends will simply continue - a realistic and cost effective 3-D video conferencing system, for example, could be expected to have a real impact on the need to travel to meetings. ICT should, at the margin, also make home working and more flexible working more feasible, but is unlikely to have a transport related impact on services like education and health. Assuming income grows, demand for personal services and retail are likely to also grow, and these plus any increase in leisure time will probably increase travel demands.

Economic Development and Land Use

53. The demand for transport is closely related to the size and structure of the resident population and where it is located with respect to employment and services. Population is also related to economic performance, and a relative decline in jobs or earnings in the North East compared with a growing central belt economy will have a negative impact on the region's population. The region needs to remain a high growth, high earnings area or face decline.

54. Projected population change together with changes in household size and composition give rise to changes in demand for housing. Over the period 2006 to 2021 the regional forecasts indicate an increase of 15,900 households in total; of this growth, 54% is forecast in Aberdeenshire, a total of 8,650 households: 70% of the new houses forecast would be required within Aberdeen Housing Market Area, which at present is judged to extend 30km around the City. Changes in the attraction of immigrants, especially from Eastern Europe or other new entrants to the EU, including possibly from Turkey could lead to different outcomes. Whilst development scenarios will be dealt with in a future Structure Plan Review, the RTS will consider the transport impacts of potential scenarios in general terms and the strategic transport interventions which might facilitate suitable options.

55. To sustain and grow the population will involve attracting new people and retaining people like students. The future population may also be more diverse than at present in terms of incomes, skills, age structure and household composition. It may also require different housing and services. The future performance of the economy is a major factor underlying the demographic forecasts; a successful high wage economy will tend to attract people. The process is two way, as favourable changes in demographics - becoming a magnet for young entrepreneurs and people with in-demand skills - would attract business investment and employment, and multiplier processes would lead to spillover benefits for the wider community.

56. The North East has outperformed Scotland as a whole in terms of GVA per capita over a period of years. In 2002, the region was ranked third in the UK and compared to Scotland as a whole, GVA per capita in the region was 37.5% higher. As is well known this reflects the economic structure and the level of GVA generated by the oil and gas sector. GVA includes profits, which do not necessarily remain in the region. However, evidence on earnings shows that the region enjoys higher earnings than Scotland and Great Britain as a whole.

57. Unemployment is low although there are pockets where worklessness is high. In the urban area there are no apparent constraints on labour market efficiency which either limit companies' abilities to recruit or to use labour and skills effectively. Better connectivity within the urban area will make the labour market more efficient still, reducing the time needed to recruit and fill vacancies and to match applicants to jobs more precisely. In the rural areas companies tend to experience more difficulties with recruitment and better connectivity for travel away from the urban area due in part to the WPR could benefit companies located 20-30 miles from Aberdeen.

58. The energy industry has longer term aspirations to specialise in renewable energy technologies such as wind, wave, forestry/waste/biomass, and in carbon capture. There is some optimism regarding this potential, but it is noted that activity in renewables is not anchored in the same way as exploitation of local natural resources, and that other areas also have ambitions and expertise in this direction. The 2004 Strategic Forecasts for the oil and gas sector indicate a decline in employment from 39,000 in 2003 to 25,000 in 2021, of which onshore job losses account for 5,500, and offshore 8,500. Construction activity and employment is expected to grow slightly, but

the Strategic Forecasts predict service employment growth of only 1.7% between 2003 and 2021 to a total of 138,950 jobs. Decline or relatively poor employment growth is expected in the higher added value sectors, while growth is expected in sectors like retail and personal services where many of the employees would have low skills and low earnings.

59. At present, the retail "offer" of the City centre is poorer in terms of size and quality than what would be expected in a region of over 430,000 people with among the highest average earnings in the UK. Some spend appears to be diverted to off-centre retail areas or to Dundee. Unless Aberdeen becomes more competitive in terms of scale, range and quality, the predicted 8% growth in retail may be optimistic.

60. On the basis of these forecasts, GVA per head in the region is likely to decline relative to Scotland and the UK as a whole and would therefore fail to retain its current position. To improve upon this, the region has to become a global knowledge centre for the energy sector and re-invent its core as a dynamic, high value service-based economy. Otherwise, relative decline in GVA per head and absolute decline in population and employment could, in the latter half of the post 2011 plan period, feed on itself and bring about an accelerated spiral of decline, in which key skills and talent are lost and not replaced. If the GROS demographic projections are nearer to future reality, the region would also lose around 25,000 jobs. The regional centre appears to offer opportunities for physical and economic renewal which could help to drive the process of re-invention. The region's gateways and especially the airport can contribute to this.

61. The manner in which the land use and the economy have co-developed in the region has led to housing and employment locations being very dispersed. High income levels, rural living, employment sites away from transport nodes and other factors combine to generate high levels of car ownership and car use. These all combine to generate a complex pattern of trip making, largely by car. Unlike most cities where a high proportion of trips are into a dense urban core, in Aberdeen many trips are to the peripheral and off centre employment locations; and many of these journeys to work are cross city. Many businesses also operate on a number of sites, which generates cross city travel during the working day. The well known constraints such as at Bridge of Dee and around Anderson Drive lead to relatively severe levels of congestion; in addition, traffic seeks to avoid these pinch points by rerouting onto inappropriate minor roads.

Strategic Issues

62. The North East faces many challenges over the period of the Regional Transport Strategy. Some of these will be external issues, which NESTRANS will be unable to influence. Others, however, will be directly relevant and can be influenced by transport interventions brought about by NESTRANS and its partners. The following section attempts to identify the key transport issues facing the North East over the next 15 years.

1. Combating Peripherality

63. Peripherality is a relative concept, and whilst the north east's external transport links have improved in recent years the region faces an issue in combating its actual and perceived peripherality which could impose constraints on the competitiveness of business activity, especially on goods movements.

64. External connections are vital to the economy of the region and contribute to its attractiveness as a place to live, work, invest or visit. Whilst the WPR will significantly improve connectivity within the region, bottlenecks in the road network outwith the region also have an impact on travel to and from the North East, and adversely affect the transport costs facing the region's manufacturing industries.

65. The speed and quality of rail connections to Edinburgh, Glasgow and further south are also of concern, while bottlenecks and stopping patterns south of Dundee can lead to delay on long-distance services. Upgrading the rail line north of Aberdeen would support a regular and faster service between Inverness-Aberdeen. High speed rail links are being considered for the UK; the inclusion of more peripheral cities such as Aberdeen within such a network will significantly enhance real and perceived connectivity.

66. Within the European Union the recent accession of new member states has shifted the centre of gravity to the east, making Scotland relatively more peripheral in Europe. Enhancing external links and overcoming the reality and perception of the area's peripherality is important for the future of the north east economy. Direct air connections from Aberdeen have improved considerably in recent years aided by the lifting of restrictions on the airport's operating hours. Additional direct international links are likely to depend on runway extensions at the airport. Enhanced maritime links are also important, particularly for the transport of freight. EU programmes such as the Motorways of the Northern Seas can assist in the identification of such opportunities.

2. Impact of the Aberdeen Western Peripheral Route

67. The WPR will reduce the time cost of travel, which will benefit the business community in particular, and help to sustain economic growth in the region. However, choices of where to live and how to travel are strongly influenced by house prices and the costs of transport. The WPR could make rural living - and hence decentralisation - more attractive to house buyers. Even if an increase in the cost of transport is part of national policy over the next 20 years, strong transport and land use policies will be needed in the North East to limit further dispersal of population.

68. Transport policies influence travel demand partly by altering the time and financial costs of travel. Provided it does not encourage additional travel demand or generate traffic through new development near its corridor, the WPR will reduce the time costs of travel by car within the North East. There is clear evidence that given the benefit of improved mobility, people exploit it by lifestyle choices which include choosing to live in rural

settings, which can offer better quality of life and value for money, but also involve more travel to work, shops, leisure and other services.

69. While the WPR and developing land use policies aim to enable more sustainable development close to the City, house buyers may find that easier travel will make living further away from the City possible, and the development industry is likely to seek planning consents to satisfy this demand. Any further dispersal would increase the demand for travel, making environmental goals even harder to achieve while also adding to costs to the public sector especially as the population gets older. Therefore, while changing costs of transport may have a role in shaping demand in the medium to longer term, strong land use policies to limit dispersal are also needed.

3. Changing Travel Behaviour

70. There is evidence at a national level that almost half of the population would like to change its travel behaviour if provided with really good alternatives, including safe walking and cycling opportunities. Addressing perceptions regarding value for money on public transport is one problem in the North East, but other barriers to reducing car use need to be tackled. Improving the perception of walking and cycling by improving safety is another important aspect.

71. In Aberdeen, half of car commuters believe they could use public transport for travel to work, while in Aberdeenshire the proportion is 24%. Both are below the corresponding urban and rural benchmarks, and Aberdeenshire is significantly below. The North East needs to achieve substantial levels of change of travel mode in order to contribute towards meeting Scottish Executive targets for traffic reduction and environmental improvement. There is scope to make major differences in behaviour if good quality, safe, and easy to use alternatives that meet people's needs and aspirations can be offered. Better public transport services need to be backed up by information, assistance, encouragement and incentives, while measures are also needed to make walking and cycling more attractive. For some trips in rural areas, car use will remain essential, but measures to encourage higher car occupancy can help to make such car trips less environmentally harmful on a per user basis. Further casualty reduction is also a priority, particularly for vulnerable users of the transport system, and there is a need for co-operative working with the Police Safety Camera Partnership and other partners.

4. Public Transport Usage

72. Car use in the North East is high and bus use is low compared with urban and rural benchmarks. Relative to other areas, access to bus services in Aberdeen compares favourably, but on average Aberdeenshire's bus services are marginally better in terms of walk times to bus stops and marginally worse in terms of bus frequency compared with "accessible" rural areas. A consistent factor in low bus use is perceived poor value for money, availability of service and interchange problems.

73. In Aberdeen, people recognise they could use alternatives to the car but far fewer rural area residents believe there are viable alternatives. An ageing population and the need to encourage more sustainable travel habits by young people will require improvements and innovation in public transport, including development of demand responsive transport.

5. The Role of Aberdeen Airport

74. Development of the airport will play a key role in the attraction of the mobile investment needed to sustain the growth of the region, especially in its development as a centre of

excellence for the energy sector, in developing an export based service sector and in attracting tourists. Nationally air passenger numbers are forecast to grow at 4.2% per year for the next 25 years, well ahead of likely economic growth. At present air travel contributes around 4% of UK carbon emissions, although some evidence suggests that overall environmental damage is higher because of other upper atmosphere effects.

75. For the North East, growth in air travel could be even more rapid than in the UK as a whole, as the region catches up with the development of new air services, with both business links to European hubs and possibly to North America, and also to leisure destinations. An extension of the runway will be important in realising these opportunities. Air is more important for the North East than most other parts of Scotland, partly because of location and partly because the region is a global player in the international energy sector and seeks to remain so. Larger aircraft will limit the growth in air transport movements and aero engine technology will reduce noise and emissions per seat-mile. Nonetheless, over the next 15 years it is likely that some form of carbon taxation will be applied to aviation, which would tend to reduce growth especially in leisure travel, while also stimulating technological changes.

76. Nonetheless, the overall environmental effects of more air travel will be considerable. If environmental goals are to be achieved, action to achieve deeper cuts in emissions from other transport modes, and possibly from other industries, would be required. Better public transport links to the airport can help to reduce growth in car travel to the airport.

6. Ensuring Social Inclusion

77. There remain pockets of multiple deprivation and poor health, even though the North East is, overall, a high wage economy with low unemployment. 31% of City households and 16% of Aberdeenshire households do not have access to a car and pockets of transport poverty exist, limiting access to employment, services and health care.

78. Access to a car and car use are relatively high in both Aberdeen and Aberdeenshire, relative to other areas. Bus access is better than average in the City, and an above average proportion of people walk to work there. The situation is reversed in Aberdeenshire, and while access to a car is relatively high, for low income households the cost of a having a car reduces money available for other things. There are areas within towns such as Peterhead and Fraserburgh which are among the most deprived in Scotland, where employment opportunities are much more limited than in Aberdeen and where transport poverty is one of a number of factors which contribute to locking people into a cycle of unemployment and deprivation.

7. Emissions of Greenhouse Gases and Pollutants

79. Transport emissions in the North East are close to the average for Scotland, but this level is already unsustainably high, so real reductions in emissions are required if transport's impacts on climate change and air quality are to be reduced.

80. Increasing demand for both surface and air transport as more people acquire cars, travel more often and over longer distances, is tending to outweigh improvements in vehicle and aircraft technology and therefore emissions are remaining at unsustainable levels. National targets are to reduce overall emissions of greenhouse gases by 12.5% by 2008-12 in comparison with a 1990 baseline and to reduce CO2 emissions by 60% by 2050. The North East can play its part in effecting a real reduction in transport's impacts on the environment and climate change and the Scottish Executive has signalled that more ambitious carbon emission targets are required. There is also

a need to address local urban air quality issues, in order to help improve health and improve the urban environment.

8. The Need for a Strong Regional Centre

81. Aberdeen is not performing as a regional centre of the scale and quality befitting its status as a world player in the energy sector and as one of the UK's most prosperous regions. A stronger city centre with a more diverse base would strengthen and grow the economy of the region as a whole.

82. Aberdeen is at the heart of the region but the strength of its retail and business sector and the quality of the urban environment could be much improved. The retail and business service base within the city centre is currently relatively weak, and firms providing business services primarily serve a local market. Both sectors need to develop strongly to contribute to growing and restructuring the regional economy, in part by securing benefits arising from the co-location of a critical mass of activities. These activities need to be concentrated rather than dispersed, in order to secure productivity advantages which come from co-location.

83. A strong centre with a more concentrated retail, leisure and business base will increase demand for travel to the centre, which makes improvements in public transport more viable, which in turn will attract more trips to be made by public transport rather than by car. To achieve environmental goals, better transport connections to the centre, a well integrated transport hub and appropriate parking policies (including park and ride) should help enhance the attractiveness of public transport relative to the car. Without changes in how people travel to access the centre, other measures may be required to manage car demand where this imposes unsustainable impacts on the economy and the built and natural environment through congestion and degradation of air quality.

9. The Role of Aberdeenshire's Towns

84. The North East's larger towns presently have a mixed residential, service and employment function. This role could be further enhanced by focussing development (other than that which is more appropriate for Aberdeen) to these towns, helping to strengthen their service role and employment base and reduce travel demand.

85. Demand for new housing developments will continue within Aberdeenshire, and concentrating these in the main towns will has transport and environmental benefits. The larger towns offer more sustainable travel options than would be the case with a much more decentralised settlement pattern. By concentrating local land uses sufficiently to stimulate local services growth, it will be possible to address car use for non-commuting trips by making more services available within these settlements, whilst at the same time supporting local economies. There is clearly a need for balance between development of the City as the principal services and retail base, and the larger towns as complementary retail and service centres.

10. Maintaining a High Quality of Life

86. To attract and retain the skills needed to diversify and grow the economy, the region must offer world class quality of life. For some, the rural areas are especially attractive, but further dispersal of population will add to the need to travel, and the evidence suggests most of this travel will be by car.

87. The region must continually improve its competitiveness as a location for skills and business if the economy is to thrive. The option of rural living is important to potential new residents as well as to those seeking family housing, partly because housing costs

are generally lower. But rural living involves longer trips, and mainly by car. If both economic and environmental goals are to be achieved, there is a need to influence people's choices, both of where to live and how to travel. At the same time, consideration must be given to the needs and quality of life of those who live and work in rural areas, who in the future may face increasing energy costs which will affect their ability to travel, especially by car.

11. Ensuring Efficient Movement of Goods

88. The North East's economy is underpinned by efficient and reliable freight movements. Within the region, these are predominately undertaken by road. ea and rail based freight movements are both growing, but need better inter-modal facilities to realise their full potential. Costs of movement of freight by road and high due in part to distances to market, and this disadvantages manufacturing industry within the North East. The WPR will improve journey times and reliability, which are important within the context of the Working Time directive and increasingly tight delivery windows in a just in time environment. The recent success of the North East Scotland Rail Freight Development Group in securing loading gauge improvements opens up the potential for a significant transfer of freight from road to rail.

89. The potential for sea freight is expected to grow. Projects such as the Interreg III Northern Maritime Corridor Motorways of the Northern Seas and other initiatives will help, but as energy costs rise, the economics of coastal and continental roll-on roll-off services become more attractive, and the North East has well developed ports capable of exploiting such opportunities. The North East is particularly well located to serve the growing markets of the Baltic and Russia. However, to maximise these advantages and to reduce growth in road freight, opportunities to allow easy and cost effective interchange of freight between sea and rail also need to be developed.

12. Embracing New Technologies

90. The next 15-20 years will see a host of innovative transport initiatives, which may include a national road user charging scheme, alternative fuel technologies and greater use of information technology. The North East has the opportunity to be a leader of change, which fits with its economic aspirations to develop as a centre of excellence in energy technologies.

91. Becoming a pilot region for new initiatives would send positive signals about the region's ambitions for change and to address environmental issues. There are opportunities for the North East to embrace the development of new fuel technologies. Demand management would also begin to influence land use decisions within the development industry which in time will reduce the need for travel.

Vision for Transport

92. The vision for transport in the north east is a statement of the final high-level outcomes the RTS is intended to achieve. The vision has been developed from both national and local policies, and seeks to be realistic and inspiring, not least because it is intended that this will motivate those involved in implementing measures designed to reach this outcome.

93. The visions and policies contained within a wide range of national and local policy documents have been considered in the formation of a vision for transport, these include:

- National policy through the White Paper for Transport, draft National Transport Strategy, Scottish Planning Policy documents and the National Planning Framework.
- The existing Modern Transport System.
- Aberdeen City and Aberdeenshire Councils' approved and developing Local Transport Strategies.
- Other strategic documents and corporate strategies of public bodies and existing partnerships within the North East, including Aberdeen City and Shire Economic Forum (ACSEF), the Structure Plan (North East Scotland Together), and the Community Plans within the region.

94. The proposed vision for transport is:

"A transport system for the North East of Scotland which enables a more economically competitive, sustainable, and socially inclusive society."

95. The vision recognises that the North East of Scotland already enjoys a high quality of life, based on a world class environment, a sound high income economy and abundant choices of places to live, work, shop and visit. The future challenge is to enhance the quality of life and to increase opportunities for every citizen to participate more fully in the life of the region. Economic prosperity must be sustained, but all development must been undertaken in a way that is inclusive to benefit all sectors of the community and does not compromise the region's internationally renowned natural and built environment, which also underpins quality of life.

Objectives

96. The vision sets a high level direction for the strategy, if this vision is to be attained then a series of specific objectives must be achieved. From consultation, research and discussion processes, four strategic transport objectives have been developed.

97. As with the development of the vision for transport careful consideration has been given to both national and local policy documents to ensure there is consistency between these policies and the four **strategic transport objectives** for the RTS -

- To enhance and exploit the Region's competitive economic advantages, based on its people, skills, environment, quality of life and accessibility.
- To enhance the quality, cost and safety of access for all to employment, education and training, healthcare, leisure and shopping.
- To conserve and enhance the Region's internationally renowned natural and built environment and heritage and reduce transport's effects on climate and air quality.
- To create and sustain a strong, vibrant, dynamic and export-based regional centre.

98. Scottish Ministers have recently made clear their overall policy objectives. Their prime objective for public policy is to enhance the performance of the Scottish economy, which recognises the central importance of economic performance in achieving other objectives. Economic progress is required to provide the resources needed to enhance the environment and to ensure objectives concerned with social justice are achieved.

99. Therefore giving primacy to the economy does not mean that environmental enhancement and social justice are to be neglected; rather, sustainable economic growth is a pre-requisite if these other areas of policy intervention are to be properly resourced and implemented. This overarching set of national policy objectives is entirely consistent with the both vision and objectives for the RTS.

100. Below the high level strategic transport objectives, the RTS will address a range of operational transport objectives. The operational transport objectives set out the outcomes that need to be achieved if the strategic transport objectives are to be accomplished. These are the practical and measurable factors that will be outlined in the RTS: each relates to a specific strategic transport objective.

Strategic Transport Objectives	Operational Transport Objectives
a) To enhance and exploit the Region's competitive economic advantages, based on its people, skills, environment, quality of life and accessibility.	i) To reduce journey times and costs within the North East and to/from the North East for both personal and business travel. ii) To reduce freight transport costs, including journey times, especially to non-local markets. iii) To improve local journey time reliability for the movement of people and goods. iv) To improve connectivity between residential areas (including growth areas) and key employment sites.
b) To enhance the quality, cost and safety of access for all to employment, education and training, healthcare, leisure and shopping	v) To enhance all journey experiences by all modes, and especially for non-car journeys. vi) To achieve sustained change in the relative costs of public transport versus car. vii) To reduce the number and severity of accidents and improve the security of transport.
c) To conserve and enhance the Region's internationally renowned natural and built environment and heritage and reduce its effects on climate and air quality.	viii) To reduce the proportion of journeys made by cars and especially by single occupant cars. ix) To reduce carbon emissions from travel within the North East and by North East residents. x) To reduce growth in person kilometres travelled within the North East and by North East residents (especially by car and air).
d) To create and sustain a strong, vibrant, dynamic and export based regional centre.	xi) To improve connectivity to town and city centres by all modes and especially by public transport, walking and cycling. xii) To enhance the quality of space linking transport nodes/interchanges and key facilities. xiii) To create high quality interchanges throughout the North East, especially within town and city centres.

Consultation Questions

Q1. Do you agree that the twelve strategic issues identified are the key transport challenges facing the North East over the period of the Strategy? Do you think there are other, higher priority issues which we should take into account and if so, do you think any of the identified issues should be deleted?

Q2. Have we set the right strategic transport objectives to address the issues and achieve the vision of a transport system for the North East of Scotland which enables a more economically competitive, sustainable and socially inclusive society?

Q3. Are the operational transport objectives appropriate? Should any others be included? Is there a need to prioritise between these objectives?

Q4. The Regional Transport Strategy will identify (and then test and consult upon) a series of schemes and proposals for addressing the issues. What do you consider to be the most important schemes or proposals, which could contribute towards addressing the issues facing the North East.

Q5. Do you believe that the North East should be seeking to lead the way in transport policy in Scotland, pioneering new approaches or policy targets such as travel planning, reducing carbon emissions or developing demand management solutions?

Q6. Are there particular opportunities available to the North East because of its relative economic strength, technological or energy expertise that could be prioritised to ensure that the region maximises its potential to take advantage of changes in transport over the next 15 years?

Next Steps

101. The first stage in developing the RTS is establishing the current and future transport issues in the region and using conclusions to determine a vision for transport in the region and a set of strategic and related operational objectives to deliver the vision. The next key stages of the RTS development are set out below:

Generation of Strategy Options	July/August
Appraisal and Prioritisation of Strategy Options	September/October
Preparation of Draft Strategy	October
Public Consultation on Draft Strategy	Mid November to mid January
Preparation of Final RTS	February/March
Submission of RTS to Scottish Ministers	March

102. We value you views on the options which should be considered for inclusion within the RTS and would be very grateful if you could answer the questions in this consultation paper by:

Friday 4 August 2006

Responses should be returned by post to:

North East Scotland Transport Partnership
27-29 King Street
Aberdeen
AB24 5AA

or by email to:

rdickson@nestrans.org.uk

Glossary of Terms

NESTRANS	The North East Scotland Transport Partnership
RTS	Regional Transport Strategy
NTS	National Transport Strategy - the Scottish Executive are presently consulting on a draft NTS.
LTS	Local Transport Strategies - both Aberdeen City Council and Aberdeenshire Council have approved LTSs and are currently n the process of reviewing these.
NEST	North East Scotland Together, the Structure Plan covering Aberdeen City and Shire.
ACSEF	Aberdeen City and Shire Economic Forum, a partnership of economic development agencies and associated partners in the North East.
STAG	Scottish Transport Appraisal Guidance
MTS	Modern Transport System, the existing regional transport strategy for the North East, covering the period up to 2011.
WPR	Western Peripheral Route - one of the schemes proposed in the MTS.
TMO	Transport Management Organisation - NESTRANS has helped to establish a TMO in Dyce, encouraging companies to work together towards sustainable transport solutions.
Aberdeen Crossrail	One of the schemes proposed in the MTS, a proposal for incremental improvements to enable a more frequent and direct through rail service between Inverurie, Aberdeen and Stonehaven with additional stations.
Stepchange	A Scottish Executive funded project facilitating direct travel advice to households in pilot areas. Both Aberdeen City and Aberdeenshire Councils have participated in the Stepchange Project in Cove, Cults and Inverurie.
GROS	The General Register Office for Scotland - responsible for running the Census and publishing information about population and households.
ICT	Information and Communication Technology
GVA	Gross Value Added - a measure of relative economic performance, normally expressed as an average per person in an area.
Urban and Rural Benchmarks	The Scottish Household Survey publishes data by local authority area and for summarised areas. Aberdeen is benchmarked against “large urban areas” and Aberdeenshire against “accessible rural areas”.
Greenhouse Gases	Emissions which can contribute to global damage, including climate change, predominantly Carbon Dioxide (CO2).
Pollutants	Emissions which can contribute to local air quality concerns. Most significant in the North East are particulates (PM10) and Oxides of Nitrogen (NOx), especially Nitrogen Dioxide (NO2).