



Nestrans & NHS Grampian

Health & Transport Action Plan

Background Study





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# 1 Introduction

## Background to Report

### Context

- 1.1 JMP Consultants Ltd (JMP) has been commissioned by Nestrans, the Regional Transport Partnership (RTP) for Aberdeen City and Shire, in collaboration with NHS Grampian, to prepare an action plan to address three key themes or interrelationships between health and transport:
- Promoting Active Travel – that inappropriate use of some transport modes is contributing to sedentary lifestyles;
  - Transport & Public Health – that undesirable side-effects of the transport system have detrimental impacts on public health; and
  - Access to Healthcare – that transport is required to enable access to healthcare, and that accessing health services is a key transport demand.
- 1.2 The Health and Transport Action Plan (HTAP) is one of three regional action plans identified in the Regional Transport Strategy (RTS), published in March 2007 (the others being for buses and freight).
- 1.3 The RTS states that Nestrans will develop a HTAP which will, “set out how Nestrans, the two local authorities and NHS Grampian will work together in the planning of health services and transport provision, encouraging more sustainable and healthy travel behaviour and achieving the aims of the RTS and Community Health Plan.”
- 1.4 In addition to the HTAP, the RTS sets out Nestrans' commitment to undertaking a Health Impact Assessment (HIA) of the RTS. The HIA is a combination of procedures or methods by which a policy, program or project may be judged as to the effects it may have on the health of the population. The results of HIA may be used to change a proposal or guide the implementation of a strategy to protect and promote the health of the community or population.
- 1.5 The findings of the HIA are available at the same time as this Consultative Draft of the HTAP. While there are synergies between the HTAP and the HIA of the RTS, it should be noted that the two processes have different objectives and, as such, have been mostly prepared in isolation of each other.

### Process

- 1.6 As the first task in developing the HTAP, JMP undertook a detailed background study to obtain a better understanding of the key issues for the region under each theme. A Briefing Note was prepared summarising the findings of the study and outlining the main issues, opportunities and constraints for each theme.
- 1.7 The Briefing Note was issued to selected stakeholders including representatives from Aberdeen City Council (ACC), Aberdeenshire Council (AC), bus operators, community transport providers, and the Scottish Ambulance Service (SAS), who were then invited to a Stakeholder Workshop event held on Friday 30 November 2007 to discuss the note and 'brainstorm' opportunities for action. A paper summarising the outcomes of the workshop was produced and issued to all attendees.

- 1.8 Following the workshop, JMP produced a Vision, Objectives and Actions Report, outlining suggested vision and objectives for each theme and suggested action plans for each. This was reviewed by a Steering Group comprising representatives from Nestrans, NHSG, ACC, AC and SAS and final, draft action plans for each theme were agreed.
- 1.9 This report is therefore structured to provide, for each of the three themes: the background context, including the key **issues**, **opportunities** and **constraints** and the proposed HTAP **vision** and **objectives**.
- 1.10 The Action Plan itself is intended to be a 'fluid' document, updated as actions progress, and is available under separate cover.

#### Best Practice Boxes

In addition to issues, opportunities and constraints, the HTAP also highlights some examples of integrated approaches, projects and schemes that have worked well, both within the study region and throughout the UK.

These are examples of 'best practice' and are summarised in '**Best Practice Boxes**' throughout this report.

## Study Themes in Brief

### Active Travel

- 1.11 'Active travel' is a term used for modes of travel that incorporate some form of exercise. Although horse riding has been recognised as an active travel mode, the term is generally limited to cycling and walking and it is these two modes we consider in this report. Cycling and walking are both important components of a sustainable transport network and aid healthy living.
- 1.12 Active travel has become increasingly important with increased awareness of high profile topics such as obesity and climate change. Walking and cycling provide useful physical activity and, unlike sedentary modes of travel such as the private car, they are pollution-free.

### Transport & Public Health

- 1.13 Transport networks can have both direct and indirect impacts on public health. Direct impacts include poor air quality from transport pollution, high background noise levels due to rail or road links and injury/death in road traffic accidents, which can all affect the health and wellbeing of a population.
- 1.14 More indirect public health impacts of transport include severance (communities being 'cut off' from key services by a busy road or rail link), visual and landscape impacts and the impact on wellbeing and health deprivation through over-reliance on sedentary modes.
- 1.15 For the purposes of this study, we focus on the direct impacts of transport on public health (air quality, noise and road traffic accidents), though we note that this does not mean indirect impacts are not also important.

### Access to Healthcare

- 1.16 The ability of patients to access healthcare is essential to ensure that its benefits can be realised. The Social Exclusion Unit (SEU) report on transport published in 2003 noted that in the UK over a 12-month period 1.4 million people, "miss, turn down or choose not to seek medical help because of transport problems". People unable to access healthcare are more likely to suffer ill-health and rely on acute care later.

- 1.17 As with most of the NHS boards in Scotland, NHS Grampian (NHSG) is in a period of change. Services are being relocated from the current 'central' focus to more local, community-based facilities and are being redesigned to include more preventative and self-care measures. The redesign of NHSG is discussed in its document, 'Healthfit: Tomorrow's Health Today 2007/2008', (herein after referred to as 'Healthfit').
- 1.18 The redesign will mean that the travel patterns to and from key services will change. It is important that we take account of this and make recommendations to ensure accessibility problems do not arise.

## HTAP Area

- 1.19 Although the Nestrans region comprises the local authority areas of ACC and AC, the HTAP has jointly been commissioned by NHSG, whose authority area also includes the Moray Council (MC) area.
- 1.20 Wherever possible, therefore, our work makes reference to the whole of the NHSG region. This is important to ensure that the access to healthcare issues identified, and opportunities and constraints for action, are as comprehensive as possible. Wherever the report makes reference to 'the region', this should be read as the wider NHSG region, not the Nestrans region.

## Background Study Approach

- 1.21 As discussed above, JMP undertook a detailed background study into each of the three theme areas and has collated background information, including relevant data and anecdotal evidence, of the existing situation.
- 1.22 For the Promoting Active Travel and Transport & Public Health themes, this involved discussions with key stakeholders and desktop-based review of relevant projects, schemes and initiatives.
- 1.23 For Access to Healthcare, JMP attended several workshops and meetings with staff members at NHSG and the Scottish Ambulance Service (SAS) and has collated a wealth of health intelligence and SAS data. This has been used, in collaboration with public transport information and information on Demand Responsive Transport (DRT) and community transport schemes, to build an accessibility model of the NHSG region using the modelling software package, Accession.
- 1.24 It is worth noting that, for the purposes of the HTAP, we have considered 'healthcare' to encompass a wide range of key services and facilities, from acute and emergency services, through to primary and local services including GPs, pharmacies, dentists, and opticians.

## Report Structure

- 1.25 This Background Study report is structured around the three key themes of the HTAP: Promoting Active Travel, Transport & Public Health and Access to Healthcare.
- 1.26 Subsequent sections define the Key Issues, Opportunities & Constraints and the Vision & Objectives for each theme in turn.

# Promoting Active Travel

## 2 Promoting Active Travel: Key Issues, Opportunities & Constraints

### Introduction

- 2.1 The Scottish Household Survey (SHS) undertaken in 2006 provides the most recent large-scale survey analysis of cycling and walking activity in Scotland. The SHS<sup>1</sup> asked adults whether, in the previous seven days, they walked or cycled more than a quarter of mile in order to go somewhere (e.g. to work or the shops) or simply for pleasure and keep fit purposes.
- 2.2 The survey found that nearly half of respondents had not undertaken a walking trip, either as a means of transport or for pleasure, in the previous week and only one in six had done so daily. Only 4% of people had cycled more than a quarter of a mile. This is an indication of the current low levels of active travel within Scotland and the scale of the challenge.
- 2.3 The report also indicates that, in 2006, 68% of Scottish households had at least one car available for private use - up from 63% in 1999. 24% of households had two or more cars in 2006, compared with 18% in 1999. As the SHS is a sample survey, its results are subject to year-to-year fluctuations.
- 2.4 The 2001 Census indicates that within Aberdeen City, 66% of households have one or more cars, with 21% having two or more. In contrast, Aberdeenshire results indicate 82% of households with one or more cars, with 37% with two or more cars. Moray has a similar pattern to Aberdeenshire in that 76% of households have one or more and 26% have two or more.
- 2.5 Therefore, compared to Scotland, Aberdeenshire and Moray have high car ownership levels, perhaps a reflection of the rural nature of the Council Areas and the relative periphery of transport services and facilities for many people.
- 2.6 The promotion and uptake of active travel modes has an important role to play in achieving many cross sector policy objectives, including sustainability, land use planning, transport, health, environment and education. The active travel context in Scotland is discussed in more detail below, followed by a review of initiatives being pursued throughout the region.

#### **Best Practice Box: Increased Public Transport Use and Active Travel**

Americans who walk to and from public transit obtain an appreciable amount of daily transit-related physical activity (median of 19 minutes). This study also suggests that 29% of transit users achieve more than 30 minutes of daily physical activity solely by walking to and from transit. Efforts to increase transit accessibility and usage may not only decrease road congestion and air pollution but may have health benefits.

Ref: Besser, L., Dannenberg, A., 2004 Walking to public transit: Steps to help meet physical activity recommendations, *Am J Prev Med* 2005;29(4):273–280

### Active Travel Context

- 2.7 Active travel modes are sustainable and are a key part of any sustainable transport network. They are also healthy modes of transport, and both the environmental and health benefits are recognised in transport policy throughout Scotland, with dedicated objectives in the National Transport Strategy (NTS), Regional Transport Strategy (RTS) and in the emerging Local Transport Strategy (LTS) documents.

<sup>1</sup> <http://www.scotland.gov.uk/Publications/2007/10/08091115/0>

2.8 Active travel is a vital component to delivering sustainable development and is cited in Scotland's sustainable development strategy, 'Choosing our Future', which calls for good quality design to encourage the uptake of these modes. Similarly, the importance of people to be able to walk and cycle to key services from their homes and places of work is stressed in Scottish planning policy documents SPP17 and PAN75. SPP17 states that within an approach to integrated land use and transport planning, modes of personal travel should be prioritised according to the following hierarchy:

- Walking;
- Cycling;
- Public Transport; and
- Motorised modes.

2.9 Active travel is also crucial to increasing physical activity and improving health, both in the physical sense and for mental wellbeing. The recent Foresight report, 'Tackling Obesities: Future Choices' (October 2007 – Government Office for Science) sets out startling evidence and projections about the future of our society if increasing instances of obesity are not addressed. It notes that, by 2050, 60% of men and 40% of women could be clinically obese if action is not taken, with consequential demands and impact on healthcare services and resources.

2.10 Transport is implicated directly in the report as contributing to what it describes as 'obesogenic lifestyles' in which 'healthy choices' are not 'easy choices' because of existing perceptions and habits where the car is the normative mode of travel.

2.11 In addition, a recent Institute for European Environmental Policy (IEEP) report, 'Unfit for Purpose: How Car Use Fuels Climate Change and Obesity', published in August 2007, presents interesting correlations between increases in obesity and CO<sub>2</sub> emissions.

2.12 The report makes the point that, as walking and cycling levels have generally declined, they have been replaced by more sedentary, energy-intensive modes and estimates that, if we were to revert to walking patterns of 1975, we would cut CO<sub>2</sub> emissions by 5.7%. This points to the benefits that promoting active travel can have in meeting other public policy priorities outside of transport and health.

**Best Practice Box: Health Improvement Team, NHS Greater Glasgow & Clyde**

In 2006, the Health Improvement Team at NHS Greater Glasgow & Clyde (NHSGGC) in collaboration with Strathclyde University and the Glasgow Centre for Population Health undertook a pilot scheme to investigate the potential for awareness raising active travel projects.

The study was conducted over one school term with Primary 5 pupils, teachers and families. Surveys were also undertaken with a 'control' class at a similar school with no project. The study showed that, in the participating school, mean distance walked to school increased by 389% from 198 to 772m while mean distance travelled to school by car decreased by 57.5% from 2018 to 933m. In the control school, the distances were largely unchanged.

Ref: McKee et al, J Epidemiol Community Health 2007;61:818–823.

**Best Practice Box: Active Bristol**

Active Bristol is a five-year programme to be launched in summer 2008. It aims to bring about a significant and sustainable increase in physical activity levels for Bristol residents. It is largely predicated on increasing the use of the active travel modes. It will be owned by the Bristol Partnership (a multi agency group including voluntary sector). Initial funding for the scoping for the programme has come through the Primary Care Trust but resources for the 5-year programme are to be sought from the Partnership, including the Bristol City Council as a key agency.

## Local Initiatives

2.13 In this section, we summarise previous or ongoing initiatives to promote active travel in the NHSG area.

### School Travel Plans

2.14 A significant proportion of the publicised information relating to active travel revolves around implementation of 'smart' initiatives such as Travel Plans in schools and each local authority has a dedicated School Travel Plan Coordinator.

2.15 In 2007, there were 133 schools in the Aberdeenshire area alone currently involved with developing School Travel Plan (STPs). By their very nature, STPs seek to promote and encourage uptake of active travel modes in preference to the private car.

2.16 Initiatives that have been promoted through STPs in the NHSG area and include:

- Engaging children in developing information leaflets;
- Walking buses and cycle trains;
- 'Park and strides' and voluntary 'no-parking zones';
- Leaflets and newsletters relating to travel planning;
- Incentive/prize driven schemes, for instance:
  - Aberdeenshire have the 'Go for it' scheme which allows students to collect points for using active travel modes that can be used to trade for leisure days;
  - Aberdeen City have the 'Walk 100 days' scheme which provides students with trophies and prizes for walking to school 100 days a year; and
  - Moray host a 'School Annual Travel Awards' which rewards schools and pupils involved in the delivery of the Active Travel agenda which is sponsored by Stagecoach Bluebird<sup>2</sup>.

### Best Practice Box: National Bike It Project

The 'Bike It' project works directly with schools making the case for cycling in their STPs, supporting school champions who want to promote cycling and demonstrating that cycling is a popular choice for children to get into school. It provides cycle lockers, training and info on safe cycle routes as well as fun awareness raising events like bicycle breakfast.

Between June 2004 and July 2006, 19% of children aged 9 – 12 years old cycled at least one day a week in Bike It schools, compared with 4% previously.

Bike It is funded by the bicycle industry through its "Bike Hub" fund and is also supported by Cycling England and the Department for Transport. The scheme has strong partnerships with many cycling, health and education bodies and people from the business world.

### Best Practice Box: Oyne, Aberdeenshire

By way of an example of the effectiveness of school based initiatives Oyne (in Aberdeenshire) saw a reduction in car trips from 74% down to 16%.

This was due to a range of initiatives including cycle rack provision and an effective 'park and stride' system for the school which rose in popularity from 2% to 46%. The school previously had no sustainable/active travel initiatives.

<sup>2</sup> [http://www.moray.gov.uk/moray\\_news/news\\_50267.html](http://www.moray.gov.uk/moray_news/news_50267.html)

**Figure 2.1: Examples of STP Initiatives in Moray**



**Other Travel Plans**

- 2.17 Nestrans operates a Sustainable Travel Grants Scheme (STGS) for the development of Travel Plans and travel awareness in both Aberdeen City and Shire. Through the STGS, organisations can apply for up to £10,000 in matched funding to support initiatives promoting sustainable travel.
- 2.18 Since its launch the STGS has provided funding for various projects, implementing active travel measures such as improved pedestrian access and secure cycle parking. Uptake of the scheme is has been slow, however, and there is potential to improve the marketing of the scheme.
- 2.19 Since 2004, Nestrans have been very active in promoting travel planning and travel awareness in the north east, particularly working with private sector and public employers in the region. The Dyce Transport Management Organisation (TMO) has stemmed from this strategy with the start up and development being funded by Nestrans. Other examples are the regional car share website<sup>3</sup> and the commuter challenge for north east businesses in June 2007<sup>4</sup>.
- 2.20 In August 2006, Nestrans produced a ‘Travel Planning Strategy and Action Plan<sup>5</sup>’ which outlined the partnerships strategy and actions for the next 18 months.
- 2.21 It is also noted that the local planning authorities have a process by which workplace or other Travel Plans can be secured through development planning. The local authorities have been promoting travel planning and travel awareness within their areas, an example being the Aberdeenshire’s establishment of ‘IT Hot Stops’ to reduce business travel and Aberdeen City Council’s support for the Aberdeen Cycle Forum, producing the Aberdeen Cycle Map and supporting cycle training.

<sup>3</sup> <http://www.nestranscarshare.com/>  
<sup>4</sup> [http://www.nestrans.org.uk/news/news\\_detail.asp?news\\_id=181](http://www.nestrans.org.uk/news/news_detail.asp?news_id=181)  
<sup>5</sup> [http://www.nestrans.org.uk/docs\\_info/docs\\_info.asp?doc\\_cat\\_id=7](http://www.nestrans.org.uk/docs_info/docs_info.asp?doc_cat_id=7)

### Core Paths Plans

- 2.22 ACC is currently developing a “basic network of core paths”, in addition to the local path network that already exists. A Consultative Draft ‘Core Paths Plan’, as required under the Land Reform (Scotland) Act 2003, has been developed with key stakeholders and was subject to a period of consultation<sup>6</sup>.
- 2.23 The vision for the Aberdeen Core Path Plan, which has been agreed with Aberdeen Outdoor Access Forum, is to, “form a complete path network throughout the city, encouraging healthy and sustainable access opportunities for all”. Further information on the vision, aims and objectives developed for the Core Paths Plan are available from the council website<sup>7</sup>.
- 2.24 The Core Path Plan aims to provide a network of paths that caters for all abilities and type of users, although not every core path has to be useable by all. They will satisfy the basic needs of local people and visitors for recreation and for getting about, and provide key links to the wider path network. The candidate core paths are on existing routes but some new paths are proposed in order to achieve a “coherent network”.
- 2.25 Aberdeenshire Council is currently collating the information obtained from the first round of consultation and using this to draw up an Initial Draft Core Paths Plan. “After consultation with landowners, communities and the Aberdeenshire Local Outdoor Access Forum, this draft plan will be available for public comment during April and May 2008<sup>8</sup>”. The Council aim to draw up a Final Draft Plan for consultation by October 2008.
- 2.26 Moray Council has produced a Draft Core Paths Plan<sup>9</sup> which has been through a period of consultation with the intention of publishing and submitting a Finalised Draft Moray Core Paths Plan to Scottish Ministers by February 2008.

### NHSG Obesity Strategy

- 2.27 NHSG is preparing an Obesity Strategy to tackle obesity in the region. It is understood the strategy will include consideration of active lifestyles, including promoting active travel for improving health. While NHSG has previously undertaken work to tackle obesity, it is acknowledged that this was on a piecemeal basis. The strategy will seek to provide a more joined up approach.
- 2.28 It is worth noting that anecdotal evidence suggests there is already a precedent in the area with some GPs providing active travel ‘prescriptions’ as a way to improve patient health.

### Joint Health Improvement Plan

- 2.29 The Joint Health Improvement Plan<sup>10</sup> (JHIP) 2005 - 2008 is part of the Community Plan for Aberdeen City. It sets out the main priorities for the community planning partners – the public sector, voluntary organisations and the community. The priority for the JHIP is the reduction of health inequalities, with the main focus of action around mental health and well-being and obesity.

<sup>6</sup> [http://www.aberdeencity.gov.uk/ACCI/web/site/WalkingCycling/SL\(WalkingCycling\)/pla\\_corepaths.asp](http://www.aberdeencity.gov.uk/ACCI/web/site/WalkingCycling/SL(WalkingCycling)/pla_corepaths.asp)

<sup>7</sup> [http://www.aberdeencity.gov.uk/ACCI/web/site/WalkingCycling/SL\(WalkingCycling\)/wac\\_corepaths\\_visionaimsobjectives.asp](http://www.aberdeencity.gov.uk/ACCI/web/site/WalkingCycling/SL(WalkingCycling)/wac_corepaths_visionaimsobjectives.asp)

<sup>8</sup> [http://www.aberdeenshire.gov.uk/outdooraccess/core\\_paths\\_plan/index.asp](http://www.aberdeenshire.gov.uk/outdooraccess/core_paths_plan/index.asp)

<sup>9</sup> [http://www.moray.gov.uk/moray\\_standard/page\\_52217.html](http://www.moray.gov.uk/moray_standard/page_52217.html)

<sup>10</sup> [http://www.nhsgrampian.org/nhsgrampian/gra\\_display\\_simple\\_index.jsp?pContentID=2963&p\\_applic=CCC&pElementID=163&pMenuID=4&p\\_service=Content.show&](http://www.nhsgrampian.org/nhsgrampian/gra_display_simple_index.jsp?pContentID=2963&p_applic=CCC&pElementID=163&pMenuID=4&p_service=Content.show&)

- 2.30 The JHIP identifies key actions for each of the main priorities, together with national and local targets to be achieved for each priority area. Key actions for Obesity include supporting an Active School programme and health promoting schools.
- 2.31 Similarly, Aberdeenshire has also published a Joint Health Improvement Plan 2007 – 2010<sup>11</sup>. The Plan identifies three main strands of action, one of which is the development of health promoting schools.

#### Investment in Active Travel Infrastructure

- 2.32 In 2006-07, Nestrans spent over £500,000 on cycling projects, examples of which are the strategic cycle routes between Westhill-Kingswells-Aberdeen, the A96 outside Inverurie, peripheral cycle routes around Peterhead and the River Don cycle route. For 2007-08, Nestrans has allocated £533,000 for strategic cycle routes to progress the work already undertaken. Nestrans is also supporting smaller local projects by providing financial allocations to the councils.
- 2.33 Recently Sustrans, the national sustainable transport charity, has been working with ACC to improve and upgrade the disused Old Deeside Railway Line (the Deeside Way) to a dedicated cycling and walking route. Part of the route has been resurfaced to provide the potential for an alternative and more satisfactory route cycle route along the line from Aberdeen to Banchory. It is understood that Sustrans has undertaken before and after surveys of usage of this path, and will publish findings in due course.
- 2.34 Sustrans funding has also upgraded a cycle track along the River Don through Riverside Park in Dyce, which now provides a high quality route to link in with National Cycle Network Route 1 just north of Dyce. Long term plans are for this route to continue alongside the river to Seaton Park, Aberdeen.

## Issues

- 2.35 The previous section provides an overview of the active travel context and the findings of the background study. The key issues for promoting active travel in the region are now summarised in below. While these include issues captured in the context above, they also include other issues identified throughout the HTAP process.
- 2.36 The key issues are as follows:
- **Cultural Challenge** – increased car ownership and, in particular, increased car usage means these sedentary modes are selected over active travel by many people. Unless active travel can be made as 'attractive' as these modes, there will be a challenge in promoting uptake.
  - **Lack of Information** – there is a perception that there is a lack of information about alternatives to private car use, such as walk/cycle routes. This also includes information about public transport services, which also promote increased active travel.
  - **Increased Instances of Obesity** – as with most of the UK, the region is expected to see a continued increase in obesity levels due, in part, to more sedentary lifestyles.
  - **Land Use Planning** – attractive active travel infrastructure, such as direct, convenient routes to services and facilities and good cycle parking facilities are not being consistently requested for all new developments.

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<sup>11</sup> <http://www.hi-netgrampian.org/hinet/3085.html>

- **Diversity of the Population** – an ageing population and increased instances of obesity and general unfitness could mean that active travel will become more challenging or more of a priority for NHSG and the local authorities.
- **Road Safety and Personal Security** – perceptions of road safety risk and the potential for crime mean that uptake of active travel is reduced. This presents a particular problem for more vulnerable groups that benefit most from active travel; children and elderly people. This is particularly an issue where walking and cycle routes are bisected by busy roads.
- **School Focus** – it is important for good practice in school travel planning to influence travel planning more generally and for both to be integrated with general transport policy and planning.
- **Loss of School Travel Plan Coordinators** – notwithstanding the above, STPs present real opportunity to instil sustainable travel behaviour in early life. Current funding for School Travel Plan Co-ordinators was reviewed in November 2007 and the funding will come directly to local authorities but will not be ringfenced.
- **Asset Management** – it is important to ensure that footways, cycleways and road surfaces where cyclists are anticipated to travel are fit for purpose and adequately maintained.
- **Climate and Topography** – in considering any actions to increase uptake of active travel in the region, it is important to recognise that the weather in the region will have an influence, particularly during dark and cold winter months. The region comprises of city and towns, coastal areas and hilly sections which may influence uptake of active travel.
- **Rurality/Peripherality** – the region comprises of both urban conurbation and more rural settlements, which can result in long distance journeys to facilities and services which are therefore not feasible by active travel modes.

## Opportunities

2.37 Similarly, the HTAP process has allowed identification of key opportunities for promoting active travel. These are perceived to be:

- **Partnership Working** – the Health and Transport Action Plan itself is an example of the good partnership working that already exists between NHSG, Nestrans and its component local authorities. The plan should identify, support and endorse a long-term commitment to collaborative working between all stakeholders. This should include the above stakeholders, voluntary groups and recognised specialists such as Sustrans.
- **Enhanced Accessibility** – schemes that offer increased access by foot or cycle between residential developments and key services or transport hubs will help to facilitate social inclusion in areas of deprivation and improve the local environment. Improvements and improved maintenance of existing infrastructure could increase uptake of these modes.
- **Improved Travel Awareness and Behavioural Change** – increased awareness of cycle and walking opportunities to key facilities and the benefits of a more active lifestyle may be important to increase uptake of these modes. There is also an opportunity to deliver improvements created by the RTS and two LTSs which attach particular importance to promoting sustainable travel.
- **Joint Health Improvement Plans** – the above opportunities are further strengthened as they are aligned with objectives set out in the JHIPs.
- **Improvements to Public Transport** – there is evidence that there is a correlation between increased active travel and public transport use, as passengers have to walk to and from

facilities and during interchange. Therefore integrated promotion of active travel with improvements to public transport (i.e. through the bus action plan for instance

- **Increased Funding/Resources** – high profile issues like climate change and obesity present an opportunity for cross-funding for active travel promotion.
- **Integrated Transport and Spatial Planning** – integration of transport and development planning presents an opportunity to ensure that active travel and accessibility are considered prior to development of sites and schemes. This could ensure that sustainable, active travel choices are made from the outset.
- **Local Active Travel Brands** – there is potential to derive local brands for initiatives, i.e. 'Active Aberdeen' and or 'Active Aberdeenshire'. These could be based on models from other cities, e.g. Active Bristol. An appropriate brand could increase the profile of active travel in the same way as has been done for road safety messages and health improvements.
- **Active Prescriptions** – there is potential within the NHS to promote and encourage active travel and the associated health benefits through the primary care system.

## Constraints

2.38 The HTAP process has also lead to identification of key constraints to promoting active travel, which are perceived to be:

- **Lack of Understanding/Awareness of Need for Action** – the importance of active travel to address issues like obesity is often over shadowed, particularly in the transport sector, by equally important yet more high profile issues such as climate change.
- **Unwelcoming Infrastructure and Environment** – uneven surfaces, poorly lit routes and busy, trafficked roads all contribute to aversion of active travel. Also, poor public transport interchanges and infrastructure mean that there is a perception of some people that it is too difficult not to drive.
- **Demand for Skills and Enthusiasm of Champions** – development and promotion of active travel initiatives relies on dedicated, enthusiastic individuals and often requires input from volunteer organisations. Within the region there are motivated people promoting sustainable travel and a constraint could be harnessing their skills and co-ordinating activities between public/private/voluntary sectors.
- **Financial Constraints** – competing demands for budgets and resources in NHSG, Nestrans and local authorities could mean active travel is not given appropriate funding.
- **Climate, Topography, Rurality** – the topographical meteorological conditions of the region may constrain uptake of active travel modes. However this may more about changing peoples' perceptions; some journeys require motorised transport but many short journeys can be made by walking or cycling.

### 3 Promoting Active Travel: Vision and Objectives

#### Vision

3.1 The HTAP vision for promoting active travel is:

For everyone living in the region to be able to, and choose to, travel safely by active modes such as walking and cycling for the majority of their local journeys.

#### Objectives

3.2 Key HTAP objectives required to achieve this vision are

- To increase the number of journeys made by active travel modes.
- To make people aware of the physical and mental health benefits of active travel.
- To contribute to achieving road safety targets.
- To ensure actions achieve best value.

#### Links with other Objectives & Outcome

3.3 The key linkages between the Health and Transport Action Plan (HTAP) promoting active travel objectives above and the objectives of the RTS are shown in **Table 3.2** below. The HTAP objectives make a strong contribution to RTS objectives and there are no conflicts with them.

3.4 In addition to the RTS objectives, it is prudent to ensure that the HTAP objectives do not conflict health objectives, specifically the corporate objectives of NHSG. Key linkages between these objectives are shown in **Table 3.3** below. The HTAP objectives make a strong contribution to the corporate objectives of NHSG and there are no conflicts with them.

3.5 For completeness, we have also compared the HTAP objectives to the Scottish Government's National Performance Framework for Scotland. This comprises high level targets, 15 'national outcomes', which define the vision for the future and 45 'indicators' by which progress will be measured. Key linkages between the HTAP objectives and their contribution to the 15 national outcomes are shown in **Table 3.4** below. There are no conflicts and, in some cases, the HTAP objectives make a strong contribution to the national outcomes.

**Table 3.1: Key Objective Linkages Table**

✓✓	Strong Correlation
✓	Weaker Correlation
○	No, or Negligible, impact
×	Weaker conflict
××	Strong Conflict

**Table 3.2: Links between RTS and HTAP Objectives**

RTS Objectives	HTAP Objectives	To increase the number of journeys made by active travel modes	To make people aware of the physical and mental health benefits of active travel	To contribute to achieving road safety targets	To ensure actions achieve best value
<b>Economy</b>					
To make the movement of goods and people within the north east and to/from the area more efficient and reliable		✓	○	○	✓
To improve the range and quality of transport to/ from the north east to key business destinations		○	○	○	○
To improve connectivity within the north east, particularly between residential and employment areas		✓	○	○	○
<b>Accessibility and Social Inclusion</b>					
To enhance travel opportunities and achieve sustained cost and quality advantages for public transport relative to the car		✓	○	○	✓
To reduce the number and severity of traffic related accidents and improve personal safety and security for all users of transport		○	○	✓✓	○
To achieve increased use of active travel and improve air quality as part of wider strategies to improve the health of north east residents		✓✓	✓	✓	○
<b>Environment</b>					
To reduce the proportion of journeys made by cars and especially by single occupant cars		✓	✓	○	○
To reduce the environmental impacts of transport, in line with national targets		✓	✓	○	○
To reduce growth in vehicle kilometres travelled		✓	✓	✓	○
<b>Spatial Planning</b>					
To improve connectivity to and within Aberdeen City and Aberdeenshire towns, especially by public transport, walking and cycling		✓✓	○	○	✓
To encourage integration of transport and spatial planning and improve connections between transport modes and services		○	○	○	✓
To enhance public transport opportunities and reduce barriers to use across the north east, especially rural areas		✓	○	○	✓

**Table 3.3: Links between NHSG and HTAP Objectives**

<p style="text-align: center;"><b>HTAP Objectives</b></p> <p><b>National Outcomes</b></p>	<p style="text-align: center;">To increase the number of journeys made by active travel modes</p>	<p style="text-align: center;">To make people aware of the physical and mental health benefits of active travel</p>	<p style="text-align: center;">To contribute to achieving road safety targets</p>	<p style="text-align: center;">To ensure actions achieve best value</p>
<b>Improving Health</b>				
Improve the public's health	✓✓	✓✓	○	✓
Reduce inequalities in health	✓	✓	✓	✓
Protect the population from hazards which damage their health	✓	✓✓	✓✓	✓
<b>Financial</b>				
Meet financial targets	○	○	○	✓✓
Redistribute resource in line with the Grampian Health Plan	○	○	○	✓
Ensure best value through continuous improvement	✓	✓	✓	✓✓
<b>Service Delivery &amp; Organisation</b>				
Improve access to healthcare services	✓	✓	○	✓
Shift the balance of care from hospital to community	✓	✓	○	✓
Meet appropriate clinical and non-clinical standards and ensure patient safety	○	○	○	○
<b>People</b>				
Ensure the public is involved, engaged and consulted on healthy living and in service planning and delivery	○	✓	○	✓
Develop effective joint working with partners	✓	○	✓	✓
Improve the public's awareness and satisfaction of our services	○	○	○	✓
<b>Learning &amp; Growth</b>				
Ensure effective staff involvement to achieve a healthy and positive work experience for staff	○	○	○	○
Ensure right numbers of staff with right skills, in right place	○	○	○	○
Promote the development of a flexible, creative, learning organisation	○	○	○	○

**Table 3.4: Links between National Outcomes and HTAP Objectives**

	HTAP Objectives	To increase the number of journeys made by active travel modes	To make people aware of the physical and mental health benefits of active travel	To contribute to achieving road safety targets	To ensure actions achieve best value
	<b>National Outcomes</b>				
1	We live in a Scotland that is the most attractive place for doing business in Europe	✓	✓	○	✓
2	We realise our full economic potential with more and better employment opportunities for our people	○	○	○	✓
3	We are better educated, more skilled and more successful, renowned for our research and innovation	○	○	○	○
4	Our young people are successful learners, confident individuals, effective contributors and responsible citizens.	✓	✓	○	○
5	Our children have the best start in life and are ready to succeed	✓	✓	✓	○
6	We live longer, healthier lives.	✓✓	✓✓	✓✓	✓
7	We have tackled the significant inequalities in Scottish society	✓	✓	✓	✓
8	We have improved the life chances for children, young people and families at risk.	✓	✓	✓	✓
9	We live our lives safe from crime, disorder and danger.	✓	○	✓✓	○
10	We live in well-designed, sustainable places where we are able to access the amenities and services we need.	✓✓	✓	✓✓	✓✓
11	We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others.	✓	✓	✓	✓
12	We value and enjoy our built and natural environment and protect it and enhance it for future generations.	✓✓	✓✓	○	✓
13	We take pride in a strong, fair and inclusive national identity.	○	○	○	○
14	We reduce the local and global environmental impact of our consumption and production.	✓✓	✓✓	✓	✓
15	Our public services are high quality, continually improving, efficient and responsive to local people's needs.	○	○	○	✓✓

# Transport & Public Health

## 4 Transport & Public Health: Key Issues, Opportunities & Constraints

### Introduction

- 4.1 Transport networks can have many impacts on the health and wellbeing of residents living nearby and people using them. For the purposes of this report we have focused on the three most significant direct public health impacts of air quality, noise and road safety.

### Air Quality Context

- 4.2 The NHS estimates that over 10,000 people die prematurely in the UK each year because of poor air quality<sup>12</sup>.
- 4.3 Over 200 local authorities in the UK, including ACC, have declared Air Quality Management Areas (AQMAs); areas where pollutant concentrations fail to meet required levels to protect human health. The majority of these AQMAs are located close to or along busy roads and are due to high levels of road traffic pollutants such as nitrogen dioxide (NO<sub>2</sub>) and particles (PM<sub>10</sub>).
- 4.4 In general, air quality throughout the NHSG region is considered to be good. No AQMAs have been declared by Aberdeenshire or Moray Councils, a reflection of the largely rural, and, in parts, coastal nature of these areas. Where no AQMAs are declared, the air quality of the area has been identified as complying with objectives set for the protection of human health and public exposure is therefore not considered to be a problem.
- 4.5 It is worth noting that traffic can have an impact on air quality at a local level in other places outside AQMAs, however whilst this level of pollution is not significant enough to trigger an AQMA, it can create an unpleasant environment for people and discourage active travel.
- 4.6 Aberdeen City Council (ACC), declared an AQMA for NO<sub>2</sub> following its first review of air quality in June 2001. The AQMA was originally centred on Market Street and Union Street, but has been extended following subsequent reviews.
- 4.7 The current AQMA is declared for both NO<sub>2</sub> and PM<sub>10</sub> and covers Market Street, Union Street, Virginia Street, Commerce Street and parts of Holburn Street, King Street and Guild Street. **Figure A.1** is a map of the AQMA and is shown at **Appendix A** for information.
- 4.8 2001 Census data for the Census Output Areas immediately around the AQMA indicate that there are potentially more than 5,000 people living in close proximity to it. However, it is noted that not all of these people live directly by the affected roads, so the actual exposure level could be much lower.
- 4.9 The measured concentrations of both pollutants within the Aberdeen city centre AQMA are amongst the highest recorded throughout the UK. In July 2006, ACC published an Air Quality Action Plan<sup>13</sup> which set out measures to reduce air pollution in the AQMA. A Progress Report was published in June 2007 which outlines the progress in the implementation of these measures and other major developments that have an impact on air quality.

<sup>12</sup> Source: 'Making the Case: Improving health through transport', Health Development Agency, 2005

<sup>13</sup> [http://www.aberdeencity.gov.uk/acc/web/site/AirQuality/nc/air\\_AirQuality.asp](http://www.aberdeencity.gov.uk/acc/web/site/AirQuality/nc/air_AirQuality.asp)

- 4.10 In summary, ACC is pursuing the following measures in order to improve the air quality in the AQMA:
- Pedestrianisation of Union Street and associated road infrastructure improvements;
  - Additional controlled parking;
  - Additional park and ride facilities;
  - Travel plans;
  - Improved public transport;
  - Increased awareness of air quality issues; and
  - Construction of a Western Peripheral Route around the city.
- 4.11 The measures outlined above are currently being taken forward through the regional and local transport strategies. However, research shows that significant reduction in NO<sub>2</sub> and PM<sub>10</sub> levels is only likely to be achieved through large reduction in the number of vehicles in the area.
- 4.12 ACC's Action Plan also suggests implementation of politically sensitive traffic management interventions, such as Low Emission Zones or congestion charging, which are challenging and have not been pursued to date. The other measures in the Action Plan aim to promote increased awareness of air quality and reduce the level of car usage and hence will facilitate a 'softer' gradual improvement in air quality.
- 4.13 There are conflicting policies and projects within the local authority and some projects currently being pursued may exacerbate the AQMA, e.g. the deferred pedestrianisation of Union Street and proposal for additional city centre car parks.
- 4.14 However, treatment of the air quality issue has to be balanced with consequential impact on climate change. For example, promoting out-of-town development to improve air quality in the city centre may lead to an increase in global carbon emissions.

## Noise

### General

- 4.15 Ambient noise, and the degree to which those exposed to high noise levels find them a nuisance, is obviously a point of perception. The World Health Organisation (WHO) uses figures to indicate noise levels that invoke minimum impact to the exposed community. These are taken from the Environmental Health Criteria 12 – Noise report published in 1980, which states:
- “...general daytime outdoor noise levels of less than 55 dB (A) Leq are desirable to prevent any significant community annoyance...”
- “...based on limited data available, [an indoor] level of less than 35 dB (A) is recommended to preserve the restorative process of sleep...”
- 4.16 However, it is noted that these are the ideal, and in urban locations it is very difficult to achieve these levels. Planning Advice Note 56, Scottish Government, suggests the use of Noise Exposure Categories (NECs) to help planning authorities determine applications for residential development on sites subject to transportation noise. The categories range from A (<55 dB) to D (>72 dB), with category A sites noise is unlikely to be a determining factor, while for Category D sites refusal of planning permission is likely to be the most appropriate outcome.
- 4.17 The European Union has estimated that around 20% of the EU's population, or close on 80 million people, is subject to noise levels that scientists and health experts consider unacceptable. They are annoyed, their sleep is disturbed, and adverse health effects are expected.

4.18 The European Parliament and Council Directive for Assessment and Management of Environmental Noise 2002/49/EC, more commonly referred to as the Environmental Noise Directive (END) deals with noise from road, rail, air traffic and industry. The directive focuses on the impact of such noise on individuals, complementing existing EU legislation which set standards for noise emissions from specific sources. The Scottish Government, in response to the requirements of the END, published the Environmental Noise (Scotland) Regulations 2004, which describes a two-round process to manage environmental noise<sup>14</sup>. Round One involved production of 'Strategic Noise Maps' for the country, which has now been completed. Round Two requires local authorities to draw up 'Action Plans' to manage noise within their areas.

### Scottish Noise Maps

4.19 Noise maps for the major conurbations in Scotland are available from the Scottish Government<sup>15</sup>. A noise map is analogous to a weather map, but instead of showing a temperature or percentage cloud cover it shows noise levels in terms of coloured contour bands.

4.20 The maps represent the noise that is anticipated to be experienced within a certain area over a given period of time. Therefore, as most noise maps show levels based on annual averages, the actual noise levels may vary throughout the day or on a daily basis.

4.21 The maps produced in response to the END are strategic and are based on predicted noise levels using a 10m grid spacing at a receptor height of 4m above ground level. The value of the 'grid' is determined by the centre point of the grid and therefore, in reality, there may be some variation of noise levels within the grid. With a receptor point at 4m above ground level and the 'average' ear at about 1.2 – 1.5m above ground level, it is clear that strategic maps cannot be used to determine the level for any specific property or experienced by individuals.

4.22 Notwithstanding this, the completed maps can be interrogated to determine the number of people or properties within each noise band, the number of people or properties exposed to noise above any given level, etc. The noise maps can also be used to consider the effect of certain actions such as resurfacing a road or introducing noise barriers<sup>16</sup>.

### NHS Grampian Region

4.23 Noise contour maps for the region have been extracted from the aforementioned website and are included at **Appendix A** for information.

4.24 The noise maps indicate that there may be several noise hotspot locations where levels are predicted to exceed those recommended by the WHO. Within the NHSG region these are:

- Along the A96 through Elgin;
- Along the A96 near Huntly;
- Along a short section of the A944, to the east of Alford;
- Along the A90 corridor to the south of Aberdeen City;
- Along the north-western major routes into Aberdeen City;
- Aberdeen City Centre, centring on Union Street and Market Street;
- Area around Aberdeen Airport.

4.25 As can be seen in **Figures A.2 to A.7** in **Appendix A**, the noise levels can exceed 70 dB(A) along these roads and in particular in north-west Aberdeen where the level is between 75 – 80 dB(A) in some sections.

<sup>14</sup> <http://www.scottishnoisemapping.org/default.aspx>

<sup>15</sup> <http://www.scottishnoisemapping.org/public/view-map.aspx>

<sup>16</sup> <http://www.scotland.gov.uk/Publications/2007/08/24141743/8>

## Road Safety

### General

- 4.26 In March 2000, the UK Government, the then-Scottish Executive and the National Assembly for Wales announced a new national road safety strategy and casualty reduction targets for 2010. These new targets were introduced to focus on achieving a further substantial improvement in road safety over the next ten years, with particular emphasis on reducing child casualties.
- 4.27 The new targets, which are prescribed in the Department for Transport (DfT) document, 'Tomorrow's roads – safer for everyone', are based on the annual average casualty levels over the period 1994 to 1998. By 2010 it was hoped that there will be, compared with the average for 1994-98:
- A 40% reduction in the number of people killed or seriously injured (KSI) in road accidents;
  - A 50% reduction in the number of children KSI; and
  - A 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.
- 4.28 The Scottish progress against these 2010 targets is discussed below. These have been taken from the then-Scottish Executive report, 'Road Accidents Scotland 2005'. However, it is worth noting that provisional numbers of accidents and casualties have been published in the report 'Key 2006 Road Accident Statistics'. These have been used where appropriate.
- 2,908 people were provisionally reported as KSI in 2006, 40% (1,930) below the 1994-98 average of 4,838;
  - 368 children were reported as killed or seriously injured in 2005, 56% (474) below the 1994-98 average of 842; and
  - The slight casualty rate of 35 casualties per 100 million vehicle kilometres in 2005 was 25% below the 1994-98 baseline average of 46.
- 4.29 Hence all the targets for 2010, set in 2000, for road safety improvements have been met (assuming they can be sustained until 2010)

### NHS Grampian Region

- 4.30 In order to assess the progress of the NHSG region against the 2010 targets, the percentage change from the 1994-1998 baseline average has been compared against indicative target lines to the target for 2010. The comparisons are shown in **Figures A.8 to A.10** included in **Appendix A** for information.
- 4.31 Note that the indicative target lines are not straight lines, because of the 'compounding over the years' effect of constant annual percentage reductions. To two decimal places, the target annual reductions are: 3.58% p.a. for killed or seriously injured casualties; 4.83% p.a. for child killed or seriously injured casualties; and 0.75% p.a. for the slight casualty rate.

#### Best Practice Box: Safe Drive Stay Alive

In the region, the Safe Drive Stay Alive programme has provided a wealth of information to young drivers about the importance of safe driving. Every pupil in the Nestrans area in S4/5 has attended a workshop on road safety. The campaign has also recently used the social networking site, Bebo, to further convey the message.

### Key Facts - Aberdeen City

- 61 people were reported as KSI in 2006, 46% below the 1994-1998 annual average of 112;
- 9 children were reported Child KSI in 2005, 44% below the 1994-1998 annual average of 16; and
- The slight casualty rate of 33 casualties per 100 million vehicle kilometres in 2005 was 33% below the 1994-98 baseline average of 49.

4.32 Aberdeen City has achieved to date a greater percentage reduction in KSI casualties and slight casualty rate than the Scottish average. However the Child KSI percentage reduction (44%) is below the Scottish average of 56% but the indicative target for 2005 is a 36% reduction which has been achieved.

4.33 Therefore Aberdeen City is on course to achieve the three 2010 targets.

### Key Facts - Aberdeenshire

- 171 people were reported as KSI in 2006, 20% below the 1994-1998 annual average 215;
- 13 people were reported Child KSI in 2005, 32% below the 1994-98 annual average of 19; and
- The slight casualty rate of 24 casualties per 100 million vehicle kilometres in 2005 was 23% below the 1994-98 annual average of 49.

4.34 Aberdeenshire has failed to achieve the same degree of percentage reduction in KSI (20%) and Child KSI (32%) as the Scottish averages of 40% and 56% respectively. The indicative 2010 reduction target for KSI in 2006 was 31% and Child KSI in 2005 was 36%. Therefore it is clear that Aberdeenshire are falling short of the required percentage reduction to achieve the 2010 targets.

4.35 With regard to the slight casualty rate, Aberdeenshire has achieved the target reduction of 10% already, albeit it is below the Scottish average of 25%. The indicative target in 2005 was only a 7% reduction.

### Key Facts - Moray

- 47 people were reported as KSI in 2006, 32% below the 1994-1998 annual average of 69;
- 5 people were reported Child KSI in 2005, 44% below the 1994-98 annual average of 9; and
- The slight casualty rate of 26 casualties per 100 million vehicle kilometres in 2005 was 28% below the 1994-98 annual average of 36.

4.36 Moray has not achieved the same degree of percentage reduction in KSI (32%) and Child KSI (44%) as the Scottish average of 40% and 56% respectively. However, the indicative 2010 target have been exceeded, and thus Moray is on course to achieve the 2010 target.

4.37 With regard to the slight casualty rate, Moray has achieved a 28% reduction in 2005, which is greater than the Scottish average of 25%, thus the 2010 has been achieved so far.

## Issues

4.38 The previous section provides an overview of the transport and public health context and the findings of the background study. The key issues for promoting transport and public health in the region are now summarised below. While these include issues captured in the context above, they also include other issues identified throughout the HTAP process.

4.39 The key issues are as follows:

- **Aberdeen City AQMA** – poor air quality prevails in parts of Aberdeen City Centre, which has the potential to adversely impact on human health. Actions to address air quality are challenging and require buy-in from a range of stakeholders and transport authorities. Where actions have been implemented no progress towards reducing air pollution has been reported.
- **Background Noise** – Some key road links in the region contribute to high levels of background noise which may disturb local residents and lead to health impacts, particularly if sleep is disturbed. Actions to address noise require buy-in from a range of stakeholders and transport authorities.
- **Road Safety** – despite significant reductions in casualty rates in recent years too many people are killed or seriously injured on roads in the region and road safety continues to be a concern, particularly the high number of young casualties in the region.
- **Social Deprivation** – air quality is poorer and noise greater along busy roads where property is also less desirable. This means that, generally, residents of busy roads are from lower income groups and are more likely to suffer from poor health already. They are therefore more likely to be susceptible to the health impacts of pollution.
- **'Environmental Health' versus 'Transport Planning'** – within local authorities, air quality and noise the typically the responsibility of environmental health departments. Often they have little integration with transportation departments, who could have the ability to implement improvement measures.
- **Conflicting Policies and Projects** – some projects currently being pursued will exacerbate the Aberdeen AQMA. However, care needs to be taken that actions to address air quality do not lead to increased global emissions.

## Opportunities

4.40 Similarly, the HTAP process has allowed identification of key opportunities for transport and public health. These are perceived to be:

- **The Climate Change & Obesity Agenda** – the climate change agenda is arguably becoming a more pressing issue than those of air quality and noise and the increase in obesity is a much more pressing public health issue. This increased awareness of the external effects of travel presents an opportunity to address these issues collectively. Reduced car use, use of alternative, active and less polluting modes of travel and greater awareness of personal responsibility will equally address air quality and noise issues.
- **Partnership Working** – there is an opportunity for the environmental and transportation departments of ACC to work together better to address the city AQMA and implement the Air Quality Action Plan. Also, there is potential for the local authorities to work with Transport Scotland to develop Noise Action Plans and address the transport noise problems in the region.
- **Increased Active Travel** – increased active travel within the AQMA, where it reduces car trips, will improve air quality.

- **Increased Funding/Resources** – cross-funding opportunities may exist if air quality and noise benefits can be correlated with reduced CO<sub>2</sub> emissions, increased active travel, improved health, etc.
- **Reduced Car Use** – there is an opportunity to improve air quality and noise problems by reducing car use and congestion.
- **Road Safety** – continuing efforts for road safety improvements will reduce accident rates further.

## Constraints

4.41 The HTAP process has also led to identification of key constraints to improving the public health impacts of transport, which are perceived to be:

- **Public Acceptability** – measures required to substantially reduce air quality, noise and CO<sub>2</sub> ultimately require politically sensitive measures to tackle car use such as road user charging, congestion charging, low emission zones and controlled parking.
- **Lack of Awareness of Personal Responsibility** – habitual car users may not be aware of the direct impact they are having on problems such as noise and air quality or may not see it as their responsibility to change their behaviour.
- **'Accessibility' versus 'Environment'** – measures to reduce car use could be perceived as reducing accessibility to central Aberdeen.
- **Land Use Planning** – care must be taken that the existence of the Aberdeen AQMA does not result in less sustainable locations for development.

## 5 Transport & Public Health: Vision and Objectives

### Vision

5.1 The HTAP vision for transport and public health is:

For everyone in the region to live without exposure to poor air quality, high noise levels or a threat to personal safety associated with the transport network.

### Objectives

5.2 Key HTAP objectives required to achieve this vision are:

- To improve air quality within any designated Air Quality Management Area (AQMA) to a point where the AQMA is revoked.
- To minimise the number of people exposed to high noise levels.
- To minimise the rate of road accident casualties and achieve national road safety targets.
- To ensure actions achieve best value.

### Links with other Objectives & Outcome

- 5.3 The key linkages between the Health and Transport Action Plan (HTAP) and transport and public health objectives above and the objectives of the RTS are shown in **Table 5.1** below. The HTAP objectives make a strong contribution to RTS objectives and there are no conflicts with them.
- 5.4 In addition to the RTS objectives, it is prudent to ensure that the HTAP objectives do not conflict health objectives, specifically the corporate objectives of NHSG. Key linkages between these objectives are shown in **Table 5.2** below. The HTAP objectives make a strong contribution to the corporate objectives of NHSG and there are no conflicts with them.
- 5.5 For completeness, we have also compared the HTAP objectives to the emerging National Performance Framework for Scotland produced by the Scottish Government. It comprises high level targets, 15 'national outcomes', which define the vision for the future and 45 'indicators' by which progress will be measured. Key linkages between the HTAP objectives and their contribution to the 15 national outcomes are shown in **Table 5.3** below. There are no conflicts and, in some cases, the HTAP objectives make a strong contribution to the national outcomes.

**Table 5.1: Links between RTS and HTAP Objectives**

<p style="text-align: center;"><b>HTAP Objectives</b></p> <p><b>RTS Objectives</b></p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">To improve air quality in Aberdeen city centre to a point where the AQMA is revoked</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">To minimise the number of people exposed to high noise levels</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">To minimise the rate of road accident casualties and achieve national road safety targets</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">To ensure actions achieve best value</p>
<b>Economy</b>				
To make the movement of goods and people within the north east and to/from the area more efficient and reliable	○	○	○	✓
To improve the range and quality of transport to/ from the north east to key business destinations	○	○	○	○
To improve connectivity within the north east, particularly between residential and employment areas	○	○	○	○
<b>Accessibility and Social Inclusion</b>				
To enhance travel opportunities and achieve sustained cost and quality advantages for public transport relative to the car	○	○	○	✓
To reduce the number and severity of traffic related accidents and improve personal safety and security for all users of transport	○	○	✓✓	○
To achieve increased use of active travel and improve air quality as part of wider strategies to improve the health of north east residents	✓✓	✓✓	✓	○
<b>Environment</b>				
To reduce the proportion of journeys made by cars and especially by single occupant cars	✓✓	✓✓	○	○
To reduce the environmental impacts of transport, in line with national targets	✓✓	✓✓	○	○
To reduce growth in vehicle kilometres travelled	✓✓	✓✓	✓	○
<b>Spatial Planning</b>				
To improve connectivity to and within Aberdeen City and Aberdeenshire towns, especially by public transport, walking and cycling	○	○	○	✓
To encourage integration of transport and spatial planning and improve connections between transport modes and services	○	○	○	✓
To enhance public transport opportunities and reduce barriers to use across the north east, especially rural areas	○	○	○	✓

**Table 5.2: Links between NHSG and HTAP Objectives**

NHSG Objectives	HTAP Objectives	To improve air quality in Aberdeen city centre to a point where the AQMA is revoked	To minimise the number of people exposed to high noise levels	To minimise the rate of road accident casualties and achieve national road safety targets	To ensure actions achieve best value
<b>Improving Health</b>					
Improve the public's health		✓✓	✓✓	○	✓
Reduce inequalities		✓✓	✓✓	✓	✓
Protect the population from hazards which damage their health		✓✓	✓✓	✓✓	✓
<b>Financial</b>					
Meet Financial targets		○	○	○	✓✓
Redistribute resource in line with the Grampian Health Plan		○	○	○	✓
Ensure best value through continuous improvement		✓	✓	✓	✓✓
<b>Service Delivery &amp; Organisation</b>					
Improve access to healthcare services		○	○	○	✓
Shift the balance of care from hospital to community		○	○	○	✓
Meet appropriate clinical and non-clinical standards and ensure patient safety		○	○	○	○
<b>People</b>					
Ensure the public is involved, engaged and consulted on healthy living and in service planning and delivery		✓	✓	○	✓
Develop effective joint working with partners		✓	✓	✓	✓
Improve the public's awareness and satisfaction of our services		○	○	○	✓
<b>Learning &amp; Growth</b>					
Ensure effective staff involvement to achieve a healthy and positive work experience for staff		○	○	○	○
Ensure right numbers of staff with right skills, in right place		○	○	○	○
Promote the development of a flexible, creative, learning organisation		○	○	○	○

**Table 5.3: Links between National Outcomes and HTAP Objectives**

	National Outcomes	HTAP Objectives	To improve air quality in Aberdeen city centre to a point where the AQMA is revoked	To minimise the number of people exposed to high noise levels	To minimise the rate of road accident casualties and achieve national road safety targets	To ensure actions achieve best value
1	We live in a Scotland that is the most attractive place for doing business in Europe		✓	✓	○	✓
2	We realise our full economic potential with more and better employment opportunities for our people		○	○	○	✓
3	We are better educated, more skilled and more successful, renowned for our research and innovation		○	○	○	○
4	Our young people are successful learners, confident individuals, effective contributors and responsible citizens.		✓	✓	○	○
5	Our children have the best start in life and are ready to succeed		✓	✓	✓	○
6	We live longer, healthier lives.		✓✓	✓✓	✓✓	✓
7	We have tackled the significant inequalities in Scottish society		✓	✓	✓	✓
8	We have improved the life chances for children, young people and families at risk.		✓	✓	✓	✓
9	We live our lives safe from crime, disorder and danger.		✓	✓	✓✓	○
10	We live in well-designed, sustainable places where we are able to access the amenities and services we need.		✓✓	✓	✓✓	✓✓
11	We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others.		✓	✓	✓	✓
12	We value and enjoy our built and natural environment and protect it and enhance it for future generations.		✓✓	✓✓	○	✓
13	We take pride in a strong, fair and inclusive national identity.		○	○	○	○
14	We reduce the local and global environmental impact of our consumption and production.		✓✓	✓✓	✓	✓
15	Our public services are high quality, continually improving, efficient and responsive to local people's needs.		○	○	○	✓✓

## Access to Healthcare

## 6 Access to Healthcare: Key Issues, Opportunities & Constraints

### Introduction

- 6.1 The NHS Grampian region comprises the local authority areas of Aberdeen City and Aberdeenshire Councils (the Nestrans area) and also includes the Moray Council area.
- 6.2 As discussed briefly in Section 1, this study is being undertaken at a time of change within NHSG services. Some key planned services are being (or may be) relocated from acute centres to community-based settings, which will mean that the travel patterns of patients, visitors and staff will also change.
- 6.3 This section below sets out the baseline transport and accessibility context of the existing and future NHSG operation.

### Transport Context

- 6.4 In parallel with the geographic variations of the NHSG region, the transport system of the region is highly diverse. It ranges from the congested urban network of Aberdeen, where for many journey distances are short and public transport access good, to the remote rural areas of western/northern Aberdeenshire and eastern/northern Moray. Between these two extremes are a large number of smaller and larger towns with their own particular access issues and inter-urban transport corridors.
- 6.5 With Aberdeen City and Shire, the road and public transport networks are strongly focussed on radial links to the city centre. This results in high quality journey opportunities on some corridors but leaves many of those wishing to undertake journeys on orbital movements without strategic road links or direct public transport.
- 6.6 The vast majority of public transport journeys rely on the bus network; rail services are available only on the Dundee – Stonehaven – Aberdeen – Inverurie – Huntly – Elgin – Inverness corridor (and then only with limited frequency between Aberdeen and Inverness and with infrastructure that is geographically inaccessible for many people).
- 6.7 In common with all of the UK, delivery of transport services is fragmented between many stakeholders. Local authorities provide and maintain most roads but Trunk Roads (the A90, A96 and A95 in the region) are the responsibility of Transport Scotland.
- 6.8 Within the delivery of road-based public transport, the key players are:
- Local authorities (providing road and bus stop infrastructure, some information about and financial support for socially-necessary bus services);
  - Commercial bus operators (operating scheduled bus services, on fixed or demand responsive routes and providing some information on them); and
  - Demand Responsive Transport (DRT) and community transport operators (operating services using a variety of vehicle types, including private car, usually to specific target markets and on a not-for-profit basis).
- 6.9 Given that there are three local authorities and a wide variety of large and small bus operators, it is inevitable that co-ordination between services, fares and information does not always occur. However, there are good examples of high quality services operating in the region and Nestrans is

working actively with transport providers to improve public transport co-ordination through its emerging Bus Action Plan.

- 6.10 In addition, within the health sector, the Scottish Ambulance Service (SAS) is the provider of transport for a significant proportion of journeys. Many of the journey decisions are not made by the SAS, however with patients being referred by GPs or others booking medical appointments. These also therefore become key stakeholders in the transport system.
- 6.11 It is also acknowledged that other forms of transport play a role in enabling people to access healthcare. Taxis are a particularly important travel mode for people with impaired mobility and those without access to a car. However, taxis are usually an expensive option when compared to public transport, even when users hold a taxicard. The non-motorised modes of walking and cycling are of key importance too, especially for access to primary healthcare.
- 6.12 Private car remains the single most used mode for access to healthcare for patients and their visitors. This then places severe strain on objectives for sustainable travel, as well as demand for parking on and around NHSSG property. In addition to patient transport, there is non-negligible demand for travel generated by staff either on the commute or travelling on NHSG business. NHSG as an employer within the region.

## Accessibility Context

### Access to Acute Centres

- 6.13 By their very nature, hospitals tend to have catchment areas beyond their immediate local geographic boundary and result in a need for patients and visitors to travel beyond their local boundaries to access them.
- 6.14 Figures showing the patient flows and accessibility to the key acute hospitals in the region, namely Aberdeen Royal Infirmary (ARI), Woodend (also in Aberdeen) and Dr Gray's (in Elgin), are included in **Appendix B** for information. **Maps B.1 to B.3** show, geographically, the home postcodes of all patients (inpatient and outpatient combined) treated during the 2006/07 period at these hospitals.
- 6.15 **Map B.1** shows that the majority of the patients using ARI are located in Aberdeen City and Aberdeenshire, with the high proportion from Aberdeen itself and the immediate surrounding area. **Map B.2** displays a similar patient origin pattern to ARI, although the patient volume is significantly less. **Map B.3** indicates that the majority of the patients treated at Dr Grays in Elgin originated from within Moray and Aberdeenshire, with only a limited amount from Aberdeen City.
- 6.16 The maps indicate the number of patients accessing services at these hospitals from outside the region. NHSG estimates 7% of all its specialist activity comes from outside the region, mostly from communities in Orkney, Shetland, the Western Isles and in Tayside.
- 6.17 **Maps B.4 to B.6** below show the public transport accessibility of these key acute hospitals for the region between the hours of 10:00 and 16:00. These show that public transport accessibility to the key centres is focussed around the key settlements, as can be expected. There are parts of the region with little or no public transport accessibility to acute centres. For ARI and Woodend, these are within Aberdeenshire and Moray and are locations outwith the main settlements where there are no bus routes present. Nevertheless, in many parts of Aberdeenshire and all of Moray, where there is access to bus services, the journey time to ARI and Woodend is over 90 minutes. However almost all of Moray is within a 90 minute bus journey of Dr Gray's. All of Aberdeen City and the majority of Aberdeenshire are over 90 minutes by bus from Dr Grays.

- 6.18 **Maps B.7 to B.9** below then show the relative accessibility of each of the hospitals by private car for the region. The maps indicate that most of the region can access their nearest acute centre within 60 minutes.
- 6.19 For the purposes of calculating drive times, a set of assumptions have been made about road speeds. Accession derives road speeds from the road type speed limit that is included within the database of roads used, in this case the OSCAR road centreline database. In order to represent average road speeds, rather than speed limits, a further assumption that speeds are two thirds of the speed limit for the road type has been applied.

#### Access to Community Hospitals

- 6.20 It is envisaged that service redesign within NHSG will alleviate some of the pressure currently experienced at these acute centres by relocating selected key services to a larger number of community-based settings.
- 6.21 In particular, some **planned care** (appointments, treatments and operations) is being relocated to the supporting community hospitals or, indeed, to alternatives such as self care and telemedicine, where, for example, consultations are held with patients via video link.
- 6.22 The vision is that relocation of some appropriate planned care services will enable the acute centres to be re-organised and focus on specialist skills and facilities. 'Healthfit' (an NHSG document that sets out the principles of the redesign) sets a target for 40% of all outpatient activity to be managed in alternative ways by 2010.
- 6.23 In addition, NHSG is developing a new approach to care, termed **intermediate care**. Intermediate care services are targeted at patients who no longer require the specialist focus of one of the acute centres, but still require more care than can currently be provided by a local GP. It is envisaged these patients will be treated at one of the community hospitals or, alternatively, at home with support from a local nurse. 'Healthfit' sets a target for 25% of inpatient activity to be managed in community settings by 2008.
- 6.24 In some ways, the 'localisation' of these services, which are currently provided at the acute centres, may be seen to address the problems of wide catchment areas discussed above. For much of the population, the relocation of services to a large number of community settings will ease access to healthcare services as journey distances (and hence costs and times) will be reduced.
- 6.25 However, for some, and particularly those reliant on public transport, local does not necessarily mean more accessible and relocation of services may cause real accessibility issues for

#### Best Practice Box: Linking Foresterhill

In 2004, NHSG, Aberdeen City Council, and the University of Aberdeen won the NHS Scotland Property & Environment Award for the 'Linking Foresterhill' bus improvement project.

The partnership has already secured improved bus services to the site, as well as other sustainable transport improvements such as improved bus shelters and timetable information, cycle lockers, a car share scheme and transport information and awareness raising measures. Improvement of transport infrastructure around Foresterhill is ongoing with development of the masterplan.

One of the aspirations of the 'Linking Foresterhill' project included the development of branded bus service along the Woodend – Summerfield – Woodhill – Foresterhill – Cornhill corridor (albeit that this service is yet to commence operating).

some people.

- 6.26 As an example, figures showing the future accessibility of proposed relocated services in the Aberdeenshire area are included at **Appendix C** for information. **Maps C.1 to C.12** show the transport and accessibility implications of relocating outpatients or those requiring intermediate care to some community-based hospitals in the Aberdeenshire area.
- 6.27 **Note:** While it is acknowledged that there are likely to be some service relocations in Aberdeen city centre and Moray, detailed proposals of these were not available at the time of writing. The maps in **Appendix C** therefore serve to show the potential implications of relocating services within Aberdeenshire on those living within Aberdeenshire. In some cases, patients living in Aberdeenshire may still travel into ARI or Woodend for treatment, so these maps are not intended to show definitive accessibility. Rather, they serve to indicate the potential impact on accessibility that might arise from service redesign in Aberdeenshire.
- 6.28 **Maps C.1 to C.7** then show public transport accessibility to the nearest Aberdeenshire-based service proposed under the relocation. Map C.1 shows accessibility to the nearest community hospital, all of which will provide services for dermatology, minor surgery, orthopaedics, diabetes, elderly care and INR blood testing. Maps C.2. to C.7 then show specific accessibility to cardiac assessment, chemotherapy, endoscopy, ear, nose and throat (ENT) services, renal dialysis and GP ultrasound respectively.
- 6.29 As for the acute services, public transport accessibility is highest in the main settlements and along key public transport routes, as expected. Comparing these maps with those for the acute centres (**Maps B.4 to B.6**) shows that the planned relocations increase the number of Aberdeenshire households living within fifteen minutes journey time of key services (i.e. increased 'red' areas, such as Inverurie).
- 6.30 The maps also indicate that, for other areas, accessibility remains higher to services located within the acute centres than to those within local community hospitals (for example, those living in Oldmeldrum comparing map B.4 and maps C.1 to C.6). The relocation of services could therefore result in real accessibility issues for patients if it is not properly considered when patients are assigned appointments.
- 6.31 It should also be noted that, for outpatients in particular, these services are an important part of patient rehabilitation and that any accessibility issues may affect those with already restricted transport opportunities, including people with impaired mobility and those that require specialist care.
- 6.32 Similarly, the ability of inpatients to receive visitors is also recognised as a key contributor to rehabilitation. Accessibility of the community hospitals will be substantially lower than that of the acute centres during conventional evening visiting hours for some people, especially those dependent on public transport.
- 6.33 **Maps C.8 to C.14** then show the comparative drive times to the proposed relocated services in Aberdeenshire. These indicate that, for those with access to a private car, the relocation of services will almost certainly be more accessible than the acute centres alternatives.

#### Access to Emergency Care

- 6.34 It is noted that a significant amount of patient transport to Accident and Emergency (A&E) services is undertaken by 'blue light' emergency ambulance services provided by the Scottish Ambulance Service (SAS). Even if a patient is not transported by SAS 'blue light' ambulance, it is unlikely that,

in an emergency, they will be in a position to make a choice about their mode of transport. To a certain extent, therefore, accessibility to A&E services has limited scope in the context of this study.

6.35 However, accessibility has a key role to play when considering how patients (and carers) travel from A&E services once discharged.

6.36 In its document, 'Fair to All, Personal to Each', published in 2004, the then-Scottish Executive announced a target for all patients to be seen and either discharged or transferred from A&E within four hours of arrival.

6.37 During meetings with key NHSG staff, it was noted that poor transport accessibility, particularly to get patients home or away from A&E, has a direct impact on the ability of NHSG to meet this target.

#### Scottish Ambulance Service

6.38 The SAS is a Special Health Board directly funded by the Health Department of the Scottish Government and provides patient transport services over the largest geographic area of any ambulance service in the UK.

6.39 In addition to 'blue light' emergency ambulance and rapid response transport to A&E facilities, the SAS also provides a much utilised Non-Emergency Patient Transport Service (NEPTS). The SAS has a particularly important role providing 'lifeline' services to people living in remote communities including the Western Isles, Orkney and Shetland. SAS operates a dedicated 'Air Wing' comprising two helicopters and four fixed wing aircraft in addition to its ground-based vehicle fleet.

6.40 The NEPTS Vision sets out a categorisation of patients eligible for NEPTS. Under this Vision, all patient conditions and clinics/wards have been categorised into one of three different categories which prioritise the need for ambulance transport:

- Priority 1 – Cardiac, Cancer, Renal, Mental Illness;
- Priority 2 – Invasive Diagnostic, X-Ray, Endoscopy, etc;
- Priority 3 – General Appointments, Day Care Patients, Physiotherapy, etc.

6.41 The NEPTS booking procedures require the clinician to ensure that the patient has a genuine 'medical need' for transportation within each of these categories. From March 2005, SAS has implemented a policy to decline requests for transport of patients with a social or geographic (but not medical) need and to provide those patients with information about alternative transport.

6.42 'Medical need' is defined by SAS as:

- a high expectation that the patient may require first aid or personal care;
- a lifting/handling requirement; or
- where the patient's condition is sufficiently fragile that they are likely to deteriorate if they travel by other means.

#### Best Practice Box: Egress from A&E

Investigating breaches in the four hour A&E target, the Unscheduled Care Collaborative and Operational Support team at ARI recognised that lack of transport away from the site was a key factor in many breaches.

They have undertaken a short trial of a dedicated 'out of hours' minibus service between ARI and Woodend. The bus transported both patients admitted from A&E and those entering intermediate care. The trial made use of a G-MED minibus and funding was provided for a dedicated driver. A report is being prepared and breaches due to transport are now recorded as a distinct issue. It is expected that, following the report, an improved service will be provided with a wheelchair loading vehicle.

- 6.43 Further to the categories above, NEPTS movements are also categorised by the mobility of the patient transported as follows:
- C - Patient requires little or no assistance and can travel by car;
  - C1 - Patient requires assistance of one person but must travel in an ambulance (e.g. long leg plaster);
  - C2 - Patient requires assistance of two persons to move from house to vehicle and back, or requires oxygen therapy;
  - C5 - Patient requires treatment from trained crew (e.g. suction, high oxygen dose, ECG monitor); and
  - Str - Patient requires to lie down in the vehicle and is unable to sit during transportation.
- 6.44 Despite existing booking policies, anecdotal evidence gained throughout the course of this background study suggests that the NEPTS may not always be used appropriately and that there are instances of journeys booked for patients who could have accessed healthcare services by alternative means.
- 6.45 The NEPTS has provided patient journey information for the period October 2006 to September 2007. The data contains information on the category and mobility classification of the patient together with their journey origin and destination details. The GP practice that made the referral to the NEPTS has been provided where appropriate.
- 6.46 In total there were 54,050 NEPTS journeys, of which 8,064 were booked by GP referral. Others were possibly booked by staff within care facilities. **Tables 6.1 and 6.2** below show the total number of NEPTS journeys under each priority and mobility classification. There is a slight difference in totals due to incomplete records in the dataset.

**Table 6.1: NEPTS Patient Journey by Priority**

Priority Classification	All NEPTS Journeys (including GP referral)	NEPTS Journeys by GP referral
Priority 1	14,833 (27%)	8,77 (11%)
Priority 2	9,212 (17%)	2,946 (36%)
Priority 3	30,000 (56%)	4,241 (53%)
<b>Total</b>	<b>54, 045 (100%)</b>	<b>8,064 (100%)</b>

**Table 6.2: NEPTS Patient Journey by Mobility**

Mobility Classification	All NEPTS Journeys	NEPTS Journeys by GP referral
C	16,617	5,550
C1	26,617	1,757
C2	8,973	656
Cat 5	135	7
Str	1,708	96
<b>Total</b>	<b>54,050</b>	<b>8,666</b>

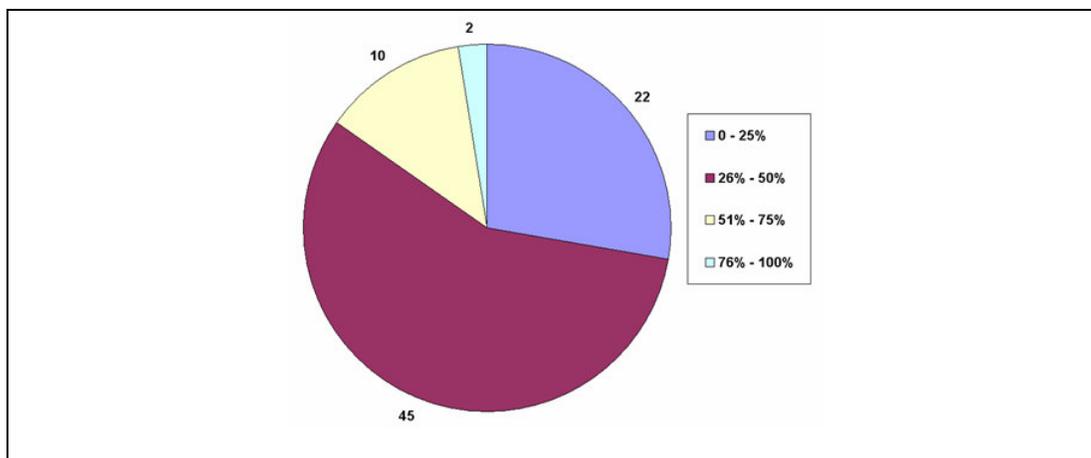
- 6.47 The tables above suggest that 'Priority 3' patients comprise 30,000 journeys, 56% of the total NEPTS journeys for the time period. The NEPTS has confirmed that 'Priority 3' patients are the first ones to be removed from the system if there are pressures on capacity.
- 6.48 Anecdotal evidence also suggests that some GP practices do not strictly adhere to the 'medical need' criteria listed above when booking patients onto the service. However, the data provided does not enable this to be readily inferred as NEPTS will transport 'Priority 3' patients if space permits. However, we can use the dataset to infer the number of journeys which could, in theory, be undertaken by alternative modes.
- 6.49 Although the priority classification is dictated by the clinic the patient is attending, the mobility classification is partly subjective and provided by the person making the booking. With this in mind, it may be reasonable to assume that those patients who are 'Priority 3' with a 'C' classification, i.e. 'Priority 3/C', are amongst the most capable, medically speaking, of travelling to a health service via an alternative such as private car, taxi or by a scheduled or demand responsive public transport service.
- 6.50 **Table 6.3** below shows that 21% of all patients classified as 'Priority 3' are a 'C' mobility; overall 'Priority 3/C' patients account for 10% of the total NEPTS journeys for the time period used.

**Table 6.3 NEPTS Patient Journeys by Priority 3 Classification & Mobility**

Priority 3 Classification	All NEPTS Journeys	NEPTS Journeys by GP referral
C	5,359 (21%)	2,898
C1	11,541 (45%)	933
C2	7,298 (28%)	351
Cat 5	122 (0.5%)	5
Str	1,439 (5.5%)	54
<b>Total</b>	<b>25,759 (100%)</b>	<b>4,241</b>

- 6.51 **Figure 6.1** below shows the proportion of total GP referrals that are 'Priority 3/C' patients and the total number of GP practices within each range. Only GP practices with 10 or more referrals in total have been taken into consideration.
- 6.52 The chart shows that there are 12 GP surgeries where over 50% of all referrals are 'Priority 3/C' patients. 45 surgeries are within the 26% to 50% bracket and 22 practices in the 0% to 25% bracket.
- 6.53 As noted above, these results should not be used to infer 'misuse' of the NEPTS as SAS has confirmed that, space permitting; they will carry Priority 3 patients. However, the results do indicate that there is potential to ensure stricter adherence to 'medical need' criteria at the booking stage. This, coupled with provision of information about alternative transport options as the appointment is made, could reduce demand for the NEPTS.

**Figure 6.1: Proportion of GP Referrals which are 'Priority 3/C Patients'**



6.54 Although we have not received data for the NHSG region, there is anecdotal evidence that a significant number of NEPTS journeys are wasted (i.e. that the service arrives at a patient's house to find nobody home or that the health appointment has been cancelled). In the Glasgow region, we understand that as much as 9% of journeys are wasted. Every wasted journey of course reduces the opportunity for the NEPTS to transport patients with genuine need.

#### **Access to Primary Services**

- 6.55 Primary care services comprise some 90% of all NHS interactions with the public in Scotland.
- 6.56 Throughout the NHSG region there are no prescriptive catchment areas for GPs and residents have the right to choose whichever GP facility they deem preferable. This means that patients can include consideration of the accessibility of surgeries when deciding which GP to choose.
- 6.57 Maps showing the accessibility of GP facilities and pharmacies in the region are included at **Appendices D and E** respectively for information.
- 6.58 **Maps D.1 and D.2** show the accessibility of the region by public transport to the nearest GP surgery in Aberdeen city during the daytime (10:00 – 16:00) period. Figure D.3 and D.4 show the drive time to the nearest GP surgery in Aberdeen city.
- 6.59 For most residents in Aberdeen, there is good public transport accessibility to GP facilities.
- 6.60 Similarly, **maps D.5 and D.6** show the public transport accessibility and drive times respectively to the nearest GP surgery in Moray and Aberdeenshire. The figures show that accessibility to local GPs by public transport improves for residents living in Aberdeenshire and Moray registered with local GPs.
- 6.61 It is noted that it is not feasible to model access to every GP, but patient choice implies that access to the most convenient GP surgery should be sufficient. The maps indicate that there are still residential areas where there is limited public transport accessibility. As expected, these are areas outside of key settlements and off public transport routes.
- 6.62 In addition to GP facilities, the redesign of services also focuses on the importance of self-care and preventative care. Accessibility to pharmacies is therefore an important topic, and accessibility maps are included at **Appendix E** for information.

- 6.63 **Maps E.1 and E.2** show the accessibility of the region by public transport to the nearest pharmacy during the daytime (10:00 – 16:00) period. **Maps E.3 and E.4** show the drive time to the nearest pharmacy. As for GPs, public transport accessibility to pharmacies within the city is fairly good for all those living in the city centre. However, as expected, there are some areas on the wider region where accessibility by means other than the private car becomes challenging.
- 6.64 Also of importance is accessibility of NHS dental services and local opticians, though these have not been included in the accessibility model at the time of writing.
- 6.65 NHSG has recently been under pressure to provide more NHS dental facilities for patients due to a shortage of available dentists in the region. As an example, it is understood that new services have recently been provided at community facilities in Buckie and Keith, which is also expected to serve patients outside of these towns. Anecdotal evidence suggests that transport was not factored into the decision to provide these facilities, and as a result they are not easily accessible by public transport for a large proportion of the population likely to require the services they provide.

## Telemedicine

- 6.66 In addition to considering accessibility to key healthcare services, it is important to note that measures to actively reduce the need to travel to and from appointments are also included in the redesign of NHSG through promotion of alternatives such as telemedicine.
- 6.67 Telemedicine involves using advances in technology such as video-conferencing to undertake 'remote' diagnosis and advice, without the need for either the patient or NHSG staff to travel.

## Missed Appointments

- 6.68 NHSG has a wealth of data regarding the number of missed appointments, by postcode sector, within NHSG over the last year. This data has been triple standardised to reflect age, sex and postcode sector deprivation category of each patient who missed an appointment.
- 6.69 While this data will not show all those appointments missed due to transport, it will allow comparisons about relative accessibility to be drawn and can be used to provide further information about the impact of transport accessibility on the ability of patients to access to healthcare.

## Issues

- 6.70 The sections above serve to provide an overview of the transport and accessibility issues of healthcare in the region. However, it is noted that several other key issues were also identified, though not covered above.
- 6.71 The key issues identified during the background study are summarised below:
- **'Local' versus 'Accessible'** – localisation of services means travel patterns will become less radial and more cross-regional, so although average journey distances should fall and many patients and visitors will benefit, some people without private transport could be inconvenienced and greater pressure may be placed on the NEPTS.
  - **Responsibility for Accessibility** – there is a lack of clear policy on who is responsible for patient transport and who should ensure that patients can actually access appointments they are given.

- **Inappropriate Use of the NEPTS** – anecdotal evidence suggests that there is a perceived misuse of the NEPTS, with patients being booked for transport where there is no medical need. Available data indicates that there were a substantial number of Priority 3, Category C patients transported by NEPTS in the 2006/07 period. These patients are lowest in the NEPTS priority and are fully mobile, so could potentially have travelled by other means.
- **Cost of Transport** – cost of travel to healthcare is a key constraint to many patients and visitors, especially for longer journeys to acute centres or if taxi services are required. If new transport is being provided, economic appraisal is necessary to understand who should and will bear the costs of improved services.
- **NHSG/SAS Pressures and Priorities** – in considering location (and relocation) of services, NHSG and SAS are under pressure to meet various Government targets which do not include accessibility. For NHSG, the priority is to provide patient care. This means the transport consequences may not be given detailed consideration.
- **Diversity of Need** – access to healthcare is required by people with a wide variety of different needs, from those who require medical assistance and support to more mobile individuals accessing their GP, dentist or optician for a routine check-up.
- **Very Restricted Mobility/Housebound Patients** – from experience elsewhere, we also note that there may be an issue of patients with very restricted mobility, or indeed that are housebound, not being able to access to self care or preventative care measures and becoming acute patients as a result.
- **Use of Scheduled Public Transport** – it is also important to note that a large part of the demand for access to healthcare, particularly for visitors, comes at times outside of weekday daytimes when transport choice is limited. Also, the traveller may already be under duress, either as a patient or a visitor and finding information on transport choices may not be a high priority.
- **Missed Appointments & Targets** – evidence suggests that transport is a main reason cited by patients for missing a healthcare appointment. Also, anecdotal evidence suggests poor transport accessibility is a factor in some key NHS targets not being met (e.g. A&E 'four hour' target).
- **'Physical' versus 'Social' Accessibility** – just because a patient can theoretically access site a site by public transport doesn't mean they can actually use that service. Anecdotal evidence suggests that, for many patients, the cost of public transport is a problem. Also, there are other social barriers to consider such as perceptions of safety and the ability of a patient (with, for example, mental health issues) to travel by public transport.
- **Diversity of the Region** – the region comprises both urban conurbation and rural settlements. Also, there is cross boundary demand from neighbouring regions of Hitrans, Zettrans and Tactran.
- **Diversity of the Population** – as with most of Scotland, the population in the region is ageing, which exacerbates accessibility issues. Also, the demand for access to healthcare often comes at a time when transport options or choices are already limited, for example, frail or elderly people or people with impaired mobility. In addition, transport accessibility is often worse in deprived areas so social exclusion is concern.
- **Range of Transport Providers** – there is a wide range of transport providers from conventional public transport services through to DRT providers and both formal and informal community and voluntary services. Taxis also have an important role to play, although there are cost issues related to this mode.

- **Land Use Planning #1** – currently NHSG is not a statutory consultee in the development planning process although they are involved in the Local Development Framework (LDF) process. Development proposals influence the demand for healthcare in surrounding areas.
- **Land Use Planning #2** – there is currently no consistent requirement for public transport accessibility to be considered in Transport Assessment (TA) supporting development of new healthcare facilities.

## Opportunities

6.72 Similarly, the HTAP process identified key opportunities for improving access to healthcare. These are perceived to be:

- **Partnership Working** – the HTAP itself is an example of the good partnership working that already exists between Nestrans and NHSG. There is an opportunity to endorse a long-term commitment to collaborative working between all stakeholders. This could include a partnership approach between NHSG and its component local authorities, Nestrans, the SAS, public transport operators, DRT and community transport operators, volunteer groups and the neighbouring RTPs.
- **Responsibility for Accessibility** – there is potential for greater consideration to be given to patient transport and accessibility as appointments are made to ensure that patients can access the appointment by appropriate means.
- **Increased Transport Awareness** – increased awareness of alternatives to both private car and the over-subscribed NEPTS is important where these alternatives exist, i.e. public transport, DRT, community transport and, importantly, walking and cycling where practical. Awareness should be raised with both patients and GPs/NHSG staff alike, as they may be able to influence patient transport choice.
- **Development and Implementation of NHSG Site Travel Plans** – staff Travel Plans have an important role to play in reducing private car use. There is an opportunity to extend Travel Plans to include improvements for visitors and patients also, i.e. increased public transport/DRT awareness, improved signage, etc.
- **Improved Transport Infrastructure** – in addition to information, it is important that the social obstacles to use of alternatives to the car are addressed. Public transport and DRT services should be clean, safe and run efficient, reliable and have appropriate timetables, particularly where interchange is required. The whole journey experience should be pleasant, with well presented, sheltered stations and stops and well maintained footways.
- **Improved Transport Services** – in some cases, revision of existing transport services to provide access to healthcare services or provision of new transport options may be needed to address specific accessibility issues. In particular, enhanced DRT or community transport present a real opportunity to address accessibility in more rural areas.
- **Improved Health Service Planning** – there is an opportunity for NHSG to consider the transport consequences of its redesign at the planning stage. Through efficient partnership working and foresight, some accessibility issues can be addressed proactively rather than reactively.
- **Integrated Health, Transport and Spatial Planning** – integration of health, transport and development planning presents an opportunity to ensure historical access issues are not continued into new development. Proper consideration of transport and accessibility in development planning for new healthcare services would identify issues early and allow them to be addressed.

- **Increased Funding/Resources** – like many public bodies, Nestrans, NHSG and the local authorities have finite funding and resources to dedicate to improvements. Increased funding streams dedicate to improving access to healthcare could overcome some key issues.
- **Telemedicine** – telemedicine has the potential to reduce the need for patients to travel to access healthcare services where they can be treated remotely from home or their local GP.

## Constraints

6.73 Key identified constraints to improving access to healthcare are perceived to be:

- **Fragmented Transport Delivery System** – responsibilities for transport delivery lies with a variety of stakeholders.
- **Social Exclusion** – it is important that actions and measures within the HTAP do not lead to exclusion of key groups, for example those socially less able to access public transport facilities.
- **Busy Staff** – as with many organisations, staff in the health sector are all busy and transport concerns are not automatically considered part of their remit.
- **'Healthcare' versus 'Transport Planning'** – NHSG staff have an obligation and priority to provide patient care and not all NHSG staff see patient transport as their responsibility.
- **'Transport Planning' versus 'Healthcare'** – likewise, the transport network carries people other than those accessing healthcare and it is not possible for the transport system to focus solely on access to health.
- **Dynamic Health Service Provision** – actions to improve access to healthcare need to be dynamic as healthcare provision and services are constantly changing.
- **Financial Constraints** – solutions to accessibility may seem obvious but funding constraints often limit what can be taken forward.

## 7 Access to Healthcare: Vision and Objectives

### Vision

7.1 The HTAP vision for access to healthcare is:

For all patients, visitors and staff to be able to access healthcare by convenient, affordable transport appropriate to their needs. For the environmental impacts of journeys to healthcare services to be minimised.

### Objectives

7.2 Key HTAP objectives required to achieve this vision are:

- To make transport to healthcare accessible for all, both physically and socially.
- To make healthcare accessible and socially inclusive.
- To ensure transport to healthcare is undertaken by sustainable modes wherever possible.
- To ensure actions achieve best value.

### Links

7.3 The key linkages between the Health and Transport Action Plan (HTAP) Access to Healthcare objectives above and the objectives of the RTS are shown in **Table 7.1** below. The HTAP objectives make a strong contribution to RTS objectives and there are no conflicts with them.

7.4 In addition to the RTS objectives, it is prudent to ensure that the HTAP objectives do not conflict health objectives, specifically the corporate objectives of NHSG. Key linkages between these objectives are shown in **Table 7.2** below. The HTAP objectives make a strong contribution to the corporate objectives of NHSG and there are no conflicts with them.

7.5 For completeness, we have also compared the HTAP objectives to the emerging National Performance Framework for Scotland produced by the Scottish Government. It comprises high level targets, 15 'national outcomes', which define the vision for the future and 45 'indicators' by which progress will be measured. Key linkages between the HTAP objectives and their contribution to the 15 national outcomes are shown in **Table 7.3** below. There are no conflicts and, in some cases, the HTAP objectives make a strong contribution to the national outcomes.

**Table 7.1: Links between RTS and HTAP Objectives**

RTS Objectives	HTAP Objectives	To make transport to healthcare accessible for all, both physically and socially	To make healthcare accessible and socially inclusive	To ensure transport to healthcare is undertaken by sustainable modes wherever possible	To ensure actions achieve best value
<b>Economy</b>					
To make the movement of goods and people within the north east and to/from the area more efficient and reliable		✓	✓	✓	✓
To improve the range and quality of transport to/ from the north east to key business destinations		○	○	○	○
To improve connectivity within the north east, particularly between residential and employment areas		✓	✓	✓	○
<b>Accessibility and social inclusion</b>					
To enhance travel opportunities and achieve sustained cost and quality advantages for public transport relative to the car		✓	✓	✓	✓
To reduce the number and severity of traffic related accidents and improve personal safety and security for all users of transport		✓	✓	○	○
To achieve increased use of active travel and improve air quality as part of wider strategies to improve the health of north east residents		○	○	✓	○
<b>Environment</b>					
To reduce the proportion of journeys made by cars and especially by single occupant cars		○	○	✓	○
To reduce the environmental impacts of transport, in line with national targets		○	○	✓	○
To reduce growth in vehicle kilometres travelled		○	○	✓	○
<b>Spatial Planning</b>					
To improve connectivity to and within Aberdeen City and Aberdeenshire towns, especially by public transport, walking and cycling		✓	✓	✓	✓
To encourage integration of transport and spatial planning and improve connections between transport modes and services		✓✓	✓✓	✓✓	✓
To enhance public transport opportunities and reduce barriers to use across the north east, especially rural areas		✓✓	✓✓	✓✓	✓

**Table 7.2: Links between NHSG and HTAP Objectives**

NHSG Objectives	HTAP Objectives	To make transport to healthcare accessible for all, both physically and socially	To make healthcare accessible and socially inclusive	To ensure transport to healthcare is undertaken by the most sustainable mode possible	To ensure actions achieve best value
<b>Improving Health</b>					
Improve the public's health		✓✓	✓✓	✓	✓
Reduce inequalities		✓✓	✓✓	✓	✓
Protect the population from hazards which damage their health		✓	✓	✓	✓
<b>Financial</b>					
Meet Financial targets		✓	✓	✓	✓✓
Redistribute resource in line with the Grampian Health Plan		✓	✓	✓	✓
Ensure best value through continuous improvement		✓	✓	✓	✓✓
<b>Service Delivery &amp; Organisation</b>					
Improve access to healthcare services		✓✓	✓✓	✓	✓
Shift the balance of care from hospital to community		✓	✓	✓	✓
Meet appropriate clinical and non-clinical standards and ensure patient safety		○	○	○	○
<b>People</b>					
Ensure the public is involved, engaged and consulted on healthy living and in service planning and delivery		○	○	○	✓
Develop effective joint working with partners		✓	✓	✓	✓
Improve the public's awareness and satisfaction of our services		○	○	○	✓
<b>Learning and Growth</b>					
Ensure effective staff involvement to achieve a healthy and positive work experience for staff		○	○	○	○
Ensure right numbers of staff with right skills, in right place		○	○	○	○
Promote the development of a flexible, creative, learning organisation		○	○	○	○

**Table 7.3: Links between National Outcomes and HTAP Objectives**

	National Outcomes	HTAP Objectives	To make transport to healthcare accessible for all, both physically and socially	To make healthcare accessible and socially inclusive	To ensure transport to healthcare is undertaken by sustainable modes wherever possible	To ensure actions best value
1	We live in a Scotland that is the most attractive place for doing business in Europe		✓	✓	✓	✓
2	We realise our full economic potential with more and better employment opportunities for our people		✓	✓	✓	✓
3	We are better educated, more skilled and more successful, renowned for our research and innovation		○	○	○	○
4	Our young people are successful learners, confident individuals, effective contributors and responsible citizens.		○	○	○	✓
5	Our children have the best start in life and are ready to succeed		○	○	○	○
6	We live longer, healthier lives.		✓✓	✓✓	✓✓	✓
7	We have tackled the significant inequalities in Scottish society		✓	✓	✓	✓
8	We have improved the life chances for children, young people and families at risk.		✓	✓	✓	✓
9	We live our lives safe from crime, disorder and danger.		○	○	○	○
10	We live in well-designed, sustainable places where we are able to access the amenities and services we need.		✓✓	✓✓	✓✓	✓✓
11	We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others.		✓	✓	✓✓	✓
12	We value and enjoy our built and natural environment and protect it and enhance it for future generations.		✓	✓	✓✓	✓
13	We take pride in a strong, fair and inclusive national identity.		✓	✓	○	○
14	We reduce the local and global environmental impact of our consumption and production.		✓	✓	✓✓	✓
15	Our public services are high quality, continually improving, efficient and responsive to local people's needs.		✓✓	✓✓	✓	✓✓



## Appendix A

### Air Quality, Noise & Road Safety



# Appendix B

## Acute Hospital Maps



# Appendix C

## Community Hospital Maps



## Appendix D

### GP Maps



# Appendix E

## Pharmacy Maps