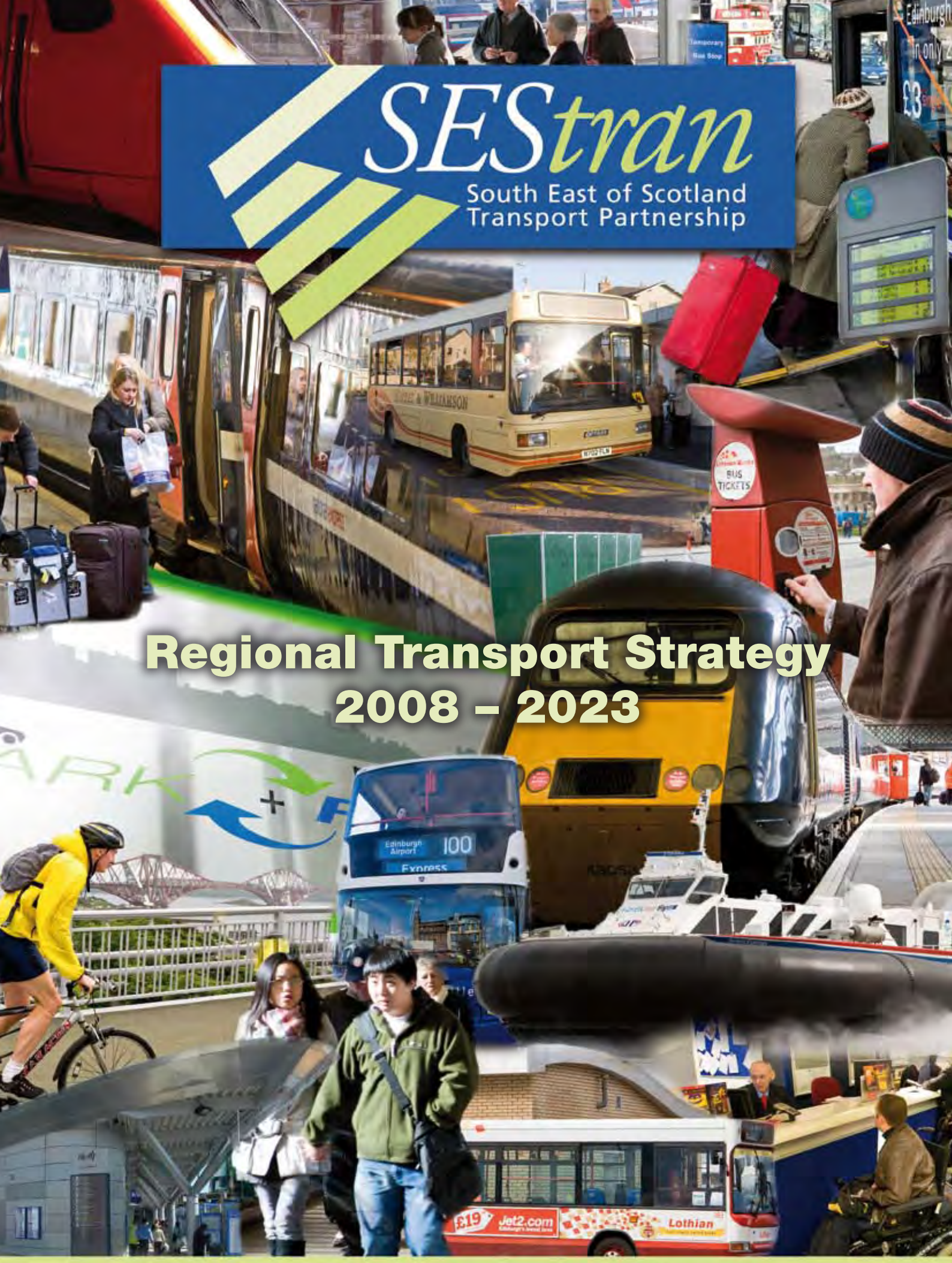

Regional Transport Strategy 2008 – 2023

Clackmannanshire Council · Edinburgh · East Lothian Council · Falkirk Council · Fife Council · Midlothian · Scottish Borders Council · West Lothian Council

As Chair of SEStran, I am proud to introduce our Regional Transport Strategy. It represents an historic first opportunity to plan for the long-term transport needs of over 1.5 million people, living in Scotland's most economically vibrant region. In developing the strategy, we have consulted extensively with stakeholders and the public, to ensure that as wide a range of views as possible from around the region are reflected.

South East Scotland needs a transportation system that is comprehensive, sustainable and inclusive. It must meet the needs of business and ensure that people living in the region can share in its prosperity. It must provide a choice of suitable transport options that will improve access to health care, education, public services and employment opportunities. It must also contribute towards reducing the emissions of greenhouse gases, and reducing the growing problem of traffic congestion.

Through our Regional Transport Strategy, SEStran wants to encourage people to make smarter choices when travelling. We want them to consider a range of transport options, including; cycling and walking, making sensible use of their cars, avoiding single occupancy journeys wherever possible, and by making public transport their travel mode of choice.

We are already supporting a significant programme of initiatives that offer real added value to public transport provision. In 2006-7 alone we supported over 50 infrastructure improvement projects, in partnership with local authorities. In 2007/8 we have spend an additional £15 million on projects ranging from park and ride, to bus priority schemes and improved cycle paths. Over the next 15 years, we hope to invest almost £170 million in improving infrastructure and transport services throughout the South East Scotland in partnership with our eight constituent local authorities, as the Regional Transport Strategy is implemented.

The Regional Transport Strategy is no quick fix. It will take time, planning and resources to ensure that South East Scotland has a transportation system that fully meets the needs of the whole community. It will also take close cooperation with a wide range of partners and stakeholders. SEStran aims to make that system a reality, starting now.

Russell Imrie, Chair SEStran

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This document is the Regional Transport Strategy (RTS) prepared for the South East Scotland Transport Partnership (SEStran). SEStran is one of seven new statutory Regional Transport Partnerships (RTP) which have been established to provide a regional perspective on transport in Scotland. The purpose of this RTS is to set out a clear framework for the future direction of investment in, and management of, transport in the SEStran area for the next 10-15 years.

Since March 2006, a process of consultation and strategy development has been undertaken leading to the publication of a draft RTS in November 2006 and a Final RTS, which together with its associated documents was presented to Scottish Ministers by 31 March 2007. This version of the RTS takes on board comments received from the Cabinet Secretary for Finance and Substantial Growth in January 2008. It also recognises the policies and objectives of the new Scottish Government and demonstrates its compatibility with and continuing relevance to the new government priorities.

The SEStran area covers a diverse range of geographical locations from the highly urban, in Edinburgh city centre, to the rural Borders. These areas have very different transport requirements, and the RTS therefore faces a large number of issues and challenges in formulating measures to address the transport needs of the whole region.

Perhaps uniquely amongst the RTP areas though, the SEStran area is growing rapidly, both in economic and population terms. Inter-dependence between different parts of the SEStran area will also increase as the economy grows. A principal aim of the RTS is to promote a programme of transport policies and measures which will accommodate this growth, by providing a transport system which allows the economy to function efficiently, without adversely affecting the environment. The means to do this will primarily be through improvements to public transport, which will enhance the range, quality and reliability of public transport available in the area.

At the same time, investment in public transport will reduce the economy's dependence on the private car. In the medium term, increasing concern over climate change is likely to be reflected in the cost of motoring, meaning the most car-dependent economies are likely to be hardest hit by any increase. In addition, the RTS explicitly recognises the need to reduce the emission of greenhouse gases.

A key to achieving a sustainable long-term future for the SEStran area is successful integration between land-use and transport planning. The forthcoming City Region plan and other development plans, provide a real opportunity to develop a regional, joined up approach which will create a new pattern for development, focussed on locations with good public transport, both present day and planned.

The RTS also aims to ensure that all residents of the SEStran area can share in the economic success of the area, by widening access to opportunities in health, employment/training, education, leisure and culture. Targeted measures will address those geographical areas and groups in society who are disadvantaged by poor access to key services and other opportunities.

These two main aspects – **the sustainable development of the area in a less car dependent manner**, and the **widening of access for all areas and groups** – form the basis of the RTS. This RTS document describes the development of the strategy, and outlines the types of measures which will be implemented in the coming years, to deliver the transport system required for the successful future development of the SEStran area.

The RTS itself is comprised of a number of main elements, which are now described.

Key Problems, Trends & Context

The principal key trend in transport in recent decades has been the dramatic increase in car traffic, and use of the car.
As well as the benefits brought about by increased mobility, there are a number of problems associated with this increased car use, including traffic congestion, detrimental effects on the environment, safety for all road users, and the encouragement of more sedentary lifestyles (and hence public health).

Until the mid 1990s, the main policy for dealing with increasing traffic was to provide greater highway capacity, so-called 'predict and provide'. Since that time, it has been recognised that such an approach is neither sustainable nor affordable. The focus of policy since the late 1990s is much more on improving public transport and providing alternatives to car travel.

Within this wider picture, there are a number of key global and local issues which the RTS sets out to address:

- in the SEStran area, the level of population and number of households are projected to increase by 150,000 (+10%) and 140,000 (+22%) respectively by 2024;
- strong growth in employment is forecast to continue;
- there is considerable scope for increased car ownership in the SEStran area, as levels are relatively low compared to some other European countries;
- around one third of households in the SEStran area do not have access to a car, many of whom are in vulnerable or socially excluded groups;
- the cost of motoring has reduced in real terms in recent decades, whilst the cost of travelling by public transport has increased;
- road traffic (vehicle kilometres) in the SEStran area has increased by around 20% in the last decade;
- the pattern of residential and employment location in the area has become more dispersed, away from Edinburgh city centre which has the highest use of public transport as a destination;
- the use of the car for travel-to-work has increased between 1991 and 2001 (up from 59% to 62%);
- in Scotland, the car now accounts for around 60% of all journeys made and over 75% of distance travelled; and
- in the UK, emissions of greenhouse gases from the transport sector are rising (up by 50% between 1990-2004), at a time when emissions from most other sectors are falling – including travel by consumers, transport now accounts for around 23% (and rising) of total UK emissions.

The success of the SEStran area as a business and residential location, is placing increasing strain on the transport systems of south east Scotland. In addition, changes in society in recent years have led to a greater degree of car dependency. Continuing growth in the use of the car cannot however be sustained from the point of view of congestion or emissions, and car dependency is also an economic risk, given the upward pressures of fuel prices brought about by 'green' taxes and uncertainties regarding medium-term fuel supply.

More efficient use must therefore be made of transport systems and road space in particular, allowing 'essential' economic links to be maintained, whilst encouraging those who can, to use public transport or make 'smarter' travel choices.

RTS Vision, Objectives & Targets

In the light of the above, the following Vision Statement captures the overarching direction of the RTS – *'South East Scotland is a dynamic and growing area which aspires to become one of northern Europe's leading economic regions. Essential to this is the development of a transport system which enables businesses to function effectively, allows all groups in society to share in the region's success through high quality access to services and opportunities, respects the environment, and contributes to better health.'*

To implement this Vision, the RTS has developed 17 specific sub-objectives which stem from the four high level objectives of: Economy, Accessibility, Environment, and Safety and Health. Each of the sub-objectives has a clearly defined target (quantified where possible), together with a means to monitor progress towards each target.

'Economy' – to ensure transport facilities encourage economic growth, regional prosperity and vitality in a sustainable manner:

- widening labour markets;
- improving connectivity;
- supporting other strategies; and
- tackling congestion.

'**Accessibility**' – to improve accessibility for those with limited transport choice or no access to a car, particularly those who live in rural areas:

- targeting improvements in access to employment, health and other services/opportunities; and
- addressing barriers to the use of public transport, including cost.

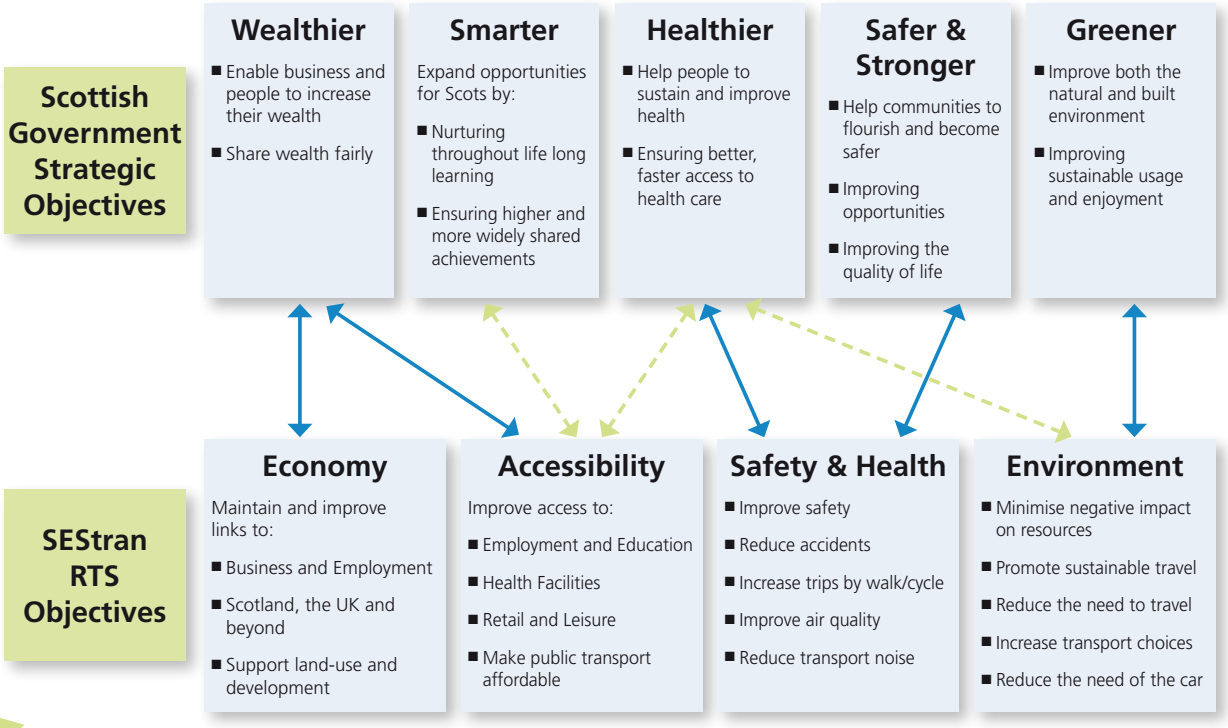
'**Environment**' – to ensure that development is achieved in an environmentally sustainable manner:

- reducing greenhouse gas emissions and other pollutants; and
- enabling sustainable travel/reduce car dependency.

'**Safety and Health**' – to promote a healthier and more active SEStran area population:

- reducing transport related injuries and deaths;
- improving the health of the population; and
- tackling local air quality and transport related noise.

The above objectives have been mapped to the high level objectives of the new Scottish Government to ensure that they remained valid. That mapping is shown below and confirms the continuing relevance of the RTS objectives.



Policies

A wide range of policies have been developed which provide a clear statement of SEStran's position and approach across a range of transport issues over the period of the RTS.

Strategy Framework & Measures

A 'framework' for the RTS was developed to give a firm rationale for the projects and initiatives which will be carried out to deliver the RTS. The Strategy Framework comprises three main themes which give rise to the range of different types of projects and initiatives as follows:

Region-wide initiatives – measures affecting the whole SEStran area:

- region-wide measures cover a range of measures which are not necessarily geographically specific in the way, for example infrastructure based measures are;
- areas covered are travel behaviour/travel planning, integrated ticketing, regional freight initiatives, frameworks for parking (standards and management), demand management, regional road safety, regional cycling initiatives, public transport (vehicles, fares, integration, information, enforcement), initiatives for the mobility impaired, and sustainable urban design; and
- a set of actions are proposed across these areas – e.g. the collation of best practice, ensuring consistency of provision across the region, and developing regional frameworks for common standards which can be applied across the region.

Initiatives for specific areas and groups – aimed primarily at accessibility and providing minimum levels of service to specific localities and groups, and rural areas more generally:

- areas have been identified where there are significant numbers of households without access to a car, and where access by public transport to a number of defined key hospitals is poor (defined as greater than 60 minutes);
- areas classed as deprived by the Scottish Government, where access to employment opportunities is relatively poor have been identified;
- key actions to improve accessibility for these groups are defined; and
- a framework for rural transport is proposed, including community transport and demand responsive transport.

Network-based initiatives – covering carefully targeted physical infrastructure schemes and public transport supply on the principal travel corridors:

- mode share targets for commuting have been set, based on analysis of Census data;
- meeting these targets over the period of the RTS will significantly reduce traffic, congestion, and emissions, compared to a 'business as usual' scenario;
- a wide range of measures have been proposed for different strategic movements affecting the SEStran area- these movements have been prioritised for investment measures – these investments are implemented via prioritised strategic 'corridors', representing the main flows of movement affecting the SEStran area;
- proposed measures include new/more bus services, greater bus priority, new interchanges, support for new tram and rail schemes, traffic management and improved public transport quality; and

- at the same time, the maintenance and development of the wider key economic network (including external links) is supported as a priority for the efficient functioning of the SEStran economy.

The RTS is a 'Balanced Strategy' encompassing all three of the RTS themes, to ensure all RTS objectives and targets will be met.

Strategic Environmental Assessment

Central to the development of the RTS has been the role of Strategic Environmental Assessment (SEA). A SEA is now required for all new public sector strategies, plans and programmes, but in this case, the SEA has been at the heart of the development process, rather than an appraisal of a completed strategy. This has ensured that environmental issues have been comprehensively included in the process. An Environmental Report, which accompanies this draft RTS, is available separately.

Consultation

Consultation has been at the heart of the process throughout the development of the RTS. Extensive consultation on the draft RTS indicated widespread stakeholder and public support for the strategy being adopted. A comprehensive Consultation Report is available as a separate document.

RTS Summary

In overview, the SEStran RTS is setting out to deliver the following:

- Key **connectivity** on the transport networks, linked to **economy**;
- **Improved public transport in SEStran** – journey time, reliability, price, convenience, quality, availability, information and integration;
- Integrating land use and transport **planning**;
- **'Smarter Choices'** – behavioural change;
- Encouragement of **walking and cycling** – the healthiest and most environmentally friendly forms of transport;
- Access to a **wide labour market** for employers;
- A **reduction in car dependency** across the region;
- **Improved accessibility for disadvantaged** areas to health services and employment opportunities, and improve opportunities for those with mobility difficulties, and rural areas;
- **Funding for rural transport**, improving links to main corridors and within rural areas, and **community transport**, to ensure the transport needs of all within the SEStran area are met;
- Reduction of **greenhouse gas** emissions; and
- Improved **road safety**.

1.1 Introduction

1.1.1 SEStran (South East Scotland Transport Partnership) is one of seven Regional Transport Partnerships (RTP) in Scotland, set up by the Transport (Scotland) Act 2005, with an initial remit to develop a Regional Transport Strategy (RTS). The main purpose of the RTS is to provide a framework which will guide the future management of, and investment in, transport for the SEStran area over the next 10-15 years. SEStran contains eight constituent council areas – City of Edinburgh, Clackmannanshire, East Lothian, Falkirk, Fife, Midlothian, Scottish Borders and West Lothian. An overview map of the SEStran area is shown in Figure 1.1 below.

Figure 1.1 *SEStran Area Map*

1.1.2 SEStran became a statutory body on 1 December 2005, with a new Board and new responsibilities. The new Partnership carriers forward the work – and the name – of the former SEStran group which was previously a voluntary partnership. In March 2006, the Partnership started work on a new RTS to replace the existing strategy which was approved in 2003. The new RTS covers a 15 year period, starting from 2008/09. The RTS has also been the subject of a Strategic Environmental Assessment (SEA), a systematic process for assessing the likely significant environmental effects of public sector strategies, plans and programmes.

1.1.3 The location and geographical structure of the SEStran partnership area presents it with some major opportunities and challenges, ranging from those posed by strong economic growth to those related to access from remote rural areas to a range of services including hospitals. Within the SEStran area, there is also a huge diversity of transport issues ranging from urban congestion to rural public transport. SEStran aims to address these issues and work towards a more sustainable and efficient transport network, in line with local, regional and national policy. Clearly, a partnership approach will be required between SEStran, the eight local authorities and Transport Scotland, along with other RTPs and the Scottish Government, to ensure clear roles and responsibilities with respect to transport planning and delivery.

1.1.4 This document lays out the context in terms of transport in the SEStran area, the process undertaken to develop the RTS, and the substantive measures being promoted by the RTS (which can be found directly in Chapters 6 8).

1.1.5 The SEStran RTS has been prepared together with SEStran by a consultancy team led by MVA Consultancy, in association with WSP and Natural Capital.

1.2 RTS Context

1.2.1 In Figure 1.2, the position of the RTS relative to the wider policy and strategy context is shown. The RTS provides a key input to regional planning policy, Local Transport Strategies and planning policy, and will also impact on other public bodies such as Health Boards. Feeding into the RTS is the national policy context covering, in particular, the areas of transport, planning, and economic development.

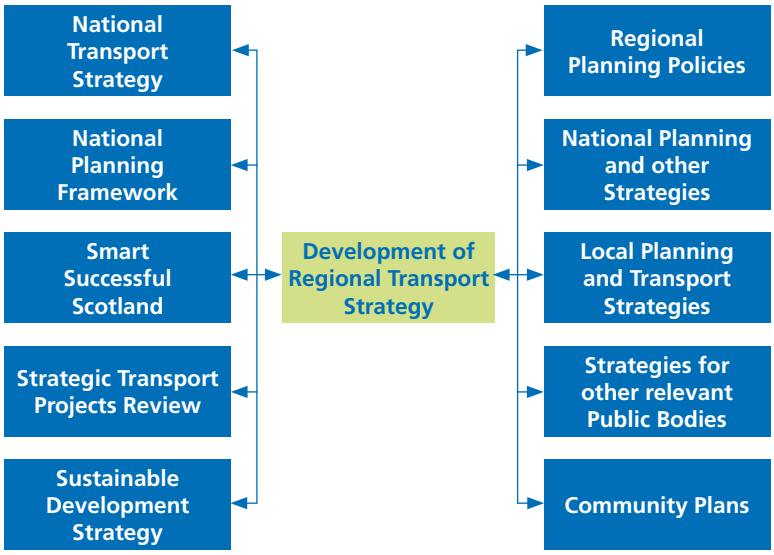


Figure 1.2 *RTS in its Wider Policy Context*

1.2.2 A key role of the RTS is to support sustainable economic growth in line with Scottish Government priorities and, as such, it is also vital to build links between SEStran and Local Enterprise Companies, and other economic development groups such as the South East of Scotland Economic Forum. Perhaps the key link for the RTS is with the relevant structure/local planning teams and the emerging strategic development plans and local development plans, as well as the evolving National Planning Framework. It is clearly important that the RTS takes forward transport schemes which complement the planning context and that the planners plan development around sustainable travel principles. In addition to the links shown in Figure 1.2, the Scottish Government's 'Regeneration Policy Statement' and 'Closing the Opportunity Gap' publications emphasise the role of transport in regeneration programmes.

1.2.3 An outline of the RTS related requirements of the Transport (Scotland) Act 2005 and the Scottish Executive RTS Guidance can be found in Appendix A.

The Scottish Government Economic Strategy

1.2.4 A key objective of the Scottish Government is to increase sustainable economic growth. Higher sustainable economic growth is seen as the key which will unlock Scotland's full potential and create benefits for all our people. The Government and Public Services will therefore focus on creating a core successful country, with opportunities for all of Scotland to flourish through sustainable economic growth. Within the overall purpose are five strategic objectives to make Scotland greener, safer and stronger, healthier, smarter, wealthier and fairer within which are embedded five strategic priorities, Equity, effective government, learning skills and wellbeing, supportive business environment, infrastructure and development.

An efficient transport system is one of the key enablers for enhancing productivity and delivering faster, more sustainable growth. Enhancing transport infrastructure and services can open up new markets, increase access to employment and help to build a critical mass of businesses that drive up competitiveness and deliver growth.

1.2.5 In December 2006, the Scottish Executive published the National Transport Strategy (NTS)[1] which sets out, for the first time, the long term vision for transport, together with objectives, priorities and plans. The SEStran RTS has been developed with close links to the NTS, and cross references are made throughout this document, in terms of synergies between the measures put forward.

1.2.6 At a high level, the NTS states three 'strategic outcomes'[2] for the NTS, and these very much complement the overall direction of the SEStran RTS:

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

1.3 RTS Process

1.3.1 The process of producing a RTS for the SEStran area has followed a series of well defined steps. These are now briefly described.

Identification of Key Trends & Consultation on 'Problems & Issues'

1.3.2 In order to develop a strategy to prepare the SEStran area for the future, a sound understanding of the key trends in transport, particularly the underlying reasons behind growth in travel and traffic, is required. This work looked to identify these reasons and lay out the key trends which will affect the SEStran area during the period of the RTS, and is described in overview Chapter 2 and in more detail in Appendix B.

1.3.3 A wide range of key stakeholders were consulted to gather views on what they saw as being key problems/issues regarding the transport system in the SEStran area. These consultations took a SWOT (strengths/weaknesses/opportunities/threats) form, and were a mix of workshops and structured interviews. An overview of the consultation process can be found in Chapter 9, and full details are available in a separate Consultation Report.

Development of and Consultation on Objectives

1.3.4 Feeding directly out of the key trends and issues identification work, a comprehensive set of 17 objectives was developed which reflect the aims of the RTS. The objectives were grouped under four main headings – Economy, Accessibility, Environment, and Safety and Health which can be found in Chapter 3. Following the development of objectives, a public and stakeholder consultation exercise was undertaken. This provided feedback on whether the public and stakeholders viewed the objectives as meaningful and relevant.

1 http://www.scotland.gov.uk/Topics/Transport/NTS/introduction
2 NTS paragraph 10

Development of Policies

1.3.5 The Objectives, as defined, are a statement of what the RTS is trying to achieve. A set of policies was then developed, the main purpose of which is to provide a guide as to the way in which these objectives will be achieved and the types of intervention that are likely to be selected as a means to achieve certain objectives. The policies also provide explicit links to the wider policy environment, in that they are based on many other policy documents, such as the national level strategies listed in Annex E of the RTS Guidance, as well as regional strategy (Structure Plans in particular) and Local Transport Strategies. This ensures that the SEStran RTS is clearly in line with national and regional policy. The RTS policies are contained for reference in Chapter 3.

Option Generation

1.3.6 A comprehensive inventory of relevant transport proposals was compiled for the SEStran area. This list was qualitatively appraised against the RTS objectives and assessed for fit with the RTS policy context. The existence of this list provided an RTS 'toolkit' which was drawn upon during the on-going development of the RTS.

Development of Strategy Framework

1.3.7 The RTS could potentially be drawn directly from the inventory of schemes described above. It was felt important however, that a strategy framework should be developed to give the RTS a clear structure – the inventory of schemes was then used in part to turn the new RTS framework into a programme of measures.

1.3.8 Assessment of the RTS Objectives, Policies and Inventory led to the development of three key themes in terms of the nature of the measures which the RTS should consider. These are:

- **Region-Wide Initiatives**: regulatory, service, policy and behavioural change measures affecting the whole of the SEStran area;
- **Initiatives for Specific Areas and Groups**: focussing on the transport needs of rural areas and groups disadvantaged by poor accessibility; and
- **Network-Based Initiatives**: focussing on improving public transport in the main commuter networks and enhancing the other key economic transport corridors.

1.3.9 Each of these three themes were developed and analysed to provide a clear overall RTS Framework. They are reported in Chapters 6, 7 and 8 respectively. Central to the development work on these three themes, was the parallel SEA process.

1.3.10 Figure 1.3 below gives an overview of the process under which the RTS strategy framework was developed.

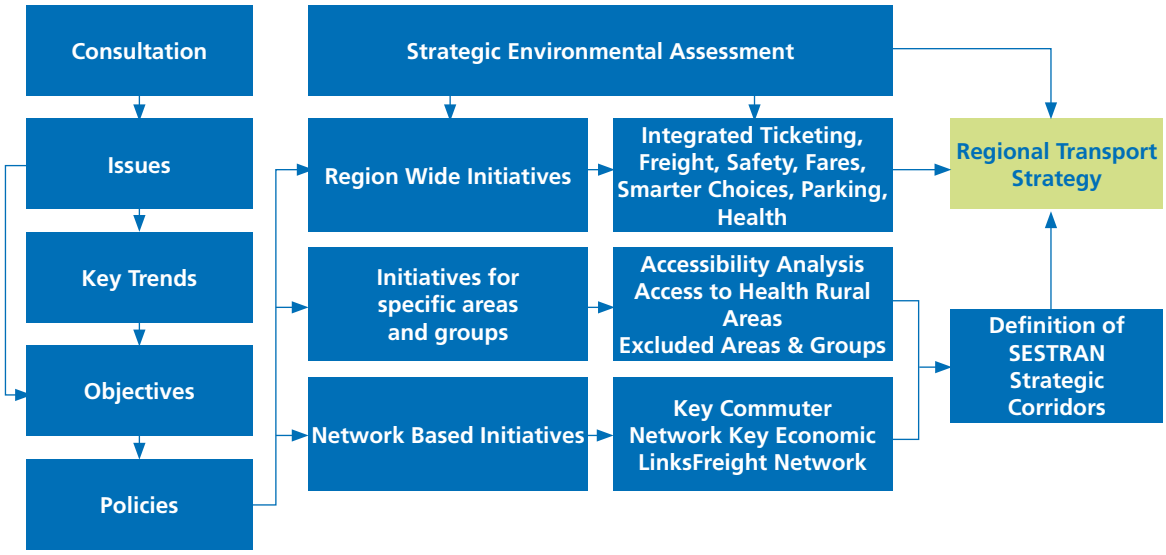


Figure 1.3 *Development of RTS Framework*

1.3.11 On the left of the diagram, the process of stakeholder consultation gave rise to a set of issues with which the RTS should be concerned. At the same time, the key trends in transport, demographics and economics were detailed. Both of these work streams fed into the development of RTS Objectives. These in turn gave rise to a set of RTS policies, which essentially led the strategy towards certain types of intervention, given the wider policy context.

1.3.12 All of these aspects fed into the definition of the three main themes for the RTS, touched on above, which are outlined further in the following Chapters.

Development of Strategic Corridors

1.3.13 Accompanying the above, the transport networks and the nature of the demand for transport in the SEStran area were analysed to define a set of main 'strategic corridors'. This provides a geographical focus for some of the measures likely to be implemented as a result of the RTS. These corridors were prioritised in terms of the measures required to meet a carefully developed set of mode share targets.

Gap Analysis & RTS Development

1.3.14 Having defined the strategy framework, the inventory of transport proposals was re visited to select measures which fit the framework. Any 'gaps' were filled with new proposals. This process gives rise to the list of measures which comprise the RTS itself.

Consultation on Draft RTS

1.3.15 An extensive eight-week public and stakeholder consultation exercise was undertaken following the publication of the Draft in November 2006.

Finalisation of RTS

1.3.16 Following this final consultation, the responses received were given due consideration and the Final RTS was drafted. Clearly it is not possible to incorporate all (often contradictory) consultation suggestions, but SEStran has sought to reflect the main themes of the consultation responses in this Final RTS. Full details can be found in the Consultation Report. The RTS programme of measures was finalised, costed and prioritised, a process also informed by the consultation responses and taking in to account of the outcome of the comprehensive spending review in November 2007.

Role of Strategic Environmental Assessment (SEA)

1.3.17 In parallel with the process of developing the RTS, the SEA of the RTS was developed, providing a key role in shaping the RTS. A comprehensive Environmental Report is available which describes the assessment. SEStran is committed to acting on the findings and recommendations of the SEA throughout the implementation of the RTS.

Role of STAG

1.3.18 The SEStran RTS has been developed from a strong STAG-based philosophy – mainly through being objective-led driven by 'SMART'[3] objectives, with close adherence to consultation, targets and monitoring. In addition, the RTS objectives closely reflect the STAG Government objectives. It is based on a comprehensive analysis of the key issues and trends facing the area from a regional perspective. A STAG Appraisal Summary Table (AST) of the RTS can be found in Appendix I to the Delivery Plan.

1.3.19 The RTS measures will be implemented via an annual Business Plan. The RTS will therefore evolve over time and the annual plans will reflect this. The RTS sets the direction, framework and scale for investment in the coming years.

1.3.20 The actions and measures suggested by the RTS are many and varied, and many are at an early stage of development. Each of these will be taken forward through the appropriate STAG processes to ensure that, at the detailed level, proposals offer good value for money, are well designed, and meet the objectives of the RTS, i.e.the RTS cannot pre-empt the detailed STAG appraisals which will follow.

Implementation of RTS

1.3.21 The confirmation of the Final RTS sets the overall direction for SEStran over the next 15 years. Throughout this process there will be on-going monitoring and feedback to inform the implementation plans. Details of the initial proposals considered can be found in Appendices F and H. The prioritisation of these proposals and proposed delivery timescales taking account of likely financial resources are shown in a separate delivery plan.

3 SMART – Specific, Measurable, Achievable, Realistic, Timed

1.4 Strategy Overview

1.4.1 The RTS developed for the SEStran area combines many initiatives into a coherent overall strategy. The main aspects of the RTS are summarised in the following paragraphs:

- Good **access to a wide labour market** is essential to the SEStran economy. Many of the RTS measures will improve access by public transport to key employment sites. This reduces dependence on the private car at a time when the use of the car is coming under increasing 'pressure' from congestion, environmental issues and pricing, and widens labour markets;
- Key **connectivity** on the transport networks in the SEStran area is also supported by the RTS, ensuring external links, ports and airport links are maintained and improved to facilitate a successful **economy**;
- The RTS includes extensive measures which will **improve public transport** in SEStran in terms of journey time, reliability, price, convenience, quality, availability, information and integration;
- It also includes a policy framework on parking standards and a recognition that **integrating land-use and transport planning** is key to developing sustainable employment and residential locations in the medium and long term;
- There will be a strong emphasis on **'Smarter Choices'** measures– influencing travel behaviour at the level of the individual through personalised planning and information;
- Increased use of **walk/cycle** is a win/win scenario – motorised travel is reduced and there are **health benefits** to the nation – the RTS encourages this;
- There are targeted measures to improve **accessibility** for disadvantaged areas to **health** services and **employment** opportunities, and improve travel opportunities for those with **mobility difficulties** and improve public transport more generally in **rural areas**;
- The RTS recognises that SEStran must play its part in the **reduction of greenhouse gas** emissions. Many of the RTS measures are aimed at reducing the need for car travel, and indeed reducing the need to travel at all is also a priority; and
- **Road safety** measures will be supported to meet ambitious targets for the reduction of casualties.

1.4.2 In summary, this RTS will help deliver a SEStran area which is economically successful, accommodating growing prosperity and population in a much less car-dependent way, whilst improving access for the most excluded and vulnerable groups. This will be of benefit to the residents of the SEStran area, the SEStran economy and the wider environment.

2.1 Introduction

2.1.1 The main purpose of the RTS is to provide a framework which will guide the future management of, and investment in, transport for the SEStran area over the next 10 15 years. Before embarking on the development of a RTS, there are a number of key issues related to transport which are essential to understand. This Chapter summarises the key trends and issues which the RTS is setting out to address. A more detailed analysis can be found in Appendix B.

2.2 The SEStran Area

2.2.1 The SEStran area is very diverse from both a geographic and socio-economic perspective. In terms of geography, the area has a wide range of urban and rural environments, from a major capital city in Edinburgh, to very rural areas in East Lothian and the Scottish Borders. From an economic perspective, the importance of Edinburgh as the main driving force of the SEStran economy is clear. From a socio-economic perspective, areas of deprivation can be found across most of the SEStran area, some of which is compounded by geography and location in some cases. This diversity brings with it a wide range of transport needs which the RTS sets out to address.

2.2.2 The level of transport provision generally reflects the geography of the area, with the densely populated areas supporting well developed public transport systems, which diminish as areas become less densely populated. Reflecting this, the levels of traffic congestion vary enormously across the area, whilst a number of regional bottlenecks, such as the Edinburgh City Bypass and the Forth Crossings are particularly prone to congestion.

2.2.3 Population levels by SEStran local authority area, together with an indication of the urban/rural split are shown in Table 2.1 below.

Table 2.1 *SEStran population*

	Population (2004)	% urban*	% rural**
Clackmannanshire	48,240	85	15
East Lothian	91,580	72	28
Edinburgh, City of	453,670	99	1
Falkirk	147,460	91	9
Fife	354,600	82	18
Midlothian	79,610	81	19
Scottish Borders	109,270	52	48
West Lothian	162,840	88	12

* defined as living in any settlement of greater than 3,000 persons
** defined as living in any settlement of less than 3,000 persons

2.2.4 In 2004, the population of the SEStran area was estimated as approximately 1,447,000. It can be seen that the City of Edinburgh and Fife make up over half the population, with the City of Edinburgh having the highest population at around 440,000. The other local authorities are of varying sizes, Clackmannanshire being the smallest, with a population of only 46,000. City of Edinburgh and Falkirk are the most highly urbanised areas whilst East Lothian and Scottish Borders have the highest proportion of rurally based population. Indeed the Scottish Borders represent only 8% of the SEStran population, but over half of the geographical area.

Road and Rail Networks

2.2.5 For reference, this section provides a brief overview of the transport networks in the SEStran area. More details can be found in Appendix B. Figure 2.1 below shows the main road network in the area distinguished by class of road and trunk/non trunk road.

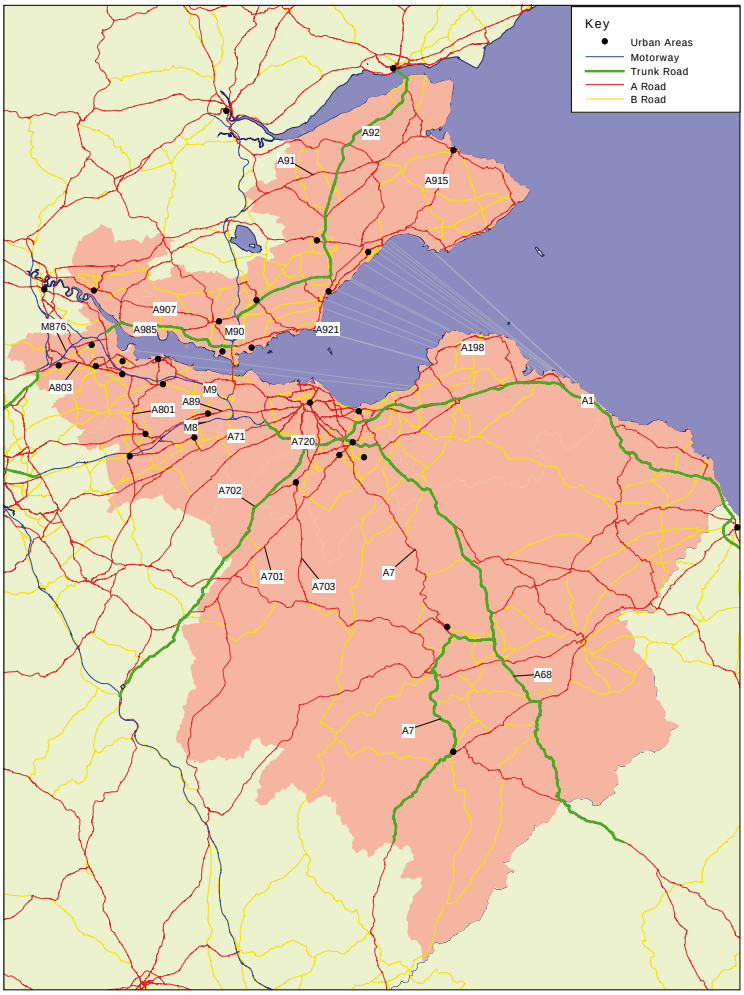


Figure 2.1 *SEStran Area Road Network*

2.2.6 The trunk road network is supplemented by an extensive network of local roads. These provide internal connectivity, in addition to further external links. Most of the inter urban local road network in SEStran is single carriageway. Some of the main heavily trafficked local roads in the SEStran area are:

- A90 (M90 Junction 1 to Edinburgh);
- A921 Kirkcaldy to M90;
- A915 Kirkcaldy to St Andrews;
- A91 Stirling to St Andrews;
- A907 Alloa to Dunfermline;
- A803 Linlithgow – Falkirk – Bonnybridge;
- A801 M8-M9;
- A71 West Calder – Edinburgh;
- A89 Bathgate-Edinburgh;
- A7 Edinburgh-Galashiels;
- A703 Edinburgh – Peebles;
- A697 A68 – Coldstream;
- A701 Edinburgh – Moffat; and
- A198 Prestonpans – North Berwick.

2.2.7 The road network provides key strategic links to the area's ports and airports, the most important of which are Grangemouth, Leith, Roysth and Methil docks, and Edinburgh Airport.

2.2.8 The rail network in SEStran is a combination of local and long distance services operated by ScotRail, and long distance services provided by GNER and Virgin Cross Country. Edinburgh Waverley station forms the main focus of these services. The main characteristics of the rail network in the SEStran area are as follows:

- **East Lothian/Borders**: local service to North Berwick, with GNER and Virgin serving Dunbar, and Berwick-upon Tweed providing access to many in the Scottish Borders;
- there are currently no train services directly serving **Midlothian**, **Scottish Borders** and **Clackmannanshire** (although new lines are currently planned or under construction);
- **West Lothian** is served by four main train services – Edinburgh-Shotts (Carstairs) Glasgow, Edinburgh-Bathgate, Edinburgh-Falkirk-Glasgow, Edinburgh-Falkirk-Dunblane – the latter two also serving **Falkirk**; and
- **Fife** has an extensive local network via the Fife Circle, services to Dundee and the north-east, and other services to Perth and the north.

2.2.9 The network and stations are shown in Figure 2.2 below. The stations are grouped into seven categories to indicate passenger levels at each station. Outside of Edinburgh Waverley and Haymarket, it can be seen that the busiest stations are Linlithgow and Kirkcaldy, followed by Falkirk High, Falkirk Grahamston, Inverkeithing, Dunfermline, Bathgate and Livingston North.

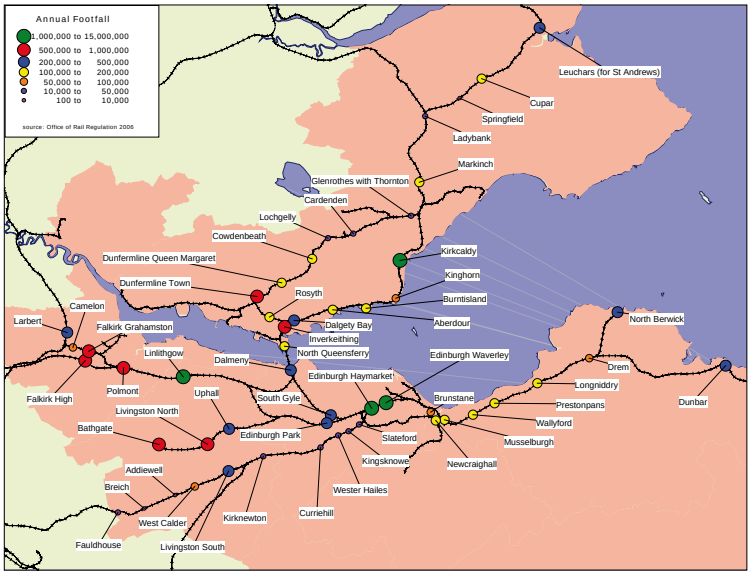


Figure 2.2 *SEStran Area Rail Network and Station Footfall*

2.3 RTS Key Issues

2.3.1 At the heart of the RTS is the need to balance the needs of a growing area and expanding economy, and the associated growth in movement of people and goods this implies, with the recognition that this increased movement has consequences for the local and global environment. In addition, many in society, without access to a car, are excluded in some way through lack of access to services and opportunities, with a detrimental impact on their quality of life.

2.3.2 Transport systems enable people and goods to move, facilitating the economy and providing access to the essentials of life. In their simplest form however, the main **problems** associated with transport can be summarised as:

- Problems associated with lack of access to employment, training, services (in particular health services) and leisure for people who have no, or limited, car availability stemming from, in particular:
  - problems associated with public transport provision in rural areas;
  - problems associated with 'off peak' weekend and evening travel across the area;
  - physical access to public transport vehicles, and indeed the public transport network; and
  - cost of public transport.
- Problems associated with increasing use of the car and rising traffic levels, including:
  - **congestion** – affecting economic performance at all levels, travel times, journey time reliability, freight transport, and the convenience of personal travel;

  - **environment** -greenhouse gas emissions, local air quality, noise and other impacts on the natural environment and resources;
  - **safety** – in terms of road accidents and personal security; and
  - increasingly **sedentary lifestyles** and related health problems – due in part to reduced physical activity resulting from greater car dependence, particularly amongst children[4]. This can have knock-on impacts on psycho-social wellbeing.
- Problems associated with lack of access to employment, training, services (in particular health services) and leisure for people who have no, or limited, car availability stemming from, in particular:
  - problems associated with public transport provision in rural areas;
  - problems associated with 'off peak' weekend and evening travel across the area;
  - physical access to public transport vehicles, and indeed the public transport network; and
  - cost of public transport.

2.3.3 Allied to the above problems, over recent decades, economies have become increasingly **dependent** on the car, and indeed road transport for freight. People are making longer journeys than in the past, and many more are now made by car. In addition to the environmental and health issues, this dependency can now be increasingly seen as an economic risk due to:

- increasing recognition and awareness of climate change, and therefore pressure on the continued use of fossil fuels; and
- medium-term uncertainty concerning the security and longevity of current energy supply – fossil fuels are a finite resource, and many of the remaining reserves are in unstable regions of the world.

2.3.4 Both of these factors are likely to create significant upward pressure on fuel prices in the medium term. Economies which are the most car-dependent are therefore also those most at risk from these pressures.

2.3.5 In addressing the problems caused by rising traffic levels in the RTS, the underlying causes of this trend must be understood. At the heart of this rise is simply that the overall cost of motoring has come down in real terms over the years. Incomes have risen with national economic prosperity, and cars have become more affordable, whilst the cost of public transport has increased[5]. In parallel, the supply of roads has increased with major investment in the nation's road infrastructure over the years. This has led to:

- rapidly increasing car ownership (although levels are still below many other European countries); and

4 NTS paragraph 68 states that around 60% of the adult population and 33% of children are either overweight or obese.

5 In the Bulletin of Public Transport Statistics GB (2003) it is reported that in the 15 years to 2003, in Scotland motoring costs decreased by 1% and bus fares rose by 20% in real terms.

- dramatic increases in the use of the car (since 1950) whilst the use of bus and walk has been in decline. This latter pattern has shown some changes in more recent years however. In the Lothian area, bus patronage has risen by 25% since 1999 and in addition, vehicle traffic growth, especially in town and city centres, appears to have been slowing or even stopping in the last three to four years. Rail and air travel are showing strong upward trends.

2.3.6 Increasing car ownership and cheap travel have led to a more dispersed society, with people living further from their place of employment, and being willing to travel further to take up shopping, leisure and other opportunities. A further key trend is that of reducing household size (i.e.the average number of persons per household). This contributes significantly to travel volumes as e.g.two single-adult households are likely to generate more travel than one two-adult household.

2.3.7 These two main trends (cheaper car travel and extensive new and improved road networks) have been a key factor in the development of successful economies in industrialised countries, and contributed enormously to personal mobility and quality of life. Care must therefore be taken in the measures used to address the problems caused by the use of the car, as it is an integral part of modern-day economies. A balance must be sought between reducing the negative impacts of transport without causing undue damage to the wider economy.

2.3.8 In economic terms, the key to the RTS is to seek to provide alternatives to the private car, which can maintain and increase the level of accessibility required to continue economic growth in the face of increasing pressure on travel by car – from congestion, environmental concerns, and potentially fuel prices. This will enable the economy to adapt, becoming less car dependant and more sustainable in the longer term, whilst remaining competitive.

2.3.9 Significantly improving both public transport and conditions for walking and cycling, thus moving towards a less car dependent society, would:

- reduce greenhouse gas emissions (from the only UK sector where emissions are currently increasing);
- 'protect' the economy to some degree from rising fuel prices by providing a range of alternatives to the private car;
- improve the health of the community, and improve local air quality;
- increase travel opportunities for those without access to a car, and in so addressing social exclusion issues; and
- help to protect and improve sensitive urban and rural environments from the intrusion of additional private vehicle traffic.

2.3.10 With respect to making step-change improvements to public transport, the role of the bus as the principal means of public transport in the SEStran area is recognised.[6] Many of the RTS proposals will result in significantly improved bus services in the area.

6 NTS Bus Action Plan paragraph 1.12 & Action 1.

2.4 The Future of the SEStran Area

2.4.1 The SEStran area is home to what is generally recognised to have been Scotland's fastest growing economy in recent years, with the City of Edinburgh being the main driver of this economic growth. This section briefly considers how the SEStran area is forecast to change over the coming years, looking at the key areas of population/ households, employment, car ownership and planning.

Population and Households

2.4.2 In contrast to almost all other RTP areas, the SEStran area is projected to see a significant increase in **population** of nearly 150,000 (around 10%) between 2004 and 2024 (GROS[7], 2004 based). During this period, there will be a pronounced demographic change, with the number of over 65s projected to increase by around 40%, only a 5% increase in working age adults and a very small rise in the number of children. In terms of **households**, it is anticipated that there will be an additional 140,000 households (a 22% increase) between 2004 and 2024. The changing nature of household composition combines with population growth to create this requirement for many more households. As an example, the proportion of single-adult households has increased from 24% of all households in 1981 to 40% in 2004, a trend which is set to continue.

2.4.3 Implications for RTS – the projected increases in population and households will have pronounced effects on the transport system, the integration of land use and transport planning is essential if dispersed, car dependent growth is the be avoided. The RTS must account for the projected growth, by location, in its specification.

Employment and Labour Force

2.4.4 Edinburgh and Glasgow have been the main economic drivers for Scotland in recent years. In order to continue and spread this growth, both Edinburgh and the wider SEStran area requires an expanding, skilled, and available labour force. Edinburgh accounts for around 45% of total jobs in SEStran (but only 31% of the population), so acts as a major draw for surrounding areas. The two sectors of 'Public Administration, Education and Health' and 'Banking/Finance/Insurance' account for around 60% of jobs in Edinburgh. There are now relatively few jobs in Manufacturing (around 10% of the total) in the SEStran area.

2.4.5 In recent years, employment in the SEStran area has increased substantially – up by 63,000 between 1998 and 2004, with over half of these jobs being located in Edinburgh. This growth in employment has resulted in lower unemployment and greater prosperity in the area, which in itself, leads to greater demands on the transport networks. The Edinburgh and Lothians Structure Plan forecasts a 43,000 increase in employment between 2000 and 2015, the largest increase again being in Finance/Insurance/Business Services.

2.4.6 **Implications for RTS – Continuing employment growth on this scale will require larger labour markets, potentially with employees travelling from further afield. This will add to pressure on the transport networks in the SEStran area. Again, new developments must be planned together with public transport to minimise car dependence.**

7 General Register Office for Scotland

Car Ownership

2.4.7 The number of vehicles on Scotland's roads has increased from 775,000 in 1962 to around 2.5m today. In spite of this, car ownership levels in Scotland are lower than in the many other EU countries. Significantly, although rates of car ownership here are lower than some other comparable areas of the EU, the use of the car is greater here. Within SEStran, there is a marked division, car ownership being low in Edinburgh, and higher in other local authority areas. The low figure for Edinburgh reflects, amongst other things, the density of population, the good level of public transport, and difficulties with parking in parts of the city.

2.4.8 This means that there are significant numbers of households without access to a car. In broad terms, around 1/3 of SEStran households do not own a car, 1/3 have partial availability (e.g.two adults/one car) and 1/3 have 'full' car availability (e.g.two adults, two cars)[8]. Looking at individual household types, over 40% of non-car owning households are either 'single parent' or 'single pensioner' households.

2.4.9 **Implications for RTS – (i) there is significant scope for car ownership to continue to grow in the SEStran area, but this need not inevitably lead to increased car use, and (ii) very large numbers of households remain without access to a car – many of these are in more vulnerable groups.**

Planning

2.4.10 This combination of anticipated increases in population and households places considerable pressure on the planning system, especially when coupled with continuing economic and employment growth. The planning system clearly has a key role to play in planning the location of this new activity and the sheer numbers involved mean that development activity will be occurring across the SEStran area. While this may lead to increasingly dispersed patterns of residential and employment location, it also presents major opportunities to develop growth in a more sustainable way. **It is therefore vital that this new development is planned with a firm perspective on sustainable transport.**

2.4.11 This is one of the key issues for the RTS – planning transport in the medium term to complement the ongoing development of the SEStran area. In particular, the forthcoming City Region Plan and other development plans must be developed in partnership with the RTS and indeed Local Transport Strategies, in order to encourage more sustainable forms of transport. Indeed, in future, City Region Plans and other development plans will need to take explicit account of Regional Transport Strategies.

2.4.12 The RTS has been developed against a background of the most up to date planning data available.

2.4.13 **Implications for RTS – the allocation of extensive new land for development underlines the importance of integrating land-use and transport planning in the SEStran area, building these links into the forthcoming City Region plan and other development plans. Failure to do so will lead to further significant increases in car use.**

8 It is noted that, for some, non-car ownership is an 'active' choice.

2.5 Freight

2.5.1 In freight, there is a similar pattern to personal travel. Despite the changing nature of the Scottish economy away from manufacturing and heavy industry, the volume (tonnage) of goods lifted in Scotland has remained broadly static over recent years. There has been very significant growth in light goods vehicle (LGV, <3.5 tonnes) traffic, with vehicle kilometres increasing by 41% between 1994 and 2004 in Scotland. Heavy goods vehicle (HGV, >3.5 tonnes gross weight) traffic (vehicle kilometres) in contrast grew by only 19% – the same as overall traffic growth. LGV traffic is growing faster than any other type. Indeed, LGV growth accounted for around a quarter of all traffic growth in Scotland between 1994 and 2004, with growth in HGV traffic accounting for only 6% of total traffic growth.

2.5.2 Rail continues to account for a very low proportion of goods lifted although the volume has increased over the past decade. For example, the road/rail freight facility at Grangemouth is expanding with high profile users such as ASDA/WH Malcolm and Tesco/Eddie Stobbart.

2.5.3 **Implications for RTS – growth in freight traffic continues, with growth in LGV traffic particularly strong. Grangemouth in particular is becoming increasingly important within the SEStran area as a centre for freight activity. SEStran must act to facilitate efficient movement of goods and ensure quality facilities for the freight sector in key freight corridors.**

2.6 Accidents

2.6.1 Despite rising traffic levels, the number of personal injury accidents (including pedestrians) on the road network continues to fall. The total number of personal injury accidents in Scotland fell by 17% between 1994 and 2004. The number of fatal accidents also fell from 319 to 281 over this period. All three SEStran area police forces have seen reductions in casualties over this period.

2.6.2 These figures represent some success in terms of accident prevention/reduction. The significant efforts of all stakeholders are reflected in these figures. However, these efforts need to be continued and reinforced if further dramatic falls in accident figures are to be realised. It is also the case that an element of this decline may be due to a reduction in the exposure of vulnerable groups (pedestrians and cyclists) who are disproportionately represented in accident statistics ie, there may be fewer of them being killed because there are fewer of them on the road, so the rate of accident involvement per cycling or walking trip may not be decreasing, or decreasing as fast as the absolute figures. The Scottish Government has a target to achieve a 40% reduction in KSI (killed and seriously injured) by 2010 (compared to the average from 1994-98). The corresponding target for child KSIs is a 50% reduction.

2.6.3 **Implications for RTS – SEStran must work to continue the trend of reducing transport related casualties**

2.7 Environment

Climate Change

2.7.1 There is now widespread consensus that climate change is a real, man-made phenomenon, and this has been reflected in the recent seminal reports from the Stern Review[9] and the Intern-Governmental Panel on Climate Change[10]. The Scottish Government has published 'Changing Our Ways – Scotland's Climate Change Programme' (March 2006), which recognises this, and lays out the Executive's ambitions to tackle climate change. This document acknowledges that climate change is 'one of the most serious threats facing our planet'.

2.7.2 In simple terms, climate change is caused by increasing concentrations of 'greenhouse gases' (GHG) in the atmosphere, which trap more of the Sun's energy and therefore increase the earth's temperature. The main GHGs are carbon dioxide, methane and nitrous oxide. Of most concern though is the level of emissions of carbon dioxide, the key GHG which, of most relevance here, is emitted by the burning of fossil fuels (i.e. carbon based), including coal, gas and oil.

2.7.3 The level of carbon dioxide found in the atmosphere has increased markedly since the onset of global industrialisation – from around 290 parts per million (ppm) to 380ppm at present. The Earth saw an increase in temperature of 0.6C during the 20th century. The consensus view is that carbon dioxide levels have to be kept below 450ppm in order to avoid a 2C increase in global temperatures – the currently accepted point at which the effects of climate change become highly dangerous, including the onset of extreme weather and significant rising sea levels.

2.7.4 There are two key benchmarks towards which the UK Government is aiming, regarding GHG emissions, to which the Scottish Government is committed to contributing its share. These are:

- Kyoto Protocol: The UK's obligation here is to reduce GHG emissions by 12.5% by 2008-12, compared with 1990 levels; and
- the short term domestic target of reducing GHG emissions by 20% below 1990 levels by 2010, together with a longer term goal of a 60% reduction by 2050.

2.7.5 Note also that the Scottish Government has set its own target of exceeding the Scottish share of these targets by 1m tonnes of carbon savings[11] (the Scottish share is to achieve 1.7m tonnes of carbon saving per annum by 2010, the Scottish target is to achieve 2.7m tonnes per annum by 2010). Also, in February 2007 the EU committed to cutting carbon emissions by 20%, compared to today's levels, by 2020.

9 http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm
10 http://www.ipcc.ch
11 Source: http://www.scotland.gov.uk/Publications/2006/03/30091112/0

2.7.6 It should be noted that a growing number of other organisations are calling for far greater reductions in carbon emissions. For example, a recent report from the Tyndall Centre for Climate Change Research, laid out the case for a 90% reduction in carbon emissions by 2050.

2.7.7 At the UK level, 2004 GHG emissions are reported to have dropped by 9% compared to the 1990 levels, although total emissions have been increasing in recent years. Much of this reduction has been due to a switch from coal to gas fired electricity generation. Significantly, GHG emissions from the transport sector have gone up consistently during this period, increasing by over 50%. If travel by consumers is included, transport now accounts for 23% of total UK GHG emissions compared to only 16% in 1990[12]. Note that all SEStran local authorities have signed up to Scotland's Climate Change Declaration[13].

2.7.8 **Conclusion – if the Kyoto, EU and domestic policy commitments are to be met, the growth in emissions from the transport sector clearly cannot be sustained, and in the medium to long term, very significant reductions are likely to be necessary.**

Alternative Fuels

2.7.9 In the light of an emerging consensus on climate change, there is growing interest in the use of alternative fuels as a means to reduce overall GHG emissions. In 2004, there were 32.3m motor vehicles licensed in the UK. Of these, 0.09% were 'Petrol/Gas', 0.07% were classed as 'Gas/Gas BiFuel/Gas-Diesel' and 0.05% were 'Electric & Hybrid-Electric' vehicles. This means that 99.8% of all registered vehicles in the UK are petrol or diesel powered, illustrating that the use of alternative fuels remains at an embryonic stage, although it is growing[14].

2.8 Implications for the RTS

2.8.1 The SEStran area faces a set of issues which are perhaps unique in Scotland. It is first and foremost a rapidly growing area, and the main thrust of the RTS is in managing this growth, rather than in seeking to lead regeneration, as is likely to be the case in some other RTP areas. The local authorities within the SEStran area are becoming more interdependent. In order to compete on an international basis, areas have to bind together to form larger economic 'blocs' – this is the philosophy behind the emerging City Region agenda. City Regions can acquire a certain critical mass, in terms of skilled labour markets and the agglomeration benefits brought about by close proximity of similar firms. Good transport links are clearly a vital element in achieving this.

12 Source: http://www.statistics.gov.uk/StatBase/Expodata/Spreadsheets/D5695.xls

13 See http://www.sustainable-scotland.net/climatechange/index.asp?pg=2

14 Note that the uptake of alternative fuels would be enhanced by their development locally – there are also potential economic benefits to the SEStran area, where the Grangemouth area in particular has a concentration of relevant skills and businesses.

2.8.2 The SEStran area economy has changed significantly in a relatively short period. Outside Edinburgh, the traditional manufacturing base has declined rapidly. There then followed a boom in inward investment, which itself has proved to be only a short term boost in places. The policy emphasis now is on the development of indigenous industries in the key sectors of tourism, life sciences, advanced engineering, food and drink, financial services and energy. Reflecting the national picture, in certain areas, there is a heavy reliance on the public sector for employment, but employment levels throughout the SEStran area are generally high, although pockets of unemployment and deprivation remain. In contrast, the economy of Edinburgh has enjoyed greater stability and growth, built on its traditional strengths of the business sector and financial services in particular. This has been boosted by significant growth in public administration resulting from Scottish devolution.

2.8.3 The economic geography of the area has changed markedly in recent years too. Around Edinburgh, there have been major new retail and office developments at Leith, Kinnaird Park, Straiton, Edinburgh Park etc. The main hospital for the Lothians has relocated to an edge of town site. Many of the industrial sites of Edinburgh have been transformed into residential development, in filling sites in places, and creating large scale developments in other areas, particularly Leith and Granton. Other centres of excellence have emerged, such as the biotechnology park in Midlothian, and the Alba centre in Livingston. None of this necessarily means that the importance of Edinburgh city centre is diminished, and indeed it continues to thrive as a commercial centre – merely that economic growth, the ease and relatively low cost of car travel, and the planning environment has led to a more dispersed pattern of economic geography across the region.

2.8.4 Increasing population and the reduction in average household size, coupled with increased prosperity, have created pressure on the housing market throughout the area, but particularly in Edinburgh. Property prices have increased dramatically, and this has impacted on the ability of staff in some key sectors to enter the property market, which in itself affects labour markets and travel patterns. Whilst the majority of the residential development in Edinburgh has been in the form of high-density flats, beyond the Edinburgh green belt there has been extensive construction of family homes to cater for local markets, Edinburgh out migration, and in-migration from other parts of the country.

2.8.5 These developments in demographics and economic geography all point to an increased level of interdependence throughout the SEStran area. In order to develop and compete in increasingly competitive markets, employers will require wider labour markets for skilled staff. Access to these labour markets should not be constrained by congestion, or poor public transport. Skills shortages are already apparent in some sectors and are forecast to increase in the SEStran area. Good transport can assist in matching employers with employees. At the same time, there is increasing pressure on the use of the car through environmental concerns, fuel prices, congestion and parking supply. Many major employment locations are currently highly car-dependent in terms of their locations.

2.8.6 Strategic public transport provision in the SEStran area is currently highly focussed on Edinburgh city centre. Travel between most other local authority areas, or between other local authority areas and Edinburgh's suburbs, generally requires travel via Edinburgh city centre. Travelling via Edinburgh city centre by bus is time consuming, as it involves the most congested area within SEStran, so these types of journeys are usually not attractive public transport options.

2.8.7 The range of key destinations which are not based in Edinburgh city centre therefore seem likely to continue to grow in importance. The transport system of the SEStran area needs to adapt to reflect this, whilst at the same time, the strategic planning process has to work in partnership with transport planning to create new development in sustainable locations.

2.8.8 In addition to this pattern of economic growth being dispersed across the area, moves to reduce car dependency will inevitably create pressure on public transport in existing transport corridors. Key public transport corridors will be more intensely used, and capacity and level of service in these corridors will have to reflect this.


Departures
09:33 Platform 9
Dunblane
Calling at: Page 1 of 1
Haymarket
Edinburgh Park
Linlithgow
Polmont
Falkirk Grahamston
Camelon
Larbert
Stirling
Bridge of Allan
& DUNBLANE.
First ScotRail
Std Class Only
Departures
09:36 Platform 16
Perth
Page 1 of 1
Haymarket
Inverkeithing
Kirkcaldy
Markinch
Ladybank
& PERTH.
First ScotRail
Departures
09:39 Platform 9
North Berwick
Calling at: Page 1 of 1
Musselburgh
Wallyford
Prestonpans
Longniddry
Drem
& NORTH BERWICK.
First ScotRail
Departures
09:41 Platform 16
Glenrothes
Page 1 of 1
Haymarket
South Gyle
Dalmeny
North Queensferry
Inverkeithing
Dalgety Bay
Aberdour
Burntisland
Kinghorn
Kirkcaldy
& GLENROTHES.
First ScotRail
Std class
Platform 14
14
Platform 14
Glasgow Queen St
First ScotRail

3.1 Introduction

3.1.1 The background and analysis described in Chapter 2 provides an overview of the key issues and trends which the RTS has to address. In broad terms, these related to:

- issues concerned with the detrimental effects of the use of the car, and car dependency, whilst recognising the importance of the private car and road-freight in economic terms; and
- issues concerned with lack of access for those without use of a car.

3.1.2 Having identified the pertinent issues which the RTS should be addressing, a five stage process was adopted:

- development of a 'Vision Statement' and specification of a clear set of SMART (Specific/Measurable/Achievable/Realistic/Timed) RTS objectives, described below;
- a series of Policies were then developed. These policies are intended as a statement of the general way in which the RTS will go about meeting its objectives;
- a set of SMART targets and associated monitoring requirements were formulated (see Chapters 4 and 12 respectively);
- a 'strategy framework' was then developed, which developed three key themes for the RTS; and
- a range of measures were established from the strategy framework which form the programme of activities for SEStran over the period of the RTS.

3.2 RTS Vision Statement

3.2.1 In the light of the issues emerging from consultation and an analysis of key transport related trends, the following high-level Vision Statement for the RTS was established:

'South East Scotland is a dynamic and growing area which aspires to become one of northern Europe's leading economic regions. Essential to this is the development of a transport system which enables businesses to function effectively, allows all groups in society to share in the region's success through high quality access to services and opportunities, respects the environment, and contributes to better health.'

3.2.2 This Vision Statement encapsulates the spirit of the RTS, covering economic development, accessibility, the environment and health.

3.3 RTS Objectives

3.3.1 The Issues identified gave rise to a comprehensive set of RTS Objectives. The objectives were developed under the four main categories covered in the RTS Vision Statement: Economy, Accessibility, Environment, and Safety and Health. Note that there is no specific category headed 'Integration' as the integration of transport systems is a means to achieve other objectives, rather than an objective in its own right. However, many of the policies and interventions in the RTS will, in themselves, clearly help to achieve a more integrated transport system for all modes of travel in south-east Scotland, which is of fundamental importance.

Objectives

3.3.2 The objectives of the RTS are as follows:

1. Economy – to ensure transport facilitates economic growth, regional prosperity and vitality in a sustainable manner:

1.1 to maintain and improve labour market accessibility to key business/employment locations, from all localities and communities.

1.2 to maintain and improve connectivity to the rest of Scotland, the UK and beyond.

1.3 to support other strategies, particularly land-use planning, and economic development.

1.4 to reduce the negative impacts of congestion, in particular to improve journey time reliability for passengers and freight.

3.3.3 The economy is one of the main priorities highlighted in the RTS Guidance. The three main ways in which the transport system affects economic performance are: (i) allowing for the efficient movement of goods and personnel in the course of business, (ii) giving employers access to as wide a labour force as possible, allowing the most efficient match between employees and employers, and (iii) creating an attractive environment for businesses to remain or locate in an area. The RTS Objectives recognise the need to maintain and improve access to key employment locations, and also to ensure that the links between SEStran and the rest of the country/world are of a standard which does not act as a constraint on economic growth.

3.3.4 The provision of transport is a cross-cutting issue, affecting a wide range of policy areas. The RTS has an Objective to work with other policy agencies and stakeholders in the area, to ensure that planning for transport has an active role in the development of other strategies. Transport has a strong role to play in **economic development** – through working with Scottish Enterprise, local authorities, Chambers of Commerce, and other stakeholders, steps can be taken to ensure that the needs of these stakeholders are fed directly into the transport planning process. The development of **land use planning** policy must be integrated with transport planning, if more sustainable development is to be achieved.

3.3.5 Unreliable journey times, on routes which are affected by congestion, are a source of economic inefficiency, as additional time has to be allowed for travel which may not be required. The RTS has an Objective to alleviate congestion and hence tackle unreliable journey times.

2. Accessibility – to improve accessibility for those with limited transport choice (including those with mobility difficulties) or no access to a car, particularly those who live in rural areas:

2.1 to improve access to employment.

2.2 to improve access to health facilities.

2.3 to improve access to other services, such as retailing, leisure/social and education.

2.4 to make public transport more affordable and socially inclusive.

3.3.6 A second strong theme of the RTS covers the area of accessibility. If all groups in society are to share in the economic success of the SEStran area, access to a range of employment, health and other opportunities must be as wide as possible. Those without access to a car in particular can be excluded from employment and educational/training opportunities, limiting their participation in the labour market. Difficulties in accessing health facilities can have a detrimental effect on health, and poor access to retail and leisure opportunities impact on consumer choice, health and culture.

3.3.7 Lack of public transport services is only one element of poor access. Other barriers to use of transport include lack of physical access (i.e.access to public transport vehicles and access to the public transport network) and also cost. Affordability can be a major barrier to use of transport and hence participation in wider society.

3.3.8 The RTS Objectives for accessibility compel the RTS to improve accessibility in its broadest sense in geographical areas and for groups in the community where poor access is identified as a significant problem.

3. Environment – To ensure that development is achieved in an environmentally sustainable manner:

3.1 to contribute to the achievement of the UK's national targets and obligations on greenhouse gas emissions.

3.2 to minimise the negative impacts of transport on natural and cultural resources.

3.3 to promote more sustainable travel.

3.4 to reduce the need to travel.

3.5 to increase transport choices, reducing dependency on the private car.

3.3.9 There are a range of **environmental** issues at the heart of the RTS Objectives. The RTS is committed to developing a transport system for SEStran which minimises the impact of transport on the local and global environment. In particular, there is a specific sub objective with reference to the reduction in the emission of greenhouse gases (GHG). Other sub objectives include the promotion of more sustainable travel and measures which reduce the need to travel. Reducing dependency on the private car is a cross cutting objective, which would also be beneficial in economy and health terms.

4. Safety and Health – To promote a healthier and more active SEStran area population:

4.1 to improve safety (accidents) and personal security.

4.2 to increase the proportion of trips by walk/cycle.

4.3 to meet or better all statutory air quality requirements.

4.4 to reduce the impacts of transport noise.

3.3.10 The final theme of the RTS Objectives is **safety and health**. A reduction in the number and severity of accidents is a sub objective of the RTS. The other main way in which transport directly impacts on health is through air quality. There has been a dramatic increase in respiratory diseases and deaths attributed to poor air quality, and the RTS has a specific sub-objective relating to this. Transport noise can have a detrimental effect on the health of individuals, and this is recognised in the RTS Objectives.

3.3.11 Increasing the proportion of trips made by walk/cycle, and reducing the proportion by car, will have positive impacts on health through a reduction in sedentary travel, and there is a sub-objective to this effect. This has the further benefit of improving local air quality and reducing GHG emissions, if there is a corresponding reduction in car journeys.

3.3.12 The approach taken to translating these objectives into 'Targets and Monitoring' can be found in Chapter 4.

3.4 RTS Policies

3.4.1 A set of policies has been developed for SEStran which act as a 'bridge' between the RTS Objectives and the type of action which is generally promoted by the RTS to address the Objectives. These provide a clear SEStran policy position on the issues raised throughout the RTS. A policy may indicate a presumption in favour of a certain type of 'intervention' in a given set of circumstances.

3.4.2 The RTS Policies also provide a link to the wider policy context, to ensure that the RTS is, as required, consistent with other strategy/policy documents at the local, regional and (particularly) national level. This includes links to the documents listed in Annex E of the Scottish Government Guidance on Regional Transport Strategies, covering planning, planning policy, spending plans, economic development and regeneration, sustainable development, social inclusion, climate change and health. The content of these documents has been very much reflected in the policies seen in the RTS.

3.4.3 The RTS policies are listed in summary in Table 3.1 below, grouped together into broad category areas, and shown in relation to the RTS objectives. The policies are also found in Appendix C, where a commentary and policy links are also included.

Table 3.1 *Summary of RTS Policies*

RTS Policy	Relates to Objectives…
Improvements to Public Transport (Bus)	
Policy 1 – There will be a general presumption in favour of schemes that improve the efficiency and effectiveness of public transport, and make it a more attractive option for existing car users.	1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.3, 3.5
Policy 2 – Support will be given to the improvement of all aspects of bus services (services, vehicle quality, fares, infrastructure, bus rapid transit, and integration) as a means of reducing congestion and enhancing accessibility	1.4, 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.3, 3.5.
Improvements to Public Transport (Rail)	
Policy 3 – Encouragement will be given by SEStran to Transport Scotland for cost-effective investment and service support that builds an integrated rail-based regional transport network, including trams, fully integrated with existing and planned development.	1.1, 1.2.
Policy 4 – There will be a presumption in favour of supporting the targeting of rail investment to enhance the public transport capacity (including, where appropriate, station capacity) of existing heavily-used and congested rail corridors for passengers and/or freight.	1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.3.

RTS Policy	Relates to Objectives…
Public Transport Affordability	
Policy 5 – SEStran will support intervention or seek to intervene where affordability is recognised by the Partnership as a barrier to the use of public transport.	1.1, 2.4, 3.4, 3.5.
Information/Campaigns	
Policy 6 – Investment in new infrastructure and services will generally be complemented by 'soft' measures such as information, marketing, personalised travel assistance, awareness campaigns (including the promotion of the links between transport, safety, health and environment) travel plans and, where relevant, traffic management measures to ensure that the benefits will not be eroded by induced traffic.	1.3, 1.4, 2.1, 2.2, 2.3, 3.2, 3.3, 3.4, 3.5.
Policy 7 – The RTS will give support to the promotion of 'soft' measures such as information, marketing, personalised travel assistance and travel plans.	3.1, 3.2, 3.3, 3.4, 3.5.
Parking	
Policy 8 – A consistent framework for parking standards for new development will be applied across the region to ensure that comparable developments have similar parking standards.	1.3, 1.4, 2.1, 2.2, 2.3, 3.2, 3.3.
Policy 9 – Town and city centre parking provision (including areas on the edge of centres) will favour shoppers, essential business users and residents, whilst commuter parking for that town or city centre will be discouraged.	1.3, 1.4, 2.1, 2.2, 2.3.
Policy 10 – Parking provision at major employment and essential service centres outwith town and city centres (e.g.hospitals, areas around business parks) will favour visitors, business/service users and residents, whilst commuter parking will be discouraged.	1.3, 1.4, 2.1, 2.2, 2.3.
Traffic Reduction	
Policy 11 – The RTS will seek to reduce road traffic levels, especially single occupant cars in the most congested places at the most congested times.	1.1, 1.4, 3.1, 4.3 & 4.4.

RTS Policy	Relates to Objectives…
New Roads and Infrastructure	
Policy 12 – The RTS will give high priority to the maintenance of any future SEStran assets.	1.1, 1.2, 1.3 and 1.4.
Policy 13 – There will be a presumption in favour of addressing problems of congestion through measures to reduce demand for car travel and promote modal shift.	1.3, 1.4, 3.1, 3.3, 3.4, 3.5 and 4.2.
Policy 14 – Any additional capacity on commuter corridors that are congested, or forecast to become congested within the lifetime of the strategy, will normally be used to benefit space-efficient modes such as bus, train and high-occupancy vehicle and cycles. Such additional capacity on freight corridors may also be used to benefit HGVs.	1.4, 2.1, 2.2, 2.3, 2.4, 3.3 and 3.5.
Policy 15 – New road capacity, to improve journey times and reliability, may be provided where it can be demonstrated that these benefits will not be eroded by induced traffic in the medium to long term, and that other alternatives have been evaluated and found to be less effective.	1.1, 1.4.
Mode Shift – Freight	
Policy 16 – SEStran will work with the freight transport industry to minimise the negative impacts of freight on the environment, including, where appropriate promoting greater use of rail and water-borne transport.	1.3, 1.4, 3.3.
Accessibility	
Policy 17 – SEStran will seek to ensure that communities with poor access to employment by PT and low car ownership/high deprivation will be the subject of targeted measures to address this.	2.1, 2.4.
Policy 18 – In selecting interventions as part of the RTS, SEStran will seek to pay particular regard to the need to reduce problems caused by peripherality in rural and other areas of the region that are less well served by PT.	2.1, 2.2, 2.3, 2.4.
Policy 19 – Where improvements in accessibility are found to be required, the RTS will seek, in the first instance, to deliver these by enhancing conditions for pedestrians, cyclists and public transport users (including community transport/DRT).	1.4, 3.3, 3.4, 3.5, 4.2.
New Development	
Policy 20 – SEStran will use its influence to support development plan strategies by seeking to ensure that major trip generating sites – including housing – are located in areas that are capable of being well served by walking, cycling and public transport, or will be made so by transport investment delivered in phase with the development.	1.1, 1.3, 2.1, 2.2, 2.3.
Policy 21 – SEStran will support planning authorities in using their land-use planning powers to reduce the need to travel, to promote the provision of non-car access to and within new developments and to promote travel plans.	3.3, 3.4, 3.5.

RTS Policy	Relates to Objectives…
City and Town Centres	
Policy 22 – Support will be given to interventions which reinforce and strengthen the role of Edinburgh city centre and of other town centres, as centres of economic activity including retailing and tourism.	1.1, 1.3, 2.1, 2.3, 3.1, 3.3, 3.4, 3.5, 4.2.
Sustainable Modes	
Policy 23 – Schemes that improve the accessibility by public transport, walking and cycling of key development areas will be afforded higher priority for implementation.	1.1, 1.2, 1.3.
Policy 24 – The RTS will prioritise interventions that promote the use of more sustainable modes of transport, in particular non-motorised modes.	3.2, 4.4, 1.4.
Equal Opportunities	
Policy 25 – All interventions will be subject to an equal opportunities audit to ensure that they promote equal opportunities in accordance with the law.	Relates to all objectives
Disabled Access	
Policy 26 – SEStran will seek to ensure that people who have difficulties in using conventional public transport due to disability will be the subject of targeted measures to address this.	2.1, 2.2, 2.3, 2.4.
Health	
Policy 27 – SEStran and its constituent authorities will work in partnership with Health Boards to improve access to health services and to reduce congestion caused by travel to these services. This would not include subsidy for services needed for new health buildings or services, which would be subject to the normal transport assessments and access policies.	2.2.
Policy 28 – SEStran will seek to ensure that Health Boards take into account transport issues in all service decisions, and make necessary provisions to meet any transport impacts of these decisions, including where necessary funding public transport services.	2.2, 4.1.
Environmental Impact	
Policy 29 – Transport interventions will be designed and operated to minimise their impact on the environment.	3.2, 4.4.
Policy 30 – Interventions in the RTS should contribute to the achievement of national and international targets related to local air quality climate change, particularly reducing emissions of CO2 and other greenhouse gases.	3.1, 1.4.
Policy 31 – New transport infrastructure proposals which could have significant adverse effects on areas designated for their natural or cultural heritage and environmental quality, including air quality, will not normally be supported.	3.2.

RTS Policy	Relates to Objectives…
Energy Use/Efficiency	
Policy 32 – The RTS will promote interventions that will reduce the consumption of non-renewable resources.	3.2, 3.3, 3.4.
Policy 33 – The RTS will promote interventions that will improve energy and resource efficiency.	3.1, 3.2, 3.3.
Accident Reduction	
Policy 34 – Interventions that are cost-effective in reducing accidents will be supported.	4.1, 3.3, 3.4, 3.5.
Health Promotion	
Policy 35 – There will be a presumption in favour of schemes that lead to greater physical activity, and that facilitate independent travel especially by children.	4.2, 2.1, 2.2, 2.3, 3.3, 3.4, 3.5.
Personal Security in Transport	
Policy 36 – There will be a presumption in favour of schemes that enhance personal security, especially for pedestrians, cyclists, and public transport users.	4.1, 2.1, 2.2, 2.3, 1.1, 1.3.
Air Quality	
Policy 37 – There will be a presumption in favour of schemes that assist the achievement of local air quality targets.	4.3, 3.2, 3.3, 3.4, 3.5.
Transport Noise	
Policy 38 – In the development of new infrastructure, appropriate measures will be taken to minimise the adverse impacts of transport noise.	4.4, 3.2.
Strategy & Policy Integration	
Policy 39 – Schemes supported in national strategy and policy documents will be afforded a higher priority for implementation.	1.1, 1.2, 1.3.
Policy 40 – All projects and interventions will be subject of a Quality Audit to ensure they maximise opportunities to meet all RTS objectives and policies. In particular schemes designed to encourage public transport use and/or reduce congestion should be audited to ensure they maximise their potential to also encourage walking and cycling. The Quality Audit will ensure that the needs of all groups are given due consideration in the assessment and design of RTS measures.	3.3, 3.5, 4.2.
Local Funding	
Policy 41 – SEStran will set aside funding to support cost-effective local projects and services consistent with initiatives in the RTS.	1.1, 1.2, 1.3, 1.4.

4.1 Introduction

4.1.1 Targets are set at the beginning of a strategy period to give some quantified indication of how much progress SEStran should make towards achieving its objectives. Targets are valuable because they give an indication of how far a strategy has moved towards its objectives. The Scottish Government's RTS Guidance specifically requires the setting of targets in the RTS. However, too many targets can be problematic in that they can be confusing, and may require a very large amount of data collection for them to be measured.

4.1.2 Therefore, each objective is covered by at least one target, but that one target may cover more than one objective, where appropriate. This means that all objectives are covered, but that the total number of targets is minimised. In each case, a baseline must be measured. The targets shown here are mainly set in terms of a percentage change on the baseline. Note that the time period for the RTS is taken here as 15 years. Also included here are the proposed measures which will be used to monitor the progress of the RTS during its lifetime.

4.2 Targets for Economy

4.2.1 The **economy** targets are particularly aimed at reducing congestion, widening labour markets and ensuring key economic transport links are maintained and developed.

4.2.2 In the RTS mode share targets are set for particular movements of people along corridors within the region. Mode share is used here as a proxy for congestion, the implication being that as the mode share for car falls, congestion should also fall. These mode share targets will measure progress against Objective 1.4 'to reduce the negative impacts of congestion, in particular, to improve journey time reliability for passengers and freight'.

4.2.3 Each RTS objective is now considered in turn.

1.1 – to maintain and improve labour market accessibility to key business/ employment locations

4.2.4 Access to key business and employment locations can be assessed in terms of the number of potential employees with a given travel time by public transport. This can be thought of as the labour market catchment for key, currently identified, employment centres. Improvements in public transport will increase this catchment, which can be defined in two bands – under 30 minutes and under 60 minutes.

4.2.5 **Target**: Relative to 2007, achieve a 10% increase in (public transport) labour market catchments (within 30 minutes, and within 60 minutes) for selected locations within the following key regional employment centres, and any others that may emerge – reach 3% in 5 years, 10% over 15 years:

- Edinburgh city centre;
- Gyle, Edinburgh Park, Edinburgh Airport;
- Livingston;
- Glenrothes;
- Leith Waterfront – Victoria Quay; and
- Edinburgh Royal Infirmary/Medipark.

4.2.6 A further set of key secondary employment centres will also be defined in the context of this target, to provide greater geographical coverage.

4.2.7 **Monitoring**: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information will be able to measure this.

1.2 – to maintain and improve connectivity to the rest of Scotland, the UK and beyond

4.2.8 Key economic 'gateways' to the rest of Scotland, the UK and the rest of the World include the motorway network, major railway stations, Edinburgh Airport, and Rosyth, Grangemouth and Leith ports. This objective seeks to ensure links to these gateways and beyond are maintained and improved.

4.2.9 Improved 'connectivity' here implies improved transport links in the shape of e.g. shorter travel times, more reliable journey times, more frequent services, new or more direct services. SEStran will identify a series of indicators for all modes, incorporating passenger and freight travel – road, rail, sea and air, in terms of links to key external destinations, in Scotland and beyond. As in the National Transport Strategy, this focuses on reduced journey times, increased frequencies and reliability (rail), reduced journey times and improved reliability (bus) and increased reliability (car). Integration has a key role to play here.

4.2.10 **Target**: To improve 'connectivity' to a range of key external destinations (as defined above) – either directly, where under SEStran's sphere of influence, or indirectly via influencing other bodies such as bus and train operators, other RTPs and Transport Scotland. Although no quantitative target is set at present, SEStran is committed to working with councils, other RTPs, Transport Scotland and other stakeholders to develop consistent targets for this key measure during 2008.

4.2.11 **Monitoring**: to be confirmed.

1.3 – to support other strategies, particularly land-use planning, and economic development

4.2.12 No quantitative target possible – only demonstrable synergies with other strategies, through new working relationships and structures.

4.2.13 **Target**: Demonstrable progress in collaborative working between SEStran, planning authorities, economic development agencies and other appropriate stakeholders. For example, SEStran will seek to become a statutory consultee in the planning process at an appropriate level, and actively engage in City Region Plans and other development plans. In the longer term, an RTS target (10 year) is to deliver the transport infrastructure and services required to meet the relevant development plan requirements.

4.2.14 **Monitoring**: none required – demonstrable progress in collaborative working.

1.4 – to reduce the negative impacts of congestion, in particular to improve journey time reliability for passengers and freight

4.2.15 Commute-based mode share targets have been developed for the RTS. Achievement of these targets will reduce congestion in key corridors and improve journey time reliability. 'Time lost to congestion' is regularly monitored on the busier parts of the trunk road network by the Scottish Government, and reported annually. At present, congestion is not measured in a consistent, quantitative way in the wider SEStran area. However, new technology in the near future may dramatically improve the potential to measure congestion consistently. SEStran will seek to make use of these new data as and when it becomes available, and will update its target accordingly.

4.2.16 **Target**: (i) Reduce 'car driver' share for travel-to-work by six percentage points over the period of the RTS (see Chapter 8 for details), 2% after five years; (ii) Over the period of the strategy, stabilise (after five years) and reduce (after 15 years) time lost due to congestion across the SEStran trunk road network (through non trunk road interventions); (iii) From the Scottish Household Survey (Travel Diary), reduce the proportion of car driver journeys made by SEStran residents which are reportedly affected by congestion between 0700 and 0900.

4.2.17 As suggested above, these targets represent an interim arrangement pending the availability of better data with which to systematically measure congestion.

4.2.18 **Monitoring**: (i) Use of Census data once every 10 years, use of Scottish Household Survey Travel Diary (supplemented by SEStran area 'booster' surveys). (ii) Scottish Government's current congestion monitoring (supplemented by new SEStran/local authority monitoring).

4.3 Targets for Accessibility

4.3.1 The overarching objective for accessibility is 'to improve **accessibility** for those with limited transport choice or no access to a car, particularly those who live in rural areas'. Targets for each sub objective are proposed below.

2.1 – to improve access to employment

4.3.2 Through accessibility modelling, the RTS has established a measure for residential access to employment for all areas of SEStran, at a detailed spatial level. Modelling can be used to measure the impact of public transport improvements on this accessibility measure.

4.3.3 **Target**: For communities defined as most deprived by the Scottish Index of Multiple Deprivation (SIMD), improve access (by public transport) to employment (using the above measure) by an average of at least 10% (3% after five years, 10% after 15).

4.3.4 **Monitoring**: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information will be able to measure this. A 'Hansen' access to employment indicator will be the key measure.

2.2 – to improve access to health facilities

4.3.5 The accessibility modelling undertaken in the RTS also allows an accurate picture to be built of communities with long travel times, using public transport (defined here as greater than 60 minutes), to hospital services, where there are a significant number of zero-car households (see Chapter 6).

4.3.6 **Target**: Reduce the proportion of zero-car households with poor access (>60 minutes travel by public transport) to defined key hospitals by 50% over the period of the RTS (15% after five years).

4.3.7 **Monitoring**: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information will be able to measure this.

2.3 – to improve access to other services, such as retailing, leisure and education

4.3.8 **Target**: Reduce the proportion of zero-car households with poor access (>45 minutes travel by public transport) to defined further education colleges, job centres and regional shopping centres by 20% over the period of the RTS (7% after five years).

4.3.9 Note that improvements to public transport targeted at those >60 minutes from key services will in many cases also benefit those living closer.

4.3.10 **Monitoring**: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information will be able to measure this.

2.4 – to make public transport more affordable and socially inclusive

4.3.11 There are a range of barriers to the use of public transport which the RTS is setting out to address.

4.3.12 **Targets**: (i) By, or before the end of the RTS, seek to ensure that all DDA requirements regarding accessible buses and other RTS measures are met. (ii) Identify and address high fare 'anomalies' in the SEStran area by reducing fares on selected routes (after five years); and achieve an overall real-terms reduction in fares by the end of the RTS period, relative to 2007 (after 15 years). (iii) Seek to influence national policy in relation to the procurement of bus services if necessary to meet other RTS targets.

4.3.13 **Monitoring**: Information from bus operators; analysis of fares; definition of 'basket of fares' required – should reflect a range of different journeys and ticket types (e.g.singles, multi trip tickets, OneTicket). Bus fares in this basket then need to be monitored every six or 12 months.

4.4 Targets for Environment

3.1 – to contribute to the achievement of the UK's national targets and obligations on greenhouse gas emissions

4.4.1 Reducing the level of road traffic is central to the goal of cutting greenhouse gas emissions.

4.4.2 **Target**: Progress should be made at the SEStran level towards the Scottish Government's aspirational national traffic reduction target of a return to 2001 traffic levels by 2021, and the Scottish Government's emissions targets.

4.4.3 **Monitoring**: Scottish Government published statistics. Traffic counters on key links in SEStran area. Depending on availability of Automatic Traffic Counters, these may be largely on the trunk road network.

3.2 – to minimise the negative impacts of transport on natural and cultural resources

4.4.4 **Target**: To minimise significant effects on areas designated for, or acknowledged for, their biodiversity interests (including protected species), landscape and/or cultural heritage importance, from interventions in the RTS.

4.4.5 **Monitoring**: 1) The number of applications/interventions affecting areas designated for nature conservation or on habitats and species of importance; 2) the number of applications/interventions affecting areas designated for landscape or greenspace; 3) the number of applications/interventions affecting features of the historic environment including historic gardens.

3.3 – to promote more sustainable travel

4.4.6 The achievement of more sustainable travel choices will be evidenced through changes in mode share, and in particular a reduction in the share of 'car driver'.

4.4.7 **Target**: Targets for mode share (see objective 1.4).

4.4.8 **Monitoring**: SHS Travel Diary ('booster' surveys for SEStran), Annual or biennial vehicle occupancy counts on key corridors and at key stations.

3.4 – to reduce the need to travel

4.4.9 Advances in technology are creating opportunities for reducing the amount of travel undertaken, e.g.home working, tele conferencing, internet shopping etc.

4.4.10 **Target**: To stabilise and reduce the number of trips per person per year made using motorised modes, by 5% over the period of the RTS (1.5% after five years).

4.4.11 **Monitoring**: SHS Travel Diary (booster surveys for SEStran).

3.5 – to increase transport choices, reducing dependency on the private car

4.4.12 Target: Targets for mode share (see objective 1.4).

4.4.13 Monitoring: SHS Travel Diary (booster surveys for SEStran), Annual or biennial vehicle occupancy counts on key corridors and at key stations.

4.5 Targets for Safety and Health

4.1 – to improve safety (reducing accidents) and personal security

4.5.1 **Targets**: (i) By 2010, to cut killed and seriously injured (KSI) casualties by 40% and child KSIs by 50% from a 1994-98 base. (ii) Over the period of the strategy, a 20% reduction (7% after five years) in pedestrian and cyclist KSIs per trip made (using SHS data for trip making). (iii) Over the period of the strategy, a five percentage point improvement in the perception of the safety of travel by bus in SEStran (currently around 85%), using Scottish Government Bus Satisfaction monitoring data (two percentage points after five years).

4.5.2 **Monitoring**: Local authority accident databases; SHS data factored up to total SEStran population to give number of trips by each mode – Divide by number of casualties by mode to derive exposure rate; Scottish Government Bus Satisfaction monitoring data, collected quarterly.

4.2 – to increase the proportion of trips by walk/ cycle

4.5.3 **Targets**: Targets for mode share (see objective 1.4); in addition, over the period of the strategy, a 5% point increase in walking and cycling mode share for all trips, SEStran wide (1.5% after five years).

4.5.4 **Monitoring**: Annual or biennial vehicle occupancy counts on key corridors and at key stations. SHS provides reliable annual data on mode share for different and all trip purposes.

4.3 – to meet or better all statutory air quality requirements

4.5.5 **Target**: To contribute to meeting these requirements by 2010 or before.

4.5.6 **Monitoring**: Local authority and Scottish Government air quality monitoring data.

4.4 – to reduce the impacts of transport noise

4.5.7 The Scottish Government are currently undertaking a 'noise mapping' exercise which, based on 2005 traffic levels, will identify 'hot spots' of transport related noise. Flowing from this will be an action plan to tackle these hot spots. Via this action plan, the number of people exposed to excessive transport related noise should be reduced.

4.5.8 **Target**: No quantitative target possible but, as a stakeholder, SEStran will engage with the Scottish Government's Noise Mapping team to influence where possible, the programme of interventions arising from the action plan.

4.5.9 **Monitoring**: to be confirmed.

5.1 Introduction

5.1.1 This chapter outlines SEStran's position on a number of the most significant national level and other transport projects which are being, or may be promoted by Transport Scotland and others over the coming years. The positions taken reflect the RTS Objectives and RTS Policy context. More details can be found in Appendix H to the Delivery Plan.

5.1.2 The Scottish Government agency, Transport Scotland, has responsibility for the maintenance and development of Scotland's trunk road and rail networks, and therefore these elements fall outwith the immediate remit of SEStran, to some extent. SEStran will however seek to influence and work constructively with Transport Scotland on the development of its transport proposals within the SEStran area in the context of available financial resources.

5.2 National Rail Schemes

5.2.1 Transport Scotland are currently taking forward a number of schemes nationally which are of particular relevance to the SEStran area.

Rail/Tram Schemes – Committed or Under Construction

5.2.2 Stirling-Alloa-Kincardine The project re-opens approximately 21km of existing, disused and abandoned railway lines between Stirling Station and Longannet Power station in Kincardine. Passenger services will be introduced between Stirling and Alloa and new freight routes will be provided linking the west of Scotland with Longannet Power Station. **Status: Under Construction, opening 2008.**

- SEStran wishes to see passenger services extend beyond Alloa in the longer term.

5.2.3 Waverley Line Re-opening: Covering around 35 miles, the re instated Waverley Line will provide passenger services between Tweedbank and Edinburgh, with stops at the new stations of Galashiels, Stow, Gorebridge, Newtongrange, Eskbank, Shawfair, and existing stations at Newcraighall and Brunstane. This highly significant project will provide new rail services to expanding areas of Midlothian and the central Borders, providing a step change in the quality of public transport in this corridor. **Status: Committed, Royal Assent, estimated opening date 2011.**

- SEStran supports the re-opening of the Waverley Line and would also support measures to further reduce journey times, to provide competitive end to end journey times compared with car; and
- SEStran wishes to see passenger services extended beyond Tweedbank to Carlisle in the longer term.

5.2.4 Airdrie-Bathgate Line Re-opening (£300m): Restoring the link between Airdrie and Bathgate will allow through services to run between West Lothian, North Lanarkshire and east Glasgow, frequency between Bathgate and Edinburgh will increase from two to four trains per hour. At present, a new station will be provided at Armadale, a rapidly growing community. **Status: Committed, before the Scottish Parliament, estimated opening date 2010.**

- SEStran wishes to see a new station at Blackridge station included as part of this scheme and are encouraged by the Scottish Executive's commitment to investigate further a station at Blackridge.[15]

5.2.5 New rail access to Edinburgh Airport: A new station constructed close to Edinburgh Airport will allow national rail connectivity to this growing Airport via the Edinburgh Tram. Train services will run between Edinburgh, Fife, Falkirk and West Lothian, and further afield via the airport through the introduction of the Dalmeny chord **Status: Scottish Government commitment under development.**

- SEStran will seek to build on the opportunities afforded by the new airport access to develop the facility as a major public transport interchange.

5.2.6 Edinburgh Trams: Funding has been approved for the construction of the Leith to Edinburgh Airport section of the route (Phase 1a). Current funding levels may also allow the construction of the link between Haymarket and Granton (Phase 1b). **Status: Committed, construction commenced 2007, estimated opening date 2010/11.**

- SEStran will support the further expansion of the tram network within Edinburgh and beyond.

5.2.7 Waverley Station Redevelopment, Phase 1: This work has provided additional platform capacity, improved track layout and signalling, and will provide improved station access for passengers. The station will be able to handle four more trains per hour. **Status: Phase 1 completed.**

5.2.8 SEStran strongly supports these major projects which represent a significant investment in rail infrastructure in the SEStran area. SEStran will strive to see further enhancements to the rail network and expansions of the tram network in the future.

Rail/Tram Schemes – Feasibility/Not Yet Committed

5.2.9 Waverley Development Phase 2: A phase 2 of the Waverley development work could further increase station capacity and probably involve a fundamental rebuilding of the station. Without this further development, Waverley Station will act as a fundamental constraint on the development of the rail network affecting the SEStran area. **SEStran strongly supports any further development of Waverley Station as a central and essential element of the further development of the rail network.**

15 The Executive has promised to ensure that the necessary process of consultation and STAG analysis will start as soon as possible in the new Parliament, with a view to putting forward an order under the Transport and Works Bill or using the relevant local authority powers if that is more practicable. These proposals should enable the construction of the station to take place while the main route is being built.

5.2.10 High Speed Rail, Edinburgh – Glasgow, Edinburgh – London: In addition to planned improvements to the current lines, there are long term proposals for high speed rail links between Edinburgh and Glasgow and indeed between Scotland and London, including the consideration of MAGLEV technology. The Scottish Government has committed to developing a package of measures to improve journey times, improve reliability and increase capacity between Edinburgh and Glasgow, including infrastructure improvements to provide an effective interchange between the rail network and Edinburgh airport and Electrification of the core route between Edinburgh and Glasgow plus diversionary routes. **SEStran supports the further development and evaluation of these proposals.**

5.2.11 SEStran supports the Glasgow Crossrail proposals as a way to reduce central Glasgow interchange for travellers to and from the SEStran area.

5.2.12 The re-introduction of passenger services on the Edinburgh South Suburban Railway is not currently supported by Transport Scotland. A recent consultants' draft report suggests various alternative proposals for this scheme. SEStran wish to see proposals for this under utilised resource taken forward and will await the final report.

5.2.13 SEStran supports Transport Scotland's[16] plans for:

- Redevelopment of Haymarket station;
- Reduced journey times between Edinburgh and Inverness, Aberdeen, Dundee and Perth (through revised stopping patterns), together with the further development of 'interchange' stations (subject to fair treatment of intermediate stops which are dropped);
- North Berwick and Dunbar service enhancements;
- The introduction of express services on the Shotts line between Edinburgh and Glasgow Central;
- Electrification of Edinburgh – Falkirk – Glasgow line;
- 4/3 hour fastest journey time to London/Manchester respectively;
- electrification of Dunblane line;
- network wide enhancements for railfreight; and
- further capacity enhancements in the Edinburgh suburban networks.

Other Rail Issues

5.2.14 Network Rail has recently published a Route Utilisation Strategy (RUS) for Scotland, following a period of consultation. This has implications for cross-Edinburgh and Fife services in particular. SEStran will engage with Network Rail in the on-going development of these proposals, particularly those affecting the continuation of the Edinburgh Crossrail service where, although the Crossrail service is being retained, the service configuration will change.

16 Scotland's Railways, December 2006, http://www.scotland.gov.uk/Resource/Doc/157764/0042650.pdf

5.2.15 The East Coast mainline (ECML) is a key external connection for the SEStran area. The franchise for this route is now operated by National Express. As part of the franchising process a 'Franchise Consultation' document was published in early 2007. SEStran provided input to this document which would improve services on the line and enhance rail transport provision in the area, including:

- a greater emphasis on making the Edinburgh – London route more competitive with air travel;
- reduced journey times through revised stopping patterns;
- earlier and later departure times, coupled with faster end to end journey times for business travel;
- better co-ordination of ECML services with Cross Country services at key stations in England;
- the combination of Intercity East Coast and Cross Country services between Edinburgh and Glasgow Central, to be operated by a single franchise; and
- safeguarding and improving those services that extend to the north of Edinburgh.

Network Rail published an East Coast Route Utilisation Study to which SEStran provided similar input. SEStran will continue to seek to influence Transport Scotland, National Express and Network Rail to achieve the improvements outlined above.

5.3 National Road Schemes

National Road Schemes – Committed or Under Construction

5.3.1 There are very few significant Trunk Road schemes currently in the pipeline which have a direct impact on the SEStran area. These are listed below.

5.3.2 A68 Dalkeith Northern Bypass: new 5km link between Fordal Mains on the present A68 and a new junction on the Edinburgh City Bypass west of Old Craighall junction. **Status: Under construction, estimated opening date 2008.**

5.3.3 A876 Upper Forth Crossing at Kincardine: this new bridge and related works provides relief to the village of Kincardine and will allow the existing, listed bridge to be refurbished. **Status: Under construction, estimated opening date 2008.**

5.3.4 A7 and A68 Improved Overtaking Opportunities: minor schemes providing unambiguous overtaking opportunities on single carriageway routes[17]. **Status: Under construction, estimated opening date 2007/08.**

5.3.5 Completion of M80, Stepps-Haggs: off route and upgraded motorway link improving access between the west of SEStran and the Glasgow conurbation. **Status: Committed, construction commencing 2008, estimated opening date 2011.**

5.3.6 A8 Newhouse – Baillieston motorway upgrade: completes the M8 motorway between Edinburgh and Glasgow. **Status: Committed, construction commencing 2008, estimated opening date 2010/11.**

17 NTS Freight Action Plan, support this measure

5.3.7 SEStran supports the completion of the central Scotland motorway network, where it reduces congestion and improves strategic economic links to the region.

National Road Schemes – Feasibility/Not Yet Committed

5.3.8 Sheriffhall Grade Separation: Sheriffhall at-grade roundabout on the Edinburgh City Bypass is a major east/west (A720) and north/south (A7 and A68) bottleneck on the trunk and local road networks. There are major new developments planned in Edinburgh's 'south east wedge' and other developments in Midlothian which will add to the lengthy delays currently experienced there. Proposals are being developed to provide some degree of grade separation at the junction to separate east/west and north/south traffic, also allowing access to the Sheriffhall park and ride site which is north of the A720. **SEStran supports this proposal, providing it is demonstrated that the new configuration does remove, rather than simply relocate a major regional bottleneck, and provided that the new arrangement incorporates robust public transport priority measures.**

5.4 Edinburgh Airport

5.4.1 A new Edinburgh Airport Surface Access Strategy 2007-2011 was published in early 2007, designed to cater for increasing passenger numbers and reflecting the changing picture concerning the rail and Trams projects. SEStran will engage with British Airports Authority (BAA) to encourage sustainable transport solutions for surface access to Edinburgh Airport.

5.5 Forth Crossing

The proposed replacement crossing of the Firth of Forth will be a cable stayed bridge upstream of the existing road bridge.

Announced in the Scottish Parliament on 19 December 2007, the scheme is set to be the largest construction project in the country in a generation and will create a new modern landmark structure for Scotland.

Incorporating two main spans of 650 metres each and equal back spans of 325 metres, the deck will be supported by three towers with the central tower founded on the Firth of Forth's Beamer Rock.

The indicative route corridor runs from the northern shore of the Forth, just west of the existing road bridge to a point west of South Queensferry on the southern shore. The crossing will greatly enhance the trunk road network in the area, linking with the M9 in the south and the A90/M90 in the north.

With the ability to run dedicated public transport and high occupancy vehicle lanes from the outset, the bridge has also been planned with the strength and breadth to allow for additional 'multi-modal' public transport options such as light rail or a guided bus system in the future.

5.5.1 It is currently predicted that HGV traffic could be banned on the existing Bridge by 2013 due to the deteriorating condition of the current structure, meaning this is likely to be a significant gap between an HGV ban and the opening of a new crossing. Any significant restriction placed on the use of the current Bridge (such as the HGV ban) in advance of a new crossing becoming operational would have a severe and detrimental impact on the SEStran economy. It would also have a major impact on the diversionary routes, for example the A977 and the Kincardine Bridge. **SEStran therefore welcomes the commitment to a new crossing and wishes to see this progressed as quickly as possible.**

5.5.2 SEStran supports a sustainable solution to the problem of the deteriorating condition of the present Bridge. SEStran considers that the new crossing should be constructed to allow for future tram and, if possible, heavy rail use. It is likely that the construction of a second crossing will allow for the replacement or augmentation of the current structure's main cables in the medium term. In the longer term, where two crossings are therefore available, SEStran considers that:

- the combination of old and new crossings should provide no more than the current two lanes in each direction available to single- occupant cars;
- all new traffic lanes across the Forth need to be dedicated to buses and high occupancy vehicles (HOVs). Consideration should be given to the possibility of allowing HGVs to access these lanes;
- HOV priority measures should also be introduced on the A90/M90 in the short term to encourage more sustainable travel and provide a means of managing the southbound traffic flow during periods of maintenance on the existing crossing;
- physically separate running lanes for the mixed use of buses, HOVs and possibly HGVs should be considered, but as far as possible, flexibility should be maintained to enable full vehicle carrying capacity for traffic during periods of bridge maintenance; and
- the promoter should be required to put in place a demand management and investment package that will seek to ensure that traffic in Edinburgh will remain at or below the levels that would have been forecast without an additional crossing.

5.5.3 The additional crossing at Queensferry creates significant opportunities for the development of public transport in the area, both cross-Forth and in the bridgehead areas. SEStran will seek to use these opportunities to maximise public transport use in the corridor, in terms of bus, HOVs, guided bus and light rail networks.

5.6 Development-Led Schemes

5.6.1 There are a number of major transport infrastructure schemes in the pipeline which are essential in serving large scale development in the SEStran area, i.e.supporting existing Structure Plan developments. The main projects are as follows:

- new railway station and M9 motorway junction at Winchburgh;
- the provision of east facing slip roads on the M876 Junction 2, giving all ways access to strategic development sites at Larbert/Stenhousemuir; and
- new junction on the M8 at Whitburn to serve the proposed 'Heartlands' development on the site of the former Polkemmet Colliery.

5.6.2 These major projects are being funded by the relevant developers in each case. SEStran supports these projects as making a significant positive contribution to the development of the SEStran area.

5.7 Interaction with Other RTP areas

5.7.1 Throughout the development of the RTS, SEStran has engaged with the other RTPs on cross boundary issues. SEStran-relevant schemes highlighted by other RTPs (supported in principle unless stated otherwise) not covered elsewhere in this document are:

- Strategic park and ride (SPT) – providing better park and ride for travellers from the SEStran area;
- Queen Street Station improvements (SPT);
- Ayrshire to Edinburgh rail service improvements (SPT);
- Forth and Clyde Canal opportunities for freight/leisure (SPT);
- Improved connections from M74 to Edinburgh, including 'Fastlink' (SWSRTP) – this would improve strategic connectivity between SEStran and the UK's main north south route and as such is given guarded support, dependent upon the scheme details;
- Improved rail services between Dumfries and Edinburgh, including a new rail chord allowing direct train connections (SWSRTP);
- Reduced Aberdeen-Edinburgh rail journey times (NESTRANS), subject to fair treatment of intermediate stops which are dropped;
- Inverness – Edinburgh Airport direct rail services (HITRANS);
- improvements to the A9 between Perth and Inverness (TACTRAN);
- measures to reduce congestion on the M80/A80 between Stirling and Glasgow (TACTRAN);
- additional semi-fast rail service from Dundee to Edinburgh (TACTRAN);
- hourly rail service and line speed improvements between Perth and Edinburgh (TACTRAN); and
- Park and Ride/Park and Choose schemes for Dundee, Perth and Stirling (TACTRAN).

5.7.2 It is also noted that other cross boundary issues to England will be recognised, as a further 'cross-boundary' issue.

5.8 RTS National Schemes

5.8.1 There are a number of other infrastructure schemes being promoted by the RTS which would impact directly on the trunk road or rail network. These are listed amongst the full list of proposed RTS projects in Appendix G to the Delivery Plan, with some the key measures being highlighted below:

- Improvements to Redhouse Junction on the A92 in Fife;
- Re-opening of the Levenmouth railway line to passenger services;
- Edinburgh City Bypass based bus services and bus priority;
- Bus priority on M8/M9;
- Further extensions to the Edinburgh tram network;
- A90 high occupancy vehicle lanes; and
- Further improvement to services on the Shotts railway line.

6.1 Introduction

6.1.1 The first theme of RTS measures are those which are classed as 'region wide' i.e.they are not necessarily geographically specific in the way that infrastructure or transport services are. Region-wide measures include initiatives to address travel behaviour – smarter choices agenda; ticketing arrangements; freight; parking; demand management; safety; cycling; public transport – services, vehicles, fares, integration, information; mobility impaired; urban design; enforcement; and other measures.

6.1.2 Each of these areas is now covered in turn in the sections which follow. Each measure has been given a grading of low, medium or high priority in terms of its being taken forward by SEStran based on its performance against the objectives. In many of the topics discussed below, the potential role for SEStran involves one or more of the following:

- collating information on best practice across the area;
- establishing this as an information source for other local authorities, providing 'added value' by taking a regional perspective where appropriate;
- development of 'regional frameworks' – where appropriate, frameworks will be developed which recognise the diverse geographical nature of the SEStran area;
- encouraging the development of consistency of provision across the area, seeking to 'level up' provision across the area;
- acting as a 'centre of excellence' offering information and advice to particularly the smaller councils, in areas where lack of resources affect the councils' capabilities in these areas; and
- funding local council implementation or implementing the measures itself.

6.1.3 In developing the proposals contained in the Region Wide Measures theme, it is essential that a partnership approach is adopted and maintained between SEStran, the local authorities and other stakeholders. A first stage indication of possible delivery is shown below. However, SEStran will need to decide the most appropriate delivery mechanism on a case by case basis over time. These issues are discussed further in Chapter 10, but will include:

- Type 1 – SEStran review, support or **influencing** only, delivery as appropriate;
- Type 2 – SEStran **guidance**/policy framework/ best practice, local authority delivery/ participation;
- Type 3 – SEStran **guidance** policy framework/ best practice and funding, local authority delivery/participation;
- Type 4 – SEStran funding (and **co-ordination)**, local authority delivery/participation;
- Type 5 – SEStran funding (and **co-ordination**), joint SEStran & local authority delivery; and
- Type 6 – SEStran funding and SEStran **delivery**.

6.1.4 For each region-wide measure, an indication of how it will be taken forward, using the above typology is given. Appendix E to the delivery plan contains details of how these measures relate to the RTS objectives, and the separate RTS Delivery Plan contains details of the implementation of the measures, and the likely costs in each case.

6.2 Travel Behaviour – 'Smarter Choices'[18]

6.2.1 There are a number of initiatives which can be undertaken to encourage behavioural change amongst the population, when it comes to travel choices. This can range from 'hearts and minds' campaigns, to information supply and travel plans, typically implemented by large employers.

Topic 1 – Travel plans: facilitation of widespread workplace and school travel plans

- contributes well to a range of RTS objectives.

6.2.2 Travel plans are implemented by organisations to provide incentives and disincentives to people travelling to them, in order to travel by means other than the private car. For example, they may install cycle parking or secure improved bus services, or manage on site parking. Planning conditions and Section 75 agreements provide a means to require organisations that are applying for planning permission to implement travel plans. When implemented properly, travel plans have been seen to reduce car travel to an organisation by 15-20% (DfT, 2002). The 'school-run' is frequently identified as a significant traffic issue which school travel planning sets out to address.

6.2.3 In the SEStran area, a number of local authorities, especially Fife and Edinburgh, have been active in trying to facilitate voluntary travel plan adoption. The OPTIMUM^{2} [19] pilot project in Edinburgh is providing further evidence in this regard. In addition, all SEStran authorities follow government guidance (SPP17[20]) and request travel plans from new developments, through the planning process. In the RTS, this intervention would see an increasing number of travel plan officers employed both at the local authority and SEStran level whose job it would be to meet with large organisations to encourage them to adopt travel plans.

6.2.4 **Action**: SEStran will co-ordinate and help fund local authority travel planning capabilities and help implement travel planning itself (including for schools, local authority employees, health boards and other public and private sector workplaces). This proposal is included as a **high priority**, due to its potential effectiveness against a wide range of RTS objectives. Consideration will also be given to the delivery of further OPTIMUM2 compatible schemes at appropriate locations in the SEStran area. SEStran will also provide a regional forum for the discussion of travel planning issues and knowledge sharing. [TYPE 5]

Topic 2 – Developing sustainable travel through frameworks for development control/company travel plans, including the enforcement of travel plans

- contributes particularly to the Economy and Accessibility RTS objectives.

18 NTS paragraphs 157-162
19 OPTIMUM2 stands for 'Optimal Planning Through Implementation of Mobility Management'
20 NTS paragraph 154

6.2.5 The RTS guidance, LTS guidance and Scottish Government's road traffic stabilisation target, all require consideration of modal shift and road traffic reduction. Promoting a common framework for development control standards (including travel plans) could be a means of reducing the dependence on transport overall, thereby promoting inclusion and economic activity while reducing the need to travel and its consequent impact on network efficiency and the environment.

6.2.6 It is likely that any such frameworks may conflict with elements of locally adopted standards currently in place. Whilst these share many common themes, they do not match in all respects and consideration should be given to what added value a region wide approach would take.

6.2.7 The role of SEStran in promoting development control and related travel plans, is in establishing and sharing best practice in the delivery of the relevant standards applicable to these actions. The work conducted by SEStran authorities is a sufficient baseline upon which any example of good practice might be based.

6.2.8 **Action**: SEStran will encourage and provide guidance to constituent authorities on how to use the planning process most effectively to develop travel plans (see also Topic 10). It will also establish best practice on development control/travel planning in the RTS. This should be a **medium priority** for SEStran, as locally established standards already exist and some elements of these, e.g.parking, should have been developed according to national guidelines. [TYPE 2]

Topic 3 – Regional car sharing schemes, residential travel plans, and personalised travel assistance pilots

- contributes particularly to the Accessibility and Environment RTS objectives.

6.2.9 The regional car-share database is already in place (www.tripsharesestran.com). This should be sustained and opportunities sought to link this database to the travel plan work undertaken by local authorities for new developments. Personalised travel assistance pilots have already been undertaken by 'Step Change'. It may be appropriate to build on this work to establish best practice in personalised travel planning. Consideration should be given as to the value for money implications of any pilot, given the potential to apply it more widely to the SEStran area. The residential elements of the travel planning process will be best undertaken by local authorities, operating though their development control services (for new developments) and travel planning capabilities (for existing travellers).

6.2.10 **Action**: continue car-share scheme and offer links to local authorities' travel plan work. Establish likely value of personalised travel planning assistance in SEStran context and if shown to be good value, implement across the SEStran area. The **car share element is a high priority**, as it already exists and should be sustained. **Residential travel plans and personalised travel assistance plans are a medium priority**. Residential travel plans and personalised travel plan assistance are, by definition, local. They should, in the first instance, be delivered as part of the proposed housing developments likely to take place in the SEStran area over the appropriate development plans' periods. [TYPE 4]

Topic 4 – Promotion and facilitation of tele-working as a substitute for travel

- contributes particularly to Economy and Accessibility RTS objectives

6.2.11 Promoting tele-working is a means of reducing the dependence on transport overall, thereby promoting inclusion and economic activity, while reducing the need to travel and its consequent impact on network efficiency and the environment. The promotion of tele working will be best undertaken by SEStran and local authorities operating though their development control services, and workplace and personal travel planning capabilities. The role of SEStran in promoting tele-working as a substitute for travel would be initially limited to establishing and sharing best practice in the delivery of travel plans and the monitoring of the role of tele-working.

6.2.12 **Action**: include establishing best practice on promoting and monitoring tele working in the RTS. Consider role of travel plan officer and sustainable transport group in this context. This should be seen as a **medium priority** for SEStran, in the absence of national guidance. It would be practical to establish a region-wide approach, although pilot schemes may be established, possibly as part of travel plans for individual developments. [TYPE 5]

Topic 5 – Use of awareness campaigns to increase use of sustainable transport modes, reduce overall travel and encourage active travel

- contributes particularly to Environment and Accessibility RTS objectives.

6.2.13 SEStran will undertake awareness campaigns to increase use of sustainable transport modes and reduce overall travel. Examples of such campaigns in other areas have met with mixed success. The awareness campaigns that SEStran undertakes will be linked to specific measures, identifiable services or infrastructure provision. It is less likely that general, less targeted campaigns would represent good value for money, as they would not be as focussed on user groups or service/ infrastructure provision.

6.2.14 **Action**: establish a good practice methodology, focussing on links between services/ infrastructure and awareness campaigns. This should be a **medium priority** for SEStran, as it supports wider travel initiatives, can be delivered regionally on a relatively short timescale and does not require any capital investment. It would also be supportive of illustrating the work SEStran authorities have already completed and raising the profile of the organisation early in its formal life. [TYPE 5]

6.3 Ticketing Arrangements

6.3.1 Efficient ticketing systems can make public transport more affordable and more convenient, thereby assisting in initiatives to increase the use of public transport.

Topic 6 – Promoting through ticketing and OneTicket in SEStran area and beyond

- contributes particularly to the Accessibility and Economy RTS objectives.

6.3.2 Integrated tickets allow passengers to change between public transport modes and operators to make one journey or for many journeys during a set period. The integrated tickets 'OneTicket' and 'PlusBus' already exist in the SEStran area, but in some cases, are more expensive than the single operator alternative. For various reasons, these tickets currently have low market penetration. Scottish Government research shows that much higher market penetration rates are achieved in continental European regions, where there is no legislative impediment to the introduction of integrated tickets and they offer substantial price savings, compared with single journey alternatives.

6.3.3 **Action**: it is recommended that the existing OneTicket continues to be promoted as a **medium priority**. In addition, as a **medium priority**, SEStran should work towards developing the coverage, attractiveness and sales of OneTicket across the whole region. SEStran will seek a change in the legislation referred to above to allow the full potential of integrated ticketing to be realised. As a **high priority**, SEStran will engage with Transport Scotland and bus operators in order to progress the wider integrated ticketing agenda. [TYPE 6]

Topic 7 – Regional rail concession scheme

- contributes particularly to Accessibility RTS objectives.

6.3.4 Rail concession schemes offer discounted or free travel on the rail network for targeted groups within the community, e.g.the elderly or students. Across the SEStran area, various rail concession schemes have been in place in recent years. At the regional level, there may be a case for harmonising these schemes, to ensure equality of provision, build upon experience/best practice, and provide economies of scale in operational terms.

6.3.5 **Action**: SEStran will objectively review past and present relevant schemes from across SEStran and elsewhere, before making further recommendations. This should be seen as a **medium priority** for SEStran. [TYPE 6]

6.4 Freight

6.4.1 It is important that the needs of the freight sector are met across the SEStran area. This would be achieved by active engagement with the relevant bodies.

Topic 8 – Regional freight partnerships, supporting region-wide approach to freight management

- contributes particularly to the Economy RTS objective.

6.4.2 The 2004 White Paper and RTS guidance both highlight the requirement to consider the needs of freight in the RTS. The delivery of a Freight Quality Partnership (FQP) will most likely focus on the management of existing infrastructure. It is recognised that new infrastructure, pricing or behaviour change, may play a role in delivering outcomes, but the vast majority of existing and proposed freight movements will use existing routes. The formation and implementation of the freight quality partnership will be undertaken on a regional basis, and provide for a regular dialogue between SEStran and SEStran local authorities, and the freight sector.

6.4.3 Published sources from the Freight Transport Association suggest area-wide benefits can accrue from freight partnerships, particularly where close working between agencies leads to greater appreciation of constraints and agreement on packages of interventions. The Freight Quality Partnership will provide a forum for the discussion and progression of freight issues such as delivery time curfews, use of bus lanes, secure parking, environmental impacts etc.

6.4.4 **Action**: SEStran will implement a Freight Quality Partnership[21] at the regional level, drawing upon established guidance, as part of the RTS. Such a partnership supports agreed objectives and policies, meets requirements of the RTS guidance and will deliver packages of interventions of benefit to the freight sector (e.g.overnight parking facilities) and the wider public. This is a **high priority** for SEStran. It would be co-ordinated regionally, but it is likely that measures would be applied locally and regionally. Funding will be provided improved facilities for the freight sector, as identified through the FQP. [TYPE 4]

Topic 9 – HGV parks, route bans, signing strategy

- contributes particularly to the Economy and Health (the local level) RTS objectives.

6.4.5 The delivery of these measures will focus on the management of existing infrastructure or the provision of new facilities, where gaps in coverage are recognised. The primary focus of these interventions is network efficiency, ensuring that goods vehicles use the most appropriate routes on the network. As such, many of the proposed interventions would currently lie within the responsibility of local authorities, particularly in terms of signing and network restrictions. It will also be appropriate to consider how access to nationally or regionally significant localities can be protected or improved. Localities such as ports, freight interchanges, or key distribution sites would be considered in this context[22]. The delivery of this proposal is supportive of the delivery of a freight quality partnership and should be regarded in this context.

6.4.6 **Action**: the consideration of HGV facilities, routing issues and HGV signing will be undertaken through the FQP. Establish current extent of freight-specific infrastructure and identify any gaps, should these exist. Identify interventions that may address these gaps, should they warrant the delivery of new infrastructure. This should be a **medium priority** for SEStran, supplementing the measures outlined above. [TYPE 4]

6.5 Parking

6.5.1 Parking policy is a key element in the planning of transport. There are a range of potential regional issues with regard to parking.

21 NTS Freight Action Plan paragraph Action 10
22 NTS Freight Action Plan paragraph Action 5

Topic 10 – Consistently developed framework for maximum parking standards in relation to new developments

- contributes particularly to Environment and Health RTS objectives.

6.5.2 Parking standards are set by local authorities to guide the amount of off-street parking which is provided at new developments, for which planning permission is required. National Planning Policy (SPP17) recommends the adoption of maximum parking standards, where developers can provide parking in new developments up to a maximum number, in relation to the size of the development, in order to encourage more sustainable travel choices. SPP17 also sets standards for most land uses, for large developments. For smaller developments, most SEStran authorities currently use minimum standards. There have been national maximum standards for large developments in place in England since 2001, and in certain regions of England for much longer. Experience of their use shows that they reduce the effect of developers 'playing off' local authorities against each other to get more parking approved.

6.5.3 **Action**: A framework of suggested bands for maximum parking standards should be set across the region, depending on location, public transport accessibility and land use, for all sizes of development. For example, more generous standards could apply in deep rural areas such as the rural Borders and the east of East Lothian, compared with towns such as Haddington, Selkirk, Bathgate, Dalkeith or Alloa, and larger urban areas such as Livingston, Dunfermline. Central Edinburgh would maintain the most restrictive standards. The framework will be expressed in ranges, so that within bounds, local authorities could select parking standards appropriate to their area, but there would at the same time be some consistency across the region. It is recommended that this measure is adopted for implementation as a **medium priority.** [TYPE 2]

Topic 11 – Regional parking management policy, including decriminalised parking enforcement

- contributes particularly to Environment and Health RTS objectives.

6.5.4 A parking policy seeks to manage parking in areas where demand exceeds supply, in order to ensure that the limited parking available is focussed on priority users. Normally in such situations, local authorities try to make more parking available for residents, business travellers and shoppers, whilst discouraging all-day parking for commuters. It is important to note that normally, parking policy focuses on those places with the most acute parking problems. Decriminalised parking takes enforcement (DPE) of on street parking regulations out of the hands of the police and allows local authorities (or their contractors) to do it instead, increasing the level of enforcement significantly. However, for smaller local authorities, DPE may cost more to implement and run than it generates in revenue. A parking strategy can be implemented in areas without DPE.

6.5.5 In the first instance, the RTS will give a general direction to constituent authorities to manage parking to benefit residents, visitors and business users and to discourage commuter parking, in line with RTS policies. The areas likely to be in most need of (further) parking management policy will, in the first instance, be the larger towns in the area, Edinburgh's suburbs and district centres, and major tourist attractions.

6.5.6 **Action**: it is recommended that parking management and DPE are given medium priority in those areas where parking demand is exceeding, or will shortly exceed supply, and that the RTS provides guidance to local authorities on this. SEStran will develop a framework for regional parking management strategies as a **high priority**. [TYPE 2 – parking management, Type 6 – decriminalised parking enforcement (outside Edinburgh)]

Topic 12 – Park and Ride/Share

- contributes to a wide range of RTS objectives.

6.5.7 There are many bus and rail-based park and ride sites in operation around the SEStran area. Indeed Park and Ride accounts for 30% of all rail travel in the area. It is extremely popular with users and the demand for park and ride continues to grow. At many sites, car park capacity is often reached and this can cause local conflicts in the vicinity of the site. There are obvious benefits from park and ride, most notably the removal of car traffic from congested corridors.

6.5.8 A regional strategy will monitor use of current Park and Ride sites and set out an on-going programme of investment in new and extended park and ride sites, both rail and bus based. It will also consider pricing regimes currently in operation.

6.5.9 **Action**: SEStran to establish a regional park and ride strategy as a **high priority**.[23] An on going programme, where demand at Park and Ride sites across the SEStran area is monitored annually will be established. This will lead to a clear, prioritised programme of car park expansions. Proposed new sites will be identified/appraised as part of this strategy to ensure a consistent, regional approach to Park and Ride. [TYPE 5]

6.6 Charging

6.6.1 Congestion charging has long been regarded as a potentially effective tool in shaping transport, but has encountered problems with political and public acceptability. The position of SEStran on these issues is laid out below.

Topic 13 – Congestion charging & tolls

6.6.2 Congestion charging is widely regarded as one of the most effective measures available for influencing travel behaviour in congested areas. It charges drivers a fixed or variable amount for driving on existing roads in certain places at certain times, in order to increase the cost of driving to reduce demand and hence congestion. Variable bridge charges would attempt to smooth demand for travel across e.g.the Forth Road Bridge, by charging more at peak times and less at off-peak, and differentiating between single and multi-occupant vehicles. Urban congestion charging has been implemented in London (recently extended), Singapore, four Norwegian cities and, most recently (approved by referendum), in Stockholm. Results in terms of traffic and congestion reductions have been impressive – around a 25% reduction in traffic in central Stockholm, for example.

6.6.3 There are however severe issues locally of public acceptability regarding the introduction of congestion charging, following rejection of the proposed scheme promoted by the City of Edinburgh in February 2005. The consultation process on the Draft RTS has confirmed that public and stakeholder opinion in the SEStran area on this matter remains highly polarised.

23 NTS paragraph 112

6.6.4 The UK Government is currently considering the concept of a national road pricing scheme. The design and implementation of such a scheme is a long-term issue, and clearly outwith the scope of this current RTS. Nevertheless, it remains an important consideration for the long term.

6.6.5 **Action (road user charging)**: in spite of its potential effectiveness in achieving many of the RTS objectives, the different road user charging alternatives are **not included as a priority action** in the RTS document, reflecting public and stakeholder opinion on this matter. In particular:

- **urban congestion charging** will not be pursued by SEStran at present; and
- a road user charge on the **Forth Road Bridge** was rejected by the Minister of Transport in 2006 – and will not be advocated by SEStran at present.

6.6.6 **Action (tolls)**:The Scottish Government has removed tolls on the Tay and Forth bridges. No SEStran action is required.

6.7 Safety

6.7.1 Road safety is a key element of the RTS. The following proposals outline how SEStran could provide added value in this context.

Topic 14 – Regional road safety plans to complement local AIP programmes and speed enforcement resources

- contributes particularly to the Safety & Health RTS objective.

6.7.2 The consideration of safety is required in the RTS. Moving forward, SEStran will takes a regional perspective on safety issues, which may include the establishment of regional road safety plan(s), an AIP (accident investigation and prevention) programme, and/or the expansion of speed enforcement resources. Each of these measures can play a role in supporting the improvement of safety for the travelling public. All of these measures are currently being delivered by SEStran's constituent local authorities.

6.7.3 The main issues that should be considered therefore, are the potential overlap between any action SEStran could take and the actions currently underway, and the extent to which SEStran could bring added value or additional resources to the promotion of safety.

6.7.4 The most practical inclusion of safety in the RTS is achieved by policy, supporting the government's road casualty reduction targets. This may be supported by specific measures or processes, designed to identify key groups, e.g.school children, who may be the focus of programmes or campaigns. The Scottish Government's guidance on Road Safety Plans offers an effective basis upon which to base the shaping and delivery of a SEStran wide road safety plan.

6.7.5 **Action**: carry forward general support for road safety, linking to local and national actions, and consider how best to bring added value to the delivery of safety in the SEStran area, e.g.through a best practice role. This should be a **low priority** for SEStran, as local authorities are already working to this end. [TYPE 2]

Topic 15 – Safer routes to schools

- contributes particularly to the Safety RTS objectives.

6.7.6 This proposal builds upon a significant amount of work ongoing by local authorities, particularly in terms of access to schools where ring-fenced funds and dedicated staff resources have been available. In addition to funding, SEStran's key role will fall to pooling best practice and guidance on how these interventions can be applied. The experience of the local authorities making up SEStran is an effective basis upon which to build good practice. Currently, all of the authorities in the SEStran area are delivering safer routes to schools or similar initiatives in some form.

6.7.7 **Action**: SEStran to establish an inventory of current practice amongst its members and identify gaps where these exist in localised networks. A high-level policy framework will be set to ensure consistency of provision across the area. This is a **medium priority** for SEStran in policy terms, in so far as significant work has already been undertaken. [TYPES 3 and 4]

6.8 Cycling[24]

6.8.1 The improvement of cycling facilities will assist present day cyclists, and encourage more people to consider cycling as a potential mode of transport, since exposure to traffic is a significant deterrent for some. The promotion of cycling can bring major health and environmental benefits.

Topic 16 – Urban cycle networks, including integration and parking

- contributes particularly to the Environment and Health RTS objectives.

6.8.2 Urban and commuter cycle networks make it easier and safer for cyclists to travel around urban areas and are of key importance in improving the attractiveness of cycling as a mode. In the UK, Peterborough, York, Hull, Nottingham, Oxford and Cambridge have had considerable success in stabilising or growing their cycle modal split, by gradually retrofitting safe and direct cycle routes into the existing urban fabric, as well as by ensuring that new development caters for cyclists properly. In Edinburgh, cycle use has now been increasing steadily for 20 years, and though starting from a very low base, nearly one in 20 journeys to work in the city are now made by bike, more than train. Cycle measures are generally low cost unless major structures are involved (e.g.cycle bridges). Also included here are facilities to enable cycling to integrate with other transport modes.

6.8.3 **Action**: SEStran to support the development of urban cycle networks as a **high priority** – these cycle routes would in the main parallel the major transport flows identified in the RTS. [TYPE 2]

24 NTS paragraph 112

Topic 17 – Rural cycle networks, including integration and parking

- contributes particularly to the Environment and Health RTS objectives.

6.8.4 As their name suggests rural cycle networks make it easier and safer for cyclists to travel around rural areas. Sustrans in the UK has pursued rural (as well as urban) cycle networks and its monitoring statistics show sharply increasing use of these facilities, and also demonstrate their contribution to local economies through encouraging tourism. Also included here are facilities to enable cycling to integrate with other transport modes.

6.8.5 **Action**: In SEStran, key links in this category would be developing a continuous round the Forth cycle route, and national cycle network routes. These should be implemented as a **medium priority**. [TYPE 2]

Topic 18 – Cycling infrastructure, best practice

- contributes particularly to the Environment and Health RTS objectives.

6.8.6 There is a need to ensure consistency of provision across the SEStran area in terms of the configuration and layout of cycling infrastructure. Certain road/street furniture configurations can have a negative impact on cyclists and these should be avoided. At present, the treatment of these issues varies widely across the area.

6.8.7 **Action**: Building on work previously undertaken by City of Edinburgh, SEStran will collate best practice on cycling infrastructure, as a resource available to local authorities, as a **medium priority.** [Type 2/5]

6.9 Public Transport – Services

Topic 19 – Support for off-peak and non-commercially viable bus services

- contributes to a wide range of RTS objectives.

6.9.1 The level of bus services provided during off-peak hours and in areas of relatively low demand is essential from the perspective of non car owners, and in providing alternatives to the car. At present, many services drop off sharply or cease fairly early in the evening which is problematic for many. In addition, many Sunday services are infrequent with some not running at all. This is a particular issue for access to education, retail and leisure, in addition to employment and health.

6.9.2 **Action**: As a **high priority**, SEStran will review (with local authorities) off peak and supported services across the SEStran area, identify major 'gaps' in provision, and seek additional revenue support funding to provide improved services on key routes across the area. [TYPE 4 /5]

6.10 Public Transport Vehicles

6.10.1 The quality of public transport vehicles impacts on the attractiveness of the service and image they offer. In addition older buses are problematic in terms of air quality. A high quality vehicle fleet is good for the environment and attractive (and accessible) to all users.

Topic 20 –Alternative fuels

- contributes particularly to the Environment and Health RTS objectives.

6.10.2 By encouraging the take up of alternative fuels (e.g.biofuels), and alternatively fuelled vehicles in the public transport vehicle fleet, SEStran will contribute to its environmental objectives and to energy security.[25] The SEA has underlined the importance of this measure with reference to the increasing number of buses in urban areas.

6.10.3 **Action**: As a **medium priority,** SEStran will review similar schemes in operation and under consideration in the UK and elsewhere, before deciding to take any further action. [TYPE 1]

Topic 21 – A framework for minimum standards for public transport vehicles

- contributes particularly to the Accessibility, Environment and Health RTS objectives.

6.10.4 New public transport vehicles are generally implemented as part of a wider package of improvements to public transport, so it can be difficult to isolate their impacts. However, there are some examples from smaller British towns (e.g.Perth) where the introduction of new vehicles alone has led to an increase of 10% in the number of passengers using a route within a year. Low-floor vehicles, in particular, have a positive effect, such as the 747 Fife – Edinburgh Airport service. London has a minimum level of vehicle standards specified through its contracts with operators. The same applies to the only statutory Quality Partnership in the UK, in Dundee, where operators have undertaken to provide vehicles to a minimum standard. Both cities have seen significant increases in bus use in their areas in recent years.

6.10.5 **Action**: SEStran will seek to achieve an applicable minimum standard of vehicle across the area via this framework, through either negotiation with/exhortation of operators, or by contributing to the funding of new vehicles, through additional investment. Minimum standards should be specified in terms of vehicle age, accessibility, and emissions. SEStran should examine the options available in this context as a **medium priority**, recognising the difficulties faced by small operators in this regard, and other local issues. [TYPE 3]

25 It is recognised that major improvements have been made to diesel engine technology in recent years. Also NTS Bus Action Plan paragraph 1.17.

6.11 Public Transport – Fares

6.11.1 The level of fares is a key factor in the use of public transport in some (but not all) parts of the SEStran area.

Topic 22 – Fares Measures: Costs of public transport fares[26]

- contributes to a range of RTS objectives, particularly Accessibility and Economy.

6.11.2 Fares can be a major barrier to the use of public transport in some places, limiting labour market participation, and adding to social exclusion. Analysis has revealed significant regional variation within SEStran in terms of fare levels on comparable route – for both train and bus. The long-term trend has been for a real terms increase in the cost of public transport, whilst the real terms cost of car travel has reduced.

6.11.3 **Action**: As a **medium priority**, SEStran will review fares levels across the area, and will support interventions to reduce fares where fare levels are identified as being above that which would be expected, in comparison with other routes. In the longer term, SEStran will seek to bring about a reduction in public transport fares, in real terms, reversing the long term trend. SEStran will initiate a monitoring programme for public transport fares in the area. [TYPE 5]

6.12 Public Transport – Integration & Infrastructure

6.12.1 Public transport services which are well integrated are much more attractive to users.

Topic 23 – Bus and rail timetable and service integration

- contributes to a range of RTS objectives, particularly Accessibility and Economy.

6.12.2 Cities and regions such as Madrid, Freiburg, Strasbourg, Basel and Stockholm have enjoyed significant increases in public transport patronage over the last 10-15 years. In part, this has been due to the integration of services: buses, trains and trams are timetabled, and networks structured, so that passengers can take advantage of interchange opportunities. Surveys for the SEStran Integrated Corridor Studies showed that the amount of bus to rail and bus to bus interchange in the SEStran area is currently low – this may be in part due to a lack of timed connections, poor interchange facilities and opportunities, and in the case of Edinburgh, the higher than normal level of cross city bus routes.

6.12.3 In all areas, service integration to even out headways between different bus services on common parts of the route at times of day when services are less frequent would be welcomed by the travelling public, and this could be the first element of such an intervention, although current competition legislation is an impediment to its achievement. In addition, feeder bus services to stations may be required in larger towns (e.g.Falkirk) and in areas where rail lines do not pass through town centres (e.g.West Lothian, East Lothian).

6.12.4 **Action**: This proposal is recommended for initial investigation as a **medium priority**. The investigation would recommend whether there is a definite need for better service integration and cost up options and assess the obstacles to delivering this. [TYPE 2]

26 NTS paragraph 190-195

Topic 24 – Improved pedestrian and cycle access to major stops, stations and interchanges

- contributes particularly to the Accessibility and Economy RTS objectives.

6.12.5 The RTS guidance highlights the need to provide improved pedestrian and cycle links, as part of managing overall travel demand, particularly to key destinations such as schools and public transport interchanges. This measure ensures that there is safe and high quality cycle and pedestrian access to, and cycle parking at, stations, major bus stops and interchanges across the region, since the walk to the public transport stop can be a major deterrent to public transport use. Action in SEStran will start with the most heavily used stops and stations, and work out from them to more lightly-used locations.

6.12.6 **Action**: it would be sensible to upgrade access first to those interchanges which are most heavily used and to which access is currently poorest. These will be identified by SEStran as a **medium priority**, but might include stations in the larger towns in Falkirk, West Lothian, and Fife; Haymarket; and within Galashiels, Penicuik and Dalkeith; and at all major hospitals. A framework of minimum standards will be developed. [Type 3]

Topic 25 – Improved infrastructure at bus stops

- contributes particularly to the Accessibility and Safety RTS objectives.

6.12.7 Allied to links to bus stops discussed above, it is clear that good quality bus stop infrastructure can make a major difference to both physical access to, and the perception of bus services in a corridor (and hence use). Bus build-outs and associated measures, coupled with improved enforcement (see Topic 32), improves access to buses particularly for those with mobility difficulties, or with pushchairs etc.

6.12.8 **Action**: SEStran will review bus stop infrastructure initially on the key regional public transport corridors. Gaps in provision will be identified, best practice will be established, and a framework for minimum standards will be developed. Funding for a prioritised programme of improvements will follow. This is a **high priority** for SEStran. [Type 3/2]

6.13 Public Transport – Information

6.13.1 The provision of good public transport information at the stop/station removes much of the uncertainties of travelling by public transport, and adds to the quality of the service.

Topic 26 – Public transport information strategy (bus)

- contributes particularly to the Accessibility and Economy RTS objectives.

6.13.2 The level and quality of public transport information varies across the SEStran area. There is a need to initiate a region-wide Public Transport Information Strategy. This would set standards for public transport information and define the extent and method in which operators are involved in the provision of information. The strategy may also involve the production of a region-wide public transport map, in paper or web-based form.

6.13.3 **Action**: As a **high priority**, SEStran to build on recent work to further consider the need for a SEStran Bus Passenger Information Strategy, and implement if appropriate. [TYPE 3]

Topic 27 – Real time information (RTI) at rail stations, and at interchanges and major bus stops in SEStran area, including rural areas

- although RTI does not directly meet many of the RTS objectives, it does contribute significantly to the quality of public transport.

6.13.4 The RTS guidance, the LTS guidance and the Scottish Government's road traffic stabilisation target require consideration of improving the quality of information available to travellers and potential travellers. This proposal would deliver real-time information, building on existing schemes operating in Scotland and the SEStran area, including bus-based RTI in Edinburgh and rail based information across the ScotRail network. The use of RTI systems has been beneficial where applied, particularly on light rail/tram systems in England. In such cases, the provision of RTI is seen as an essential component supporting the overall quality of service.

6.13.5 **Action**: identify current systems of RTI in SEStran and potential pilot of new routes or corridors. This is a **medium to high priority** for SEStran, as RTI offers considerable potential, is a proven technology and already operates in some parts of the region. A common regional approach should be adopted (including the definition of 'major bus stops'); particularly in IT terms, to ensure that systems are inter-operable. [TYPE 5/6][27]

6.14 Mobility Impaired

6.14.1 Those with mobility impairments have specific requirements of transport services. This topic is considered further in Chapter 11.

Topic 28 – Delivery of a regional taxicard

- contributes particularly to the Accessibility RTS objective.

6.14.2 The RTS guidance, LTS guidance and Scottish Government's road traffic stabilisation target all require consideration of alternate models of delivering public transport, particularly where commercial or subsidised services may not be appropriate. A regional taxicard augments other public transport services and provides connectivity where bus and train infrastructure is limited or absent. Some local authorities offer a taxicard which permits disabled people to travel by taxi at reduced cost. It cannot be argued that SEStran residents enjoy equality of access to a taxicard at the present time.

6.14.3 Such a **regional** taxicard would allow holders to undertake a limited number of journeys, without the need to possess a private car. This type of scheme is particularly important for the mobility impaired. In so doing, it is intended to overcome accessibility and inclusion issues. The aim of the region-wide scheme is to provide consistency of provision/equity amongst all SEStran authorities.

27 Note that the Edinburgh system should continue to be developed, managed and operated by CEC.

6.14.4 **Action**: SEStran to review and consider what scope it feels a region-wide taxicard offers in terms of delivering the RTS objectives, and as part of the rural transport hierarchy described in Chapter 7, and with respect to systems currently in operation. This is a **medium priority** for SEStran, both given the requirement to consider it under the guidance and the potential to deliver schemes or services that offer the potential to address inclusion and accessibility issues. [TYPE 1]

Topic 29 – Mobility impaired transport information services

- contributes particularly to the Accessibility RTS objective.

6.14.5 The DDA[28] and RTS guidance highlight the need to provide specific services and infrastructure where reasonable for the mobility impaired. Much of this work is already being provided by local authorities, public transport providers and other agencies. The primary consideration for SEStran is the potential to bring added value at the regional level to the management or delivery of transport information for mobility impaired persons. It is also appropriate to consider to what extent existing transport information services can deliver the required levels of service. It may also be appropriate to consider how transport information services can be used in support of Demand Responsive Transport. Good practice e.g.'Review of Demand Responsive Transport in Scotland', highlights opportunities to link information provision to the more general provision of specialist transport services.

6.14.6 **Action**: SEStran will identify the current levels of information service provision and its potential role to bring added value to the delivery of these services. This is a **medium priority** for SEStran, given the requirements of the DDA and benefits that could accrue from delivery. Mobility impaired information services are deliverable in a regional basis, although it is appropriate to consider roll-out on a corridor basis, in tandem with other improvements, including bus RTI. [TYPE 1]

6.15 Urban Design

6.15.1 Good urban design can encourage more walking/cycling by creating a more favourable environment for this type of travel, and reducing the impact of the car in urban areas.

Topic 30 – Framework for design standards for sustainable settlements and other city streetscape schemes

- contributes particularly to the Environment and Health RTS objectives.

6.15.2 The RTS guidance, SPP17 and several SEStran local authorities include reference to urban layouts and streetscape supporting the promotion of sustainable travel. This proposal is based around the alteration of streetscape and layout of developments to promote walking and cycling amongst other on-street uses. This proposal is, to some extent, related to the delivery of urban design – shared surface pilots, previously discussed.

28 Disability Discrimination Act

6.15.3 Each of the existing SEStran authorities has its road's development guidelines and standards in place. Many of these share common themes, although differences in emphasis are present. The design of residential developments, incorporating hierarchies of roads and pedestrian links, is typically included in these guidelines. As such, any proposal to adopt SEStran wide standards may impinge on local guidelines as these currently stand.

6.15.4 It may be practical to establish best practice guidance for the delivery of sustainable settlements and urban streetscape schemes. In so doing, SEStran would be able to bring added value to the delivery of such schemes, without the need to rewrite existing local authority guidance.

6.15.5 **Action**: a best practice approach will be identified, offering guidance on how best to incorporate transport provision in sustainable design (including traffic calming measures). This should be a **low priority** for SEStran, reflecting the fact that local design characteristics may be more important than regionally applied ones, and the likelihood is that the delivery of design standards will be focussed through the development plans system, rather than the RTS. Any approach SEStran does undertake should be applied on a region-wide basis. [Type 2]

Topic 31 – Town/City Centre 'Urban Realm' Improvements

- contributes particularly to the Economy and Safety RTS objectives.

6.15.6 SEStran recognises that the vitality of town and city centres is influenced by the quality of the local environment. Town and city centre schemes are therefore supported by the RTS. Such schemes usually involve substantial investment in town and city centre streets aimed at improving the pedestrian environment, but might also involve bus station/interchange improvements or high quality off-street parking.

6.15.7 **Action**: As a **medium priority**, SEStran will liaise with local authorities to assess the potential scope of this region wide measure. If appropriate, capital funding will be made available. [TYPE 3]

6.16 Enforcement

Topic 32 – Bus lane compliance and enforcement[29]

- contributes to a range of RTS objectives, as it improves journey time reliability for buses in the affected areas.

6.16.1 Bus lane enforcement cameras (static, mobile, or on-bus) provide automatic enforcement of bus lane infringements. They can be used in either a criminalised or decriminalised enforcement regime. Good enforcement is critical to the functioning and credibility of bus lanes, and experience in London (in a decriminalised regime) has shown camera enforcement to significantly enhance drivers' compliance with, and the effectiveness of, bus lanes. Enforcement of parking regulations at bus stops and in bus lanes is equally important – in general design measures which improve compliance will be used wherever possible and applied across the region.

6.16.2 **Action**: Initially this measure will be considered as a **medium priority** in Edinburgh, but may extend to other areas as further bus lanes are introduced over time. [Type 2]

29 NTS Bus Action Plan – Action 17

6.17 Other Area-Wide Measures

Topic 33 – Tourist signing strategy

- contributes in a small way to the RTS objectives, particularly Economy.

6.17.1 A tourism signing strategy can assist in the promotion of tourism facilities and attractions across the area. It also provides a consistency of signing from the perspective of the tourist. The delivery of a tourism signing strategy will focus on the provision of new infrastructure (i.e.signs where none currently exist). The delivery of the signing strategy will be undertaken on a regional basis.

6.17.2 It is considered that a best practice approach, leading to interventions, would be the most appropriate. Given the risks and deliverability issues associated with applying a region wide approach to tourist signing, it may be appropriate to focus any good practice on the existing tourist signing strategies of the constituent authorities. It may be practical to standardise this approach, although the benefits of doing so would have to be demonstrated. For wider examples of tourist signing operated on an area basis, those strategies offered by the 'Tourist Signing Policy' for Northern Ireland (April 2004) provides a useful template.

6.17.3 **Action**: SEStran to give further consideration to establishing a tourism signing strategy. This consideration should be a **low priority** for SEStran, as there is no statutory requirement for such a strategy. [Type 3]

Topic 34 – Regional coordination of community and accessible transport services

- contributes in a small way to the RTS objectives, particularly Accessibility.

6.17.4 This is a measure which is complex to evaluate and where there are many stakeholders currently involved. It is considered further in Chapter 7.

6.17.5 **Action**: As a **medium priority** SEStran to commission research to evaluate the need for SEStran to move towards a regional coordination role, and the development of demand responsive transport. This research will take cognisance of existing cross boundary co ordination such as between Stirling, Clackmannanshire and Falkirk. [TYPE 1]

Topic 35 – A framework for regional standards for ITS measures (e.g.parking guidance, RTPI)

- contributes in a small way to the RTS objectives, particularly Economy.

6.17.6 ITS can be extremely costly, and a high proportion of these costs can be fixed. Therefore it is imperative that ITS systems adopted within different parts of the SEStran area are at the very least interoperable but, preferably, built to the same standard. This will enhance public understanding of the ITS measures and reduce development and implementation costs.

6.17.7 **Action**: SEStran to compile an inventory of ITS systems in the area, assisting in information provision and the consistency of approach/inter-operability, although only as a **low priority**. As a **high priority**, SEStran will ensure cross boundary (i.e.other RTP areas) compatibility in ITS where there are significant transport flows. [TYPE 3]

Topic 36 – City Car Club systems

- contributes in a small way to a range of RTS objectives.

6.17.8 The current Edinburgh Car Club scheme allows members to have convenient access to a car within their own community without actually having the expense of owning and running a car. Members pay a fee to join/pay monthly and can 'book' a car to use and pay for on a rate per mile/per hour basis for use of the car.

6.17.9 **Action**: As a **low priority,** SEStran to review the evidence on the effectiveness of car clubs in relation to the RTS Objectives, and consider supporting their extension into other areas. [TYPE 1]

Topic 37 – Land Use Planning

- contributes to all RTS objectives.

6.17.10 The importance of land use planning and transport planning in the SEStran area moving forward in an integrated and coherent way has been noted throughout the RTS.

6.17.11 **Action**: As a **high priority**, SEStran to build joint working practices with all relevant local authority structure, strategic development and local development planning teams. [TYPE 2]

Topic 38 – Facilities for Powered Two Wheelers (PTW)

- contributes in a small way to Economy and Safety RTS objectives.

6.17.12 Users of powered two wheelers (motor bikes, scooters etc) have specific requirements, including safety[30], from the transport network. There are also regulatory issues, such as the use of bus lanes which require consideration. Improved facilities can encourage mode shift away from single occupant car, with gains in terms of congestion relief and the environment.

6.17.13 **Action**: As a **low priority**, SEStran will liaise with stakeholders from this sector of the travelling public. The regional aspects of PTW will be scoped and funds will be made available for investment in PTW-related infrastructure. [TYPE 3]

30 NTS paragraph 123


EMERGENCY DEPARTMENT
EDINBVRGH
Royal Infirmary
Bus Stop
Buses To Hyvots,
Bonnyrigg, Rosewell
Lothian 33 49 X48
SWITCH OFF
ENGINE
FIXED PENALTY
£20

7.1 Introduction

7.1.1 This RTS theme is focussed on improving accessibility for specific geographical areas and groups of travellers. It is particularly relevant to rural areas and those in the community who have difficulties in accessing public transport vehicles, and indeed the public transport network. This is particularly focused on:

- access to health care services (key hospitals);
- access to employment;
- community transport/demand responsive transport;
- public transport in rural areas; and
- the travel needs of disabled people.

7.1.2 Appendix E to the Delivery Plan contains details of how the measures in this RTS theme contribute to the RTS Objectives. The RTS Delivery Plan contains further details of the implementation and costs associated with each measure.

7.1.3 Note that the emphasis in this theme is on improving public transport services, both conventional and community transport/demand responsive transport, for specific geographical areas and groups of (often vulnerable) people. It is recognised that improved facilities for other modes, including cycling, can play a role in some circumstances[31], and these will be explored where appropriate.

7.2 Access to Healthcare – Public Transport

7.2.1 Access to hospitals has emerged as a key issue in recent years, particularly in the light of some major hospital relocations (Edinburgh Royal Infirmary, Stirling/Falkirk) and changes in the nature of the services provided at each hospital (e.g.centralisation of specialist services). Access to hospitals in SEStran is an issue for all hospital users, patients, visitors and hospital staff, as parking is often problematic and expensive, even for those with access to a car. Good public transport links are therefore vital for those without access to a car, but are also important for those with access to a car.

7.2.2 Note that this section is considering accessibility using 'fixed-route' public transport only. Section 7.4 looks at the role of demand responsive/community transport more generally, including access to health services.

7.2.3 Here, the RTS sets up a process to implement measures addressed specifically at improving access to regional hospitals (defined as the main hospitals in the SEStran areas) from areas identified as having poor access, and (in the first instance) concentrations of low car ownership – this will essentially involve increased revenue support for new/amended bus services to plug identified gaps, increase frequencies or operating hours. **SEStran's strategy is to identify geographical areas with low car ownership and poor access to regional hospitals – and provide funding for enhanced public transport services.**

31 For example, the 'Wheels to Work' scheme has proved successful in providing low cost access to mopeds and scooters for accessing education and employment, in some rural areas.

Analysis

7.2.4 As part of the RTS, an 'Accession' accessibility analysis model was developed for the SEStran area to analyse access to hospitals in the context of current fixed route public transport services. The model combines comprehensive, up to the minute public transport services with Census data at a detailed spatial scale (Census output areas), to give an accurate representation of travel times using public transport. A travel time of one hour was taken as a threshold of a reasonable travel time, and the time period considered was 0600-1000 (it is recognised that there are significant additional issues with off-peak travel by public transport). Places beyond this travel time to any particular destination, are identified and: (i) the number of people and (ii) the number of households without access to a car are located and quantified (taken from Census data). The 11 hospitals considered are Borders General; Dunfermline Queen Margaret; Kirkcaldy Victoria; Dundee Ninewells; Falkirk Royal Infirmary; Stirling Royal Infirmary; Larbert (new hospital site, serving Forth Valley Health Board area); Livingston St Johns; Edinburgh Royal Infirmary (ERI); Edinburgh Western General; and Edinburgh Sick Kids.

Action

7.2.5 The RTS has identified areas with relatively poor or no access to all the main hospitals relevant to SEStran residents, and highlighted those geographical areas with significant numbers of people and zero-car households with poor accessibility. In response, SEStran will:

- work with bus operators to explore the potential to adjust existing bus routes to serve some of these areas[32];
- consider the potential for new routes to link settlements to hospitals, based on consultation with health boards to establish key needs at the detailed level;
- consider the potential for hospital to hospital bus services, serving locations identified as currently having a poor level of access;
- review the provision of demand responsive transport in SEStran, with particular reference to rural areas where the provision of scheduled bus services would be highly uneconomical; and
- liaise with community transport groups to advise on best practice, drawing on experience from operational schemes across SEStran and beyond.

7.2.6 This process will be initiated via a comprehensive '**SEStran Access to Health Audit**'. This audit will document the complete picture of all the relevant regional issues regarding access to healthcare as affecting SEStran residents. After some initial scoping, a '**Health Summit**' workshop will be held to bring together SEStran, the Health Boards and other relevant stakeholders (e.g.bus operators, local authorities, community groups, community transport providers, health staff, representatives of patient & disabled groups). This wide ranging summit would allow all issues to be discussed at the outset of this process, and will supplement current local forums.

7.2.7 An agreed Action Plan will follow, aided by detailed accessibility modelling work[33]. This Action Plan will require significant revenue funding to bring all areas of SEStran up to an acceptable level of access to healthcare and address gaps in public transport provision. A sub set of this group could become a permanent Working Group, which will consider regional access to health issues as they emerge over time, and take forward and monitor the agreed Action Plan.

7.3 Access to Employment Opportunities

7.3.1 Poor public transport provision, in terms of accessing employment opportunities, is a significant contributor to social exclusion and deprivation, particularly for those without access to a car. If the range of employment opportunities is restricted, it affects people's ability to (i) find work, and (ii) find more highly paid work. Poor access also limits participation in the labour market, from an employer's perspective. A major component of the Network-Based analysis (Chapter 8) is focussed on improving access to employment by public transport for high demand corridors. This will clearly also impact on areas beyond these immediate corridors via public transport interchange, but is not aimed specifically at areas with poor accessibility.

7.3.2 SEStran recognises the need to improve access to employment for communities defined as deprived, where poor access to jobs is identified. The areas within SEStran which are classified as being 'most deprived' (as defined by the Scottish Indices of Multiple Deprivation (SIMD)) have been identified, areas which tend to be coincident with low car ownership. The most deprived 15% of Scottish 'datazones' are eligible for Community Regeneration Fund (CRF) funding and it is on these datazones that the RTS is focussing in this regard.

Analysis

7.3.3 From the accessibility model, access to employment (by public transport) indicators have been created for each SEStran datazone. The access to employment indicator is a function of the travel times by public transport to each other datazone, and the number of jobs located in each datazone (known as a 'Hansen' measure). This means that a local job is valued more highly than a job some distance away. Reducing travel times by public transport, therefore increases access to jobs by this measure.

7.3.4 The CRF datazones have been examined in terms of the access to employment indicators. Datazones which are both classed as deprived by the SIMD and suffering from poor access to employment can be identified.

33 NTS paragraph 232-233

7.3.5 The results of this analysis in the central SEStran area are shown in Figure 7.1 below.

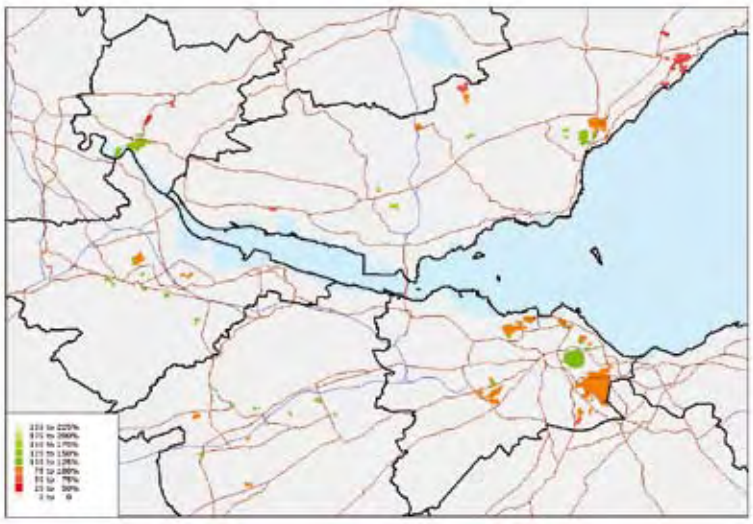


Figure 7.1 *SIMD (2004) and Access to Jobs*

7.3.6 Each of the areas highlighted in colour in the figure is classed as deprived in terms of CRF. The access to employment measure for each of these datazones is then compared to the average access to employment measure for its relevant local authority, and mapped as a percentage. Any deprived datazone with a score of less than 100% has a worse than average access to employment for that local authority area – shown as shades of red above. Datazones with better than average access to employment are shown in shades of green. Within Edinburgh for example, it can be seen that many of the CRF areas have worse than average access to employment (for Edinburgh), including areas of north, south-east and south-west Edinburgh.

Action

- SEStran will examine each area highlighted as: (i) deprived and (ii) suffering from relatively poor access to employment on a case-by-case basis. Detailed examination of the bus services available from these areas could suggest modifications to routes to improve access to employment for these geographical areas.[34] SEStran will promote modifications where practicable – these could include the modification of bus routes, or new links to defined public transport 'hubs'; and
- SEStran will engage with local employment agencies and stakeholders to identify any further geographical areas where poor public transport is perceived as a major issue for labour market participation, including areas lacking direct public transport links with Edinburgh.

34 NTS Bus Action Plan, Action 3

7.3.7 Again, building on the RTS work, an initial task will be to update the analysis based on SIMD 2006 and new (2007) public transport services. The best way to take this forward would be to prepare a Briefing Report, highlighting the issues at the detailed (community) level. This would involve accessibility modelling at the most detailed spatial level available. Consultation with employment agencies, major employers, Scottish Enterprise, local authorities, community groups and other stakeholders should then be undertaken to ensure a full understanding of the access to employment issues at the community level. A wider stakeholder group will be formed to take forward and monitor progress on this issue.

7.3.8 Again, these consultations will lead to an Action Plan. Talks with bus operators and other parties would then take place with a view to e.g.altering existing bus routes, extending hours of operation, adding new bus routes, improving security, or reducing fares to meet the requirements of the communities identified.

7.4 Community Transport/Demand Responsive Transport

7.4.1 The community transport sector plays an invaluable role in meeting the transport needs of many (both urban and rural, and including the increasing numbers of elderly) in the SEStran area including:

- those who cannot use normal public transport and who need a fully accessible door to door service (urban and rural areas);
- those who are transported by particular agencies (such as social services, or economic development agencies (transport to work));
- those, without access to a car, who live in areas of dispersed demand and rural areas in general; and
- group travel services provided by the community transport sector.

7.4.2 SEStran wishes to ensure quality provision of community transport across the area and to tackle social exclusion. Note that this applies to all community transport, not only access to health and employment, and includes transport to community health services.

7.4.3 Much of community transport can be classed as Demand Responsive Transport (DRT) in some shape or form. DRT is a form of transport whose service provision changes frequently, often daily, in response to the demands of users. DRT services can be defined also in terms of the type of route that is offered. They can operate (in order of increasing flexibility):

- along a fixed route, but at variable times, and with variable stopping points;
- to/from a fixed point to/from any number of points in an area, at any time; and
- from any point to any other point in an area, at any time.

7.4.4 The greater the flexibility then, generally, the higher the cost to serve a given number of passengers, since it is more difficult to schedule vehicles and drivers for a more dispersed set of times and destinations. According to Scottish Government, around 70% of DRT schemes in Scotland fall into the most flexible category.

7.4.5 A normal requirement for DRT is some means by which passengers' demands – where and when they want to travel – can be communicated to the service provider. For a small scheme such as a volunteer-run, car-share arrangement to take elderly people to medical appointments, the booking process can be via telephone and scheduling done on paper – nothing more complex is required. However, as the scale of an operation increases, and there is a desire to use vehicles more efficiently and to cater for the maximum possible number of trips with the vehicles and drivers available, information technology – including real time positioning of the vehicle by a control room, and real time communication with the driver – assists greatly, in particular by permitting new bookings when a vehicle is already on the road.

7.4.6 DRT services in Scotland are run by a variety of agencies. Many smaller schemes are run by voluntary groups, although the very largest examples of these may have a small number of salaried employees. In addition, much DRT is operated by social services and education departments of Councils, specifically to transport people with special needs from their homes to therapeutic centres, or between such centres. Finally, there are DRT services that are available to a wider public, such as people holding a disabled person's concessionary pass. These may be run by a local authority, or by a voluntary or private sector organisation under contract to a local authority.

7.4.7 In most parts of the SEStran area, the predominant provision is of Dial-a-Bus (which operates to fixed points from variable origins e.g.users' homes), and Dial-a-Ride (which is fully flexible). Both these services carry elderly/disabled people who pre-register to show that they are unable to use conventional fixed route public transport, other than this, there are no user restrictions. These services are provided by commercial or voluntary operators funded by the local authority in question (although in Fife they are funded and operated by the local authority directly). In addition, there are a number of smaller more limited schemes, mainly car sharing, to take people to medical appointments. The vast majority of schemes are for disabled and/or elderly people. There are very
few that are open to the general public, a notable exception being the successful 'Go Flexi' service operating in East Fife.

7.4.8 A significant number of these services are therefore provided by community and voluntary organisations and operate under a number of restrictions which limit their use to certain members and groups of society. There are in fact, only six services within the SEStran area which are open to all members of the general public.

7.4.9 A thorough review of current Community Transport and DRT schemes operating in SEStran is necessary to establish a comprehensive baseline, including details of the type and scope of the scheme, cost, funding arrangements, customer satisfaction etc. In itself, this would provide a strong indication of current 'best practice' in SEStran. This could be undertaken by SEStran staff or consultants. Consultation should be undertaken with all providers of DRT and Community Transport as part of this exercise, and this will be on going.

7.4.10 SEStran is therefore proposing an increase in funding for community transport/DRT as part of the RTS[35].

35 NTS Bus Action Plan, Action For example, on market days.

7.5 Rural Area Public Transport – Proposed Hierarchy

7.5.1 The previous three sections have addressed specific issues relating to access to health, access to employment (for deprived communities) and community transport/DRT.

7.5.2 Building on the above, this Section outlines a hierarchy of transport provision aimed at improving other areas of provision not picked up above, in the rural areas of SEStran. This hierarchy will provide a consistent and appropriate level of provision across SEStran on the communities in question. Importantly, it will also provide connections to, and interchange with, the strategic regional corridors, reported in Chapter 8.

7.5.3 The SEStran strategy is therefore to work with stakeholders and define a clear framework for appropriate levels of service in public transport across the rural areas of SEStran. Through the RTS process, significant funding will be required to provide revenue support for bus services, and fund community transport/DRD schemes as discussed above.

Approach

7.5.4 A range of options exist for the meeting of rural residents'/households' travel needs, often involving a combination of services. Optimal provision, in terms of type, cost-effectiveness, hours of operation and frequencies of service, will vary according to locality.

7.5.5 There is no 'one size fits all' solution and combinations are likely to be required, i.e.fixed public transport on inter-urban corridors supported by community transport or shared taxi operations providing access to, for example, hospitals and frequent public transport services. Based upon the above variables, it is possible to develop a matrix/model in order to guide rural transport service provision across the SEStran area and ensure equitable provision for all rural residents/households. Eight rural typologies are proposed, using a mixture of Scottish Government definitions and others to be defined:

- 1. Accessible Rural area, close to a major public transport corridor and with high car ownership;
- 2. Accessible Rural area, close to a major public transport corridor and with low car ownership;
- 3. Accessible Rural area, remote to a major public transport corridor and with high car ownership;
- 4. Accessible Rural area, remote to a major public transport corridor and with low car ownership;
- 5. Remote Rural area, close to a major public transport corridor and with high car ownership;
- 6. Remote Rural area, close to a major public transport corridor and with low car ownership;
- 7. Remote Rural area, remote to a major public transport corridor and with high car ownership; and
- 8. Remote Rural area, remote to a major public transport corridor and with low car ownership.

7.5.6 Table 7.1 summarises these area typologies by key destinations/journey purposes against the typical 'target' types of rural transport provision in each case, i.e.at the community level.

Table 7.1 *Proposed Rural Transport Provision by Typology and Destination*

Type of Area (see above)				
Destination	**1**	**2**	**3**	**4**
Urban Area Major Employment	Fixed route PT	Fixed route PT	Conventional PT with flexibility	Conventional PT with flexibility
Accessible and Remote Small Towns (<10,000 population)	Fixed route PT	Conventional PT with flexibility	Community Transport/ Taxi-bus	DRT/Taxi-bus
Key Service	Taxis to PT corridors/ Community Transport	DRT/Community Transport	Community Transport/Taxi-bus	DRT/Community Transport
Tourism	Fixed route PT	Fixed route PT	DRT/Taxi-bus	DRT/Taxi-bus
Destination	**5**	**6**	**7**	**8**
Urban Area Major Employment	Fixed route PT	Fixed route PT	Taxis to PT corridors	Taxis to PT corridors
Accessible and Remote Small Towns (<10,000 population)	Conventional PT with flexibility	Conventional PT with flexibility	Car Sharing/ Lift-giving/Taxis /Sporadic PT provision[36]	Car Sharing/ Lift-giving/Taxis Sporadic PT provision
Key Service	Taxis to pt corridors/ Community Transport	DRT/Community Transport	Community Transport/Car Sharing/Lift-giving	Community Transport/Car Sharing/Lift-giving
Tourism	Conventional PT with flexibility	Conventional PT with flexibility	Taxis/Sporadic PT provision	Taxis/Sporadic PT provision

7.5.7 The exact form of public transport provision will therefore vary by locality and will recognise where existing services can be adapted/built upon, in order to deliver future services. The type of services will include:

- 1. Conventional, fixed-route public transport;
- 2. Conventional public transport with flexibility;
- 3. Demand Responsive Transport (DRT);
- 4. Taxibus, operating solely on an on-demand basis;
- 5. Community Transport, normally operated/co-ordinated by voluntary organisations/public service providers with financial support from local councils;

- 6. Taxis, an organised taxi service with a central number for all users. Concessionary/subsidised fares available for those with a recognised need (e.g.through Taxicard (see Chapter 6));
- 7. Organised taxi services to principal public transport corridors/interchanges, catering for specific markets such as connections to urban areas, higher education and major employment;
- 8. Lift-giving/car sharing and wheels to work schemes for certain markets in the deeper rural areas; and
- 9. Sporadic public transport provision, typically by conventional public transport and limited to one or two days per week, e.g.post buses.

7.5.8 **Action**: SEStran will review rural transport/DRT provision across the area and consider the case for the development of a framework of provision, building on the above. This would move towards consistency of provision and equality of opportunity across the area.

7.5.9 The illustrative hierarchy suggested in the RTS used an eight-way classification of rural areas and suggested an appropriate 'level of service' for different journey purposes from these areas. This framework will be developed further in conjunction with relevant stakeholders, with a view, in the medium term, to ensuring equality and consistency of provision across the area. A SEStran led working group will be required to take this forward through an approved Action Plan.

7.5.10 The distribution of funding for these rural transport initiatives by local authority will reflect the distribution of the rural population in the SEStran area. Fife, Scottish Borders and East Lothian are the local authorities with the largest numbers of rural residents.

Disabled Travellers

7.5.11 DRT is clearly of particular relevance to **disabled travellers**. SEStran recognises the need to improve the opportunities for travel by disabled travellers, and this is reflected in the above measures. Other parts of the RTS are dealing with physical access, in terms of e.g.low floor buses etc, and the principles of the DDA are embedded within the relevant RTS measures. Measures implemented in the RTS will also be the subject of an Equal Opportunities Audit, see Appendix D for details.

7.5.12 In order to obtain as full a picture as possible, SEStran will collate information regarding the proportion of travellers affected by a mobility difficulty in the area. The success of the various schemes targeted at these travellers will also be monitored. Measures implemented via the RTS will also be subject to an Equality Impact Assessment, where appropriate. In addition, SEStran will liaise with Mobility Advice Committee Scotland (MACS) and other appropriate agencies to ensure a dialogue here.

8.1 Commuter Network Development

8.1.1 The third of the main RTS themes, 'Network-based Measures', is primarily concerned with targeting improvements in public transport towards the main regional corridors of commuting travel within SEStran and between SEStran and its neighbouring areas. The main purpose of this theme is to provide improved labour market accessibility in terms of public transport. By doing so, this:

- makes public transport more attractive to those who currently drive, and provides an improved service for current users of public transport;
- expands labour markets from an employers perspective, giving them a wider pool of labour to choose from;
- can open up new employment opportunities for employees, improving their earning potential and improving regional economic efficiency; and
- reduces the reliance and dependence on the private car as a means of travel-to work in SEStran.

8.1.2 In doing this, a contribution is made to a wide range of RTS Objectives. Although these measures have been developed to address travel-to-work, improvements to public transport on the main regional corridors in SEStran will clearly also be beneficial for other travel purposes.

8.1.3 This targeting is based on a quantified forecast of commuting demand, using current Structure Plan land-use allocations and demographic projections, and is aimed at encouraging and facilitating modal shift away from single occupancy cars. A **prioritised framework to guide SEStran's investment in the key area of travel to work** is therefore established. This prioritisation focuses investment towards the areas of the network where 'modal shift' is most required to reduce congestion (and hence improve reliability of travel times) and emissions, i.e.in the higher-volume corridors. The measures proposed in this theme complement many of the 'Region-Wide Measures' (such as travel planning etc) in terms of encouraging and facilitating modal shift.

8.1.4 Note that this theme is directed, in the main, to the high volume SEStran corridors – other themes covered in Chapters 6 and 7 provide measures to link to these corridors and pick up other issues relating to public transport provision off of the main regional corridors. In addition, specific cycling schemes are not considered here – see Chapter 6 for details of RTS measures on cycling.

8.1.5 There are three corridor-level main generic approaches here:

- measures which speed up existing public transport in an established corridor, e.g.bus priority measures, also adding to reliability;[36]
- measures which provide new direct public transport services, i.e.linking new origins and destinations by bus or rail; and
- measures which improve interchange facilities and service integration.

8.1.6 In addition to key commuter corridors, this section also considers the 'key economic network', where this is additional to the main commuter corridors.

36 NTS paragraph 104

8.1.7 The Strategy provides an emphasis on the development of public transport on the key SEStran regional corridors. Although the analysis is focussed on the commute trip, the resulting enhancements to public transport will improve public transport for other purposes and to other locations, such as major retail areas. This will contribute to the economic development of the area, whilst reducing dependence on the private car – two key areas for the RTS.

Overview of Approach

- The travel-to-work travel characteristics of SEStran residents have been analysed, and regional 'strategic corridors' defined;
- Mode share targets, based on reducing the mode share of 'single occupant car' have been set for all movements within SEStran, based on a division of SEStran into 20 sub-areas;
- The impact of meeting these mode share targets in terms of reductions in traffic, congestion and emissions, compared to a continuation of 2001 travel-to-work mode share has been forecast;
- A range of measures have been proposed for each corridor which will encourage and enable the mode share of car driver to be reduced; and
- The RTS will implement these measures via a broad corridor-based prioritisation, based on the reduction in traffic required to meet the mode share targets.

8.2 Rationale – Importance of Travel-to-Work

8.2.1 It has been demonstrated that the SEStran area faces particular challenges in catering for the travel volumes and patterns resulting from the anticipated growth in population and employment in the area. In addition to the forecast increase in the number of jobs, the trend of dispersal of jobs, services and homes will, if it continues, bring further pressure to bear on the transport network.

8.2.2 In the planning context, the RTS measures must therefore be developed over time in close conjunction with the evolving Structure, Local, and new Strategic Development Plans to ensure that public transport provision is at the heart of the planning of new residential and commercial development. SEStran will work with the City-Region and other planning processes to prioritise key transport investments and seek to time them in advance of major new developments coming to fruition.

8.2.3 Commuter travel is the main cause of congestion on the strategic transport networks, and accounts for nearly 2/3 of all travel between 0800 and 0900. In addition, around 60% of all travel-to-work takes place between 0700 and 0900, making the AM peak generally the most congested time of the day. This congestion can impact on the effective operation of labour markets and hence economic development. As such, travel-to-work therefore forms one of the key areas of focus for the RTS from many perspectives.

8.2.4 In addition, the RTS Guidance states that it wishes to see 'action across the region to reduce traffic levels and congestion, particularly on high density commuter routes, through traffic management, provision of Park and Ride, provision of additional public transport services, increased use of bus lanes on major corridors into and within towns and cities, parking controls and charges'. This gives a clear indication of the types of measures the RTS should be pursuing, and the Network-Based Measures theme is closely aligned to the Guidance.

SEStran Travel-to-work Characteristics

8.2.5 An overview is now given of the key characteristics of commuting in SEStran. Some 77% of all travel-to-work by SEStran residents is within one individual local authority, e.g.Fife to Fife. This figure ranges from 89% of Edinburgh residents working in Edinburgh, to only 46% of Midlothian residents working in Midlothian. The full range of figures is shown in Table 8.1 below, giving an idea of the 'out-commuting' by employed residents in each case.

Table 8.1 *Travel-to-Work Within Local Authority Areas (2001 Census)*

Local Authority	% residents working within their own local authority	Local Authority	% residents working within their own local authority
Clackmannanshire	56	Fife	82
East Lothian	53	Midlothian	46
City of Edinburgh	89	Scottish Borders	85
Falkirk	69	West Lothian	66

8.2.6 The mode share for travel-to-work varies widely, depending on the nature of the movement. The main differences in travel-to-work mode share can be seen in Table 8.2 below.

Table 8.2 *Mode Share for Travel-to-work in SEStran area (2001)*

Movement	Car	PT	Other (e.g. walk/ cycle)
Within Edinburgh	42%	29%	29%
To Edinburgh	69%	29%	2%
From Edinburgh	79%	17%	5%
Within Other LA (e.g.Fife – Fife)	67%	8%	25%
Between Other LAs (e.g.Fife – West Lothian)	84%	11%	5%
TOTAL	**62%**	**17%**	**21%**

8.2.7 Travel within local authorities includes short distance trips, so these trips see a significant proportion of walk and cycle trips in particular. For travel between local authorities (excluding Edinburgh), the mode share of car is very high at 84%. This reflects the relatively un-congested roads, parking availability and often poor public transport in these cases. For travel to Edinburgh, the proportion of car trips drops to 69%, this figure reduces further if trips to only Edinburgh city centre are considered.

8.2.8 In terms of volume, travel within Edinburgh accounts for 29% of all SEStran area travel to work, with travel between other local authority areas and Edinburgh accounting for a further 14%. Some 48% of trips are made wholly within other local authority areas, and the remaining 9% of trips are made between other local authority areas. Of the total 62% who travel-to-work by car, 54% are 'car driver' and 8% are 'car passenger'.

8.2.9 There have been significant changes in travel-to-work between 1991 and 2001. In 2001, car travel accounted for 62% of all travel-to-work – up from 59% in 1991. At the same time, the mode share for public transport has reduced from 22% to 17%. Of equal importance is the changing nature of patterns of travel affecting the SEStran area. In 1991, Edinburgh city centre was the destination of 15% of all travel-to-work by residents of the SEStran area. By 2001, this number had dropped to 12%, representing a significant proportional reduction. This illustrates the dispersal of employment to other areas of Edinburgh and the SEStran area.

8.2.10 Clearly, Edinburgh city centre is the employment location best served by public transport. It is also congested and has a constrained parking supply. All of these factors push up the public transport mode share, relative to other employment locations. Any more dispersed pattern of employment location will bring with it increased use of the car which is evident from the data.

8.2.11 Looking at specific trends through time, there has been an increase in 'out-commuting' by residents of Edinburgh and most other local authorities, but residents of the Lothians are now more likely to work in their own areas. Whilst this may seem like good news, the general theme is that travel is increasing between origins and destinations for which it is more likely that the car will be used, due to less congestion, ease of parking etc.

8.2.12 It can be seen that travel-to-work to any location other than Edinburgh city centre tends to be dominated by the car. The trend of increased employment in areas beyond Edinburgh city centre has clear implications in terms of use of the car. The process of planning for growth in non city centre locations must develop locations where more sustainable modes of travel are encouraged.

8.3 Approach

Strategic Corridors & Sub-Areas

8.3.1 The basis for the analysis of regional commuter travel in SEStran was a definition of 'strategic movements' and 'strategic corridors' within and beyond the SEStran area, derived from the 2001 Census travel-to-work (TTW) 'demand' data. Examination of the data allowed 21 internal SEStran commuter corridors to be defined together with six main external commuter corridors linking to other parts of Scotland. In addition, 20 sub-areas were defined at the local authority and sub local authority level in SEStran (see Figure 8.2). Broadly speaking, movement between these sub-areas is along the defined corridors. The definition of regional corridors provides a framework to consider and analyse potential RTS interventions in a coherent manner.

8.3.2 The SEStran strategic commuter corridors which were defined are shown in Figure 8.1 opposite and described in Table 8.3 below (E? in the figure means 'external' in this case).

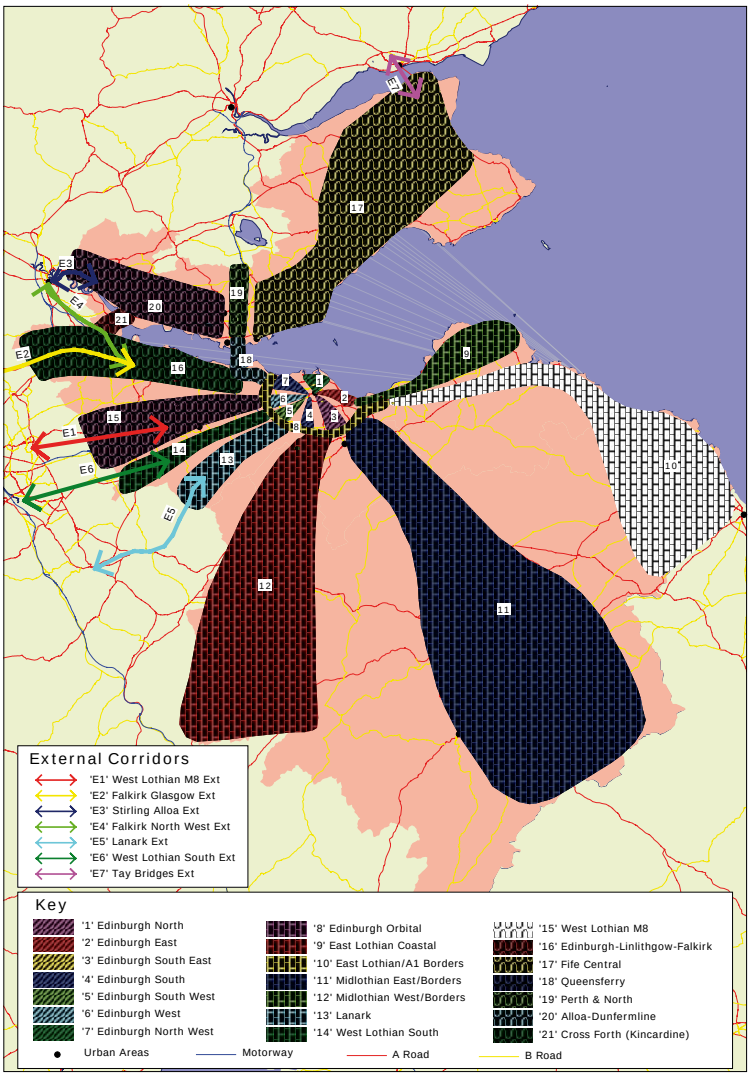


Figure 8.1 *SEStran Regional Commuting Corridors*

Table 8.3 *SEStran Strategic Corridor Description*

Corridor	Description
1 – Edinburgh North	Leith Walk, Crewe Road, Inverleith Row
2 – Edinburgh East	Links from Musselburgh, Newcraighall
3 – Edinburgh South East	Liberton Road/Old Dalkeith Road/Gilmerton Road
4 – Edinburgh South	Morningside Road
5 – Edinburgh South West	Lanark Road
6 – Edinburgh West	Corstorphine Road, Calder Road
7 – Edinburgh North West	Queensferry Road
8 – Edinburgh Orbital	Inner and Outer (inc A720)
9 – East Lothian Coastal	A199, North Berwick line
10 – East Lothian A1/Borders	A1, East Coast Main Line
11 – Midlothian East/Borders	A68, A7, A772, inc Waverley Line
12 – Midlothian West/	A701, A702, A703
Borders	
13 – Lanark	A70
14 – West Lothian South	A71, Shotts Line
15 – West Lothian M8	M8, A89, A899, Bathgate Line
16 – Edinburgh-Linlithgow	M9, A904, Edinburgh – Falkirk Line
Falkirk	
17 – Fife Central	A92, A921, East Coast Main Line, Fife Circle
18 – Queensferry	A90, A8000, Forth Road Bridge, Inverkeithing Line
19 – Perth & North	M90
20 – Alloa – Dunfermline	A985, A907 inc Stirling-Alloa Line
21 – Cross Forth (Kincardine)	Kincardine Bridge
E1 – West Lothian M8 Ext	M8, A89, Airdrie Bathgate Line
E2 – Falkirk Glasgow Ext	M876, A803, Glasgow Line
E3 – Stirling Alloa Ext	A907, A91, Stirling Alloa Line
E4 – Falkirk North West Ext	M9, A9 Stirling Line
E5 – Lanark Ext	A70
E6 – West Lothian South Ext	A71, Shotts Line
E7 – Tay Bridges Ext	Tay Road and Rail Bridges

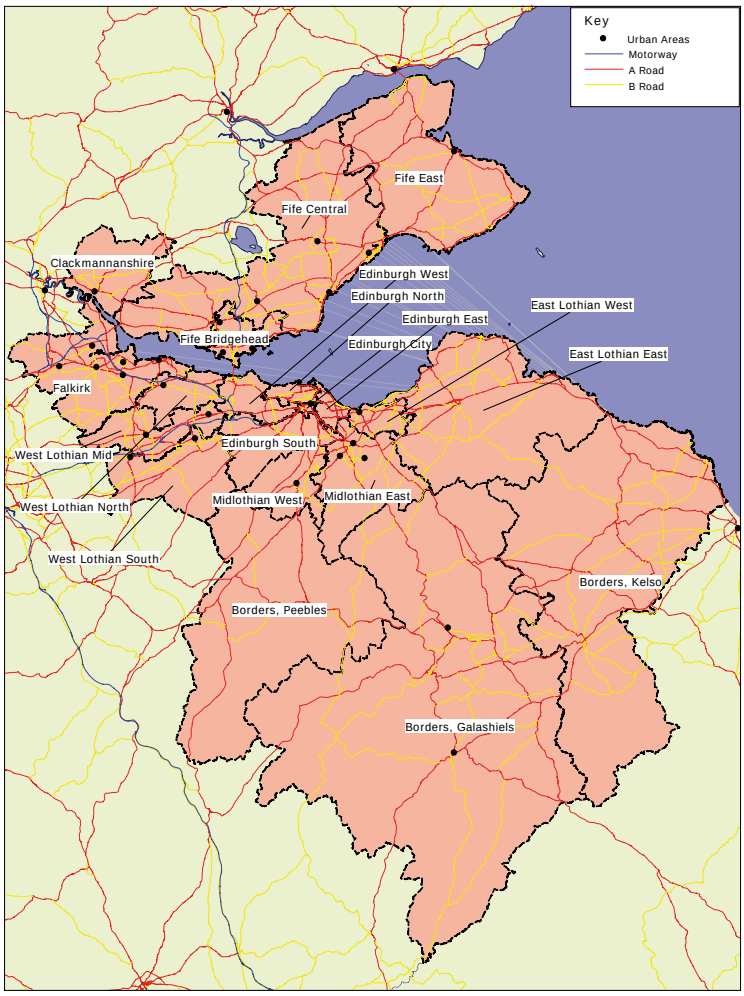


Figure 8.2 *SEStran sub areas*

Setting of mode-share targets

8.3.3 Why set mode share targets? The analysis of the Census travel-to-work data revealed large variations in commuting mode share across SEStran depending on the characteristics of the journey. Targets give a structured approach of addressing these issues. Also, the setting of targets is an essential part of the RTS process, allowing the progress of the RTS to be measured and reviewed over time. The setting of targets also allows the RTS to be target and objective, rather than scheme driven.

8.3.4 Analysis of the TTW data, using the 20 sub-areas described above, highlighted areas where travel by public transport is relatively low and relatively high, taking other factors into account. Targets have been set to improve 'under-performing' movements and further improve those movements where public transport mode share is already relatively high. Moving towards and meeting these targets will provide a range of positive benefits in terms of the objectives of the RTS.

8.3.5 Targets have therefore been developed which respect the nature of the movement in each case, as discussed above. For example, travel between dispersed rural areas is not likely to achieve the public transport mode share of travel within a large urban area, and this is reflected in the target setting.

- Stage 1 – All 'under-performing' sub-area movements were identified and mode share targets set for all – the target was either the average mode share for that type of movement, or the current mode share minus 15 percentage points, where this initial target would require excessive mode shift; and
- Stage 2 – All other (i.e.nor defined as under-performing) sub-area movements' targets were set at the current car mode share minus 5 percentage points.

8.3.6 See Appendix F to the Delivery Plan for detailed tables showing the resulting 2001 Census and 'target' mode shares for each 'strategic movement'.

What Happens if the Mode Share Targets are Met?

8.3.7 A transport modelling exercise was undertaken to estimate the result of meeting these mode share targets. A detailed forecast travel demand 'matrix' of travel-to-work in 2015 was created based on future employment patterns and residential location (both using Structure Plan inputs) and demographic/household projections, based on Transport Scotland's 'TELMoS' model.

8.3.8 Firstly, a 'Reference Case' 2015 demand scenario was created, assuming 2001 TTW mode share remains constant at the zone-to-zone level. A 'Target Case' forecast year demand scenario was created, assuming the TTW mode share targets specified above are met (stages 1 and 2 combined).

8.3.9 Assigning the Reference Case and Target Case matrices to the TMfS networks allows the impact of meeting these targets on traffic, congestion, emissions etc to be estimated – i.e.this is what the RTS would achieve if the targets were met.

8.3.10 Table 8.4 below shows the forecast change in traffic and congestion 2001 and 2015 for both the Reference Case and the Target Case scenarios (note that the figures below assume car travel by other travel purposes is similarly affected by the mode share targets).

Table 8.4 *Effect of Mode Share Targets on Commute Traffic in SEStran*

	Traffic – Vehicle kms		Congestion – time lost	
Council Area	**2001-15: Reference Case**	**2001-15: Target Case**	**2001-15: Reference Case**	**2001-15: Target Case**
Clackmannanshire	+8%	+5%	+12%	+4%
East Lothian	+1%	-1%	+20%	-1%
Edinburgh, City of	+17%	+11%	+49%	+9%
Falkirk	+14%	+10%	+12%	+4%
Fife	+12%	+8%	+71%	+33%
Midlothian	+23%	+17%	+100%	+66%
Scottish Borders	+10%	+6%	+22%	+7%
West Lothian	+20%	+14%	+72%	+44%
TOTAL	**+16%**	+11%	+53%	+18%

8.3.11 It can be seen that meeting the Reference Case mode share assumptions (maintaining 2001 Census mode share), implies a 16% increase in car traffic across the SEStran area by 2015. This is due to the increased employment and population forecast for the SEStran area, together with the location of future employment and residential development. Meeting the Target Case mode share targets would mean traffic would grow by significantly less, at 11%. So although traffic levels are reduced, they are still forecast to grown relative to 2001 levels.

8.3.12 Congestion is forecast to rise very much faster than general traffic levels, up by over 50% over the 15 years across the area, with Midlothian (from a low base), West Lothian, Fife and Edinburgh seeing large increases in congestion. In absolute terms however, Edinburgh and Fife are forecast to see the biggest increase in time lost to congestion, while congestion remains much less of a problem in the Scottish Borders, Clackmannanshire and East Lothian.

8.3.13 The overall increase in congestion between 2001 and 2015 is reduced from +53% to +18%, if the Target Case mode share targets are achieved. Again, meeting these still means additional congestion relative to 2001, but this is minimised. This means that the Target Case mode share targets **reduce forecast additional congestion by 2/3** compared to the Reference Case.

8.3.14 In addition, achieving the Target Case mode share targets would reduce CO2 emissions 8% compared to the 2015 Reference Case level. The level of other pollutants would reduce by a similar amount, but these other emissions decrease rapidly through time in any case, in line with improvements in the vehicle fleet and technological change.

8.3.15 It can therefore be seen that achieving these commute-based mode share targets would make a significant impact on forecast year congestion and emissions in particular. It should, however, be noted that these targets will be difficult to achieve in the light of the current budgetary situation and annual monitoring of the RTS will result in realistic approaches incorporated within the SEStran annual business plan.

How Will the Mode Share Targets be Achieved?

8.3.16 For the main sub area movements (i.e.for movements where meeting the targets will result in a significant reduction in car trips) a set of potential projects and schemes has been proposed in each case. These are all aimed at promoting mode shift, therefore reducing traffic, congestion and emissions, and are a mix of bus priority, new public transport services and improvements to public transport integration and interchange.

8.3.17 The quantification of the contribution of each individual intervention towards meeting the RTS mode share targets will follow over time as the RTS progresses in the coming years (as STAG appraisals and business case work is developed), but all will have a positive effect in their own right on moving things in the direction of the RTS targets.

8.3.18 Note that many of the measures described in Chapter 6 will also contribute to the meeting of mode share targets, at a region-wide level.

Prioritisation of 'Interventions' – Strategic Corridors

8.3.19 Assigning the reference case and target matrices in the transport model also highlights the parts of the **road network** where significant reductions in traffic are required, if the mode share targets are to be met (i.e.the difference between the reference case and target case assignments).

8.3.20 In particular, it highlights the traffic reductions required on the key SEStran regional transport corridors i.e.the transport routes which accommodate the main regional and inter regional movements – this allows a broad prioritisation to be attached to the interventions put forward (i.e.corridors where large reductions in car travel are required will, on balance, be a higher priority than corridors where only a small reduction in traffic is required), and allows for the identification (and specification) of further interventions in corridors where multiple movements act cumulatively in terms of the requirement for traffic reduction, including external corridors.

8.3.21 The resulting prioritisation of key regional travel-to-work corridors is shown in Table 8.5 below. The corridors have been grouped together into broad priority groups, based on the level of traffic reduction required to meet the mode share targets.

8.3.22 A wide range of schemes have been proposed in each corridor which will assist in meeting the mode share targets in each case. Full details of the network-based schemes that were considered in the RTS can be found in Appendix G to the Delivery Plan, listed by corridor. The contribution the network-based measures make towards the RTS Objectives is shown in Appendix H to the Delivery Plan. The RTS Delivery Plan contains more details of relevant schemes costs, implementation and timing.

Table 8.5 *Key SEStran travel-to-work corridors – prioritised*

Corridor	Description	Priority
1 – Edinburgh North	Leith Walk, Crewe Road, Inverleith Row	1
6 – Edinburgh West	Corstorphine Road, Calder Road	1
18 – Queensferry	A90, A8000, Forth Road Bridge, Inverkeithing Line	2
8 – Edinburgh Orbital	Inner and Outer (inc A720)	2
E1 – West Lothian M8 Ext	M8, A89, Airdrie Bathgate Line	2
15 – West Lothian M8	M8, A89, A899, Bathgate Line	3
3 – Edinburgh South East	Liberton Road/Old Dalkeith Road/Gilmerton Rd	3
11 – Midlothian East/Borders	A68, A7, A772, inc Waverley Line	4
21 – Cross Forth Kincardine	Kincardine Bridge	4
E2 – Falkirk Glasgow Ext	M876, A803, Glasgow Line	4
12 – Midlothian West/Borders	A701, A702, A703	4
17 – Fife central	A92, A921, East Coast Main Line, Fife Circle	4
16 – Edinburgh-Linlithgow-Falkirk	M9, A904, Edinburgh – Falkirk Line	4
14 – West Lothian south	A71, Shotts Line	4
4 – Edinburgh South	Morningside Road	4
2 – Edinburgh East	Links from Musselburgh, Newcraighall	5
10 – East Lothian A1/Borders	A1, East Coast Main Line	5
5 – Edinburgh South West	Lanark Road	5
E3 – Stirling Alloa Ext	A907, A91, Stirling Alloa Line	5
E7 – Tay Bridges Ext	Tay Road and Rail Bridges	5
20 – Alloa – Dunfermline	A985, A907 inc Stirling-Alloa Line	5
19 – Perth & North	M90	5
E4 – Falkirk North West Ext	M9, A9 Stirling Line	5
7 – Edinburgh North West	Queensferry Road	5
13 – Lanark	A70	6
9 – East Lothian Coastal	A199, North Berwick line	6
E5 – Lanark Ext	A70	6
E6 – West Lothian South Ext	A71, Shotts Line	6

8.4 Wider Economic Network – Other Strategic Corridors

8.4.1 In addition to the development of public transport on the key commuter movements outlined in the previous section, SEStran supports the maintenance and development of other strategic corridors, which are not necessarily heavily used commuter corridors, but form key economic links or provide strategic connectivity in their own right. Efficient movement of people and goods on these corridors is essential to the wider 'city region' aspirations for the area. Examples of these corridors are (also shown in Figure 8.3 below):

- A91 Stirling – St Andrews;
- A801 Grangemouth – M8 (West Lothian);
- Kincardine links – A985, A977;
- Borders east – west, A72/A6091/A698/A6105; and
- External links – A92, A1, A68, A697, A7, A701, A702, A72, A71, M8, M9, M80.

8.4.2 The A801 forms a key strategic link between the M9 and M8 corridors and also provides a strategic freight route from Grangemouth Docks to the various distribution centres in West Lothian and the wider central belt via the M8. The current route for this operation is via the M9 and Newbridge Interchange (a longer and more expensive route). The upgrading of the A801 Avon Gorge will reduce journey times and distances traveled thus improving freight movement and as a result will have positive knock-on effects on the economy and environment.

8.4.3 Note that as a key external link, SEStran supports further improvements to the A1 both north and south of the border.

8.4.4 Traffic levels and conditions affecting strategic regional movements will be monitored over the period of the RTS. Additional road capacity to improve reliability on key economic links may be supported, where it can be demonstrated that these benefits will not be eroded by induced traffic in the medium to long term, and where other alternatives have been evaluated and found to be less effective. Such additional capacity may include bypasses.

8.4.5 Where, on the key economic network, traffic routing through towns is: (i) demonstrated to be experiencing excessive delay and unreliability of journey times, and (ii) causing significant local environmental damage, the construction of a bypass will be supported. On the local road network, this will be a matter for local authorities. In either case, the RTS policies will ensure that alternatives to new road building are fully considered in the first instance.

8.4.6 In addition, SEStran will engage with Transport Scotland, other RTPs and other stakeholders to ensure the continuing development of external links and key internal connectivity.[37]

37 NTS paragraph 105

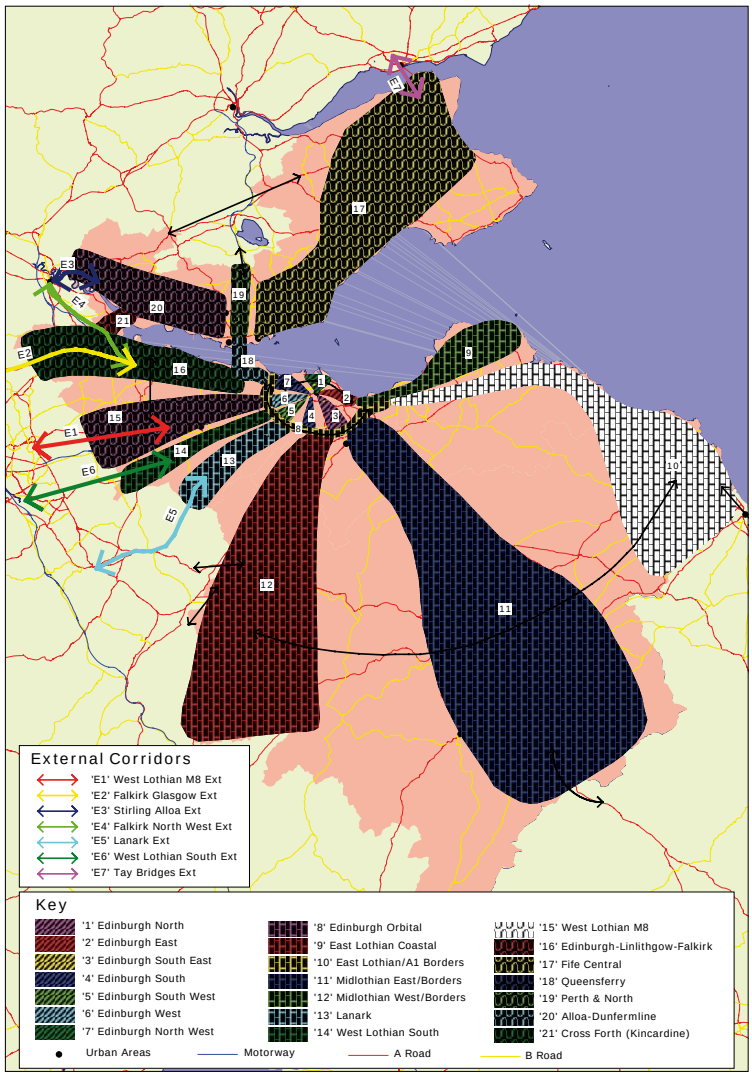


Figure 8.3 *Other Strategic Corridors in SEStran*

Specific Freight Sector Requirements

8.4.7 SEStran supports the development of a transport network which facilitates the efficient movement of goods. A working relationship with the freight sector will be established through the Freight Quality Partnership proposals discussed in Chapter 6. This will provide a means to discuss the requirements of the freight sector in a regional context and direct future investment in freight-related facilities. Examples could include the provision of safe rest areas and specific sectoral issues such as the transportation of timber in the Scottish Borders[38].

8.4.8 The promotion of modal shift of freight from road to rail and shipping is an objective of the NTS Freight Action Plan. SEStran wishes to see further development of inter modal freight facilities in the SEStran area and will work through the Freight Quality Partnership to improve land-side access to these facilities.

38 NTS Freight Action Plan, Action 14

International Connectivity – Air

8.4.9 SEStran recognises the key role played by Edinburgh Airport (operated by BAA) in the local economy, in terms of both travel and employment. SEStran supports the expansion of direct air services from Edinburgh Airport as a means to improving international connectivity and competitiveness.

8.4.10 As a major regional generator of travel, the performance of the airport, in terms of surface access, is clearly a significant issue for SEStran. SEStran will seek to work with BAA to develop and deliver improved long-term sustainable surface access solutions for Edinburgh Airport.

International Connectivity – Maritime & Inter-Modal

8.4.11 There are a significant number of ports operating in the SEStran area which provide key economic links to the rest of Europe and the wider world, primarily for freight but also passengers, via the Rosyth Belgium ferry service. The key facilities are at Grangemouth, Leith, and Rosyth with smaller ports operating in Fife and East Lothian. SEStran supports the continuing development of these facilities, and through the new Regional Freight Partnership, will engage with freight operators to ensure that multi modal landside access to these facilities is of the necessary quality. SEStran also supports the continuation and further development of the European ferry service from Rosyth.

9.1 Introduction

9.1.1 This chapter gives a brief overview of the consultation undertaken during the development of the RTS. It also contains the headline quantitative results obtained from the consultation on the Draft RTS. A comprehensive Consultation Report is available as a separate document.

9.2 Consultation Overview

9.2.1 Effective stakeholder and public consultation has been a core element in the development of this Regional Transport Strategy and also the accompanying Strategic Environmental Assessment (SEA). Tailored consultation mechanisms have been used at each of the key stages to ensure that the diverse views of consultees are considered and that there is widespread buy-in to the emerging strategy. The overall approach taken is summarised in Figure 9.1 below.

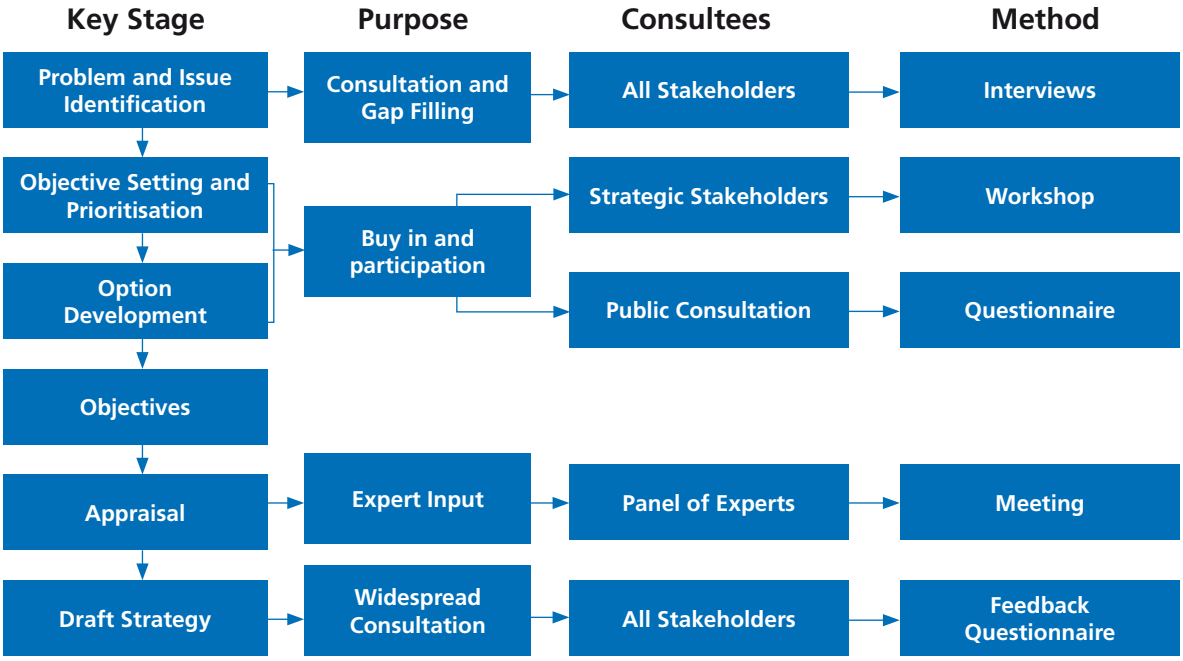


Figure 9.1 *Overview of Consultation Process*

9.2.2 The guidance for preparation of Regional Transport Strategies produced by the Scottish Government stresses the importance of effective consultation. SEStran has taken a deliberate decision to go beyond these recommendations, introducing a number of additional consultation elements in recognition of their considerable value in the process. SEStran and the consultants' team are extremely grateful for all the involvement and contributions from stakeholders and the public in arriving at this strategy.

9.2.3 A comprehensive consultation report has been produced as a separate document. This highlights the process and outputs from the following key elements of the consultation:

- awareness raising;
- structured telephone interviews;
- face to face interviews;
- expert panel workshop;
- strategic stakeholder workshop;
- interest group meetings – objectives;
- opportunities emerging from Consultation;
- expert panel consultation workshop;
- public consultation questionnaire; and
- consultation on draft strategy.

9.2.4 All these different consultation stages have fed into the development of this final strategy. Additional consultation has also been undertaken as part of the development of the Strategic Environmental Assessment (SEA). At key stages, such as the strategic stakeholder workshop, these two consultation streams have been combined to maximise integration between the processes.

9.2.5 The respective chapters in this strategy on issues and trends, objectives, policies, targets and measures aim to reflect the outputs of this considerable volume of consultation. In this brief chapter we summarise the numeric responses to the consultation on the draft Regional Transport Strategy by stakeholders and the public through a web based questionnaire, supplemented by hard copies. This was available on the SEStran website to receive responses between 24 November 2006 and 28 January 2007.

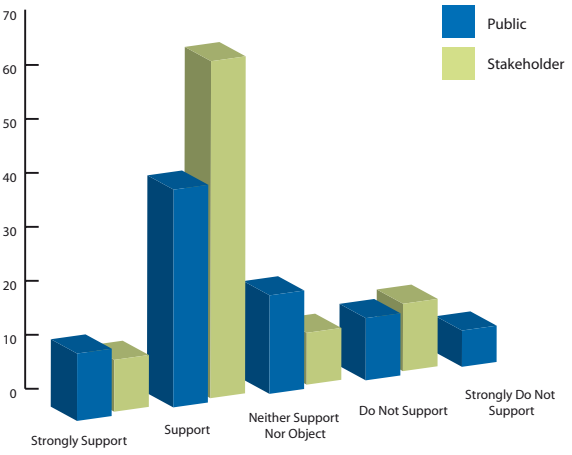
9.3 Overview of Results from Consultation on Draft Strategy

9.3.1 A few of the key consultation results are now outlined.

Support for Strategy

9.3.2 In the main respondents were supportive of the draft strategy (64% stated they support the strategy). The general feeling from many respondents was that it was too long and contained too much technical background information. This has been addressed in this final, significantly shorter strategy with separate appendices.

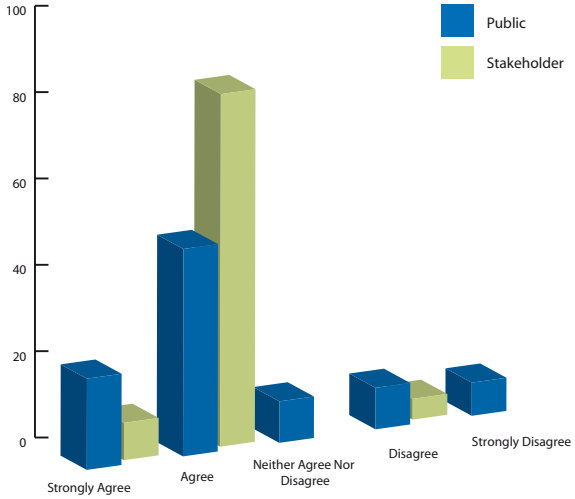
Figure 9.2 *Support for Overall Strategy*



Objectives

9.3.3 The development of the objectives had been subject to an earlier and very useful public and stakeholder consultation exercise and this was reflected in the results of this final questionnaire with almost 80% of respondents in agreement with the objectives. Some very limited wording changes have been made in this final version to reflect comments for example on car dependency.

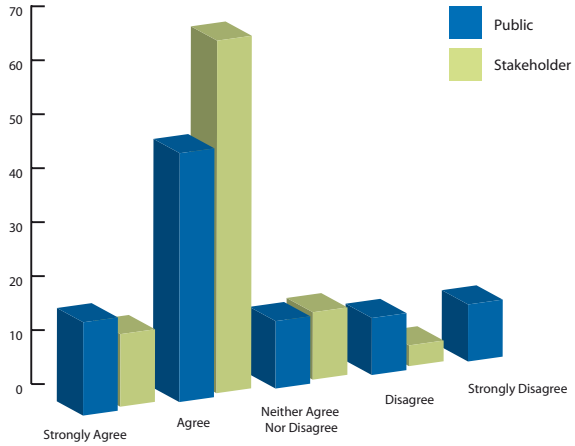
Figure 9.3 *Support for Objectives*



Policies

9.3.4 Again most respondents (68%) were in favour of the policies presented in the draft RTS. A general comment from stakeholders and the public was that there were too many policies to be effective. A clear split emerged between those who thought the policies were too anti car and those who felt the policies did not tackle the need to develop sustainable transport alternatives. Small changes have been made to address issues raised and the policies have now been moved, as reference material, to the appendices.

Figure 9.4 *Support for Policies*



9.3.5 In addition to the above, the consultation process demonstrated widespread support for a 'balanced strategy' where the RTS achieves a balance in terms of the three main themes outlined in Chapters 6 8.

10.1 Introduction

10.1.1 Throughout the development of this strategy, it has been recognised that SEStran must have the capability to deliver the projects and initiatives prescribed within the strategy. The functions and powers required to deliver the strategy have been examined and initial conclusions reached which will be the subject of ongoing discussions with the constituent local authorities.

10.1.2 The Transport (Scotland) Act 2005 gives immediate powers to partnerships to give grants and loans, to promote private bills in Parliament and carry out various financial and administrative functions. The Act also allows transport partnerships to confer or transfer various transport functions, currently held by the constituent local authorities, by Ministerial Order. The processes required to promote a Ministerial Order can be lengthy, which could result in undue delay in implementing key projects, if the requirement is not identified at an early stage.

10.1.3 *Scotland's Transport Future* envisaged three models of partnership models with varying degrees of power and responsibility. The model that SEStran has initially adopted is in line with model one which is based on a limited number of statutory functions to be exercised concurrently with local authorities.

10.2 Possible Partnership 'Models'

10.2.1 The possible partnership 'models' that SEStran could adopt in order to facilitate the implementation of the RTS are described below. Whilst the 'Level 1' model is fairly clearly defined in the guidance, the other two models do not define strictly the powers that should be taken on by the Partnership, or retained by constituent local authorities. This is a matter for careful consideration in the case of most partnerships in Scotland (although SPT, Shetland and Dumfries and Galloway are defined as 'Level 3' partnerships from the start due to the particular circumstances in these cases).

- The so-called 'Level 1' model is that adopted by SEStran at the present time, as stated above. The partnership has the statutory responsibility to produce the RTS, and the power to make grants to other bodies to implement certain elements of the RTS. All transport powers remain with local authorities, the Scottish Government, and private operators. RTS Guidance (para 120) notes that a Level 1 model will provide the RTP with a limited number of statutory powers to be shared concurrently with constituent local authorities, but it is not clear about what such powers are;
- The 'Level 2' model would see an RTP taking on certain transport powers from constituent local authorities, either solely, or concurrently with them. It could, for example, become the roads authority for the strategic road network, whilst constituent local authorities retained roads powers for the local network. The same could hold true of tendered bus services across local authority boundaries (SEStran) and services wholly within local authority boundaries; and

- The 'Level 3' model 'require[s] a significant transfer of public transport functions from constituent councils to the RTP' (RTS Guidance, para 120). However, whether it also requires the transfer of roads powers is not made clear. It must be assumed, therefore that, in common with a Level 2 model, the Level 3 does not automatically require the transfer of all, or even some, of the roads powers currently held by local authorities – but it could do so.

10.3 Delivery

10.3.1 There are a number ways SEStran can deliver its strategy:

- **Influencing** – SEStran can seek the support, influence and persuade other partners, particularly where SEStran is not the funding body;
- **Guidance** – SEStran can provide guidance and advice to other partners tied in with funding provision to achieve consistency and best practice across the region;
- **Co-ordination** – the co-ordination of partners in the development and implementation of projects and initiatives is a potential role for SEStran; and
- **Direct Delivery** – this is the function that may require SEStran to take on additional statutory powers depending on the implementation powers required.

10.3.2 The role that SEStran will play in relation to each project or initiative is identified within the delivery plan.

10.3.3 The RTS will be delivered by SEStran working in partnership with the key providers and in particular the local authorities and the Scottish Government. Where delivery routes involve functions which are not conferred on SEStran by primary or secondary legislation then delivery shall normally be achieved through the bodies on which such functions are conferred.

10.3.4 However, in accordance with its duties under Section 5(2) (f) and (g) of the Transport (Scotland) Act 2005, SEStran shall on a case-by-case basis assess and decide the procurement route which it considers represents the most appropriate or effective method of achieving the particular policy of the RTS, and in appropriate circumstances, shall consider whether direct delivery of the strategy by SEStran or other alternative routes represents best value. In such circumstances, SEStran will seek to reach agreement with its partners on the best means of delivery, where appropriate using powers under Sections 10 and/or 14 of the 2005 Act to assist such alternative delivery methods.

10.4 Additional functional capability

10.4.1 The schemes and interventions outlined in this strategy have been examined to see where benefits could be achieved by SEStran taking on additional powers. These are outlined below:

Likely Need for Functions

10.4.2 **Ticketing – Transport (Scotland) Act 2001: S28, 29.** This area presents the strongest case for SEStran to seek powers for direct delivery, as the RTP is already involved in the 'One Ticket' integrated ticketing scheme on a voluntary basis. The desirability of developing the existing scheme further, through negotiation with partners, has to be considered.

Parallel Tracking Approach

10.4.3 **Concessionary travel – Transport Act 1985: S9.** Discussions with authorities will focus on the desirability of harmonising and managing rail travel concessions currently provided by constituent councils.

10.4.4 **Quality Partnership and Quality Contracts – Transport (Scotland) Act 2001:S3, 13.** There could be benefits in SEStran facilitating a Quality Partnership or a Quality Contract on some strategic cross-boundary corridors along with the local authorities affected and the bus operator(s). The potential requirement for SEStran to assume some statutory Quality Partnership and Quality Contract functions to support and simplify any negotiation, needs to be considered.

10.4.5 **Parking Management – Road Traffic Act 1991[Topic 12, A, poss. D].** The efficiencies achievable through SEStran being involved in issues such as providing centralised decriminalised parking enforcement operation needs to be defined and discussed.

Requirements for Implementing Major Projects

10.4.6 How key projects in the RTS will be delivered, has to be considered. These projects could include:

- the outer orbital bus service;
- tram extensions;
- rail projects; and
- cross-Forth Ferry.

Supporting Constituent Authorities

10.4.7 Where constituent councils may not have the capacity and resources to deliver local authority measures, the RTP could consider providing support to the local authority to implement projects and initiatives relevant to the RTS, with agreement from the relevant authority.

10.5 General Conclusions

10.5.1 For SEStran to implement the strategy projects and initiatives, there is no need to transfer any powers from local authorities to SEStran, but there are potential benefits in taking on parallel powers to ensure that the strategy is delivered in accordance with the delivery plan.

10.5.2 On that basis the approach being adopted is a staged, evolutionary approach, but taking on board the potential delay of promoting a Ministerial Order affecting the delivery of projects. The early agreement with the constituent authorities and the promotion of any requisite orders, as outlined above, will ensure that SEStran is in a position to effectively deliver its strategy.


SWITCH OFF
ENGINE
WHEN STATIONARY
FIXED PENALTY
£20

11.1 Introduction

11.1.1 The RTS outlines the direction for investment in transport in the SEStran area and provides a strong policy and prioritisation for this investment. Securing the delivery of the RTS will clearly depend on the availability of adequate funding.

11.1.2 Relevant major capital projects from the RTSs feed into the Strategic Transport Projects Review, which will cover the period 2012-2022.

11.2 Existing Funding

11.2.1 This section outlines the current funding arrangements for SEStran.

Revenue

11.2.2 The Scottish Budget Spending Review, 2007 and subsequent correspondence identified a core funding contribution from the Scottish Government to SEStran of £300,000 for 2008/9. This is proposed to be matched by a £315,000 contribution from the partner authorities. The core funding covers costs related to staffing, accommodation, materials and some core activities. In addition, for 2008/9 the Scottish Government has committed £90,000 for sustainable transport and £620,000 for revenue projects. It is assumed for the purposes of the RTS that these funding levels will continue in real terms allowing for inflation.

11.2.3 As part of the ring fenced settlement to Local Authorities funding has been made available from the Scottish Government for various transport initiatives that are covered by the RTS e.g. Demand Responsive Transport, Community Transport etc. The RTS has taken account of these funds in the projections of revenue spend in the coming years.

Capital

11.2.4 The Scottish Budget Spending Review, 2007 transferred Regional Transport Partnership capital funding to local authorities as part of the block local authority settlement. In 2008/9 the eight authorities within the SEStran area inherited £10.1m from what was previously SEStran capital funding distributed among the authorities on the basis of 95% by population and 5% by area. The RTS assumes that this level of funding will continue and will continue to be spent on regional priority projects. The other option would be through the Prudential Borrowing Framework but this would require a future revenue income stream to cover repayments.

11.3 RTS Funding Summary

11.3.1 The RTS has laid out a comprehensive policy framework for the SEStran area. The RTS funding requirement is included in the separate delivery plan and excludes investment in nationally funded projects.

It should also be clearly understood that the Local Authority funding requirements that flow from this RTS are additional to current 'baseline' local authority spending on transport.

APPENDIX A – Legislative Framework

Relevant RTS-Related Requirements of the Transport (Scotland) Act 2005

As outlined above, the Transport (Scotland) Act 2005 requires RTPs to prepare and adopt a Regional Transport Strategy (RTS). This document constitutes the Final RTS issued following public and stakeholder consultation which took place in late 2006 and early 2007.

Section 5 of the Transport (Scotland) Act 2005 outlines the breadth of an RTS, noting that it should cover:

- 'the respects in which transport in the region needs to be provided, developed or improved';
- provision for 'meeting the needs of all inhabited places', in particular those which the Partnership considers 'different from the remainder of the region by reason of their remoteness or the scarcity of their populations';
- the RTS must include provision for 'meeting the need for efficient transport links between heavily populated places'; and
- Section 5(2) (d) lists seven 'yard-sticks' for the RTS – the RTS must consider how 'transport in the region will be provided, developed, improved and operated so as to:

  (i) enhance social and economic well-being and public health;

  (ii) promote public safety, including road safety and the safety of users on public transport;

  (iii) be consistent with the principle of sustainable development and to conserve and enhance the environment;

  (iv) promote social inclusion;

  (v) encourage equal opportunities and, in particular, the observance of the Equal Opportunities requirements;

  (vi) facilitate access to hospitals, clinics, surgeries and other places where a health service is provided; and

  (vii) integrate with transport elsewhere.

This is indeed a broad range of statutory requirements, but it is also clear from this list that the RTS must prioritise certain objectives and actions over others. This can be seen in the objectives, policies and interventions that go to make up the SEStran RTS.

The Scottish Executive's RTS Guidance

To assist an RTP to produce a compliant Regional Transport Strategy, the Scottish Executive has issued a comprehensive Guidance Document. Paragraph 14 of this Guidance lists the requirements of the RTS process and the resulting RTS. These can be **summarised** as follows:

- to provide **an analysis of the current situation**, covering transport needs and problems in the region;
- to provide **a Vision and a set of Objectives** for transport over a 10-15 year time horizon;
- to set out **a programme of activities, projects and interventions** by the RTP, its constituent councils and other stakeholders which will contribute to the achievement of the agreed regional transport Objectives;

- to inform the RTP's implementation and investment planning by **setting out how the strategy will be achieved** using funding already at the RTP's disposal;
- **to identify any additional measures** that would be dependent on further contributions and to make a case for obtaining these additional contributions from relevant potential funders;
- to provide a '**key steer for Local Transport Strategies**';
- to support the **National Transport Strategy**; and
- to provide a shopping list of **key regional schemes** as input to Transport Scotland's forthcoming **Strategic Transport Project Review,** which will set out and prioritise investment in Scotland's future 'strategic' transport projects.

Paragraph 18 of the Guidance restates Section 5(2) of the Act, listing a number of '**Guiding Principles**' which should underpin the RTS, including:

- promoting economic growth and supporting the needs of business;
- providing and promoting sustainable transport choices for people and goods;
- tackling the costs to business and individuals of the delays and unpredictability caused by congestion;
- improving access to public services, health, education and training, jobs, shopping, leisure and recreation, particularly for people who are currently excluded from enjoying the benefits of such services;
- addressing transport inequalities, including provision of and access to transport for disabled people and putting into action the (proposed) statutory duty to promote equal opportunities;
- increasing the safety and quality of transport infrastructure;
- reducing and mitigating the impact of transport on the environment;
- ensuring that new and existing initiatives represent values for money; and
- improving health through increased opportunities for walking and cycling.

APPENDIX B – RTS CONTEXT

Introduction

This Appendix provides a description of the SEStran area in terms of geography and transport networks. It also outlines some of the key trends and issues which the RTS sets out to address.

The Nature of the SEStran Area – Urban/Rural Split

The SEStran area is one of contrasts, ranging from highly urbanised to highly rural areas. The standard six-way Scottish Executive urban rural classification distinguishes between urban, rural and remote areas within Scotland, and includes the following categories:

- 'Large Urban' Areas – Settlements of over 124,999 people;
- 'Other Urban' Areas – Settlements of 10,000-124,999 people;
- 'Accessible Small Towns' – Settlements of 3,000-9,999 people within 30 minutes drive of a settlement of 9,999 or more;
- 'Remote Small Towns' – Settlements of 3,000-9,999 people, with a drive time of over 30 minutes to a settlement of 9,999 or more;
- 'Accessible Rural' – Settlements of less than 3,000 people, within 30 minutes drive of a settlement of 9,999 or more; and
- 'Remote Rural' – Settlements of less than 3,000 people, with a drive time of over 30 minutes to a settlement of 9,999 or more.

Figure E overleaf illustrates this six-way, Scottish Executive defined, urban-rural classification for the SEStran area.

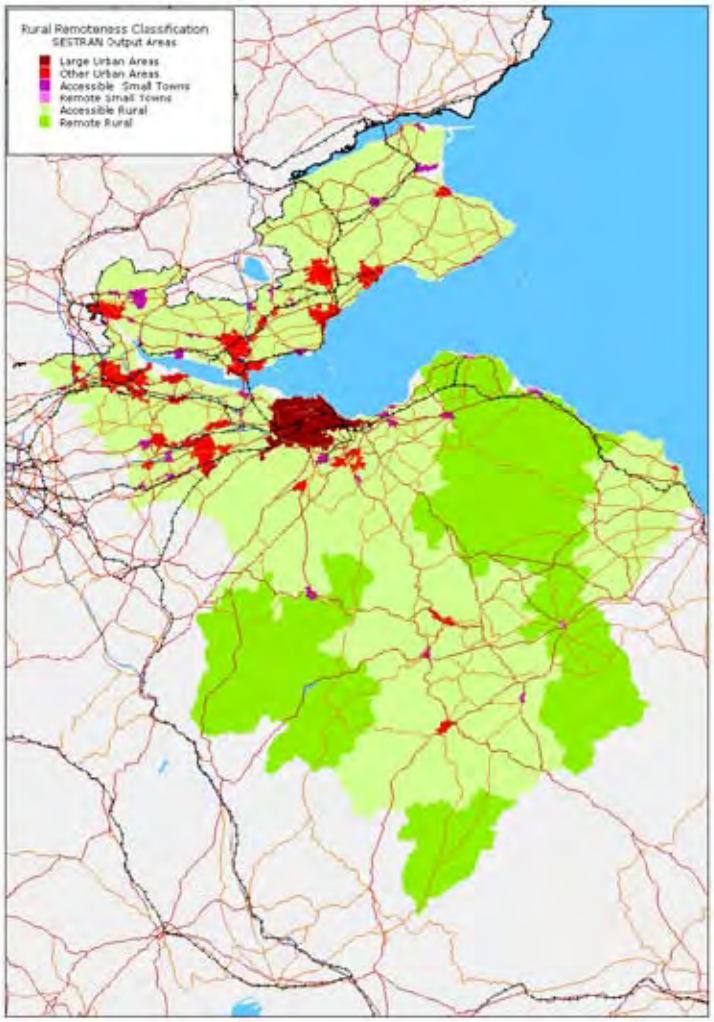


Figure E – *SEStran Standard Six-Way Scottish Executive Urban-Rural Classification*

The total population of the area is currently around 1,500,000 people. This total population can be categorised using the six way Scottish Executive urban rural classification described above as follows (as defined by the Scottish Executive):

- 32% in 'Large Urban Areas' (i.e.settlements of over 125,000 people, i.e.Edinburgh);
- 40% in 'Other Urban Areas' (Settlements of 10,000 to 125,000 people, e.g.Kirkcaldy, Dunfermline, Alloa, Falkirk, Livingston, Penicuik, Hawick, Musselburgh etc);
- **that is almost three quarters of the population are 'urban';**
- 13% in 'Accessible Small Towns' (i.e.Settlements of 3,000-10,000 people, within 30 minutes drive of a settlement of 10,000 or more, e.g.Burntisland, Queensferry, Haddington, Armadale, Tayport etc);
- 1% in 'Remote Small Towns' (i.e.Settlements of 3,000-9,999 people, with a drive time of over 30 minutes to a settlement of 9,999, e.g.North Berwick; Dunbar and Kelso);
- **that is a 14% of the population live in small towns;**

- 12% in 'Accessible Rural Areas'(i.e.Settlements of less than 3,000 people, within 30 minutes drive of a settlement of 9,999 or more);
- 2% in 'Remote Rural Areas (i.e.Settlements of less than 3,000 people, with a drive time of over 30 minutes to a settlement of 9,999 or more);
- **that is 14% of the population is 'rural'.**

Thus, the SEStran population is one that is predominantly urban in nature but with a significant rural minority. In absolute terms, population growth over the past 20 years has taken place in the main in Edinburgh, 'other urban areas' and 'accessible small towns'.

SEStran Local Authorities

Within SEStran, there is a long history of successful partnership working on a voluntary basis. Evidence of the links between SEStran authorities and between SEStran and the rest of Scotland can be found in the 2001 Census travel to work data. There is a substantial amount of commuting between Clackmannanshire and Stirling, eastern Fife and Dundee, and between Falkirk and Stirling/North Lanarkshire/Glasgow. In addition, there are significant movements between Edinburgh/West Lothian and North Lanarkshire/Glasgow.

Transport Networks in SEStran

Road

There is an extensive network of trunk and local roads in the SEStran area, controlled by Transport Scotland and the local authorities respectively. The trunk roads form the key, highest volume routes providing links within SEStran and between SEStran and the rest of the country. Figure F and Figure G below show the main roads in the area, together with a selection of traffic counts. These counts give a clear illustration of the relative level of traffic to be found around the area.

Figure F *SEStran Area Road Network*

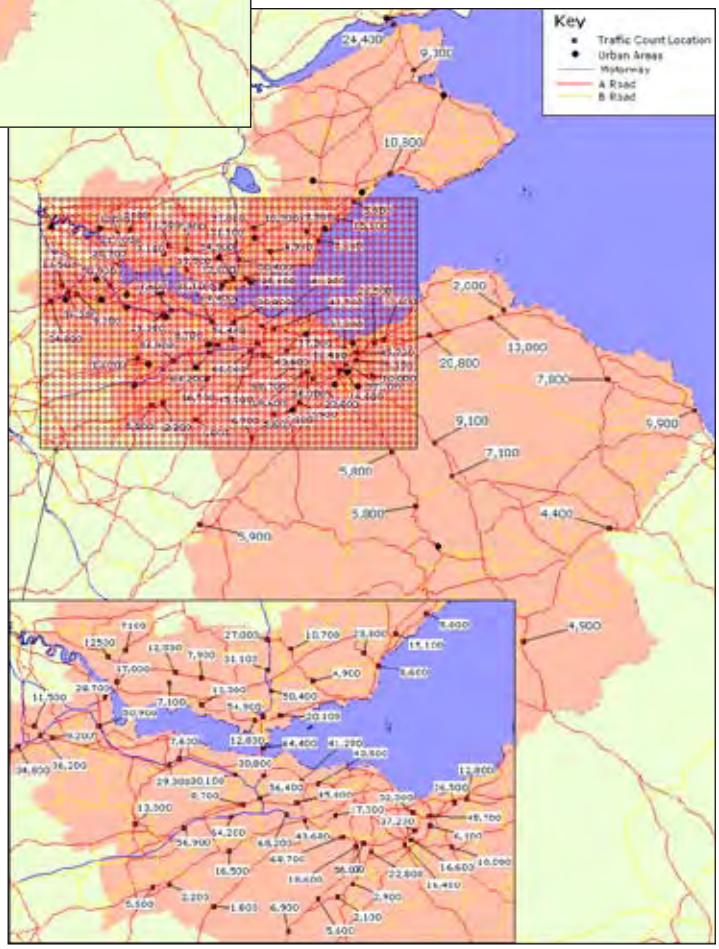


Figure G *SEStran Area Traffic Counts (AADT, 2002)*

The trunk road network within the SEStran area consists of:

- the A1, A7 (south of Galashiels) A68 (A6091), and A702, providing links to the south;
- the A720 Edinburgh City Bypass;
- the M8, M9 and A80/M80 providing links to the west and north;
- the M90 to Perth, the A9 and the Highlands;
- the A92 providing a link between Fife and Dundee/the north east; and
- the A876/M876 and A985 Kincardine Bridge to Dunfermline.

To the south, the A1 is the highest standard route, and it is gradually being upgraded, but large sections of single carriageway remain. Uninterrupted dual carriageway standard is not currently reached until Morpeth, over 100 miles from Edinburgh. There are no plans in either Scotland or England at present, to fully upgrade the A1 to dual carriageway standard. The other routes to the south, the A68, A702, and A7 are all single carriageway routes, with small sections of 'climbing lane' provision in places. However, as can be seen in the above figures, all of these routes carry relatively low levels of traffic.

The M8, M9 and M90 motorways are all of dual two-lane standard. Traffic flows on the M8 are rather higher than the other motorways, with AADT values of greater than 60,000. The busiest section of road in the SEStran area is the A720 Edinburgh City Bypass, where flows touch nearly 70,000 AADT. The Forth Road Bridge (FRB) is widely recognised to be carrying traffic loads well in excess for which it was designed (in fact around double), currently around 65,000 vehicles per day. In terms of links to the FRB, a new dual carriageway link between the M9 Spur and the A90 is currently under construction, replacing the heavily congested A8000, including the Section through South Queensferry. A further crossing of the Forth at Kincardine is currently under construction, supplementing the current historic structure.

As well as the Forth Road Bridge, there are a number of other strategic **congestion** 'hot-spots' throughout the SEStran area. The Scottish Executive's monitoring of congestion on the trunk road network identifies the 'time lost due to congestion per vehicle kilometre' (seconds)[39] on selected routes. By this measure, the most congested parts of the SEStran trunk road network are:

- north and eastbound approaches to Kincardine Bridge;
- A720 Edinburgh City Bypass (westbound) between the A1 and the M8 (including Sheriffhalll roundabout);
- the M9 (southbound) between the M9 Spur and the M8 at Claylands; and
- southbound approaches to Forth Road Bridge (M90 J4, A92 Cowdenbeath to Forth Bridge).

The A1 (Macmerry to A720) had the lowest levels of congestion of the sites reported.

The trunk road network is of course supplemented by an extensive network of local roads. These provide internal connectivity, in addition to further external links. Most of the inter-urban local road network in SEStran is single carriageway. Some of the main heavily-trafficked local roads in the SEStran area are:

39 This measure compares the observed travel times with travel times achieved during 'free flow' conditions. Time lost due to congestion is the difference between the two.

- A90 (M90 Junction 1 to Edinburgh);
- A921 Kirkcaldy to M90;
- A915 Kirkcaldy to St Andrews;
- A91 Stirling to St Andrews;
- A907 Alloa to Dunfermline;
- A803 Linlithgow – Falkirk – Bonnybridge;
- A801 M8-M9;
- A71 West Calder – Edinburgh;
- A89 Bathgate-Edinburgh;
- A7 Edinburgh-Galashiels;
- A703 Edinburgh – Peebles;
- A697 A68 – Coldstream;
- A701 Edinburgh – Moffat; and
- A198 Prestonpans – North Berwick.

The road network provides key strategic links to the area's ports and airports, the most important of which are Grangemouth, Leith, Roysth and Methil docks, and Edinburgh Airport.

Ports & Airports

There are a significant number of ports operating in the SEStran area which provide key economic links to Europe and the wider world.

Forth Ports (Leith and Grangemouth) moves the largest quantity of tonnes of any port in Scotland, mainly in the form of 'liquid bulk' exports at Grangemouth. Grangemouth also handles a substantial quantity of container based traffic, and is also home to the only rail freight terminal in the SEStran area, the use of which is growing fast.

Also in the Forth, since 2002, Superfast Ferries has been operating direct ferry services between Rosyth and Zeebrugge in Belgium. An initial daily service, using two vessels, has been reduced in 2006 to a single vessel service offering three sailings per week.

Other smaller port operations in the SEStran area are found at Methil and Burntisland. There are also several minor fishing and leisure ports and harbours along the Fife and East Lothian coasts.

Outwith the RTS, detailed study is currently being undertaken to consider the case for the introduction of new cross-Forth passenger ferry services. This comprehensive study is examining the potential for a ferry from an operational, engineering and business case perspective.

Edinburgh Airport is located west of Edinburgh and now serves 85 destinations, with 50 different airlines using the airport (source: BAA). In 2002, 81% of passengers were on domestic flights. The airport has developed considerably in recent years and supported 7,200 jobs (2,300 employed directly) in 2002[40], with the airport continuing to grow since then. Indeed, more recent figures suggest that 3,200 people are employed at the airport (Edinburgh Airport Surface Access Strategy (draft)). Surface access to the airport by public transport is currently limited to the Express bus service to/from Edinburgh city centre, although this has recently been supplemented by a new service running directly from Fife. There are well developed proposals, currently being considered by the Scottish Parliament, to link the airport with both tram and heavy rail (Edinburgh Airport Rail Link (EARL)) in the coming years.

Passenger air travel from Edinburgh Airport has grown rapidly in recent years, from around 3.0m passengers per year in 1994 to nearly 8.5m in 2005. According to Department for Transport forecasts, this figure is anticipated to grow to 20m by 2025. The resulting growth in travel to and from Edinburgh Airport is therefore a key regional issue. Major new infrastructure is planned for the Airport however, including a new tram link and the Edinburgh Airport Rail Link (EARL). In the longer term, there are plans to add a second runway at Edinburgh Airport.

The current (2005) mode split for passenger travel to and from the airport is[41]:

- private car – 48%;
- bus/coach – 20%;
- taxi – 25%; and
- other – 7%.

The bus/coach share has therefore increased from 16% in 2002, and BAA has a target to reach 25% by 2007, based on bus services alone.

The airport is therefore a major strategic transport centre for the SEStran area.

Rail

The rail network in SEStran is a combination of local and long distance services operated by Scotrail, and long distance services provided by GNER and Virgin Cross Country. Edinburgh Waverley station forms the main focus of these services. The main characteristics of the rail network in the SEStran area are as follows:

- **East Lothian**: local service to North Berwick, with GNER and Virgin serving Dunbar;
- there are currently no train services for **Midlothian**, **Scottish Borders** and **Clackmannanshire** (although new lines currently planned or under construction will resolve this);
- **West Lothian** is served by four main train services – Edinburgh-Shotts-Glasgow, Edinburgh-Bathgate, Edinburgh-Falkirk-Glasgow, Edinburgh-Falkirk-Dunblane – the latter two also serving **Falkirk**; and

40 Source: BAA Edinburgh Airport Master Plan, 2006
41 Source – Edinburgh Airport Master Plan, 2006, BAA

- **Fife** has an extensive local network via the Fife Circle, services to Dundee and the north-east, and other services to Perth and the north (note that EARL will facilitate improved interchange for Glasgow services).

The network and stations are shown in Figure 2.2 below. The stations are grouped into seven categories to indicate passenger levels at each station. Outside of Edinburgh Waverley and Haymarket, it can be seen that the busiest stations are Linlithgow and Kirkcaldy, followed by Falkirk High, Falkirk Grahamston, Inverkeithing, Dunfermline, Bathgate and Livingston North.

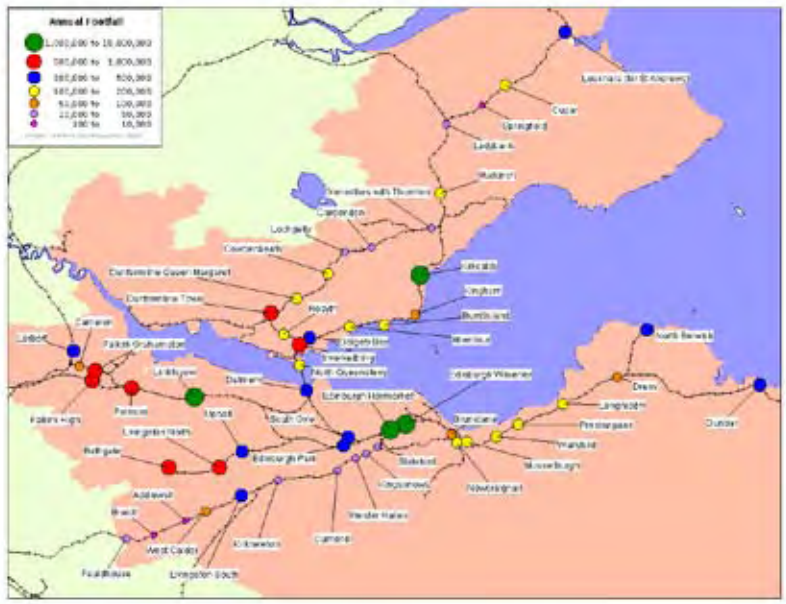


Figure H *SEStran Area Rail Network and Station 'Footfall'*

As touched on above, there are significant developments in the pipeline for the rail network in the SEStran area. The new link between **Stirling and Alloa** (and Kincardine, for freight) is currently under construction. This link will provide new passenger services, and also frees up capacity on the Forth Bridge, as coal trains to Longannet power station will divert to the new line. The Bill to facilitate the reconstruction of the **Waverley Line** between Edinburgh and Tweedbank has recently been granted Royal Ascent. When constructed, this line will provide new stations in Midlothian (Shawfair, Eskbank, Newtongrange and Gorebridge) and the Borders (Stow, Galashiels, Tweedbank). Similar Bills are currently before the Scottish Parliament considering the re-opening of the **Airdrie to Bathgate** line and the creation of an Edinburgh Airport Rail Link (**EARL**). Taken together, these schemes represent a highly significant investment of over £1 billion pounds in the rail network. In addition, there are also proposals to upgrade station facilities at Haymarket and Waverley.

Park and Ride

The rail network described above provides extensive opportunities for Park and Ride across the area. Park and Ride accounts for a significant proportion of all local rail travel in the area. As a result, there are parking capacity problems at many railway stations throughout the area. This rail-based Park and Ride provision is now being supplemented by a network of bus-based Park and Ride facilities, at Ferrytoll in Fife and around Edinburgh.

The Ferrytoll Park and Ride site at Inverkeithing was the first custom built bus based Park and Ride facility in the area, and has proved enormously successful, with car parking provision being increased to cope with demand. In 2005, new facilities were opened at Ingliston (A8) and Hermiston (A71) on the west side of Edinburgh. Again, these are proving popular. Similar facilities are under construction at Sheriffhall (A7), with new sites also planned at Straiton (A701) and Hillend (A702), together with an extended 'park and share' facility at Wallyford in East Lothian. In Fife 'park and choose' facilities are being developed at Rosyth and Halbeath.

Bus Services

Bus services in the area are extensive and comprise a mixture of commercially run and subsidised services. The main providers of services are: Lothian Buses, First, and Stagecoach. These main operators are supplemented by local, small scale operators in places.

There has been increasing investment in recent years in bus priority measures. Within Edinburgh, Quality Bus Corridors have been defined, e.g.Straiton Leith. On these QBCs, there are extensive bus lanes, real time bus information at bus stops, and selective vehicle detection which can give buses priority at traffic signals. A section of busway was also opened in west Edinburgh, to physically separate buses from general traffic along a congested corridor. Figure I below shows the location of existing (and committed) bus priority schemes in the SEStran area.

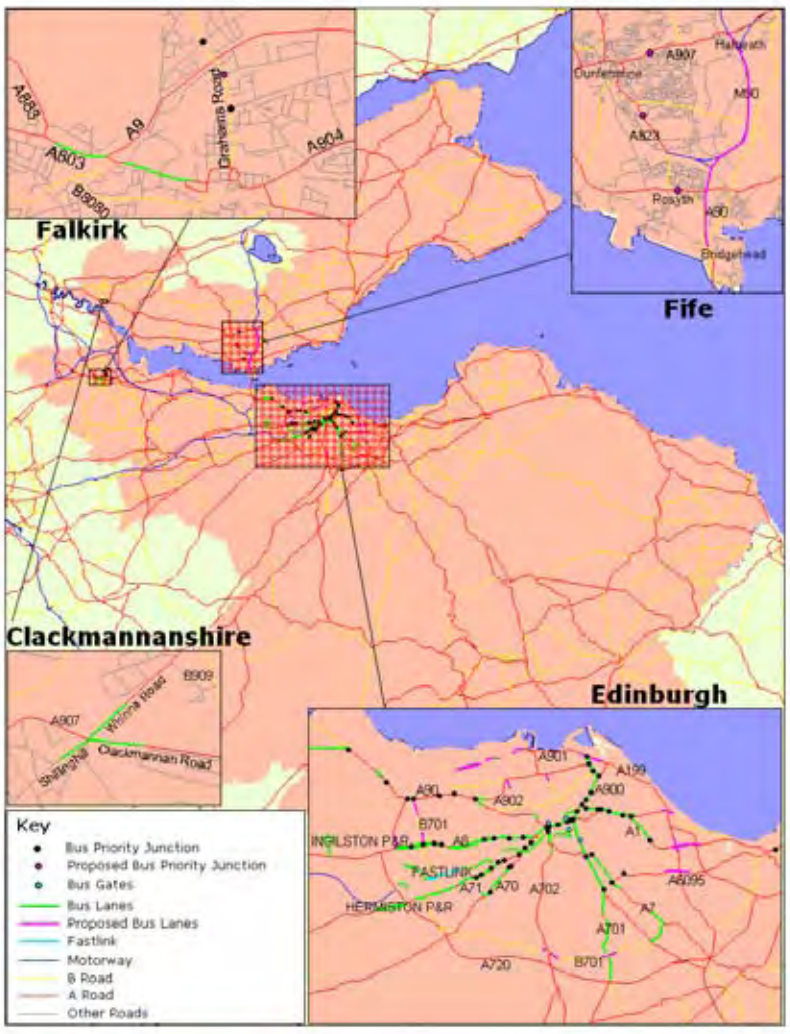


Figure I *Bus Priority Measures in SEStran*

Most of the local authorities within SEStran produce schematic bus maps which depict all the main bus services in their areas. In addition, the website **www.travelinescotland.com** provides the public with exhaustive information regarding the range of public transport options for any trip in Scotland.

Cycling & Walking

Across the area, local authorities and other stakeholders have been promoting cycling facilities in recent years. Walking currently accounts for 20% of all trips in SEStran, while cycling is around 1%. However, the share of walk/cycle drops off quickly with journey distance. While 59% of trips less than 1km are by walk or cycle, this falls to around 32% for trips between 1km and 2km and to only 16% for trips between 2km and 3km.

Within SEStran 35% of households have one or more bicycles, according to the Scottish Household Survey (SHS). However, only 6% of SEStran residents had cycled in the previous seven days. In the SEStran area, the proportion of people cycling to work is around 2%.

A key issue is that around a quarter of all car trips are under 2km in length, trips which, for most people, could easily be made by walk/cycle. This is particularly important from a health perspective, given the increasing levels of obesity and general lack of exercise in the population.

Sustrans is a UK transport charity which promotes the **National Cycle Network**, with the help of the local authorities and other agencies, see Figure J below. Based on their figures, the National Cycle Network passes within one mile of half the UK population and 232 million trips were made on the Network in 2005. The Scottish National Cycle Network map is available from the Sustrans website (**www.sustrans.org.uk**).

Figure J *National Cycle Network in SEStran Area (source: Sustrans, 2006)*

Smart Cards & Ticketing

The Scottish Executive, through Transport Scotland, is currently deploying the largest **smart card scheme** in the United Kingdom outside of London. The initial purpose of the scheme is to support the Scottish Concessionary Travel Scheme introduced in April 2006, but the aim has always been to establish a common platform upon which wider developments in both commercial and integrated ticketing can take place.

From a SEStran perspective, Lothian Buses will continue to operate their large commercial smart card scheme, however this will at least in the short term be a proprietary scheme outside of the 'ITSO' specification (giving common standards) and will not require the replacement of their existing smart cards. In the longer term, Lothian Buses have expressed an interest in migrating their scheme to ITSO.

In order for SEStran to maximise the opportunities afforded by the smart card infrastructure, the following matters need to be considered:

- resolution of the future Lothian Buses strategy for smart cards and funding to facilitate this;
- review of 'OneTicket' and the potential for smart cards given that it is a multi modal product including the rail network;
- examination of opportunities for the use of smartcards within the OneTicket environment to develop local and single mode integrated ticketing;
- examination at a regional level of the implications of a mixed smart/non smart environment for OneTicket; and
- examination the opportunities for the use of the smart card technology as a payment means on the Forth Bridge, and also for car parking at stations.

Transport Scotland is already looking at the development of a high level national strategy for Integrated Ticketing in Scotland and sees this as being something that draws together RTSs, enabling a demonstrably co ordinated approach to be taken. It is therefore important that SEStran looks to develop an Integrated Ticketing Strategy, which ensures that the future opportunities presented in this field are maximised.

The Future of the SEStran Area

The SEStran area is home to what is generally recognised to have been Scotland's fastest growing economy in recent years, with the City of Edinburgh being the main driver of economic growth. This Section considers how the SEStran area has developed and is forecast to change over the coming years, looking at population/households, employment and car ownership.

Population and Households

In 2004, the **population** of the SEStran area was estimated as approximately 1,447,000. The breakdown of this figure by individual local authority area is shown in Figure K below.

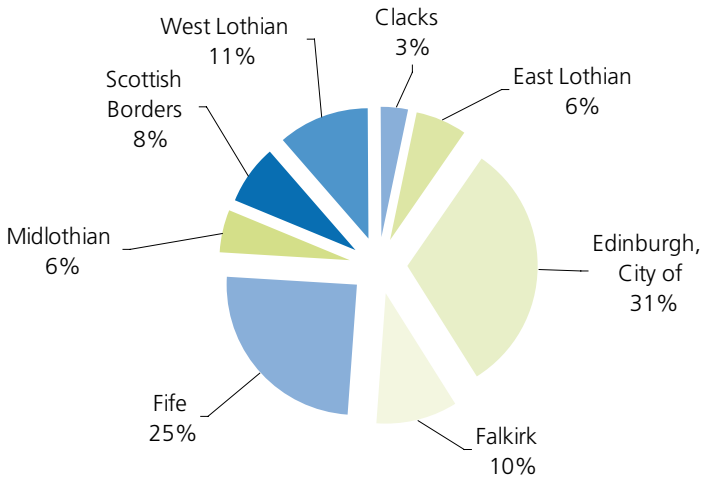


Figure K *Split of SEStran Population*

In terms of population, it can be seen that City of Edinburgh and Fife make up over half the area. The City of Edinburgh has the highest population at around 440,000. The other local authorities are of varying sizes, Clackmannanshire being the smallest, with a population of only 46,000.

In contrast to almost all other RTP areas, the SEStran area is projected to see a significant increase in population of nearly 150,000 (around 10%) between 2004 and 2024 (GROS, 2004 based). Around three quarters of this growth is projected to occur in City of Edinburgh, West Lothian and Fife. However, the biggest percentage increases are projected to occur in West Lothian, Scottish Borders and East Lothian. All areas with the exception of Midlothian and Clackmannanshire are expected to see rises in population, so the whole area is likely to be affected by this growth to varying degrees.

During this period, there will be a pronounced demographic change, with the number of over 65s projected to increase by around 40%, only a 5% increase in working age adults and a very small rise in the number of children. An aging population and falling birth rates is a trend seen across many developed countries.

It should be noted however that the GROS population projections are just that – projections. Particularly at the local authority level, these figures are not taken as a given when compiling e.g.Structure Plans. In these instances, planning policy can influence the location of population growth within a Structure Plan or larger area, comprising several local authorities.

In terms of **households**, the projections are even more dramatic. It is anticipated that there will be an additional 140,000 households (a 22% increase) between 2004 and 2024. By way of context, between 1991 and 2005, the SEStran area saw an additional 81,000 households created, a 14% increase on the 1991 figure. The projected increase in households therefore implies a broad continuation of the trend seen in recent years. The number of households in East Lothian, Edinburgh, Fife, Scottish Borders and West Lothian is forecast to increase by more than 20%. Even in Midlothian and Clackmannanshire, where no population increase is anticipated, the trend of reducing household size will lead to increases in the number of households.

The changing nature of household composition combines with population growth to create this requirement for many more households. As an example, the proportion of single adult households has increased from 24% of all households in 1981 to 40% in 2004, a trend which is set to continue.

Conclusion – the projected increases in population and households within the SEStran area will have pronounced effects on the transport system.

Employment and Labour Force

The SEStran area is recognised as having been the main economic driver for Scotland in recent years. In order to continue this growth, it requires an expanding skilled, and available labour force. The existing location of employment, in terms of SEStran local authorities and industry sector, is shown in Figure L below.

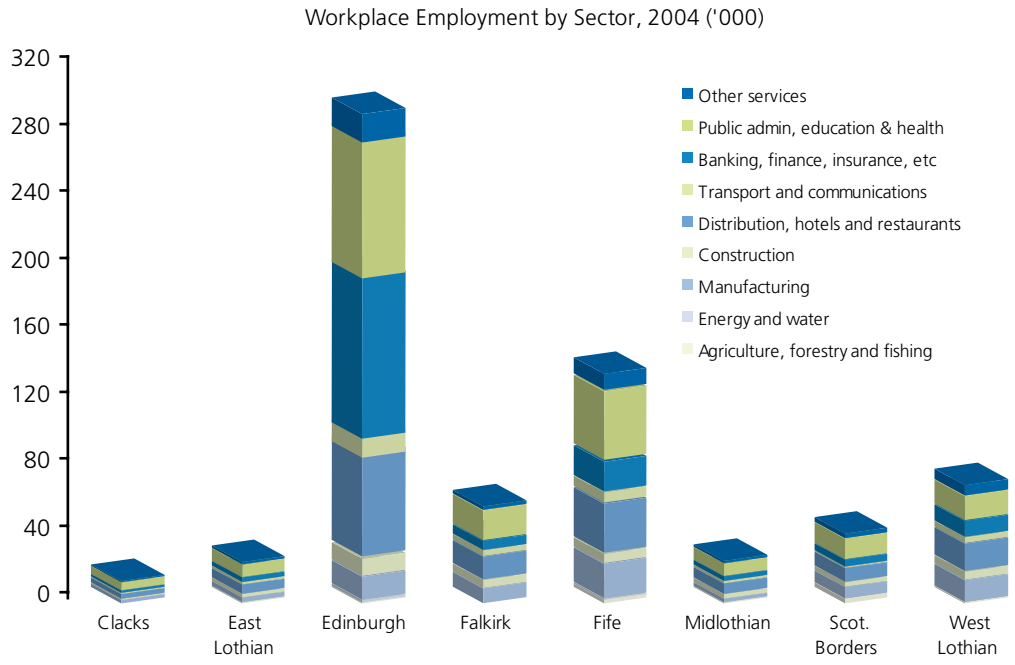


Figure L *Location and Nature of Employment in SEStran Area*

Edinburgh therefore accounts for around 45% of total jobs in SEStran (but only 31% of the population), so acts as a major draw for surrounding areas. The two sectors of 'Public Administration, Education & Health' and 'Banking/Finance/Insurance' account for around 60% of jobs in Edinburgh. It can be seen that there are relatively few jobs in Manufacturing (around 10% of the total) in the SEStran area.

In recent years, employment in the SEStran area has increased substantially – up by 63,000 between 1998 and 2004, with over half of these jobs being located in Edinburgh. Over this time, the number of Manufacturing jobs has continued to fall (by around 34,000), whilst Service sector jobs have increased by 97,000, the largest number of which have been in the 'Public Administration, Education and Health' sector. This growth in employment has resulted in lower unemployment and greater prosperity in the area, which in itself, leads to greater demands on the transport networks.

Employment in Edinburgh and the Lothians (for which figures are available) is forecast to grow substantially. The Lothians Structure Plan forecasts a 77,500 increase in employment between 2000 and 2015, the largest increase again being in Finance/Insurance/Business Services.

Conclusion – Continuing employment growth on this scale will require larger labour markets, potentially with employees travelling from further afield. This will add to pressure on the transport networks in the SEStran area.

Car Ownership

Together with changes in population, households and employment, car ownership plays a key role in influencing travel patterns. The number of vehicles on Scotland's roads has increased from 775,000 in 1962 to around 2.5m today. In spite of this, car ownership levels in Scotland, at around 400 per 1,000 population, are considerably lower than in the wealthier countries of the EU, where the 2002 average was 495 per 1,000 population (EU15). In some comparable areas of Europe, car ownership is very much higher at around 600 cars per 1,000 population.

Within the SEStran area there is a marked division; in Edinburgh, car ownership is low, at less than 350 cars per 1000 population, whilst in the other areas, it range from 430 (Fife) to 480 (Scottish Borders) cars per 1000 population. The low figure for Edinburgh reflects, amongst other things, the density of population, the good level of public transport, and difficulties with parking in parts of the city.

This means that there are significant numbers of households without access to a car. In broad terms, around 1/3 of SEStran households do not own a car, 1/3 have 'partial' availability (e.g.two adults/one car) and 1/3 have 'full' car availability (e.g.two adults, two cars). Looking at individual household types, over 40% of non car owning households are either 'single parent' or 'single pensioner' households. Within the SEStran area, the proportion of non car owning households ranges from a high of 40% in Edinburgh to a low of 24% in the Scottish Borders, reflecting the range of urban/rural SEStran communities.

Significantly, although rates of car ownership here are lower than some other comparable areas of the EU, the use of the car is greater here. Residents of countries such as Austria, Belgium and Germany travel less by car per person than in the UK, despite their higher car ownership.

Conclusion – (i) in the context of other EU15 countries, there is significant potential for increasing car ownership in SEStran area and therefore many more cars – but this need not inevitably lead to increased car use, and (ii) very large numbers of households remain without access to a car – many of these are in more 'vulnerable' groups.

Planning

This combination of anticipated increases in population (+10%) and households (+22%) places considerable pressure on the planning system, especially when coupled with continuing economic and employment growth. The planning system clearly has a key role to play in planning the location of this new activity. The sheer numbers involved mean that development activity will be occurring across the SEStran area. While this may lead to increasingly dispersed patterns of residential and employment location, it also presents major opportunities to develop growth in a more sustainable way. **It is therefore vital that this new development is planned with a firm perspective on sustainable transport.**

This is one of the key issues for the RTS – planning transport in the medium term to complement the ongoing development of the SEStran area. In particular, the forthcoming City Region Plan and other development plans must be developed to ensure that allocations are made in such a way as to complement the RTS, and its encouragement of more sustainable forms of transport. Indeed, in future, City Region Plans and other development plans will need to take explicit account of Regional Transport Strategies.

A key area for development in the SEStran area is **West Edinburgh**. The Scottish Executive with City of Edinburgh Council and Scottish Enterprise Edinburgh and Lothian are currently reviewing the West Edinburgh Planning Framework. The review takes account of the forecast growth of Edinburgh Airport, the relocation of the Royal Highland Centre and proposed land allocations for international business development. The review acknowledges the investment in trams for Edinburgh and the Edinburgh Airport rail links, and compliments that, and enhanced bus access, with new local road infrastructure to serve this national strategic area.

Conclusion – the allocation of extensive new land for development underlines the importance of integrating land-use and transport planning in the SEStran area, building these links into the forthcoming City Region plan and other development plans. Failure to do so will lead to further significant increases in car use.

Characteristics of Travel in SEStran

Cost of Travel

Together with the projected changes in population, households, employment and car ownership discussed previously, the major factor which has influenced the development of travel has been its relative cost by mode. Figures at the national (UK) level provide a powerful picture of the changing situation:

- in the past 25 years (1980-2005), the real terms cost of motoring has reduced by 10% – during the same time, car traffic (vehicle kilometres) has increased by 81%;
- over this time, average bus and rail fares have risen by more than 40% in real terms, coincident with a reduction in public transport use (although, as noted previously, there has been a growth in patronage on bus and train in the SEStran area in the past 5-10 years); and

- average disposable income has increased by 95% in real terms over this period, making all travel, but particularly car travel, very much more affordable.

The reduction in the cost of motoring has coincided with higher car ownership and increased 'supply' of roads, making car travel even more attractive relative to other modes, where the level of 'supply' has been rather more uneven. In addition, while the cost of motoring has reduced, the cost of public transport has increased.

Conclusion – in recent decades, the cost of motoring has reduced in real terms whilst that of public transport has increased.

Traffic Growth in Scotland/SEStran

For Scotland, the consequence of these cost trends is seen in Figure M below.

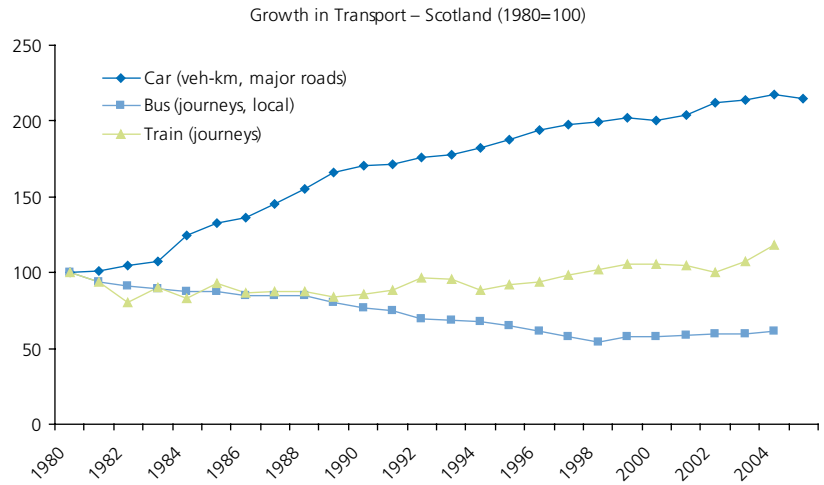


Figure M *Growth in Transport (Scotland)*

Between 1980 and around 1998, there was a clear trend in that car traffic was increasing and bus trips were reducing. Since 1998, the number of bus trips has been gradually increasing and the growth in car traffic has slowed somewhat. Rail travel has also been on the increase according to official figures since around 1990.

In terms of the SEStran area, total traffic (all roads, all vehicles) has increased by above the Scottish average (18% against 16%) between 1995 and 2005. West Lothian and East Lothian saw the highest growth in traffic at 25% with Falkirk also seeing above Scotland-average rises over this period at 23%. Traffic growth in City of Edinburgh was lower, at 13%[42].

Conclusion – Some areas of SEStran have seen above average levels of road traffic growth in recent years, but there are signs that the rate of traffic growth nationally is slowing.

42 http://www.scotland.gov.uk/Publications/2006/12/15135954/74

Sources of Growth in Travel – Travel Behaviour

Clearly, the travel choices of individuals underlie the above statistics. It is therefore important to understand some basic facts about how and why people travel, and how this has changed over time:

- people are **not** travelling more often, the number of trips per person per year has decreased in the last decade;
- people **are** travelling further, the distance people travel annually has increased by 47% between 1972 and 2002;
- people are not spending longer travelling, the average time spent travelling per year has remained broadly static;
- the number of trips made by car and the distance travelled has increased, whilst average car occupancies have gone down; and
- the split of travel by different purposes has not changed significantly over time.

Conclusion – over time, people are making longer journeys, many more of which are by car.

Freight

In freight, there is a similar pattern to personal travel. Despite the changing nature of the Scottish economy away from manufacturing and heavy industry, the volume (tonnage) of goods lifted in Scotland has remained broadly static over recent years. Over 90% of goods lifted by HGVs in Scotland are taken to destinations within Scotland, with only 0.3% (0.5m tonnes) destined for international locations. In addition, the freight and freight logistics sector makes a valuable contribution to the SEStran economy.

There has been very significant growth in light goods vehicle (LGV, <3.5 tonnes) traffic, with vehicle kilometres increasing by 41% between 1994 and 2004 in Scotland. Heavy goods vehicle (HGV, >3.5 tonnes gross weight) traffic (vehicle kilometres) in contrast grew by only 19% – the same as overall traffic growth. LGV traffic is growing faster than any other type. Indeed, LGV growth accounted for around a quarter of all traffic growth in Scotland between 1994 and 2004, with growth in HGV traffic accounting for only 6% of total traffic growth. This may reflect the more dispersed pattern of economic activity, leading to more 'local' distribution networks. The rapid rise in internet-based home shopping will also have contributed to this growth.

Rail continues to account for a very low proportion of goods lifted although the volume has increased over the past decade. For example, the road/rail freight facility at Grangemouth is expanding with high profile users such as ASDA/WH Malcolm and Tesco/Eddie Stobbart.

Conclusion – growth in freight traffic continues, with growth in LGV traffic particularly strong. Grangemouth is becoming increasingly important within the SEStran area as a centre for freight activity.

Air Travel

Passenger air travel from Edinburgh Airport has grown rapidly in recent years, from around 3.0m passengers per year in 1994 to nearly 8.5m in 2005. According to Department for Transport forecasts, this figure is anticipated to grow to 20m by 2025. The resulting growth in travel to and from Edinburgh Airport is therefore a key regional issue. Major new infrastructure is planned for the Airport however, including a new tram link and the

Edinburgh Airport Rail Link (EARL). In the longer term, there are plans to add a second runway at Edinburgh Airport.

The current (2005) mode split for passenger travel to and from the airport is[43]:

- private car – 48%;
- bus/coach – 20%;
- taxi – 25%; and
- other – 7%.

The bus/coach share has therefore increased from 16% in 2002, and 2006 figures indicate that bus/coach now accounts for 22% of airport travel. BAA has a target to reach 27% by 2011.

Conclusion – the forecast growth in air travel has major implications for the environment and surface access to the airport. Edinburgh Airport is seen as an increasingly key component of the SEStran economy.

Accidents

Despite rising traffic levels, the number of personal injury accidents (including pedestrians) on the road network continues to fall. The total number of personal injury accidents in Scotland fell by 17% between 1994 and 2004. The number of fatal accidents also fell from 319 to 281 over this period. All three SEStran area polices forces have seen reductions in casualties over this period.

Accident rates for each local authority area are shown in Figure N below. The measure here is the number of killed or seriously injured (KSI) per vehicle kilometre travelled on the roads in that local authority, for a given time period (Scottish Executive statistics).

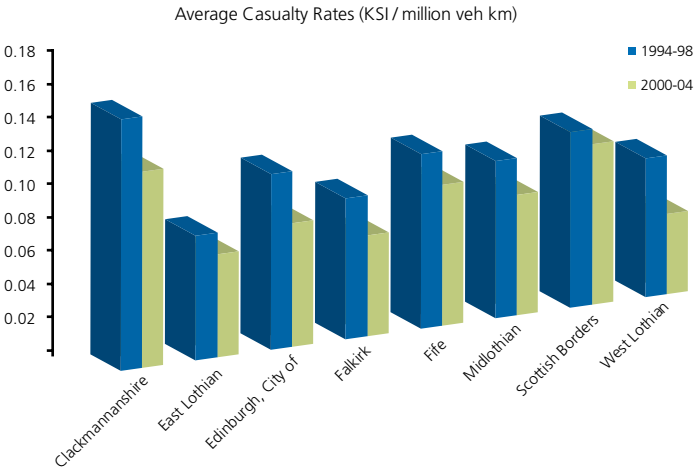


Figure N *Casualty Rates in SEStran Local Authorities*

It can be seen that casualty rates by this definition have fallen in all areas over time, although the scale of this reduction varies. There is a marked variation between council areas though with the highest rates being around double that of the lowest.

43 Source – Edinburgh Airport Master Plan, 2006, BAA

These figures represent some success in terms of accident prevention/reduction. The significant efforts of all stakeholders are reflected in these figures. However, these efforts need to be continued and reinforced if further dramatic falls in accident figures are to be realised. It is also the case that an element of this decline may be due to a reduction in the exposure of vulnerable groups (pedestrians and cyclists) who are disproportionately represented in accident statistics ie, there may be fewer of them being killed because there are fewer of them on the road, so the rate of accident involvement per cycling or walking trip may not be decreasing, or decreasing as fast as the absolute figures.

The Scottish Executive has a target to achieve a 40% reduction in KSI by 2010 (compared to the average from 1994-98). The corresponding target for child KSIs is a 50% reduction.

Local Air Quality

Policies that promote the use of new strategies and technologies in transportation can achieve major benefits to air quality. These may include attempting to alter the behaviour of individual vehicle users through the promotion of alternative modes of transport, growing acceptance for Intelligent Transport Systems (ITS) and Intelligent Speed Adaptation (ISA), specific engineering changes of vehicles such as alternate low-emission fuels or introduction of ISA devices, and infrastructure changes including congestion charging, reallocation of road space or traffic calming measures.

However, careful strategic planning is required in the implementation of these technologies to prevent conflicting environmental impacts. For example, measures such as reducing available road space to implement alternative transport modes such as rapid light transit or cycling may increase congestion unless a sufficient modal shift from car to public transport, cycling and walking is achieved.

Local authorities have statutory duties for local air quality management (LAQM) under the Environment Act 1995. They are required to carry out regular reviews and assessments of air quality in their area against standards and objectives set out in the national Air Quality Strategy (AQS) and which have been prescribed in regulations for the purpose of LAQM. Where assessments predict that these objectives are unlikely to be met, authorities must designate air quality management areas (AQMAs) and prepare and implement remedial action plans to tackle the problem.

In the SESTRAN area, the two main air pollutants associated with road traffic emissions are Nitrogen Dioxide (NO_2) and Particulate Matter (PM_{10})[44].

Poor air quality exists in some Edinburgh Cite Centre areas where air quality objectives are being exceeded. There are currently two AQMAs relating to traffic emissions within the SESTRAN area and others could be designated in the future due to emissions from road traffic. The first AQMA covers most of Edinburgh City Centre, including the main link roads into the centre. It was declared in December 2000 following a review and assessment of air quality which predicted that the national objective for NO2 would not be achieved, with the majority of exceedences occurring at or near to busy junctions. The second, designated very recently (again for NO_2), covers the congested A8 corridor at St John's Road in Corstorphine[45] west of the city centre The Local Authority aims to reduce these emissions through various means including traffic management, encouraging city vehicle operators to use cleaner fuels and introducing an Integrated Transport Initiative.

44 Airborne particulate matter with particles 10 micrometres in diameter
45 http://www.airquality.co.uk/archive/laqm/aqma.php?aqma_id=481

The City of Edinburgh Council is also undertaking further detailed assessment of air quality at Great Junction Street in Leith and at the West Port in the Old Town.

Another AQMA in the SESTRAN area has been designated in Grangemouth, however this is related to a likely breach of the sulphur dioxide 15 minute mean objective around the petrochemical facility and is not therefore directly related to transport conditions.

Elsewhere in the SESTRAN area, air quality has remained below thresholds set out in the AQS, although continued monitoring is required in certain urban areas such as Cupar and Rosyth in Fife and Musselburgh in East Lothian.

Background concentrations of NO2 and PM10 in the region are generally predicted to decrease over the period up until 2010 as policies promoting clean air continue to be implemented and as emissions technologies in vehicles are predicted to reduce pollutant emissions. However, the predictions for 2010 still identify that there will be higher background concentrations within the main urban zones compared to less populated areas.

Overall, this review suggests that background concentrations of local air pollutants are falling, in part due to improvements in vehicle technologies. Where road traffic runs freely, roadside concentrations of NO2 and PM10 have generally not worsened, despite the growth in traffic on some links. However, in urban locations of acute traffic congestion (such as parts of Edinburgh City Centre and potentially other town centre hotspots), monitoring data indicate that air quality objectives may be breached, primarily due to emissions from road transport.

Conclusion – it is increasingly recognised that local air quality directly affects the health of many. Air quality is a major issue for transport, particularly in congested urban areas.

APPENDIX C – RTS Policies

A set of policies has been developed for SEStran which act as a 'bridge' between the RTS Objectives and the type of action which is generally promoted by the RTS to address the Objectives. These provide a clear SEStran policy position on the issues raised throughout the RTS. A 'Policy' may indicate a presumption in favour of a certain type of 'intervention' in a given set of circumstances.

The RTS Policies also provide a link to the wider policy context, to ensure that the RTS is, as required, consistent with other strategy/policy documents at the local, regional and (particularly) national level. This includes links to the documents listed in Annex E of the Scottish Executive Guidance on Regional Transport Strategies, covering planning, planning policy, spending plans, economic development and regeneration, sustainable development, social inclusion, climate change and health. The content of these documents has been very much reflected in the policies seen in the RTS.

The RTS policies are listed below, grouped together into broad category areas. In each case, the policy is followed by a list of other policy documents and/or legislation from which it was derived, together with a list of the RTS objectives that are related to the policy.

Improvements to Public Transport (Bus)

In general, a major element of the RTS is making improvements to all aspects of public transport in the SEStran area. This will result in: (i) an improved travelling environment for existing public transport users (reducing the risk of them switching to car), and (ii) increases in the number of people using public transport, either to take up new opportunities or switching from car travel. In order to succeed, these measures must make public transport faster, cheaper, more frequent, more comfortable, more convenient, and/or more reliable than at present.

Policy 1 – There will be a general presumption in favour of schemes that improve the efficiency and effectiveness of public transport, and make it a more attractive option for existing car users.

- Policy Links – RTS Guidance states that the RTS should look to expand the choice of sustainable transport options available.
- Relates to Objectives 1.1, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.3, 3.5.

Policy 2 – Support will be given to the improvement of all aspects of bus services (services, vehicle quality, fares, infrastructure, bus rapid transit, and integration) as a means of reducing congestion and enhancing accessibility.

- Policy Links – RTS Guidance paragraphs 47 and 48.
- Relates to Objectives 1.4, 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.3, 3.5.

Improvements to Public Transport (Rail)

Railways are particularly effective in moving large numbers of people through congested transport corridors and, as such, offer the most attractive alternative to the car for many. The RTS supports the development of the rail network in SEStran.

Policy 3 – Encouragement will be given by SEStran to Transport Scotland for cost-effective investment and service support that builds an integrated rail-based regional transport network, including trams, fully integrated with existing and planned development.

- Policy Links – National Planning Framework, Smart Successful Scotland.
- Relates to Objectives 1.1, 1.2.

Policy 4 – There will be a presumption in favour of supporting the targeting of rail investment to enhance the public transport capacity (including, where appropriate, station capacity) of existing heavily-used and congested rail corridors for passengers and/or freight.

- Policy Links – Supports national investment priorities as set out in SSS and NPF.
- Relates to Objectives 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.3.

Public Transport Affordability

If public transport is seen as too expensive, this can act as a barrier to its use. This has implications for labour market participation and social inclusion.

Policy 5 – SEStran will support intervention or seek to intervene where affordability is recognised by the Partnership as a barrier to the use of public transport.

- RTS Guidance; Closing the Opportunity Gap; BABS (road traffic reduction).
- Relates to Objectives 1.1, 2.4, 3.4, 3.5.

Information/Campaigns

'Hard' infrastructure schemes and new public transport services will be supplemented by extensive programmes to: (i) influence both 'hearts and minds' of travellers, and (ii) point out the travel alternatives available to travellers. These programmes can be effective in influencing modal shift across the range, from the individual to the large employer level. There is strong central government support for the use of so called 'soft' (i.e.behavioural) interventions to maximise the benefits of investment in new infrastructure and services.

Policy 6 – Investment in new infrastructure and services will generally be complemented by 'soft' measures such as information, marketing, personalised travel assistance, awareness campaigns (including the promotion of the links between transport, safety, health and environment) travel plans and, where relevant, traffic management measures to ensure that the benefits will not be eroded by induced traffic.

- Policy Links – Soft measures and travel plans also supported in RTS Guidance.
- Relates to Objectives 1.3, 1.4, 2.1, 2.2, 2.3, 3.2, 3.3, 3.4, 3.5.

Policy 7 – The RTS will give support to the promotion of 'soft' measures such as information, marketing, personalised travel assistance and travel plans.

- Policy Links – RTS Guidance, National Transport Strategy.
- Relates to Objectives 3.1, 3.2, 3.3, 3.4, 3.5.

Parking

Parking policy can be a key demand management tool, both in the context of influencing the modal split of travel to new developments, and existing town and city centres. New development which provides extensive parking for commuters does not encourage sustainable travel. SEStran will encourage consistency in parking standards for similar types of development in similar locations across the area, and aim to balance parking provision against long stay commuter parking, to encourage the use of more sustainable modes of travel.

Policy 8 – A consistent framework for parking standards for new development will be applied across the region to ensure that comparable developments have similar parking standards.

- Policy Links – SPP17. Parking demand management mentioned several times in RTS Guidance.
- Relates to Objectives 1.3, 1.4, 2.1, 2.2, 2.3, 3.2, 3.3.

Policy 9 – Town and city centre parking provision (including areas on the edge of centres) will favour shoppers, essential business users and residents, whilst commuter parking for that town or city centre will be discouraged.

- Policy Links – SPP17. LTS and RTS Guidance. Several constituent authorities' LTSs e.g. Fife, Edinburgh, Clackmannanshire Draft LTS 2006-09 Policy P3. BABS.
- Relates to Objectives 1.3, 1.4, 2.1, 2.2, 2.3.

Policy 10 – Parking provision at major employment and essential service centres outwith town and city centres (e.g.hospitals, areas around business parks) will favour visitors, business/service users and residents, whilst commuter parking will be discouraged.

- Policy Links – Parking demand management mentioned several times in RTS Guidance and in LTS Guidance.
- Relates to Objectives 1.3, 1.4, 2.1, 2.2, 2.3.

Traffic Reduction

The Scottish Executive is committed to reducing road traffic levels in the medium term and this policy is in line with this aspiration. This policy targets road traffic particularly in congested areas, where traffic is most 'damaging'. Single occupancy vehicles represent the most 'inefficient' use of road space and the RTS will seek to reduce this traffic where appropriate.

Policy 11 – The RTS will seek to reduce road traffic levels, especially single occupant cars in the most congested places at the most congested times.

- Policy Links – Scottish Executive road traffic stabilisation target (in Building a Better Scotland (BABS) 2005-2008); Road Traffic Reduction Act; National CO2 emissions targets; LTS and RTS Guidance.
- Relates to Objectives 1.1, 1.4, 3.1, 4.3 & 4.4.

New Roads & Infrastructure

The RTS has a specific policy to emphasise the importance of maintaining any assets which may become the responsibility of SEStran.

Policy 12 – The RTS will give high priority to the maintenance of any future SEStran assets.

- Policy Links – RTS Guidance; Building a Better Scotland (BABS); Smart Successful Scotland (SSS); Choosing Our Future.
- Relates to Objectives 1.1, 1.2, 1.3 and 1.4.

In congested areas, the problem will be addressed in the first instance by measures which: (i) seek to reduce the need to travel, and (ii) promote modal shift. A disproportionate impact on congestion can be achieved by reducing traffic in these hotspots by a relatively small amount. Where this is found to insufficient and new capacity is required on the network, this new capacity will normally be used for vehicles other than cars (including potentially freight), or multi-occupancy cars. Where these other options are demonstrated to be ineffective, new road capacity (for cars) on the key economic network may be provided, to improve journey time reliability and/or journey times. In these instances, complementary measures will be initiated to ensure that the benefits of the scheme are not eroded by 'induced' traffic.

Policy 13 – There will be a presumption in favour of addressing problems of congestion through measures to reduce demand for car travel and promote modal shift.

- Policy Links – RTS Guidance paragraphs 46 and 47; LTS Guidance.
- Relates to Objectives 1.3, 1.4, 3.1, 3.3, 3.4, 3.5 and 4.2.

Policy 14 – Any additional capacity on commuter corridors that are congested, or forecast to become congested within the lifetime of the strategy, will normally be used to benefit space-efficient modes such as bus, train and high-occupancy vehicle and cycles. Such additional capacity on freight corridors may also be used to benefit HGVs.

- Policy Links – RTS Guidance paragraphs 46 and 47; LTS Guidance. RTS Guidance states: 'Providing and promoting sustainable transport choices for people and goods, including, where appropriate, reducing road traffic – particularly single-occupancy car journeys, increasing freight carriage by rail and water and increasing active travel and public transport patronage.'
- Relates to Objectives 1.4, 2.1, 2.2, 2.3, 2.4, 3.3, and 3.5.

Policy 15 – New road capacity, to improve journey times and reliability, may be provided where it can be demonstrated that these benefits will not be eroded by induced traffic in the medium to long term, and that other alternatives have been evaluated and found to be less effective.

- Policy Links – Scot Exec road traffic stabilisation target (in Building a Better Scotland 2005-2008). Road Traffic Reduction Act. National CO2 emissions targets. LTS and RTS Guidance. The latter wishes to see 'Action across the region to reduce traffic levels and congestion, particularly on high density commuter routes, through traffic management, provision of Park and Ride, provision of additional public transport services, increased use of bus lanes on major corridors into and within towns and cities, parking controls and charging'.
- Relates to Objectives 1.1, 1.4.

Mode Shift – Freight

SEStran is committed to working closely with the freight transport industry and the rail freight operators to meet the needs of all freight operators, and explore methods of reducing negative environmental impacts of freight transport.

Policy 16 – SEStran will work with the freight transport industry to minimise the negative impacts of freight on the environment, including, where appropriate promoting greater use of rail and water-borne transport.

- Policy Links – White Paper 2004. RTS Guidance – the RTS Guidance states 'for freight, the Executive has a general policy of promoting greater use of rail and water borne transport (including short sea shipping and inland waterways) and reducing dependency on road haulage. National Transport Strategy, Freight Action Plan.
- Relates to Objectives 1.3, 1.4, 3.3.

Accessibility

The RTS is committed to making improvements in accessibility for groups which are disadvantaged by relatively poor access. This affects areas with low car ownership and high deprivation, as well as rural areas more generally. Improvements to accessibility will be focussed on public transport and walk/cycle modes.

Policy 17 – SEStran will seek to ensure that communities with poor access to employment by PT and low car ownership/high deprivation will be the subject of targeted measures to address this.

- Policy Links – White Paper 2004. RTS Guidance, page 43 (particular attention should be paid to those who have most difficulties accessing jobs and services). NPF. Closing the Opportunity Gap.
- Relates to Objectives 2.1, 2.4.

Policy 18 – In selecting interventions as part of the RTS, SEStran will seek to pay particular regard to the need to reduce problems caused by peripherality in rural and other areas of the region that are less well served by PT.

- Policy Links – Transport (Scotland) Act 2005 and RTS Guidance; NPF; Transport White Paper 2004, Closing the Opportunity Gap.
- Relates to Objectives 2.1, 2.2, 2.3, 2.4.

Policy 19 – Where improvements in accessibility are found to be required, the RTS will seek, in the first instance, to deliver these by enhancing conditions for pedestrians, cyclists and public transport users (including community transport/DRT).

- Policy Links – Hierarchy of modes (walk, cycle, PT, freight, car) as per SPP17, referred to in RTS Guidance. National target to increase cycle use fourfold by 2012 on 1996 base. National target to increase bus use by 1% per year and rail use by 2% per year. Health policy. Road traffic reduction target.
- Relates to Objectives 1.4, 3.3, 3.4, 3.5, 4.2.

New Development

The planning of new developments must be focussed on areas with good public transport and walk/cycle access. SEStran will strongly support sustainable development patterns through links with the forthcoming City Region Plan and other development plans.

Policy 20 – SEStran will use its influence to support development plan strategies by seeking to ensure that major trip generating sites – including housing – are located in areas that are capable of being well served by walking, cycling and public transport , or will be made so by transport investment delivered in phase with the development.

- Policy Links – SPP17 hierarchy of modes, White Paper 2004, NPF, RTS Guidance para 48. RTS Guidance states 'RTPs should work with others to reduce the need to travel – facilitating access to jobs, markets and key services is essential, stimulating general mobility is not.'
- Relates to Objectives 1.1, 1.3, 2.1, 2.2, 2.3.

Policy 21 – SEStran will support planning authorities in using their land-use planning powers to reduce the need to travel, to promote the provision of non car access to and within new developments and to promote travel plans.

- Policy Links – SPP17. RTS Guidance. Several authorities' LTS e.g.Clackmannanshire Draft LTS 2006-09 p7. Fife, Lothians and Edinburgh Structure Plan, Falkirk Structure Plan Section 6.2.
- Relates to Objectives 3.3, 3.4, 3.5.

City and Town Centres

The key role of city and town centres as centres of economic activity is promoted by SEStran.

Policy 22 – Support will be given to interventions which reinforce and strengthen the role of Edinburgh city centre and of other town centres, as centres of economic activity including retailing and tourism.

- Policy Links – SPP17, SPP8.
- Relates to Objectives 1.1, 1.3, 2.1, 2.3, 3.1, 3.3, 3.4, 3.5, 4.2.

Sustainable Modes

A strong theme running through the RTS is the promotion of more sustainable modes of transport.

Policy 23 – Schemes that improve the accessibility by public transport, walking and cycling of key development areas will be afforded higher priority for implementation.

- Policy Links – National Planning Framework (NPF) Map 15; Smart Successful Scotland (SSS); Structure Plans; Health Policy.
- Relates to Objectives 1.1, 1.2, 1.3.

Policy 24 – The RTS will prioritise interventions that promote the use of more sustainable modes of transport, in particular non-motorised modes.

- Policy Links – RTS Guidance, 'Choosing our Future' Scotland's Sustainable Development Strategy (2006), 'Changing our Ways' Scotland's Climate Change Programme (2006). Health Policy.
- Relates to Objectives 3.2, 4.4, 1.4.

Equal Opportunities

Policy 25 – All interventions will be subject to an equal opportunities audit to ensure that they promote equal opportunities in accordance with the law.

- Policy Links – RTS Guidance. DDA 2005. Equal Opportunities legislation. Closing the Opportunity Gap.
- Relates to Objectives All.
- See Appendix C for details.

Disabled Access

Policy 26 – SEStran will seek to ensure that people who have difficulties in using conventional public transport due to disability will be the subject of targeted measures to address this.

- DDA 2005. Equal Opportunities legislation. RTS Guidance: Addressing transport Policy Links – inequalities, including provision of and access to transport for disabled people and putting into action the (proposed) statutory duty to promote equal opportunities.
- Relates to Objectives 2.1, 2.2, 2.3, 2.4.

Health

Hospitals and other major health facilities are major generators of travel, in terms of employees, patients and visitors. Parking at these facilities is often a major problem, again for employees and hospital users. SEStran will seek to improve access to these sites for users of public transport, assisting patients/visitors, and relieving the traffic issues around these sites.

Policy 27 – SEStran and its constituent authorities will work in partnership with Health Boards to improve access to health services and to reduce congestion caused by travel to these services. This would not include subsidy for services needed for new health buildings or services, which would be subject to the normal transport assessments and access policies.

- Policy Links – Transport (Scotland) Act 2005 Section 5(2)(d)(vi). Closing the Opportunity Gap.
- Relates to Objectives 2.2.

Policy 28 – SEStran will seek to ensure that Health Boards take into account transport issues in all service decisions, and make necessary provisions to meet any transport impacts of these decisions, including where necessary funding public transport services.

- Policy Links – RTS Guidance
- Relates to Objectives 2.2, 4.1.

Environmental Impact

SEStran has a range of policies which are concerned with the environmental impact of transport, with environmentally sensitive areas being protected in all but exceptional circumstances. In general, the impact of transport on the physical environment will be minimised, and the RTS will take steps towards ensuring a reduction in GHG emissions.

Policy 29 – Transport interventions will be designed and operated to minimise their impact on the environment.

- Policy Links – RTS Guidance, 'Choosing our Future' Scotland's Sustainable Development Strategy (2006), 'Changing our Ways' Scotland's Climate Change Programme (2006).
- Relates to Objectives 3.2, 4.4.

Policy 30 – Interventions in the RTS should contribute to the achievement of national and international targets related to local air quality climate change, particularly reducing emissions of CO2 and other greenhouse gases.

- Policy Links – National and global CO2 targets, 'Choosing our Future' Scotland's Sustainable Development Strategy (2006), 'Changing our Ways' Scotland's Climate Change Programme (2006).
- Relates to Objectives 3.1, 1.4.

Policy 31 – New transport infrastructure proposals which could have significant adverse effects on areas designated for their natural or cultural heritage and environmental quality, including air quality, will not normally be supported.

- Policy Links – RTS Guidance, Local Plans, Structure Plans.
- Relates to Objectives 3.2.

Energy Use/Efficiency

SEStran recognises that the present level of consumption of non-renewable resources is unsustainable. This is likely to be reflected in fuel prices in the medium term.

Policy 32 – The RTS will promote interventions that will reduce the consumption of non-renewable resources.

- Policy Links – 'Choosing our Future' Scotland's Sustainable Development Strategy (2006), 'Changing our Ways' Scotland's Climate Change Programme (2006).
- Relates to Objectives 3.2, 3.3, 3.4.

Policy 33 – The RTS will promote interventions that will improve energy and resource efficiency.

- Policy Links – 'Choosing our Future' Scotland's Sustainable Development Strategy (2006). This overarching strategy strongly recommends 'joined up' working and policy integration.
- Relates to Objectives 3.1, 3.2, 3.3.

Accident Reduction

Continuing the downward trend in personal injury accidents in SEStran is an essential element of the RTS. SEStran will promote schemes which are proven to reduce accidents across the transport networks.

Policy 34 – Interventions that are cost-effective in reducing accidents will be supported.

- Policy Links – National target to reduce KSIs. Previous evaluation of Camera Partnerships, 20 mph zones, AIP schemes.
- Relates to Objectives 4.1, 3.3, 3.4, 3.5.

Health Promotion

The link between sedentary lifestyles and obesity/ill health is widely recognised. The RTS will promote schemes which lead to greater physical activity.

Policy 35 – There will be a presumption in favour of schemes that lead to greater physical activity, and that facilitate independent travel especially by children.

- Policy Links – Lothian Health Plan 2002, Fife Health Plan 2003, White Paper 2004, RTS Guidance, national Health Policy.
- Relates to Objectives 4.2, 2.1, 2.2, 2.3, 3.3, 3.4, 3.5.

Personal Security in Transport

Issues of personal security can be a significant 'barrier' to the use of public transport, particularly for some vulnerable groups such as the elderly or lone, female travellers. This can lead to isolation, brought about through fear of travel, or use of the car as an alternative 'safe' mode.

Policy 36 – There will be a presumption in favour of schemes that enhance personal security, especially for pedestrians, cyclists, and public transport users.

- Policy Links – RTS Guidance: Increasing the safety and quality of transport infrastructure and services, including better information on all modes and improved service and reliability. Closing the Opportunity Gap. BABS targets.
- Relates to Objectives 4.1, 2.1, 2.2, 2.3, 1.1, 1.3.

Air Quality

SEStran recognises the role of the RTS in reducing the level of harmful emissions, particularly in congested, high-density urban areas.

Policy 37 – There will be a presumption in favour of schemes that assist the achievement of local air quality targets.

- Policy Links – Transport (Scotland) Act 2005 Section 5(2)(d) (iii), AQS.
- Relates to Objectives 4.3, 3.2, 3.3, 3.4, 3.5.

Transport Noise

Noise brought about by road transport, rail traffic and aviation can be a blight on communities. SEStran will ensure that the impact of noise is fully taken into account in developing detailed transport proposals resulting from the RTS.

Policy 38 – In the development of new infrastructure, appropriate measures will be taken to minimise the adverse impacts of transport noise.

- Transport (Scotland) Act 2005 Section 5(2)(d) (iii), Implementation of Directive 2002/49/EC relating to the assessment and management of environmental noise.
- Relates to Objectives 4.4, 3.2.

Strategy/Policy Integration

The RTS sits within a hierarchy of other policies and strategies. Synergies can be achieved if strategies complement one another in a clear and transparent way.

Policy 39 – Schemes supported in national strategy and policy documents will be afforded a higher priority for implementation.

- Policy Links – National Planning Framework (NPF); Smart Successful Scotland (SSS); Framework for Economic Development in Scotland; White Paper 2004; National Transport Strategy Consultation Document.
- Relates to Objectives 1.1, 1.2, 1.3.

Policy 40 – All projects and interventions will be subject of a Quality Audit to ensure they maximise opportunities to meet all RTS objectives. In particular schemes designed to encourage public transport use and/or reduce congestion should be audited to ensure they maximise their potential to also encourage walking and cycling. The Quality Audit will ensure that the needs of all groups are given due consideration in the assessment and design of RTS measures.

- Policy Links – RTS Guidance
- Relates to Objectives 3.3, 3.5, 4.2.

Local Funding

Local projects are often best delivered at the local level – the role of SEStran is to take a regional perspective on transport. SEStran will therefore provide funds for projects to be implemented at the local level. This ensures that there remains an identified source of funding for transport at the local authority level.

Policy 41 – SEStran will set aside funding to support cost-effective local projects and services consistent with initiatives in the RTS.

- Relates to Objectives 1.1, 1.2, 1.3, 1.4.

APPENDIX D

Equal Opportunities Audit

The purpose of the EO audit is to point out those interventions for which further consideration of their EO implications is required. It is anticipated that the large majority of interventions will not require further consideration. A checklist approach is proposed, as follows:

1. Does the intervention relate to areas such as access to public transport vehicles and buildings, where the DDA applies?

2. Will it be problematic or increase costs by more than the lesser of 10% or £1m, to design the intervention in order to make it fully accessible for disabled people?

3. Will the intervention make access for disabled people more difficult than it is at present?

If the answer to any of the above questions is yes, a more detailed audit of EO implications of the intervention is required.

Note that all RTS measures will be designed to be compliant with DDA legislation.