

Regional Transport Strategy 2015 – 2025

Refresh

July 2015

SEStran is a Regional Transport Partnership, comprised of eight local authorities:



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1.1 Background

- 1.1.1 SEStran (the South East Scotland Transport Partnership) is one of seven Regional Transport Partnerships (RTPs) in Scotland, set up under the Transport (Scotland) Act 2005. SEStran contains eight constituent council areas – City of Edinburgh, Clackmannanshire, East Lothian, Falkirk, Fife, Midlothian, Scottish Borders and West Lothian. A key requirement under the Act is for RTPs to develop a statutory Regional Transport Strategy (RTS) to provide a strategic framework for transport management and investment for the Partnership area over a 10-15 year period. SEStran's RTS 2008-2023 was approved by the Scottish Government in 2008.
- 1.1.2 Since the establishment of the RTPs, their role has moved away from direct funding and implementation of transport measures to a more strategic and co-ordinating function working in partnership with Scottish Government, local authorities and other stakeholders. The purpose of the RTS is to set a policy framework that will guide effective transport provision over the wider city region by marshalling resources, including for cross-boundary measures, by promoting connectivity requirements essential to the whole regional economy and by supporting the transport functions of the constituent local authorities.
- 1.1.3 The interventions referred to throughout this RTS derive from the RTS 2008, Scottish Government policy documents and frameworks, SESplan and Tayplan SDPs, and input from SEStran local authorities. This RTS does not prioritise individual projects; this will be dependent on a range of considerations, including full STAG appraisal and funding availability. Further information on projects will be provided in a separate RTS Delivery Plan (see Section 10). In accordance with Ministers' wishes when considering the RTS in 2008, the delivery plan does not form part of the RTS but is a separate document for which Ministers' approval is not being requested.
- 1.1.4 The establishment of Community Planning Partnerships for local authorities and associated Single Outcome Agreements has also affected the RTP role. SEStran is a Community Planning Partner in each of the constituent local authority areas although the nature and structure of involvement varies in each. The Community Planning process is still evolving, and SEStran will continue to commit significant effort to engage with the Partnerships within the region.
- 1.1.5 A number of significant policy documents have been produced by the Scottish Government since the preparation of the 2008 RTS. While these do not change the direction of policy, they need to be taken account of in the RTS framework.
- 1.1.6 As a result of these changes, the completion of a number of the projects included in the 2008 RTS and the changed economic climate, SEStran considers that a refresh of the Regional Transport Strategy is now appropriate. This document is therefore an updating of the 2008 RTS rather than a new strategy. The vision, objectives and policy framework of the Strategy remain unchanged, and the various chapters have been revised only where necessary to take account of the most recent data and information and the more detailed strategy development that SEStran has undertaken since 2008. The substance of the strategy and suggested interventions have not changed.
- 1.1.7 This Refresh of the RTS was approved by Scottish Government in July 2015.

1.2 Content of the refreshed RTS

1.2.1 The refreshed RTS is divided into 10 Chapters closely corresponding to those in the RTS 2008. Chapter 2 sets out the overall context for the RTS; Chapters 3 and 4 set out the vision, objectives and policies of the RTS and indicators and targets to monitor progress; Chapter 5 summarises the major connectivity requirements and issues for the SEStran area; Chapters 6, 7 and 8 provide detail of the topics, initiatives and interventions required within the SEStran area to achieve the RTS objectives and Chapter 9 lists the detailed strategies and initiatives that have been developed following the 2008 RTS. Chapter 10 discusses delivery and funding issues. The Table below summarises these and identifies the key changes that have been made.

Table 1.1 Changes to RTS

Chapter	Changes in this RTS refresh
2: Key Trends and Issues	Base information updated to reflect the impacts of the recession and some results from the 2011 Census. Marked divergence in travel choice trends between Edinburgh and the rest of the SEStran area identified.
3: Objectives and Policies	Greater tie in with National Objectives and more emphasis on international connectivity requirements.
4: Targets and Monitoring	Targets and indicators remain the same except for road accidents, adjusted to reflect new national targets. Monitoring results for the first 5 year period set out reflecting the monitoring carried out on an annual basis.
5: External Connectivity (formerly "National and other Transport Schemes")	Expanded to include national and international connectivity by all modes and to update the status of national projects.
6: Region Wide Measures	Topics remain unchanged but SEStran's role in implementation re-evaluated.
7: Initiatives for Specific Areas and Groups	Initiatives unchanged but text reflects progress to date.
8: Regional Transport Corridors	Chapter refocused on the potential implications of the SESplan Strategic Development Plan. Interventions (previously identified in the existing RTS) are focused on specific travel corridors which have been identified with potential future travel problems.
9: Strategy Development	New Chapter setting out the strategies and initiatives developed by SEStran since the publication of the RTS2008
10: Delivery and Funding	Replaces Chapters 9 Delivery and 10 Funding in the RTS 2008. Very much simplified reflecting SEStran's current role in facilitation and co-ordination rather than direct implementation.

1.2.2 The Appendices provide supplementary technical information and an Equalities statement.

1.3 Strategy Overview

1.3.1 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 policies aim to 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, to maintain and improve external links, ports and airport links to facilitate a successful **economy**;
- The RTS supports extensive measures to **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 is a strong emphasis on '**Smarter Choices**' measures– influencing travel behaviour at the level of the individual through personalised planning and information and the use of innovative technology;
- 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;
- Targeted proposals to improve **accessibility** for disadvantaged areas to **health services, education and employment** opportunities are supported, as well as improving travel opportunities for those with **mobility difficulties** and improving public transport more generally in **rural areas**;
- The RTS recognises that transport must play its part in the **reduction of greenhouse gas emissions** and **improvement of local air quality**. 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.

1.3.2 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.

2.2 The SEStran Area currently

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 Current, 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 2013

	Population ¹	% urban ²	% rural ³
Clackmannanshire	51,280	86	14
East Lothian	101,360	73	27
Edinburgh, City of	487,500	96	4
Falkirk	157,140	91	9
Fife	366,910	80	20
Midlothian	84,700	83	17
Scottish Borders	113,870	51	49
West Lothian	176,140	90	10

1 Mid-2013 Population Estimates Scotland, National Records of Scotland, June 2014

2 defined as living in any settlement of greater than 3,000 persons (mid 2010 estimates)

3 defined as living in any settlement of less than 3,000 persons (mid 2010 estimates)

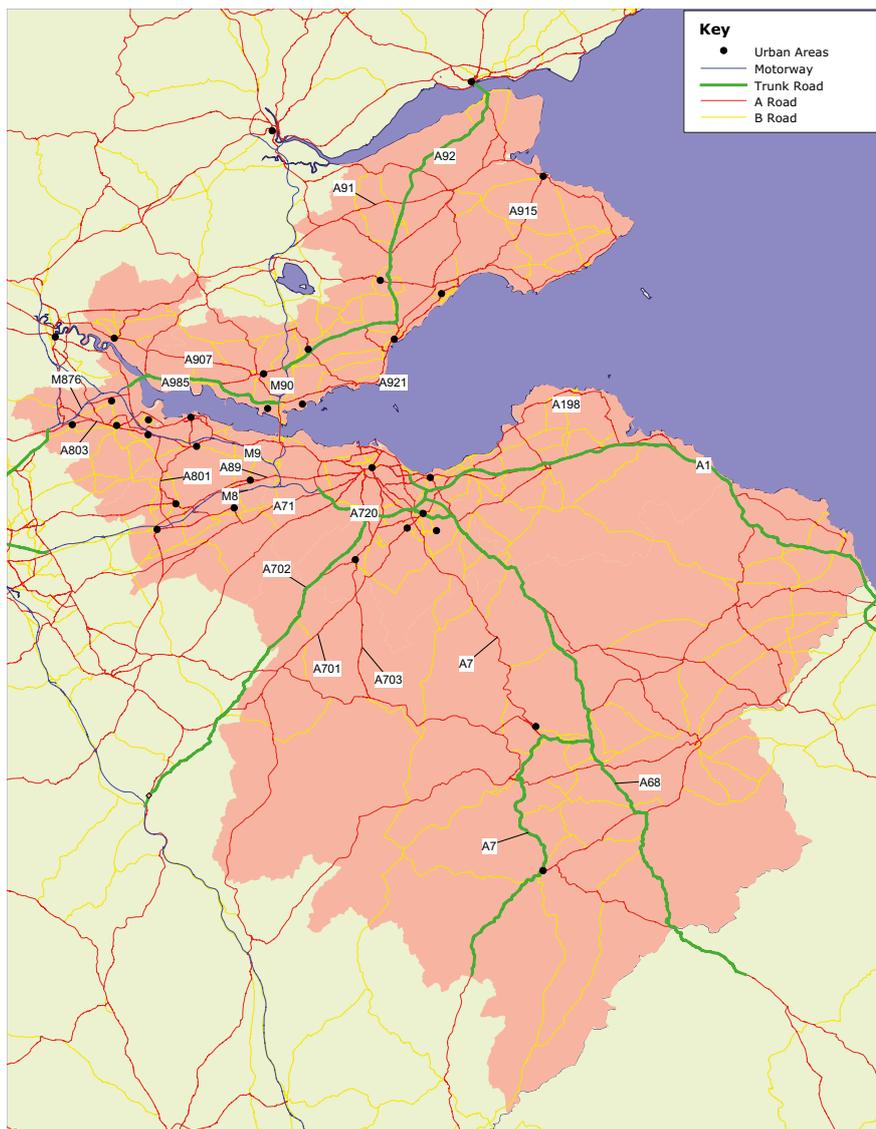
2. SEStran Area – Key Trends and Issues

2.2.4 In mid-2013, the population of the SEStran area was estimated at approximately 1,538,900. 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 487,500. The other local authorities are of varying sizes, Clackmannanshire being the smallest, with a population of only 51,280. 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 7% 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. 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;
- A68 Edinburgh to Border;
- A68/A697 Edinburgh – Coldstream
- A701 Edinburgh – Moffat;
- A198 Prestonpans – North Berwick; and
- A199 Musselburgh – Wallyford.

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, Rosyth 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 (operated by Abellio as from April 2015) and long distance services provided by East Coast, Virgin Trains, Cross Country, First TransPennine and the Caledonian Sleeper (Serco). Edinburgh Waverley station forms the main focus of these services. The main characteristics of the rail network in the SEStran area are as follows:

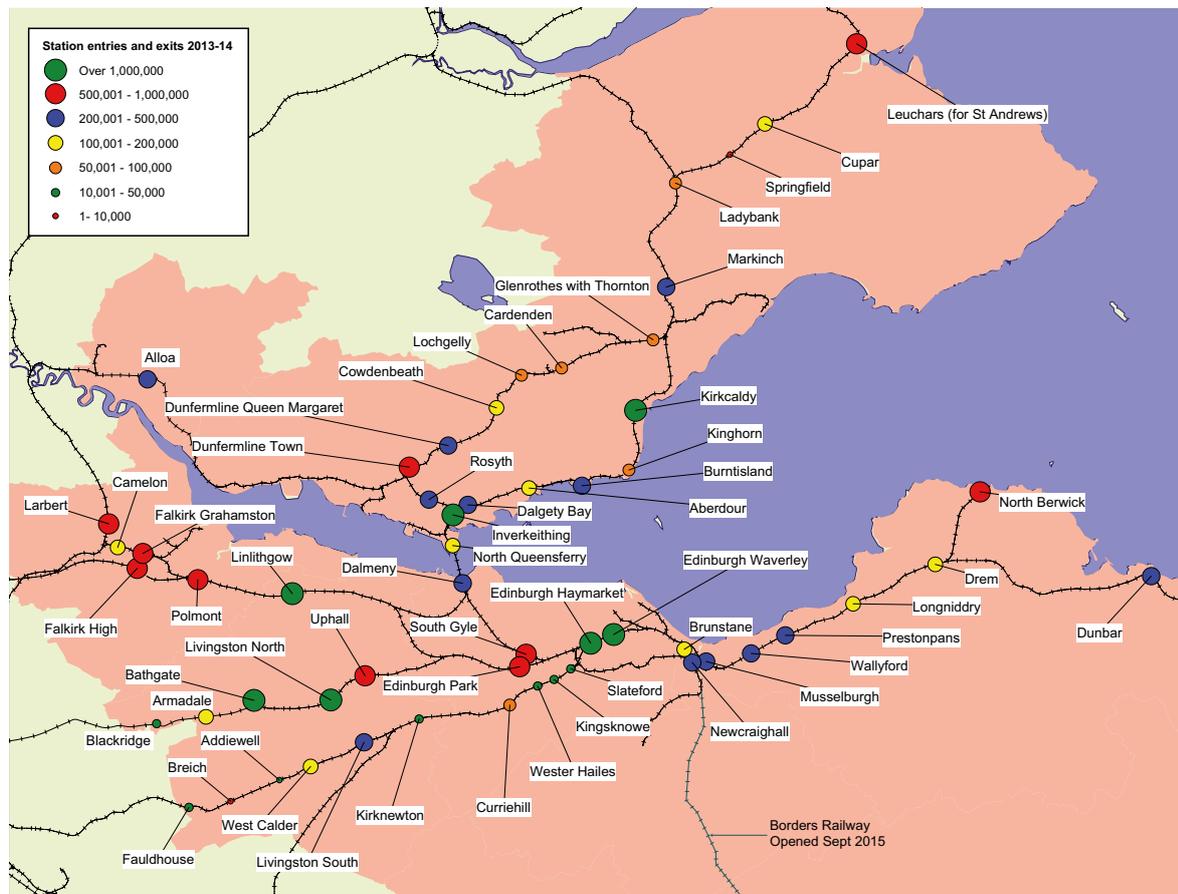
- **East Lothian/Borders:** local service to North Berwick and Dunbar, with East Coast and Cross Country also serving Dunbar and Berwick-upon Tweed, which provides rail access to many in the eastern Scottish Borders;
- **Midlothian and Scottish Borders** are served by the new Borders Railway which opened on 6 September 2015;
- **Clackmannanshire** is now served by the Stirling-Alloa line which opened in 2008, although direct connectivity is principally to Glasgow rather than Edinburgh;



2. SEStran Area – Key Trends and Issues

- **West Lothian** is served by four main train services: Edinburgh – Shotts (Carstairs) – Glasgow, Edinburgh – Bathgate – Glasgow, Edinburgh – Falkirk High – Glasgow mainline, Edinburgh – Falkirk Grahamston – 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.

Figure 2.2 SEStran area rail network and station footfall



2.2.9 The current network and stations are shown in Figure 2.2 above. The stations are grouped into seven categories to indicate passenger levels at each station. Outside of Edinburgh Waverley and Haymarket, the busiest stations are Linlithgow, Inverkeithing, Kirkcaldy, Bathgate and Livingston North.

2.3 Trends over the last decade

- 2.3.1 The first SEStran RTS was set in the context of a strongly growing economy, and a growing demand for transport. Since the publication of the RTS in 2007, the UK economy contracted sharply in 2008 and 2009 and in 2012, the economy was still 2% smaller than its 2007 peak. This has had a significant impact on transport in the SEStran area. The promotion of sustainable transport policies at national and local authority level over a prolonged period has also had an effect on transport behaviour.
- 2.3.2 The 2011 census provides some indications of the changes over the longer term, including periods of both growth and recession in the overall economy. Some of the changes in travel patterns and car ownership by residents of the SEStran Council areas are illustrated in Figures 2.3 to 2.5. These show a general continuation in the long term trend of continuing car ownership growth and reducing overall use of ‘sustainable modes’ – especially bus, cycle and walk.

Figure 2.3 Cars available to households

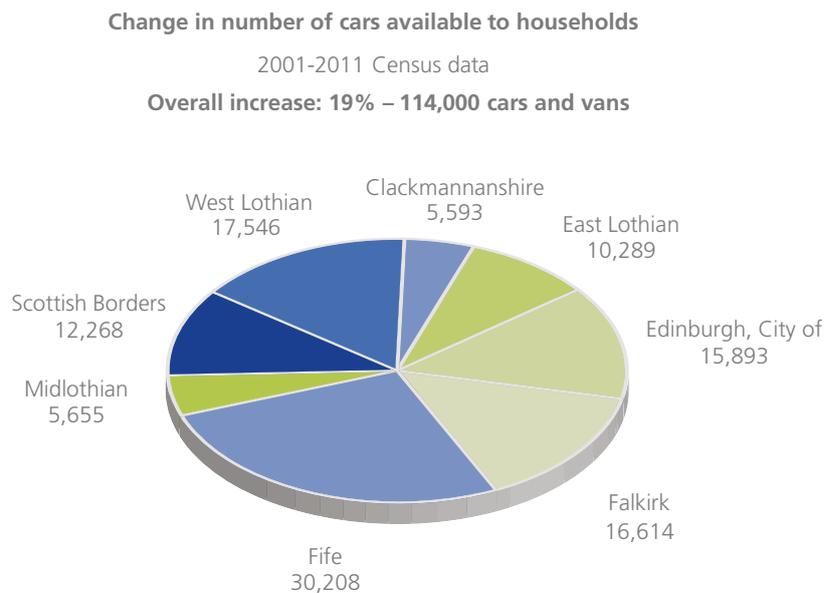


Figure 2.4 Percentage of non car owning households

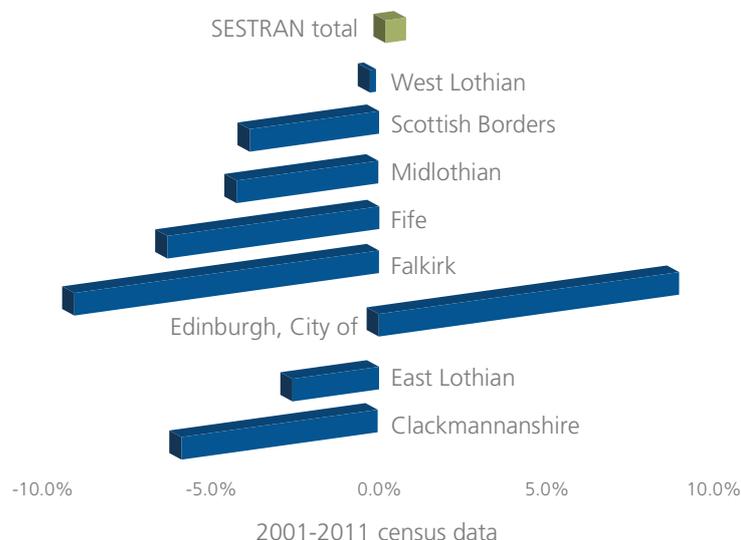
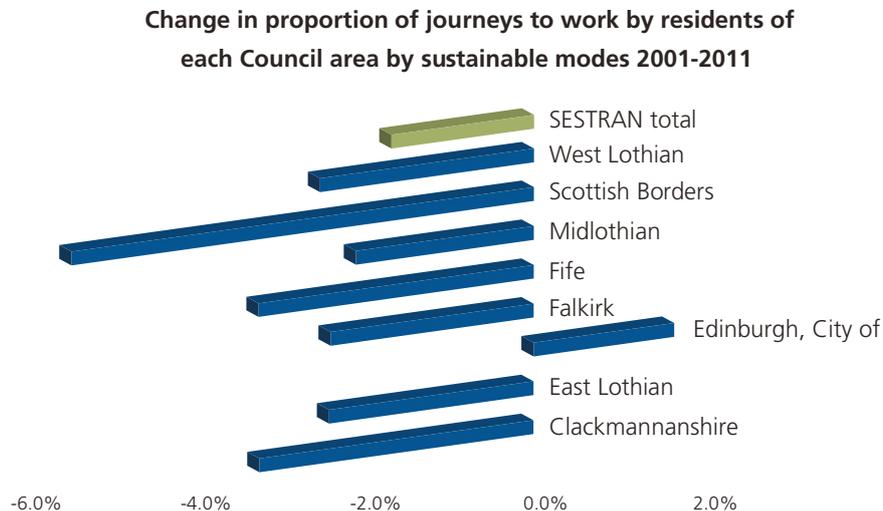


Figure 2.5 Journeys to work



- 2.3.3 However, there are some marked exceptions to these patterns. The City of Edinburgh is the only local authority area in Scotland where the proportion of households without a car available has increased, and the proportion of journeys to work as car driver has reduced. Cycling has increased substantially for journeys to work in the City of Edinburgh (over 50%), East Lothian (25%) and Midlothian (12%). Edinburgh and the Lothians have also shown increases in public transport usage, although it should be noted that train travel has significantly increased over the ten year period by residents of all the SEStran authorities. There have been negligible changes in travel to school mode shares over the SEStran area as a whole between 2001 and 2011.
- 2.3.4 After many years of continuous growth, **Road traffic** levels in Scotland peaked in 2007 and have declined slightly thereafter. At the national level, by 2012 road traffic (vehicle kilometres) was 2.5% down on 2007 levels. Within the SEStran area, comprising over 25% of all Scottish vehicle-km, traffic has reduced by 3.5%. Changes overall are small, but must be seen in the context of the pre-2007 growth trend – had the 2002-07 trend rate of traffic growth continued, road traffic in 2012 would have been around 10% higher than the actual outturn level¹. Many of the measures in the RTS were set in the context of reducing this anticipated growth in traffic.
- 2.3.4 **Bus use** has also declined over the last 5 years, with a 6% reduction in passenger numbers in South East Scotland between 2007/8 and 2012/13². This is in spite of a fall of 16% in local bus service vehicle-km, and is also a smaller drop than the Scottish average. Subsidised bus services have reduced more than commercial services Scotland-wide, and this will disproportionately affect more rural areas.
- 2.3.5 The picture with **rail** is more encouraging, with 18.3m passengers using ScotRail services in 2010/11, an increase of 1.8% from the previous year and 22% from 2004/05. Cross border services are also experiencing large increases in demand, with the East Coast Main Line showing an annual increase in passengers from Waverley of 3.3% in 2010/11 and 40% since 2004/05. On the supply side, train kilometres increased by 13% over this period and continues to grow year on year.

1 Based on Scottish Transport Statistics 32 (Table 5.5), Transport Scotland 2013

2 Scottish Transport Statistics 32 (Tables 2.2, 2.3), Transport Scotland 2013

- 2.3.7 **Aviation** has also been affected with total terminal passengers at Scottish airports down by 12% in 2012 from its 2007 peak. Edinburgh Airport had bucked this trend however, recording record passenger numbers of almost 9.8m in 2013. Edinburgh Airport's passenger numbers overtook Glasgow's in 2006 and in 2012 saw 27% more passengers than Glasgow. Freight and mail traffic through the airport, however, has declined slightly.
- 2.3.8 The fastest growing mode of travel is **cycling**. Nationally, between 2007 and 2011 recorded cycle kilometres grew by 27% and the increase in cycling in and around Edinburgh is also identified from the census data mentioned earlier.
- 2.3.9 **Freight** movement has declined significantly in recent years. The tonnage of freight moved by both road and rail in Scotland dropped by over 25% between 2007 and 2010, by coastal shipping by over 20%. However, freight is being moved further, particularly by road and rail: tonne-kilometres dropped by 14% and 17% respectively³. These statistics reflect reduced economic activity in the recession as well as changes in the structure of the local economy.

2.4 Implications of recent trends

- 2.4.1 The census data above suggest that in general underlying trends towards increasing car use have been sustained over the last ten years, although reduced traffic levels since the economic downturn of 2007/8 suggest shorter or less frequent journeys. It also appears that the policies favouring sustainable modes of travel that have been implemented over a sustained period in the SEStran area have had some success in stemming traffic growth, particularly in the urban area of Edinburgh which shows a very different pattern of change to the rest of the SEStran area and to the other Scottish cities.
- 2.4.2 Forecasts of future transport demand in the SEStran area, based on a return to overall economic growth combined with significant amounts of new development, suggest that traffic growth pressures will continue with the potential for increasing problems of congestion and environmental damage. This is discussed further in Section 8.
- 2.4.3 This refreshed RTS therefore has a rather wider set of issues to tackle compared to the original RTS at least in the short-medium term. This is set against a more challenging financial backdrop in terms of transport budgets. The two major challenges are:
- a) to support economic recovery; and
 - b) to spread the environmental and social benefits of reduced car dependency beyond Edinburgh to settlements in the remainder of the SEStran area – including the new developments that will be required to house the forecast increase in population and households.

3 Scottish Transport Statistics 32 (data for Figs 3.2, 3.3), Transport Scotland 2013

2.5 Key issues for this RTS

- 2.5.1 At the heart of the RTS is the need to balance the needs of a growing area (in terms of population) and a recovering economy, with the associated growth in movement of people and goods this implies, and the recognition that this increased movement has consequences for the local and global environment. In addition, many in society without access to a car, particularly outside core urban areas, are excluded in some ways through lack of access to services and opportunities, with a detrimental impact on their quality of life, and this could be exacerbated by reductions in bus services.
- 2.5.2 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 for economic activity associated with poor connectivity between the SEStran area and key National and International destinations. These include:
 - air travel – limited direct connections to long-haul destinations including North America and the Far East;
 - rail travel – long journey times to major destinations in Scotland and England;
 - road travel – poor road connections to NE England and to the M74/M6;
 - freight – limited port facilities;
 - gateways – poor surface access due to congestion, limited public transport and/or poor quality road links from parts of the SEStran area to key gateways for both passengers and freight.
 - Problems associated with use of the car 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;
 - cost – of fuel, maintenance etc – although this has reduced relative to public transport user costs⁴; and
 - increasingly sedentary lifestyles and related health problems – due in part to reduced physical activity resulting from greater car dependence, particularly amongst children. 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 and lack of integrated ticketing for public transport.
- 2.5.3 Allied to the above problems, over recent decades, economies have become increasingly dependent on the car, and indeed road transport for freight. 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.
- 2.5.4 Both of these factors are likely to continue to result in significant uncertainty about fuel prices in the medium to long term in spite of the major reduction oil prices that took place in 2014. Economies which are the most car-dependent are also those most at risk from these pressures, although it should be noted that public transport costs and therefore fares are also sensitive to fuel prices. In the coming years there could be a rebound effect on traffic volumes, should fuel prices remain at low levels or should alternative fuel vehicles become significantly cheaper to purchase and run.
- 2.5.5 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 (ie the average number of persons per household). This contributes significantly to travel volumes as eg two single-adult households are likely to generate more travel than one two-adult household.
- 2.5.6 Cheaper car travel and improved connectivity for business and industry resulting from extensive new and improved road networks have contributed enormously to economic development, personal mobility and quality of life for many. However, increasing use of the car has also led to the problems highlighted above. Care must therefore be taken in addressing the problems of excess traffic to ensure that further economic development is not hindered. A balance must be sought between the benefits of road-based transport and its negative impacts. Account also needs to be taken of the effects of developing technology on peoples transport needs, the characteristics of transport supply, and the management of transport.
- 2.5.7 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 enable economic recovery 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.

- 2.5.8 Significantly improving both public transport and conditions for walking and cycling, thus moving towards a less car dependent society, would:
- reduce greenhouse gas emissions;
 - ‘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.
- 2.5.9 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.⁵ Many of the RTS proposals would result in significantly improved bus services in the area.

2.6 The Future of the SEStran Area

- 2.6.1 The SEStran area is home to what is generally recognised to have been one of Scotland’s stronger economies in recent years, with the City of Edinburgh being the main driver of this economic growth. The difficulties encountered across the financial services sector globally have also affected the Edinburgh economy.
- 2.6.2 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

- 2.6.3 The SEStran area is projected to see a significant increase in population of nearly 185,000 (around 16%) between 2013 and 2033 (GROS⁶, 2010 based). Across the rest of Scotland over this period, population is projected to grow by only 6%.
- 2.6.4 Between 2010 and 2035, there is projected to be a pronounced demographic change, with the number of over 65s set to increase by nearly 75%, with only a 6% increase in working age adults and a 10% rise in those under 15 years old. In terms of households, it is anticipated that there will be an additional 168,000 households (a 24% increase) between 2013 and 2033 in the SEStran area. The changing nature of household composition (ie the average household size is reducing) combines with population growth to create this requirement for many more households.
- 2.6.5 **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 to be avoided.**

5 NTS Bus Action Plan paragraph 1.12 & Action 1.

6 General Register Office for Scotland

Employment and Labour Force

- 2.6.6 The recession has also had an impact on employment in the SEStran area. Total employment of SEStran area residents peaked in 2008 at 757,500, reduced to 734,100 in 2011 and recovered to 745,500 in 2013⁷. Initial indications are that in 2014, employment in the SEStran area may have exceeded its previous 2008 peak⁸.
- 2.6.7 The nature of the area leads to very significant commuting flows between SEStran local authorities and between SEStran and the rest of Scotland⁹. Overall, the City of Edinburgh accounts for around 45% of total jobs located in the SEStran area (but only 32% of the population), so acts as a major draw for surrounding areas. Midlothian, Clackmannanshire and East Lothian see the highest proportions of residents out-commuting, while West Lothian has similar levels of in- and out-commuting.
- 2.6.8 As well as the forecast increase in population referred to above, significant employment growth is also expected. Arising out of the Scottish Government's Agenda for Cities, the Scottish Cities Alliance was established to focus on key city-regions as drivers of growth, including Edinburgh. A 'City Deal' to bring investment and improved infrastructure to the region is currently under discussion.
- 2.6.9 **Implications for RTS – Economic recovery will bring employment growth which 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 in the medium term. Again, new developments must be planned together with public transport to minimise car-based commuting. The scaling back of bus services across the area could have an important impact on labour markets.**

Car Ownership

- 2.6.10 The number of vehicles on Scotland's roads has increased from 775,000 in 1962 to around 2,700,000 in 2012. Of these, around 85% were cars and light goods vehicles¹⁰. 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. At the Scotland level, car ownership rates have stabilised since 2008, after many years of consistent growth.
- 2.6.11 Within SEStran, there is a marked division, with 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.
- 2.6.12 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 (eg two adults/one car) and 1/3 have 'full' car availability (eg two adults, two cars)¹¹. Looking at individual household types, over 40% of non-car owning households are either 'single parent' or 'single pensioner' households.

7 <http://www.scotland.gov.uk/Topics/Statistics/Browse/Labour-Market/Local-Authority-Tables>

8 <http://www.scotland.gov.uk/Topics/Statistics/Browse/Labour-Market/Publications/APSOctSepSum>

9 <http://www.scotland.gov.uk/Topics/Statistics/Browse/Labour-Market/Publications/Supplementary-LA-Tables>

10 <http://www.transportscotland.gov.uk/statistics/j285663-04.htm#table12>

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

- 2.6.13 **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

- 2.6.14 The Edinburgh and South East Scotland Strategic Development Planning Authority (SESplan), was designated by Scottish Ministers on 25th June 2008 and comprises the City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders and West Lothian Councils. The key role of SESplan is to prepare and maintain an up to date Strategic Development Plan (SDP) for the area. SDP 1 was approved in June 2013 with modifications.
- 2.6.15 The spatial boundaries of SESplan and SEStran are not however identical, as Falkirk, Clackmannanshire and north Fife are outwith the SESplan area. Nevertheless, SESplan is clearly a key partner to SEStran in developing coherent land use and transport strategies for the future.
- 2.6.16 This combination of projected increases in population and households places considerable pressure on the planning system, especially when coupled with economic recovery 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.** To support this coordination, SEStran agreed with member authorities in 2010 that planning applications with strategic transport implications would be referred to SEStran for comment.
- 2.6.17 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 update to the SESplan SDP currently in preparation (SDP2) and other associated Local Development Plans must continue to be developed in partnership with the RTS and Local Transport Strategies, in order to encourage more sustainable forms of transport.
- 2.6.18 **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, linking Strategic and Local Development plans closely with the RTS. Failure to do so will lead to further significant increases in car use.**

Freight

- 2.6.19 The SEStran area represents a significant origin and destination for freight traffic. Over 20% of Scottish HGV tonnage is lifted or dropped in the area and over one third of Scottish maritime freight tonnage (and one third of seaborne container tonnage) uses the Forth ports. Together, the hub intermodal railheads at Coatbridge, Grangemouth and Mossend generate the same level of container traffic as the port of Grangemouth. With the loading gauge clearance of the East Coast Main Line and Edinburgh's South Suburban Line to be enhanced in 2015-16, the volume of intermodal rail traffic passing through the SEStran area is likely to grow further, and this in turn may lead to increased opportunities for intermodal railhead facilities within the SEStran area.
- 2.6.20 Overall in Scotland, coastal shipping accounts for 11% of tonnes moved in 2010, compared to 78% for road. In terms of tonne-kilometres, however, coastal shipping is the most significant mode with 47% of the Scottish total. Road accounts for 44% of tonne-km reflecting the shorter lengths of road freight journeys. Rail has a 5% and 9% share respectively¹².
- 2.6.21 **Implications for RTS – the significance of coastal shipping and the importance of linking sea and land-based transport effectively need further attention. Grangemouth and Rosyth in particular are becoming increasingly important within the SEStran area as hubs for freight activity. SEStran must continue to act to facilitate efficient movement of goods and ensure quality facilities for the freight sector in key freight corridors and gateways to facilitate economic recovery.**

2.7 Accidents

- 2.7.1 In 2009 the Scottish Government published its Road Safety Framework¹³, setting a number of targets to meet by 2020 (relative to the 2004-08 average) as set out in the table below. In addition the previous 10% reduction target in the slight casualty rate is continued to 2020.

Target	2015 Milestone % reduction	2020 target % reduction
People killed	30%	40%
People seriously injured	43%	55%
Children (aged <16) killed	35%	50%
Children (aged >16) seriously injured	50%	65%

12 Scottish Transport Statistics 32 (data for Fig 3.1, Tables 9.3, 9.5), Transport Scotland 2013. Mode share figures quoted exclude pipelines.

13 Scotland's Road Safety Framework to 2020, Scottish Government 2009

- 2.7.2 The number of accidents on the road network continues to fall. Within the SEStran area, annual road accident deaths and serious injuries fell from an average of 745 in 2004-8, to 481 in 2013, a reduction of 37%¹⁴. Nationally, the total number of serious injuries fell by 36% between 2004-08 (average) and 2013. The number of people killed also fell from 292 to 172 over this period, a reduction of 41%. Child deaths fell by 46% and serious injuries by 40%. Slight casualties have also reduced, by 24% in the SEStran area and by 32% nationally, exceeding the national target.
- 2.7.3 These figures represent significant success in accident prevention/reduction resulting from the efforts of all stakeholders involved in this area. However, these efforts need to be continued and reinforced if further dramatic falls in accident figures are to be realised and the national targets met. 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 – for example there may be fewer being killed because there are fewer 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.
- 2.7.4 **Implications for RTS – SEStran must work to continue the trend of reducing transport related casualties and contribute to the national targets.**

2.8 Environment

Climate Change

- 2.8.1 The importance of climate change and emissions reductions in transport policy is now well established, and the Scottish policy context is clear. The Scottish Government passed the Climate Change (Scotland) Act in 2009 and this Act sets an interim target of a 42% reduction in greenhouse gas emissions (relative to 1990 levels) by 2020 with an ultimate aim of an 80% reduction by 2050.
- 2.8.2 The Act places duties on all public bodies including the requirement that a public body must, in exercising its functions, act:
- in the way best calculated to contribute to delivery of the Act's emissions reduction targets;
 - in the way best calculated to deliver any statutory adaptation programme; and
 - in a way that it considers most sustainable.
- 2.8.3 These responsibilities are embodied in 'Public Bodies Climate Change Duties: Putting Them into Practice', published by the Scottish Government in February 2011. Specifically in terms of transport, the Scottish Government's Climate Change Delivery Plan of 2009 includes four 'transformational outcomes' which must be delivered to meet the 80% emissions reductions targets. One of these is:
- *'almost complete decarbonisation (the reduction in the emission of carbon dioxide and other greenhouse gases) of road transport by 2050, through wholesale adoption of electric cars and vans'.*

14 Derived from http://www.transportscotland.gov.uk/system/files/documents/tsc-basic-pages/Table%2036%20-%20Casualties%20by%20Council%2C%20severity%20and%20road%20type_0.xlsx

- 2.8.4 In more detail, the most recent policy document 'Low Carbon Scotland: Meeting our Emission Reduction Targets 2013-27' published in 2013 sets out a range of Policies and Proposals within the context of four 'packages': decarbonising vehicles, road network efficiencies, sustainable communities, and business engagement around sustainable transport. Greenhouse Gas (GHG) emissions from transport reduced from 2007 to 2011 getting back to the 1990 level. This represents a reduction of over 10% from the 2007 peak. In part this will be due to the reduction in traffic levels in Scotland mentioned earlier, but this was 2.9% – less than the GHG emission reduction¹⁵. Most other sectors of the economy showed significant reductions in GHG emissions between 1990 and 2011, highlighting the scale of the task to tackle transport emissions.
- 2.8.5 While Greenhouse gases have a global impact, other emissions from transport sources (eg Nitrogen oxides, Carbon monoxide and small Particulates) have local impacts which can directly and seriously affect people's health. European Directives provide limit values and targets for such emissions that are translated into UK and Scottish legislation. Within the SEStran area, there are currently (February 2015) 13 Air Quality Management areas established under the UK Environment Act 1995, out of a total of 33 in Scotland. A 'Low Emission Strategy' is under development by the Scottish Government to support further action to improve local air quality and meet statutory requirements.
- 2.8.6 **Conclusion – if the Scottish policy commitments are to be met, very significant reductions in vehicle emissions will be necessary, using the pathways outlined in national policy. RTPs and local authorities need to act in line with these policies.**

Alternative Fuels

- 2.8.7 In the light of an emerging consensus on the need for emissions reductions, the use of alternative fuels as a means to reduce overall GHG emissions and improve local air quality is now seen as essential.
- 2.8.8 In 2010, there were 28.4m motor vehicles licensed in Great Britain. Of these, 0.18% were 'Gas' (gas, bi-fuel, petrol/gas and gas/diesel) and 0.01% were 'Electric'. This means that 99.5% of all registered vehicles in Great Britain are petrol or diesel powered, illustrating that the use of alternative fuels remains at an embryonic stage, although it is growing¹⁶.

2.9 Overall context for the RTS

- 2.9.1 The SEStran area faces a set of issues which are perhaps unique in Scotland. It is first and foremost a rapidly growing area (in terms of population), and the main thrust of the RTS is in managing this growth. 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 units – this is the philosophy behind the Scottish Cities Alliance. 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 within SEStran and between SEStran and the rest of Scotland, the UK and the rest of the world.

15 <http://www.scotland.gov.uk/seso/DatasetSearch.aspx?TID=226>

16 <https://www.gov.uk/government/publications/tsgb-2011-vehicles>

- 2.9.2 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 had enjoyed greater stability and growth, built on its traditional strengths of the business sector and financial services in particular. Edinburgh has also been boosted by significant growth in public administration resulting from Scottish devolution. It has proved more resilient than many areas to the economic downturn¹⁷.
- 2.9.3 The economic geography of the area has changed markedly in recent years too. Around Edinburgh, there have been major new retail and office developments including Leith, Fort Kinnaird, Straiton and Edinburgh Park. One of the major hospitals for the Lothians relocated from the city centre to an edge of town site in 2003. Many of the traditional industrial sites of Edinburgh have been transformed into residential areas, both large scale developments in areas such as Leith and Granton as well as smaller infill developments throughout the region. 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.
- 2.9.4 Increasing population and the reduction in average household size, coupled with increased prosperity, created pressure on the housing market throughout the area, but particularly in Edinburgh. Property prices were also above the Scottish average in East Lothian, Midlothian and Scottish Borders¹⁸. Combined with rapid increases in prices, this 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. Again, the recession has affected property and labour markets. In 2003/4 average house prices in Edinburgh were 50% above the Scottish average. In 2013/14 they were only 40% higher¹⁹, with sales volumes 50% down. However, given the expected growth in population and households once recovery is established, these issues are likely to re-emerge.

17 Cities Outlook 2013, Centre for Cities, Jan 2013

18 Property Market Report 2003-2013, Registers of Scotland, 2013

19 Property Market Report 2003-2013, Registers of Scotland, 2013

- 2.9.5 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. 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.
- 2.9.6 Strategic public transport provision in the SEStran area is currently highly focussed on Edinburgh city centre. Travel between most other local authority areas except those West of Edinburgh, 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.
- 2.9.7 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.
- 2.9.8 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.

3. RTS Objectives & Policies

3.1 Introduction

- 3.1.1 The RTS needs to be framed in the context of Scottish Government's five Strategic Objectives, the emphasis placed on Community Planning by Government and Local authorities, Local Transport Strategies developed by constituent local authorities, the Agenda for Cities¹ and the statutory Strategic and Local Planning framework.
- 3.1.2 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 contribution of the private car and road-freight in economic terms; and
 - issues concerned with lack of access for those without use of a car.

3.2 National context

- 3.2.1 The Scottish Government's five Strategic Objectives were set out in 2007. They are:
That Scotland should be:
- Wealthier and Fairer
 - Smarter
 - Healthier
 - Safer and Stronger
 - Greener
- 3.2.2 The National Transport Strategy produced by the Scottish Government published in 2006 sets out a number of high level objectives:
- Promote economic growth
 - Improve integration
 - Promote social inclusion
 - Improve safety of journeys
 - Protect our environment and improve health
- 3.2.3 The Scottish Government identifies three strategic outcomes for Scotland's transport that will support these objectives:
- Improve journey times and connections, to tackle congestion and the lack of integration and connections in transport which impact on our high level objectives for economic growth, social inclusion, integration and safety;
 - Reduce emissions, to tackle the issues of climate change, air quality and health improvement which impact on our high level objective for protecting the environment and improving health; and
 - Improve quality, accessibility and affordability, to give people a choice of public transport, where availability means better quality transport services and value for money or an alternative to the car.

1 <http://www.scotland.gov.uk/Topics/Economy/EconomicStrategy/Cities>

3.2.4 In addition to the National Transport Strategy, there are a range of other strategy documents, produced or updated since 2008 that are relevant to the refreshed RTS. These are listed below and are referred to in Table 3.1 using the initials in brackets:

- National Planning Framework 3, July 2014 (NPF)
- Scottish Planning Policy, June 2014 (SPP)
- Let's Get Scotland Walking: The National Walking Strategy, June 2014 (NWS)
- Cycling Action Plan for Scotland, Transport Scotland, June 2013 (CAPS)
- Creating Places: A policy statement on architecture and place for Scotland, June 2013 (CP)
- Designing Streets: A Policy Statement for Scotland, March 2010 (DS)
- Strategic Transport Projects Review, Transport Scotland, 2009 (STPR)
- Infrastructure Investment Plan, 2011 (IIP)
- Scotland's Cities: Delivering for Scotland, 2012 (SCA)
- Government Economic Strategy, Scottish Government, 2011 (GES)
- Community Planning legislation and guidance (CPP)
- The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, 2007 (AQS)
- Low Carbon Scotland – Meeting our Emissions Reduction Targets 2013-2027, The Second Report on Proposals and Policies, 2014 (RPP2)
- Low Emissions Strategy: Scottish Government is currently (March 2015) consulting on a Low Emissions strategy (LES).

3.3 RTS Vision Statement

3.3.1 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 agreed in 2007:

'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.'

3.3.2 This Vision Statement continues to encapsulate the spirit of the RTS, covering economic development, accessibility, the environment and health.

3.4 RTS Objectives

3.4.1 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. These link back to the Scottish Government Strategic Objectives. 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

3.4.2 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 for business and tourists.
 - 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.

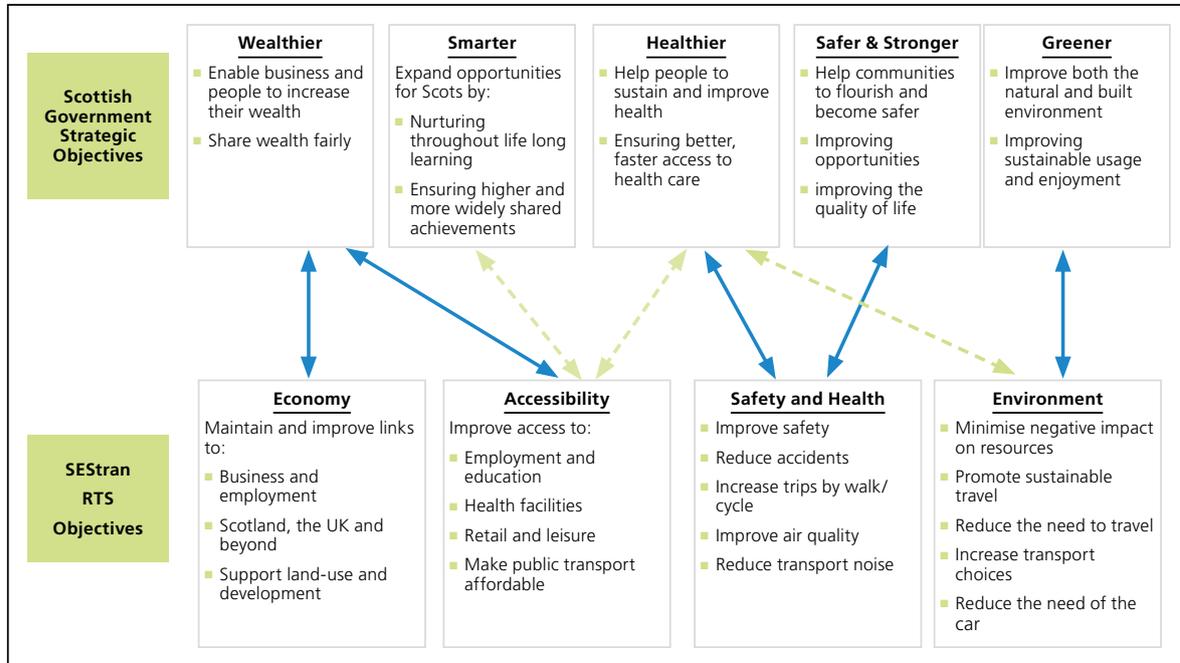
3.4.3 The economy is one of the main priorities highlighted in the RTS Guidance. The three main ways in which the transport system affects economic performance are: (i) allowing for the efficient movement of goods and personnel in the course of business both within the SEStran area and with national and international economic hubs; (ii) giving employers access to as wide a labour force as possible, allowing the most efficient match between employees and employers, (iii) creating an attractive environment for businesses to remain or locate in an area and (iv) providing high quality tourist-related transport infrastructure for visitors to the region from the UK and abroad. 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. In a time of recession it is important that the provision of good transport facilities and services is aimed at hastening economic recovery and improving Scotland's overall competitiveness, whilst still meeting environmental objectives.

- 3.4.4 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 the **economic recovery** – 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 **Strategic Development Plans and Local Development Plans** must be integrated with transport planning, if more sustainable development is to be achieved.
- 3.4.5 Unreliable journey times, on routes which are affected by congestion, are a source of economic inefficiency, as additional time has to be allowed for personal travel and the transport of goods 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 disabled people) 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 by working with health boards and other agencies.
 - 2.3 to improve access to other services, such as retailing, leisure/social and education.
 - 2.4 to influence decisions on the provision of public transport to make it more affordable and socially inclusive.
- 3.4.6 A second strong theme of the RTS covers the area of **accessibility**. If all groups in society are to share in the economic recovery 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.
- 3.4.7 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.
- 3.4.8 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 Scottish national targets and obligations on greenhouse gas emissions.

- 3.2 to promote more sustainable travel.
 - 3.3 to reduce the need to travel.
 - 3.4 to minimise the negative impacts of transport on natural and cultural resources.
 - 3.5 to increase transport choices, reducing dependency on the private car.
- 3.4.9 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). One of the main ways SEStran can influence these issues is by ensuring sustainable travel is a key element of the relevant Strategic Development Plans (SESplan and TAYplan) and the constituent authority's Local Development Plans. Other sub-objectives include the promotion of more sustainable travel, minimising impact on natural and cultural heritage 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.
- 3.4.10 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 recognising that Local Authorities will play a major role in achieving this objective. The other main way in which transport directly impacts on health is through air quality. It is clear that transport is a significant contributor to local air pollution, and that this exacerbates respiratory disease and cardiovascular mortality and morbidity². The RTS has a specific sub-objective relating to this. Transport noise can also have a detrimental effect on the health of individuals, and this is referred to in the RTS Objectives although it is recognised that the implementation of noise reduction schemes tends to be associated with specific new projects and schemes.
- 3.4.11 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.

2 Air Quality and Road Transport: Impacts and solutions, Guy Hitchcock et al, RAC Foundation, June 2014

Figure 3.1 Relationship between SEStran and Government objectives



- 3.4.12 How the SEStran Objectives links with the Scottish Government’s Strategic Objectives is shown in Figure 3.1.
- 3.4.13 The approach taken to translating these objectives into ‘Targets and Monitoring’ can be found in Chapter 4.

3.5 RTS Policies

- 3.5.1 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.
- 3.5.2 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 para 3.2.4 covering planning, planning policy, 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.
- 3.5.3 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.

Table 3.1 Summary of RTS Policies

RTS Policy	Relates to Objectives ...	Relates to SG Strategy (para 3.2.4)
Connectivity		
Policy 1 The RTS will support improvements to the connectivity of the SEStran area to key national and international destinations by supporting appropriate infrastructure investment and service improvements, and supporting improvements to key gateways such as airports, main rail stations, ports and freight terminals including local access to these especially by sustainable modes.	1.2, 1.3, 1.4	GES, NTS SCA
Improvements to Public Transport (Bus)		
Policy 2 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	NTS



RTS Policy	Relates to Objectives ...	Relates to SG Strategy (para 3.2.4)
Policy 3 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, will be encouraged.	1.4, 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.3, 3.5	NTS
Improvements to Public Transport (Rail)		
Policy 4 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 where appropriate, fully integrated with existing and planned development.	1.1, 1.2	NTS, STPR IIP
Policy 5 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.	NTS, STPR IIP
Policy 6 SEStran will support intervention where affordability is recognised by the Partnership as a barrier to the use of public transport.	1.1, 2.4, 3.4, 3.5	CPP
Information/Campaigns		
Policy 7 The RTS will give support to the promotion of 'soft' measures such as information, marketing, personalised travel assistance, awareness campaigns and travel plans.	3.1, 3.2, 3.3, 3.4, 3.5.	NWS, CAPS CP
Policy 8 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.	SPP, DS CPP
Parking		
Policy 9 A consistent framework for parking standards for new development will be promoted across the region in line with our Regional Parking Standards, to ensure that comparable developments have similar parking standards.	1.3, 1.4, 2.1, 2.2, 2.3, 3.2, 3.3.	SPP
Policy 10 Town and city centre parking provision (including areas on the edge of centres) will favour shoppers, essential business users and residents. Commuter parking in town or city centres will be discouraged with decriminalised parking control where viable and the provision of Park and Ride (see the SEStran Park and Ride Strategy)	1.3, 1.4, 2.1, 2.2, 2.3.	NTS, SPP SCA

3. RTS Objectives & Policies

RTS Policy	Relates to Objectives ...	Relates to SG Strategy (para 3.2.4)
Policy 11 The efficient use of parking provision at major employment and essential service centres outwith town and city centres (e.g. hospitals, areas around business parks) will be supported. This will be in line with the SEStran Parking Management Strategy.	1.3, 1.4, 2.1, 2.2, 2.3.	NTS, SPP
Traffic Reduction		
Policy 12 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.	NTS
Infrastructure and Roads		
Policy 13 The RTS will give high priority to the maintenance of public transport networks and infrastructure	1.1, 1.2, 1.3 and 1.4.	NTS
Policy 14 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.	NTS
Policy 15 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, high-occupancy vehicle and cycles.	1.4, 2.1, 2.2, 2.3, 2.4, 3.3 and 3.5.	NTS
Policy 16 New road capacity, to improve journey times and reliability, will be supported 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 appraised and found to be less effective.	1.1, 1.4.	NTS
Mode Shift – Freight		
Policy 17 SEStran will work with the freight transport industry to facilitate the sustainable movement of freight to key destinations, including, where appropriate promoting greater use of rail and water-borne transport and to encourage more efficient logistical distribution; and including logistics relating to sustainable energy projects.	1.3, 1.4, 3.3.	NTS, LCS
Accessibility		
Policy 18 SEStran will seek to support communities with poor access to employment by PT and low car ownership/high deprivation and areas of peripherality less well served by public transport.	2.1, 2.4.	NTS, CPP



RTS Policy	Relates to Objectives ...	Relates to SG Strategy (para 3.2.4)
Policy 19 Where improvements in accessibility are found to be required, the RTS will seek to support measures which enhance conditions for pedestrians, cyclists and public transport users (including community transport/DRT).	1.4, 3.3, 3.4, 3.5, 4.2.	NTS, SPP
New Development		
Policy 20 SEStran will use its influence to support strategies set out in Strategic and Local Development Plans 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.	SPP, CP
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 (see SEStran Sustainable Development Guidelines).	3.3, 3.4, 3.5.	SPP, NTS CP
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.	GES, SCA
Sustainable Modes		
Policy 23 Affording a higher priority to schemes that improve the accessibility by public transport, walking and cycling of key development areas as identified in Strategic and Local Development Plans will be supported.	1.1, 1.2, 1.3.	SPP, CP
Policy 24 The RTS will prioritise interventions in all types of area (city, town, local community) that promote the use of more sustainable modes of transport, in particular non-motorised modes for shorter journeys.	3.2, 4.4, 1.4.	NTS
Equalities		
Policy 25 All relevant interventions will be subject to an equality audit to ensure that they promote equalities in accordance with the law.	Relates to all objectives	CPP
Policy 26 SEStran will seek to ensure that people who have difficulties in using transport due to disability will be the subject of targeted measures to address this.	2.1, 2.2, 2.3, 2.4.	CPP
Access to Health		
Policy 27 SEStran and its constituent authorities will work in partnership with Health Boards and the Scottish Ambulance Service to improve access to health services and to reduce congestion caused by travel to these services.	2.2.	CPP

3. RTS Objectives & Policies

RTS Policy	Relates to Objectives ...	Relates to SG Strategy (para 3.2.4)
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 for public transport services.	2.2, 4.1.	CPP
Environmental Impact		
Policy 29 Transport interventions should be designed and operated to minimise their impact on the environment.	3.2, 4.4.	SPP, AQS LCS
Policy 30 Interventions in the RTS should contribute to the achievement of national and international targets related to local air quality and climate change, through reducing emissions of NOx, CO, Particulates, CO ₂ and other greenhouse gases.	3.1, 1.4.	AQS, LCS LES
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.	SPP, AQS
Energy Use/Efficiency		
Policy 32 The RTS will promote interventions that will reduce the consumption of non-renewable resources and will improve energy and resource efficiency.	3.1, 3.2, 3.3, 3.4.	LCS
Accident Reduction		
Policy 33 Interventions that are cost-effective in reducing accidents will be supported.	4.1, 3.3, 3.4, 3.5.	NTS
Health Promotion		
Policy 34 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.	NWS, CAPS
Personal Security in Transport		
Policy 35 There will be support for measures that enhance personal security, especially for pedestrians, cyclists, and public transport users.	4.1, 2.1, 2.2, 2.3, 1.1, 1.3.	NTS
Air Quality		
Policy 36 There will be support for measures that assist the achievement of local air quality targets.	4.3, 3.2, 3.3, 3.4, 3.5.	AQS, LES



RTS Policy	Relates to Objectives ...	Relates to SG Strategy (para 3.2.4)
Transport Noise		
Policy 37 In association with new infrastructure, appropriate measures will be supported to minimise the adverse impacts of transport noise.	4.4, 3.2.	NTS
Strategy & Policy Integration		
Policy 38 Schemes supported in national and other regional strategy and policy documents will be supported in the RTS.	1.1, 1.2, 1.3.	All
Policy 39 SEStran will work with member authorities, regional planning bodies and the Scottish government to promote the shared policies and objectives of the RTS and LTSs and the Single Outcome Agreements of member authorities.	All	CPP
Policy 40 All relevant projects and interventions will be subject of a Quality Audit to ensure they maximise opportunities to meet all RTS objectives and policies and 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. Targets & Monitoring

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 is making towards achieving 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, most objectives are covered by at least one target, but one target may cover more than one objective, where appropriate. For each target, 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, although intermediate targets for 5 years are also set. Also included here are the indicators which are being used to monitor the progress of the RTS. The monitoring of the targets is carried out on a regular basis and reported annually in SEStran's Annual Reports.
- 4.1.3 Over the period 2007-2012/13, progress towards the targets has been mixed as discussed in the paragraphs below and summarised in the table at the end of this section. More detail is included in Appendix B. Performance of the transport system in the SEStran area is influenced by a wide range of factors, many of them outwith the control of SEStran. Also, updated population estimates available from the 2011 Census may affect measures of accessibility to employment and health facilities in some areas. However, where targets are not being met, this may indicate where more effort and resources need to be focused.

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.

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

- 4.2.2 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.

- 4.2.3 **Target:** Relative to 2007, achieve a 10% increase in (public transport) labour market catchments (within 30 minutes, and within 60 minutes) for selected locations.

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

- 4.2.4 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.

- 4.2.5 **Target:** To improve 'connectivity' to a range of key internal and external destinations – mainly indirectly via influencing other bodies such as bus and train operators, airport operators, other RTPs and Transport Scotland. SEStran has been working with Edinburgh Airport in developing its Airport Surface Access Strategy to ensure good quality public and sustainable transport is built into their strategy.

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

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

- 4.2.7 **Target:** Demonstrable progress in collaborative working between SEStran, SESplan, planning authorities, economic development agencies and other appropriate stakeholders. For example, SEStran has become a Key Agency in the planning process in relation to Strategic and Local Development Plans. In the longer term, an RTS target (10 year) is to identify the transport infrastructure and services required to meet the relevant development plan requirements.

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

- 4.2.8 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.

- 4.2.9 **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),; (ii) Over the period of the strategy, reduce (after 15 years) time lost due to congestion across the SEStran trunk road network; (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.

4.3 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.

Objective 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% after 15 years).

Objective 2.2 – to improve access to health facilities

4.3.4 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).

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

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

4.3.6 **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).

Objective 2.4 – to make public transport more affordable and socially inclusive

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

4.3.8 **Targets:** (i) By, or before the end of the RTS, monitor the implementation of all DDA requirements regarding accessible buses and all public transport complies with the requirements of the Equalities Act 2010. (ii) Identify high fare ‘anomalies’ in the SEStran area by the end of the RTS period, relative to 2007 (iii) Seek to influence national policy in relation to the procurement of bus services, if necessary to meet other RTS targets.

4.4 Targets for Environment

Objective 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.

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

4.4.3 **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.

Objective 3.3 – to promote more sustainable travel

4.4.4 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’.

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

Objective 3.4 – to reduce the need to travel

4.4.6 Advances in technology are creating opportunities for reducing the amount of travel undertaken, eg home working, teleconferencing, internet shopping etc.

4.4.7 **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.

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

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

4.5 Targets for Safety and Health**Objective 4.1 – to improve safety (reducing accidents) and personal security**

4.5.1 **Targets:** (i) By 2020, to cut the number of killed by 40% and seriously injured casualties by 55%; and to cut the number of children killed by 50% and seriously injured by 65%, all from a 2004-2008 base. There is also a target to reduce the slight casualty rate by 10% (ii) Over the period of the strategy, a 20% reduction (7% after five years) in pedestrians and cyclists killed or seriously injured (KSI) 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).

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

4.5.2 **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. Cycling Action Plan for Scotland has a vision of 10% of all journeys will be by bike by 2020.

Objective 4.3 – to meet or better all statutory air quality requirements

4.5.3 **Target:** To contribute to meeting the national targets for air quality.

4.6 Summary of performance

Objective	5 year target	Performance 2007-2012	
1 Economy			
1.1 – to maintain and improve labour market accessibility to key business/ employment locations	Increase % of SEStran working age population within 30/60 mins of identified key employment centres by public transport by 3%	Target not achieved - except Livingston (60 mins)	↓
1.2 – to maintain and improve connectivity to the rest of Scotland, the UK and beyond	Increase number of daily coach/rail/air services to regional/national/ international destinations	Target achieved	↑
1.3 – to support other strategies, particularly land-use planning, and economic development	No quantified target.	Participation in SDP preparation, Community Planning	↑

4. Targets & Monitoring

Objective	5 year target	Performance 2007-2012	
1.4 – to reduce the negative impacts of congestion, in particular to improve journey time reliability for passengers and freight	Reduce time lost in congestion on trunk road network after 15 years (stabilise after 5 years); Reduce car mode share for the journey to work; Reduce car users reportedly affected by congestion	Trunk rds: target achieved at some sites; car mode share not achieved; car users in congestion, mixed results	↔
2 Accessibility			
2.1 – to improve access to employment	For areas defined as most deprived by the Scottish Index of Multiple Deprivation (SIMD), improve access (by public transport) to employment by an average of at least 3%	Target not achieved	↓
2.2 – to improve access to health facilities	Reduce the proportion of zero-car households with poor access (>60 minutes travel by public transport) during various time periods and to defined key hospitals by 15%.	Target not achieved Trend in wrong direction in many cases	↓
2.3 – to improve access to other services, such as retailing, leisure and education	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 7% after five years.	Target not achieved -except to Retail Parks/Supermarkets	↘
2.4 – to make public transport more affordable and socially inclusive	(i) By, or before the end of the RTS, seek to monitor the implementation of all DDA requirements regarding accessible buses and all public transport complies with the requirements of the Equalities Act 2010. (ii) Identify high fare 'anomalies' in the SEStran area by the end of the RTS period, relative to 2007 (iii) Seek to influence national policy in relation to the procurement of bus services, if necessary to meet other RTS targets.	No data on DDA compliance for 2012; reduction in proportion of bus users finding fares 'good value'; increase in use of concessionary bus pass.	↔
3 Environment			
3.1 – to contribute to the achievement of the UK's national targets and obligations on greenhouse gas emissions	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.	Traffic levels on track to 2021 target; Scottish CO2 emissions broadly on target but transport emissions still slightly higher than 1990 base.	↗

Objective	5 year target	Performance 2007-2012	
3.2 – to minimise the negative impacts of transport on natural and cultural resources	No quantified target or practical indicators	No specific changes identified	↔
3.3 – to promote more sustainable travel	Aim to increase mode share of sustainable modes	No change overall; increase in Liftshare takeup	↗
3.4 – to reduce the need to travel	To stabilise and reduce the number of trips per person per year made using motorised modes, by 5% over the period of the RTS.	No data from monitoring	
3.5 – to increase transport choices, reducing dependency on the private car	Targets for mode share (see objective 1.4).	Target not achieved, trend in wrong direction	↘
4 Safety and Health			
4.1 – to improve safety (reducing accidents) and personal security	(i) By 2020, to cut the number of killed by 40% and seriously injured casualties by 55% and child killed by 50% and seriously injured by 65% from a 2004-2008 base. There is also a target to reduce the slight casualty rate by 10% (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).	i) On track to meet 2020 target ii) Targets met in terms of total number of casualties iii) No recent data	↗
4.2 – to increase the proportion of trips by walk/cycle	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. Cycling Action Plan for Scotland has a vision of 10% of all journeys will be by bike by 2020.	Small increases in proportion walking and cycling.	↗

4. Targets & Monitoring

Objective	5 year target	Performance 2007-2012	
4.3 – to meet or better all statutory air quality requirements	To contribute to meeting the national targets for air quality	Increase in number of AQMAs from 5 to 8	↘
4.4 – to reduce the impacts of transport noise	No indicators or target currently feasible due to lack of data		

Key to symbols in table



5 year target for RTS met



Trend in correct direction towards target; or some targets for this category met, others in correct direction



Neutral; or some indicators trending towards target, others away from target



Targets for this category not achieved with some exceptions



5 year target not achieved; trend in wrong direction

4.7 Future Monitoring

4.7.1 In the light of the first 5 years' experience with monitoring of the RTS, changing data availability and in response to government strategies and guidelines, some amendments to the indicators used and the approach to monitoring may be required. For example, future Scottish low emissions strategy performance indicators may need to be reflected in the RTS. However, maintaining the continuity of monitoring is also important, and any adjustments will seek to achieve this. Future changes to the RTS monitoring framework will be reported in the SEStran Annual Reports.

5.1 Introduction

- 5.1 The SEStran area is a key driver of the Scottish Economy. Key business sectors include Financial Services, Tourism, the Knowledge economy, Creative Industries and Retailing, all of which are crucially dependent on the ability of people, goods and ideas to connect easily locally, regionally, nationally and internationally. The importance of connectivity in supporting the competitive position of any major city-region is well recognised: *“A connected city ... has a reliable, resilient infrastructure with strong transport and digital links to its workforce, its supply chain and its markets. Rail, road, sea, air and digital infrastructure link the city with its region, with neighbouring cities and with international markets. Our transport and digital infrastructure keep pace with evolving technology and international standards and enable access for all”*¹.
- 5.1.2 Connectivity requirements for the SEStran area are varied. For example:
- Businesses and their customers need to be able to get around the SEStran area easily to facilitate business activity
 - Business needs good rail, road and air connections to access other centres of economic activity in the UK and abroad;
 - Customers (including tourists) need to consider South East Scotland an easily accessible destination from elsewhere in the UK and abroad;
 - Good port, rail and road infrastructure and suitable intermodal terminals are required to support freight movement and efficient logistics;
 - Good connections for commuters maximise the labour force that is accessible to the area’s employers.
- 5.1.3 Underpinning all connectivity requirements is the need for a sustainable approach that will support the long-term competitive position of the area through resource efficiency, social inclusion and minimum environmental impact.
- 5.1.4 The SEStran area has a number of major links and gateways that provide external connections including key rail stations, Edinburgh Airport, the Forth Ports, and the motorway and trunk road network. These are important in themselves, but they are only of value if they can be accessed easily from throughout the SEStran area and if they operate effectively. They should also support the other strengths of the SEStran area for business and the workforce – in particular the quality of the environment.
- 5.1.5 The Scottish Government agency, Transport Scotland, has responsibility for the maintenance and development of Scotland’s strategic transport networks while the UK Department for Transport retains responsibility for cross border rail services and international air and sea connections. These elements therefore fall outwith the direct remit of SEStran. SEStran will however seek to influence and work constructively with Transport Scotland on the development of its transport proposals within the SEStran area and with Transport Scotland and the Department for Transport on external links serving the SEStran area in the context of available financial resources.

1 Scotland’s Cities: Delivering for Scotland, Scottish Government 2011

5.1.6 The following paragraphs consider these gateways and key links in turn, considering the connectivity needs of both people and goods and indicating SEStran's position in relation to the these topics.

5.2 Gateway – Edinburgh Airport

5.2.1 The peripherality of Scotland means it is very dependent on air transport for its international links. SEStran recognises the key role played by **Edinburgh Airport** in the local economy, in terms of both travel and employment. SEStran supports the expansion of direct international services from Edinburgh airport and the retention of services to the hub airports in the SE of England as a means to improve international connectivity and competitiveness.

5.2.3 SEStran will therefore support the development of international direct air services from Edinburgh. The airport currently supports a growing range of destinations, particularly in Europe, but direct access to longer range destinations such as North America and the major emerging market economies of Asia and elsewhere remains limited and additional services of this type would be particularly welcomed.

5.2.4 However, SEStran supports rail as the preferable, more sustainable mode for journeys within the UK. The proportion of these journeys made by train could be considerably increased with the completion of HS2 to Scotland. While international connections from Edinburgh are likely to remain predominantly by air, SEStran supports the linkage of HS2 to HS1 to make train an attractive option for travel to nearer continental destinations.

5.2.5 The airport is also Scotland's busiest for freight and mail movement, with a total of around 43,000 tonnes handled in 2012². Unlike passenger numbers, this total has declined slightly over the last 10 years, but remains a vital element in the mix of services that business requires.

5.2.6 To operate as an effective gateway, and to ensure the whole of the SEStran area can benefit from job opportunities at and around the airport, surface access to the airport from around the whole SEStran area, especially by sustainable transport modes, requires improvement. A number of projects have recently been completed or are committed, including the Edinburgh Tram and Edinburgh Gateway station, and the Transport Infrastructure Study for West Edinburgh has identified the need for a package of road and bus priority improvements around the airport. These are supported.

5.2.7 The new Edinburgh Gateway station will allow national rail connectivity via the Edinburgh Tram. Train services between Edinburgh and Fife and further afield to Dundee, Aberdeen, Perth and Inverness will operate via the airport station. SEStran will seek to build on the opportunities afforded by this investment to develop the facility as a major public transport interchange. SEStran will also seek the construction of the Dalmeny Chord so that Train services from Glasgow, Alloa, Stirling and Dunblane are able to access the new station.

- 5.2.8 A key gap in connectivity is between the airport and Midlothian, East Lothian and the Borders. Through rail services to Edinburgh Park or the new Edinburgh Gateway station could improve this, together with an Outer Orbital Bus service. SEStran considers the improvement of public transport linkages on this corridor as a priority both to serve the airport and other major employment centres (see below and Chapter 8).
- 5.2.9 The Edinburgh Airport Surface Access Strategy 2012-2017 aims to further improve surface travel by sustainable modes to and from the airport, with a public transport mode share target of 35% by 2017. SEStran will continue to engage with Edinburgh Airport and local authorities to encourage further sustainable transport solutions for surface access to Edinburgh Airport to be promoted.

5.3 Rail links – Passengers

- 5.3.1 Transport Scotland has an ongoing programme of rail improvement schemes which are of particular relevance both within the SEStran area and to the area's links to the rest of Scotland and the UK. Schemes that have been completed include the Stirling – Alloa – Kincardine line and reopening of the Airdrie – Bathgate line. Work is currently in progress on the network of lines between Edinburgh and Glasgow (EGIP – Edinburgh and Glasgow Improvement Programme) to improve journey times, improve reliability and increase capacity. This includes electrification between Edinburgh and Glasgow, signalling improvements and station upgrades including capacity for longer trains. These improvements will significantly improve rail connections between Edinburgh and Glasgow and provide better rail options for many parts of the SEStran area.
- 5.3.2 SEStran would welcome further electrification of the network in the SEStran area and beyond under the Transport Scotland 100 single track-km per year electrification plan. This will include the lines to Alloa and Dunblane, Falkirk-Cumbernauld and the Shotts line under a rolling programme of electrification.
- 5.3.3 The Stirling – Alloa – Kincardine line is open for passenger services between Alloa and Stirling. SEStran wishes to see the line between Alloa and Rosyth also utilised for passenger services in the longer term. An initial feasibility study was carried out by SEStran in 2009/10 indicating that this could provide connectivity and economic benefits, and would merit more detailed consideration.
- 5.3.4 SEStran supports plans and proposals for:
- Reduced journey times between Edinburgh and Inverness, Aberdeen, Dundee and Perth, together with the further development of 'interchange' stations (subject to full consideration of stopping patterns on these routes);
 - Upgrading of Carstairs junction although SEStran would argue the case for a higher speed limit than the suggested 45 mph
 - Introduction of a semi fast service between Edinburgh and Newcastle.

- 5.3.5 High Speed Rail, Edinburgh – Glasgow, Edinburgh – London: In addition to planned improvements to the current lines, there are longer term proposals for high speed rail links between Scotland and London probably in phased approach and for early implementation between Edinburgh and Glasgow, which would also form part of the Scotland-London High Speed Line.
- 5.3.6 SEStran welcomes the UK Government announcement to construct High Speed Lines from London to Leeds and Manchester (with early extension as far as Crewe) and would strongly argue for either of these to form part of a High Speed Line to Scotland, either up the East or West Coast allowing London to Edinburgh journey times of under 3 hours. SEStran also considers that construction need not be sequential from south to north, but could start in the north or at a number of points simultaneously.
- 5.3.7 Within the SEStran area, rail is becoming an increasingly significant mode for local journeys, and is the best alternative to car use for longer distance commuter journeys. Between 2001 and 2011, the proportion of SEStran residents travelling to work by train increased by over 40%.
- 5.3.8 Growth and development in South East Scotland has led to the location of important areas of employment and housing in new locations, and resulted in a more dispersed pattern of travel demand. One obvious effect of this is the rapid growth in traffic levels on the Edinburgh outer city bypass. Given the substantial increase in population and households anticipated over the next 10 to 15 years this trend can be expected to increase. This issue is considered in more detail in Chapter 8.
- 5.3.9 To ensure that rail services provide good connectivity and an attractive option for the future, SEStran supports a number of key rail plans and proposals within the SEStran area:
- Further capacity enhancements in the Edinburgh suburban networks including as a priority the maintenance and development of 'Cross Rail' services across Edinburgh. SEStran considers this to be an essential component of tackling increasing demand for travel around the outer orbital corridor of the city (see Section 8.5 below).
 - Re-opening of the Levenmouth railway line to passenger and freight services (feasibility work has already been undertaken by SEStran);
 - Improved local rail services throughout the SEStran area with the provision of new stations at locations including Winchburgh, Bonnybridge, Cambus, Grangemouth, East Linton, Reston, Newburgh and/or Oudenaarde. Some of these will be dependent on demand and funding from new development.
- 5.3.10 The Borders Rail line opened for passenger service on 6 September 2015. This highly significant project provides new rail services to expanding areas of Midlothian and the central Borders, a step change in the quality of public transport in this corridor. SEStran supports measures to further reduce journey times, to provide competitive end to end journey times compared with car. SEStran wishes to see passenger services extended beyond Tweedbank to Carlisle in the longer term.

- 5.3.11 SEStran will also strongly argue for the linking of Borders railway with the Fife Circle service (or another appropriate service to the west/north of Edinburgh) as part of the 'Cross Rail' service highlighted above. This would continue and develop the service currently provided with the Fife circle linking with the service to Newcraighall.

5.4 Rail Gateways

- 5.4.1 Edinburgh's Waverley station is the busiest station in the SEStran area by a large margin, used by over 18 million passengers in 2012/13. Haymarket station is the next busiest with 4 million passengers. Major investment has gone into both of these stations in recent years, providing substantial improvements to accessibility and facilities for passengers.
- 5.4.2 Waverley Station Redevelopment: A major refurbishment of the SEStran area's key rail gateway has been completed. It has provided additional platform capacity, improved track layout and signalling and better facilities for passengers.
- 5.4.3 Haymarket Station Redevelopment: This involves the total redevelopment of the station including improved platform access and passenger facilities. The new station was opened by the Transport Minister Keith Brown in December 2013. The new main entrance also provides direct access to the tram line and local bus services.
- 5.4.4 SEStran welcomes these major projects which represent a significant investment in rail infrastructure in the SEStran area. SEStran will strive to see further enhancements to stations in the future, in particular ease of access to stations by other public transport modes, on foot and by bicycle.

5.5 Buses and Trams

- 5.5.1 Buses provide the backbone of the public transport system throughout the SEStran area. Policies and proposals relevant to the whole SEStran area are set out in the following Chapter. Two specific projects are however of strategic significance in terms of connectivity – the Edinburgh Tram, and the proposed orbital bus service.
- 5.5.2 The construction of the Edinburgh Tram from York Place to Edinburgh Airport is complete and services commenced on 31 May 2014. This provides a high quality, high capacity public transport service on the key western corridor of Edinburgh. SEStran supports the extension of the tram network within Edinburgh and beyond as part of an integrated public transport system that provides an attractive and effective alternative to car use throughout the SEStran area and can promote more sustainable development
- 5.5.3 For many journeys to key non-central employment locations, public transport does not provide a realistic alternative to car use. In addition to the 'Cross Rail' train service referred to in 5.3.9 above, a high quality orbital bus service linking these employment locations, Park and Ride sites and potentially the airport could improve the attractiveness of public transport for such journeys considerably. SEStran carried out a feasibility study for an Orbital Bus Rapid Transit route in 2010, and supports the further development of this concept as a priority.

5.5.4 A number of other public transport measures are discussed in the following chapter. Of particular note is the extension in 2014 of real-time passenger information systems beyond Edinburgh to cover the whole SEStran area and beyond into the SWestrans area. The extension was procured and managed by SEStran.

5.6 Road links

5.6.1 Roads are of course fundamental to connectivity for strategic and local journeys, for car users, buses and coaches and freight. SEStran supports the maintenance and development of strategic roads, not only those that are heavily used by commuters, but also those providing key economic links and connectivity. Efficient and safe movement of people and goods on these corridors is essential to the wider 'city region' aspirations for the area.

5.6.2 A number of important trunk road schemes have been completed in recent years that are of strategic significance to the SEStran area, including:

- A68 Dalkeith Northern Bypass
- A7 and A68 Improved Overtaking Opportunities: minor schemes providing better overtaking opportunities on single carriageway routes
- A876 Upper Forth Crossing at Kincardine (Clackmannanshire Bridge)
- Completion of M80, Stepps-Haggs: upgraded motorway link improving access between the west of SEStran and the Glasgow conurbation
- A8 Newhouse – Baillieston motorway upgrade: completes the M8 motorway between Edinburgh and Glasgow
- Various motorway junction improvements.

5.6.3 SEStran strongly supports further improvements to the A1 both north and south of the border as a key external link for both personal and freight traffic and to improve safety. Improvements north of the border should not be dependent on Department for Transport decisions south of the border.

5.6.4 Strategic corridors within the SEStran area are dealt with in more detail in Chapter 8. However, there are other links that are significant either to provide access to the strategic road network, or that have economic importance. Examples of these are:

- A91 Stirling – St Andrews;
- A801 Grangemouth – M8 (West Lothian);
- Kincardine links – A985, A977;
- Borders east – west, A72/A6091/A698/A6105.

5.6.5 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 travelled thus improving freight movement and as a result will have positive effects on the economy and environment.

- 5.6.6 The road network is a key asset and should be managed efficiently. In congested areas, this means ensuring that the space available carries as many people as possible, best achieved by allocating road space for efficient modes such as buses or other high-occupancy vehicles.
- 5.6.7 Additional road capacity to improve reliability on key economic links will therefore only be supported where it can be demonstrated that the 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. Design of new road capacity should allow priority for public transport and integral provision for cyclists and pedestrians.
- 5.6.8 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 and/or road safety problems, 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.
- 5.6.9 SEStran will engage with Transport Scotland, other RTPs and other stakeholders to ensure the continuing development of external links and key internal connectivity.

5.7 Forth Road Bridge and Queensferry Crossing

- 5.7.1 The crossing of the Forth is a key strategic link in Scotland's road network, and of key importance for connectivity to, from and within the SEStran area. Concerns about the resilience of the original Forth Road Bridge led to the decision in 2007 to build a replacement crossing, currently under construction and scheduled for completion in 2016.
- 5.7.2 The purpose of the new Queensferry Crossing is not to provide additional road capacity for general traffic across the Forth. Road networks on both sides of the river do not have the capacity to handle significant increases in cross-Forth movement and there will be a continuing need to prioritise and develop attractive and effective alternatives to car use for this traffic.
- 5.7.3 Following completion of the Queensferry Crossing, the existing bridge will therefore be reserved for the use of public transport, servicing and emergency vehicles. In exceptional circumstances such as maintenance and repair requirements, traffic may be diverted from the new crossing to the old. SEStran, in association with Transport Scotland, developed the basis for a Public Transport Strategy which will maximise the benefits of public transport in association with the new bridge.

5.7.4 The strategy includes:

- Halbeath Park and Choose
- Rosyth Park and Choose
- Hard Shoulder bus lanes on M90
- Improvements to Admiralty junction
- Hard Shoulder bus lanes on M9 approaching Newbridge
- Improvements to Newbridge
- New slips on M9 spur to B800
- Bus lanes on A8 westbound and A89 eastbound.

5.8 Freight Logistics

- 5.8.1 SEStran supports the development of a transport network which facilitates the efficient movement of goods. A working relationship with the freight sector has been established through the Freight Quality Partnership proposals discussed in Chapter 6. This provides 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 whisky products and the location of consolidation/distribution centres.
- 5.8.2 The promotion of modal shift of freight from road to rail and shipping is an objective of the National Transport Strategy Freight Action Plan. SEStran wishes to see further development of inter modal freight facilities/gateways in the SEStran area and will work through European partners and the Freight Quality Partnership to improve land-side access to these facilities. The rail freight gateways most relevant to the SEStran area currently are at Grangemouth, Mossend and Coatbridge, with the potential for further sites including Bathgate and Cameron Bridge (Fife).
- 5.8.3 SEStran supports the network wide enhancements for rail freight proposed by Transport Scotland, DfT and Network Rail, including upgrading the East coast main line to W12 loading gauge (including Edinburgh south suburban line).
- 5.8.4 SEStran also supports further electrification of the rail freight network, in particular the Grangemouth branch and the Edinburgh South Suburban line; and the reopening of the Levenmouth branch line.
- 5.8.5 SEStran will work with European partners to identify and implement improvements to the efficiency and sustainability of international freight movements to ensure the potential for economic growth in the SEStran area, and ultimately Scotland, is fully realized.
- 5.8.6 The development of a Grangemouth Freight gateway is also supported. This will include improvements to port facilities, rail and road access (including the construction of the Avon Gorge bridge on the A801 and improved junctions on the M9)

- 5.8.7 Through SEStran's involvement in the EU Dryport project, SEStran has identified that a Dryport in the Coatbridge area and a Distribution Centre in the Livingston/Bathgate area would improve the efficiency of freight movement and distribution within the SEStran area and Central Scotland

5.9 Gateways – The Firth of Forth ports

- 5.9.1 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. 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 working with European partners and the Regional Freight Quality Partnership SEStran will work with freight operators to ensure that multi modal landside access to these facilities is of the necessary quality.
- 5.9.2 Additional freight capacity on the Forth is identified in NPF3 as a National Development, as is the Grangemouth Investment Zone. SEStran therefore supports the proposals for a deep water container port at Rosyth, preferably with direct rail access to the portside. SEStran also supports the development of Rosyth as a ferry port and the continuation and further development of the existing European freight ferry service to Belgium. However, the role and development of direct intermodal train services from a Scottish rail hub to continental Europe should also be considered in this context.

5.10 Sustainable Gateways

- 5.10.1 Freight Gateways, whether ports, airports or multi-modal hubs have a significant environmental impact. SEStran is participating in the EU funded 'WEASTFLOWS' project, which aims to promote more sustainable logistics including the development of the concept of 'sustainable gateways' meeting specific criteria for environmental management. The Forth is Scotland's freight gateway to Europe as well as an environmentally sensitive area and SEStran therefore supports examining the contribution that a 'sustainable gateway' approach could make.

6.1 Introduction

- 6.1.1 This chapter identifies RTS measures which can be classed as 'region-wide' ie 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; walking and cycling; public transport – services, vehicles, fares, integration, information; mobility impaired; urban design; enforcement; and other measures.
- 6.1.2 In many cases these measures will link with national strategies. These include the National Transport Strategy¹, the National Planning Framework², Scottish Planning Policy³, national strategies for walking⁴ and cycling⁵, and design guidance for streets and place-making⁶.
- 6.1.3 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;
 - marshalling funding from third parties (eg from EU, Scottish Enterprise, SUSTRANS, and the private sector); and
 - funding local council implementation or implementing the measures itself.
- 6.1.4 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 the following types of action:

1 National Transport Strategy, Scottish Government, December 2006

2 NPF3, Scottish Government, July 2014

3 Scottish Planning Policy, Scottish Government, June 2014

4 Let's Get Scotland Walking: The National Walking Strategy, Scottish Government, June 2014

5 Cycling Action Plan For Scotland (CAPS), Transport Scotland, June 2013

6 Designing Streets: A Policy Statement for Scotland, Scottish Government, March 2010

1. **Influencing** – SEStran can seek the support, influence and persuade other partners, particularly where SEStran is not the funding body;
 2. **Guidance** – SEStran can provide guidance and advice to other partners tied in with funding provision to achieve consistency and best practice across the region;
 3. **Co-ordination** – the co-ordination of partners in the development and implementation of projects and initiatives is a potential role for SEStran; and
 4. **Direct Delivery** – this is the function that may require SEStran to take on additional statutory powers depending on the implementation powers required.
- 6.1.5 For each region-wide measure, an indication of how it will be taken forward, using the above typology is given. A separate RTS Delivery Plan will provide more information on SEStran’s role in the implementation of these measures.

6.2 Travel Behaviour – ‘Smarter Choices’⁷

- 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. In addition, all SEStran authorities follow government guidance⁸ and request travel plans from new developments, through the planning process. In the RTS, this intervention would see a 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 local authorities with travel planning 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. SEStran has provided a regional forum for the discussion of travel planning issues and knowledge sharing. [TYPE 3]

7 NTS paragraphs 157-162

8 Development Planning and Management – Transport Appraisal Guidance, Transport Scotland 2011

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

- 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 management standards (including travel plans) 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.
- 6.2.6 The role of SEStran in promoting development management and related travel plans, is in establishing and sharing best practice in the delivery of the relevant standards applicable to these actions.
- 6.2.7 **Action:** SEStran has published guidance on Sustainable Development and on Parking Standards and Parking Management. This guidance has been adopted by the SEStran Partnership and SEStran Local Authorities are encouraged to implement this guidance in their development management processes as part of the statutory planning process. This should be a **medium priority** for SEStran authorities. [TYPE 2]

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

- Contributes particularly to the Accessibility and Environment RTS objectives.

- 6.2.8 The regional car-share database is in place and is well used (www.tripsharesestran.com) and SEStran has developed tripshare schemes for all the constituent local authorities, health boards and a number of major employers. This will 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' and the Scottish Government's 'Smarter Choices, Smarter Places' Scheme and Demonstration Sites (with Falkirk being the only demonstration within the SEStran area). 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.
- 6.2.9 SEStran has been successful in attracting funding for two European car share projects, NweRIDE and CHUMS both of which seek to increase car occupancy, reduce car numbers and reduce energy use by reducing the behavioural and practical barriers to car sharing/ride sharing.
- 6.2.10 **Action:** continue SEStran's car-share scheme and engagement with European car sharing projects; 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. **Workplace travel plans and personalised travel assistance plans are a medium priority**. Workplace travel plans and personalised travel plan assistance are, by definition, local. They should, in the first instance, be delivered as part of the developments likely to take place in the SEStran area over the appropriate development plan periods. [TYPE 3]

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 through their Local Development Plans, development management services, and workplace and personal travel planning capabilities. This may need to include promoting the improvement of internet connectivity especially in more rural areas.
- 6.2.12 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. This could be developed to include promotion of electronic smarter working to enable employees to work from home or a local work hub.
- 6.2.13 **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 3]

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.

- 6.2.14 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.
- 6.2.15 **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. This activity will include supporting sustainable travel events and promotion of sustainable travel at “green” events. [TYPE 3/4]

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 the 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 as a multi operator ticket continues to be promoted as a **medium priority**. SEStran has recently taken over responsibility for the daily operation of OneTicket. 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 and in particular investigate the feasibility of introduction of electronic ticketing to One Ticket and the potential of a Scotland-wide smart ticketing system. SEStran will also seek the establishment of rail-tram integrated tickets through the proposed Edinburgh Gateway rail station serving the airport. [TYPE 3/4]

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, eg 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 1]

6.4 Freight

6.4.1 It is important that the needs of the freight sector are met across the SEStran area. This will 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 Freight Quality Partnership (FQP) will focus on the opportunities to improve the economic operation of freight services. The formation and implementation of the freight quality partnership is undertaken on a regional basis, and provides 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 lorry parking, environmental impacts, distribution centres, etc.
- 6.4.4 **Action:** SEStran will continue developing a Freight Quality Partnership⁹ at the regional level, as part of the RTS. Such a partnership supports agreed objectives and policies, and meets the requirements of the RTS guidance. This action is a **high priority** for SEStran. [TYPE 2]

Topic 9 – Environmentally sustainable freight movement

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

- 6.4.5 The examination of these measures will focus on the management of existing infrastructure or the provision of new facilities. The primary focus of proposed 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, Dryports, distribution and consolidation centres, would be considered in this context¹⁰.
- 6.4.6 SEStran will also examine the extent to which modal shift from road to rail or short sea shipping can reduce the volumes of road based freight passing through the region. This will include the promotion of more environmentally sustainable freight transport to England and wider Europe through the attraction of European funding support.
- 6.4.7 **Action:** the consideration of HGV facilities, routing issues and HGV signing will be undertaken through the FQP. Through various European projects SEStran has already identified the potential for a Dryport in the Coatbridge area and a Distribution centre near Livingston/Bathgate. A freight signing strategy has been developed along with freight route maps. In addition SEStran has published information on available rail freight routes linking the region to the rest of the UK. This is a **high priority** for SEStran, supplementing the measures outlined above. [TYPE3/4]

9 NTS Freight Action Plan paragraph Action 10

10 NTS Freight Action Plan paragraph Action 5

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.

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. Scottish Planning Policy¹¹ (SPP) 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. SPP 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. SEStran has developed proposed region wide parking standards to try and overcome these problems in the SEStran area and provide a consistency of approach across the region.

- 6.5.3 **Action:** A framework of suggested bands for maximum parking standards has been developed, depending on location, public transport accessibility and land-use, for all sizes of development and adopted by the SEStran Partnership. Local Authorities should take account of this framework in developing their own standards. This measure is promoted as a **medium priority**. [TYPE 2]

Topic 11 – Regional parking management policy, including decriminalised parking enforcement (DPE)

- 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 of on-street parking regulations out of the hands of the police and allows local authorities (or their contractors) to do it instead, giving them control over the extent of parking regulations and the level of enforcement..

- 6.5.5 In 2014, The City of Edinburgh and Fife Councils have DPE parking arrangements in place. For smaller local authorities, DPE may cost more to implement and run than it generates in revenue, which has serious consequences for these authorities in managing parking – not only in town centres but also in relation to reserved ‘Blue Badge’ parking and bus lanes (see Topic 11).

6.5.6 SEStran has developed a parking management strategy, adopted by the SEStran Partnership that gives general guidance to constituent authorities to manage parking to benefit residents, visitors and business users and to discourage commuter parking, in line with RTS policies. Also the potential viability of introducing DPE in the various consistent authorities has been examined. This last aspect will need to be reconsidered as Police Scotland withdrew the traffic warden service in February 2014.

6.5.7 **Action:** SEStran local authorities should take account of the SEStran parking management strategy in developing their Local Transport Strategies and implement DPE where appropriate. Local authorities should also consider a combined DPE management regime including the option of using SEStran as a facilitating body. **High priority.** [TYPE 2]

Topic 12 – Park and Ride/Share

- Contributes to a wide range of RTS objectives.

6.5.8 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.

6.5.9 SEStran has developed a Park and Ride Strategy (see Chapter 9) which promotes the shortest car element of the journey. The cost and time of travel are also taken into account. A dedicated web site has been established to recommend to travellers various park and ride sites related to their journeys.

6.5.10 **Action:** SEStran has established a regional park and ride strategy that has been adopted by the SEStran Partnership and the promotion of measures associated with the strategy is viewed as a **high priority**. Proposed new sites have been identified/appraised as part of this strategy to ensure a consistent, regional approach to Park and Ride. SEStran will also work with partners to tackle local problems that may arise from high parking demand around stations. [TYPE 3]

Topic 13 Development of new vehicle fuels including electric vehicles

- Contributes particularly to the Environment RTS objectives.

6.5.11 Over the last few years, the motor industry has invested significant resources to developing more fuel efficient vehicles and vehicles that run on alternative fuels and the Scottish Government and EU have provided grants for infrastructure and development. SEStran has been involved in encouraging the development of electric vehicles and the allocation of vehicle charging points. Car clubs may also provide scope for introduction of electric vehicles. SEStran will also encourage the development of biofuels, hydrogen and other non-polluting sustainable fuels through projects such as the EU commercialisation road map for fuel cell buses¹². Scottish Government targets for reduction of greenhouse gases from transport will not only require a degree of reduction of road traffic but also the need to shift to non-polluting fuels if the targets are to be met.

6.5.12 **Action:** SEStran will encourage the development and use of alternative fuels within the SEStran area as a **high priority**. [TYPE 1]

12 <http://www.fch-ju.eu/>

6.6 Safety

6.6.1 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 input to complement local AIP programmes and speed enforcement resources

- Contributes particularly to the Safety & Health RTS objective.

6.6.2 The consideration of safety is required in the RTS. Moving forward, SEStran will take a regional perspective on safety issues. Road Safety measures are currently being delivered by SEStran’s constituent local authorities.

6.6.3 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.

6.6.4 The most practical inclusion of safety in the RTS is achieved by policy, supporting the government’s road casualty reduction targets and the provision of region wide statistics.

6.6.5 **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 and monitoring of road safety in the SEStran area, 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.

6.6.6 This proposal builds upon a significant amount of work ongoing by local authorities, particularly in terms of access to schools. SEStran’s key role will fall to sharing 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.

6.6.7 **Action:** SEStran to share 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 **low priority** for SEStran in policy terms, in so far as significant work has already been undertaken. [TYPE 3]

6.7 Walking and Cycling¹³

6.7.1 The promotion of 'Active Travel' in the form of walking and cycling is central to meeting many RTS objectives. This can be achieved through a combination of measures, including better and safer facilities, appropriate urban design and 'Smarter Choices' policies. SEStran will work with appropriate agencies in support of the national walking¹⁴ and cycling¹⁵ strategies as well as supporting urban design principles that will encourage active travel (see 6.14). For cycling, a number of specific actions are proposed here.

6.7.2 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. The measures below will contribute to the national targets as set out in the Cycle Action Plan for Scotland.

Topic 16 – Urban cycle networks, including integration and parking

- Contributes particularly to the Environment and Health RTS objectives.

6.7.3 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. Transport Scotland has produced a Cycling Action Plan for Scotland with the aim of achieving a 10% cycling mode share throughout Scotland by 2020. 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 (eg cycle bridges). Also included here are facilities to enable cycling to integrate with other transport modes. SEStran has identified low cost measures to complete urban cycle routes adjacent to major transport flows to encourage modal change and is assisting by the partial funding of low cost measures.

6.7.4 **Action:** SEStran to support the development of urban cycle networks as identified in our study as a **high priority**. [TYPE 3/4]

Topic 17 – Regional Active Travel network, including integration and parking

- Contributes particularly to the Environment and Health RTS objectives.

6.7.5 An initiative is being undertaken with Sustrans to develop a plan to deliver a more comprehensive Active Travel Network for the SEStran Region. Sustrans are contributing funding for a member of staff to work within SEStran supporting the development of such a Network, focusing in particular at cross-boundary active travel throughout the SEStran area.

13 NTS paragraph 163-165

14 Let's Get Scotland Walking: The National Walking Strategy, Scottish Government 2014

15 Cycling Action Plan for Scotland 2013, Transport Scotland, June 2013

6.7.6 In addition, 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, especially bus and rail where there is a need for substantial improvement in provision.

6.7.7 **Action:** To work closely in partnership with Sustrans on the development of these networks. This should be supported as a **high priority**. [TYPE 3/4]

Topic 18 – Cycling infrastructure, best practice

- Contributes particularly to the Environment and Health RTS objectives.

6.7.8 SEStran has provided guidance in terms of the configuration and layout of cycling infrastructure. At present, the treatment of these issues can vary widely across the area. This work needs to be reviewed on a regular basis to ensure current best practice is being recognised.

6.7.9 **Action:** SEStran will review best practice on cycling infrastructure; local authorities should take this into account in developing their LTS. **Medium priority**. [TYPE 2]

6.8 Public Transport – Services

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

- Contributes to a wide range of RTS objectives.

6.8.1 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.

6.8.2 **Action:** As a **medium priority**, SEStran will help local authorities to review off-peak and supported services across the SEStran area and identify major 'gaps' in provision. [TYPE 1]

6.9 Public Transport Vehicles

6.9.1 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. SEStran has already studied the potential for the introduction of alternative fuels, the standard of vehicles, fares policy and the quality of bus infrastructure in the SEStran area to address the following topics.

Topic 20 –Alternative fuels for buses

- Contributes particularly to the Environment and Health RTS objectives.

- 6.9.2 By encouraging the take up of alternative fuels and alternatively fuelled vehicles in the public transport vehicle fleet, SEStran will contribute to its environmental objectives and to energy security.¹⁶ The SEA has underlined the importance of this measure with reference to the increasing number of buses in urban areas. The technology and economics of alternative fuels are changing rapidly and the options available will need to be kept under review.
- 6.9.3 Scottish Government has provided grant to bus operators to purchase more environmentally friendly vehicles and SEStran will support any applications made to this funding source.
- 6.9.4 **Action:** As a **medium priority**, SEStran will encourage bus operators to consider the introduction of alternative fuel buses by seeking grant from Scottish Government or any other source (Lothian Buses have already introduced Hybrid buses to their fleet) [TYPE 1]

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

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

- 6.9.5 New public transport vehicles are generally introduced 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 (eg 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. Statutory Quality Partnerships can also include undertakings by operators to provide vehicles to a minimum standard. Experience in recent years in a number of UK locations shows this can achieve significant increases in bus use.
- 6.9.6 **Action:** SEStran will seek to achieve an applicable minimum standard of vehicle across the area. Minimum standards should be encouraged 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 1]

6.10 Public Transport – Fares

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

¹⁶ It is recognised that major improvements have been made to diesel engine technology in recent years. Also NTS Bus Action Plan paragraph 1.17.

Topic 22 – Fares Measures: Costs of public transport fares¹⁷

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

6.10.2 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 routes – 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.

6.10.3 **Action:** SEStran has reviewed fares levels across the area in terms of value for money. In the longer term, SEStran will seek to address inequalities in public transport fares across the SEStran area as a **medium priority**. [TYPE 2]

6.11 Public Transport – Integration & Infrastructure

6.11.1 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.

6.11.2 Cities and regions in many European countries have enjoyed significant increases in public transport patronage over the last 10-15 years. Freiburg, Strasbourg, Basel and Stockholm are examples. 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. In the UK this type of integration is more difficult to achieve due to the regulatory environment. In spite of this, Edinburgh has seen increased public transport patronage over this period.

6.11.3 SEStran needs to work within the current framework to support practical measures that can overcome barriers to customer convenience in using the public transport system caused by lack of integration. The extension of the real time passenger information system – RTPI (see Topic 27) – from Edinburgh to the wider SEStran area in 2011-14 is an example, which also helps operators in keeping services operating to time. 'One-ticket' (see Topic 6) is another example of a scheme that promotes integration and ease of interchange between services.

6.11.4 **Action:** SEStran will seek to identify barriers to integration and work with appropriate stakeholders to overcome these as a **high priority**. [TYPE 1]

Topic 24 – Improved accessibility to major stops, stations and interchanges

- Contributes particularly to the Accessibility and Economy RTS objectives.

6.11.5 The RTS guidance highlights the need to provide improved pedestrian and cycle links as part of managing overall travel demand and ensuring accessibility for people with mobility impairments. Key destinations such as schools and public transport interchanges are a key focus. 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 by both able bodied and mobility impaired people. Action in SEStran will start with the most heavily used stops and stations, and work out from them to more lightly-used locations.

- 6.11.6 **Action:** it would be sensible to encourage upgrading 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 **high priority**. [TYPE 3]

Topic 25 – Improved infrastructure at bus stops

- Contributes particularly to the Accessibility and Safety RTS objectives.

- 6.11.7 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. SEStran carried out a review of bus stop infrastructure which included the condition of the bus stop and the information provided.

- 6.11.8 **Action:** SEStran has reviewed bus stop infrastructure on key regional public transport corridors. The promotion of minimum standards at bus stops is a **medium priority** for SEStran. [Type 3/2]

6.12 Public Transport – Information

- 6.12.1 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.

- 6.12.2 The level and quality of public transport information varies across the SEStran area. There is a need to implement a region-wide Public Transport Information Strategy. This sets standards for public transport information and defines best practice. The strategy also involved the production of a region-wide public transport map, in paper or web-based form. The development of smartphone and web-based journey planners also allows a multi-modal approach to travel information, including walking/cycling.

- 6.12.3 **Action:** As a **high priority**, SEStran to build on recent work to implement, where practical, the SEStran Bus Passenger Information Strategy. [TYPE 3]

Topic 27 – Real time passenger information (RTPI)

- RTPI contributes significantly to many of the RTS objectives and to the quality of the public transport experience.

- 6.12.4 RTS guidance, LTS guidance and the Scottish Government's road traffic stabilisation target require improvement to the quality of information available to travellers and potential travellers on public transport. Modern technology allows a step change improvement in this respect. Within the City of Edinburgh RTPI is already available at many bus stops, on the internet and from mobile phone applications. SEStran has marshalled EU and Scottish Government funding to extend the coverage of RTPI into the wider SEStran area, with 300 buses operating outside the city equipped by 2014.

- 6.12.5 There remains a need to extend the coverage further, with the ultimate aim of covering all bus services and vehicles operating in the SEStran area. Outside the City, the main focus is on providing web and mobile phone-based information, supplemented by displays at key nodes. The latter could include real-time bus arrival displays within public buildings, business premises and shopping centres.
- 6.12.6 **Action:** Continue to promote and seek funding for the implementation of RTPI using up to date technology. This is a **high priority** for SEStran, as RTPI offers considerable potential, is a proven technology and is already in place in some areas. A common regional approach covering bus and rail should be adopted, particularly in IT terms, to ensure that systems are inter-operable. [TYPE 3/4]¹⁸

6.13 Mobility Impaired

- 6.13.1 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.

- 6.13.2 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 could augment other public transport services and provide 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.
- 6.13.3 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. However initial study work has indicated that the various taxicard schemes operating in the SEStran area vary so significantly and that the local authorities were not prepared to consider the suggested changes, especially where additional costs would be incurred.
- 6.13.4 **Action:** SEStran has investigated the potential for a region-wide taxicard in terms of delivering the RTS objectives, and as part of the rural transport hierarchy described in Chapter 7. This is a **low priority** for SEStran to review previous work and ascertain its current relevance, [TYPE 1]

Topic 29 – Mobility impaired transport information services

- Contributes particularly to the Accessibility RTS objective.

6.13.5 The DDA¹⁹ 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 eg 'Review of Demand Responsive Transport in Scotland', highlights opportunities to link information provision to the more general provision of specialist transport services. Most of these issues are progressed through our Equalities Forum which has been responsible for the introduction of the Thistle Card in the SEStran area, which informs bus drivers of the customer's disability and the help they require.

6.13.6 **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 through our Equalities Group. 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 on a regional basis including bus RTPI. [TYPE 3/4]

6.14 Urban Design

6.14.1 Good urban design can encourage more walking and cycling by creating a more favourable environment for these forms of travel and reducing the need to use cars in urban areas to access all types of activity. This complements specific policies for and provision of walking and cycling infrastructure, reflected in the policies and actions set out elsewhere in this RTS, for example in section 6.7 above.

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

- Contributes particularly to the Environment and Health RTS objectives.

6.14.2 The RTS guidance, SPP and several SEStran local authorities include reference to urban layouts and streetscape supporting the promotion of sustainable travel. Street design also has a direct influence on issues such as climate change, public health, social justice, inclusivity and local and district economies²⁰. SEStran supports the principles set out in the Scottish Governments guidance 'Designing Streets' which in turn supports the overall urban design and place-making objectives of 'Creating Places'²¹.

19 Disability Discrimination Act

20 Designing Streets, Scottish Government, March 2010

21 Creating Places – A policy statement on architecture and place for Scotland, Scottish Government, June 2013

6.14.3 Each of the SEStran authorities has road and street 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. SEStran has established guidance for the delivery of sustainable settlements. In so doing, SEStran has been able to bring added value to the delivery of such schemes, without the need to rewrite existing local authority guidance.

6.14.4 **Action:** Best practice guidance has been produced, offering guidance on how best to consider transport provision in sustainable design. This guidance should be taken into account in the Strategic Development Plan for South East Scotland, and local authorities should also take account of it in developing their Local Transport Strategies and Local Development Plans. **High priority.** [TYPE 2]

6.15 Enforcement

Topic 31 – Bus lane compliance and enforcement²²

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

6.15.1 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. The issues discussed in relation to Topic 11 also apply here. Enforcement measures in Edinburgh have already been implemented.

6.15.2 **Action:** Initially this measure will be considered as a **medium priority** to encourage extending measures to all viable routes in Edinburgh, but may extend to specific routes in other council areas on a consistent basis as further bus lanes are introduced over time. [TYPE 2]

6.16 Other Area-Wide Measures

Topic 32 – Tourist signing strategy

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

6.16.1 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 (ie signs where none currently exist) but also on best street design practice. The delivery of the signing strategy will be undertaken on a regional basis.

6.16.2 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.

6.16.3 **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 2]

Topic 33 – Regional coordination of community and accessible transport services

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

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

6.16.5 **Action:** As a **medium priority** SEStran to promote the establishment of a regional coordination centre, and the development of demand responsive transport. This work will take cognisance of existing cross boundary co-ordination such as between Stirling, Clackmannanshire and Falkirk. [TYPE 1]

Topic 34 – A framework for regional standards for Intelligent Transport Systems (ITS) such as parking guidance, real time information

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

6.16.6 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.

6.16.7 **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**. [TYPE 2]

Topic 35 – Car club systems

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

6.16.8 Car Club schemes allow individual members to have convenient access to a car within their own community without the expense of owning and running a car, and can help corporate members to reduce fleet costs. In addition, car clubs provide an opportunity to introduce low or zero emission vehicles to individuals and corporate bodies. Local authorities can support such schemes through provision of parking spaces and charging infrastructure.

6.16.9 **Action:** As a **medium 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 1/2]

Topic 36 – Land Use Planning

- Contributes to all RTS objectives.

6.16.10 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. SEStran is involved in the development of the SESplan and TAYplan Strategic Development Plans and the various councils' Local Development Plans promoting sustainable travel.

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

Topic 37 – Facilities for Powered Two Wheelers (PTW)

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

6.16.12 Users of powered two wheelers (motor bikes, scooters etc) have specific requirements, including safety²³, 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.

6.16.13 **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 2]

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 specifically relevant to:
- 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 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, and these will be explored where appropriate.
- 7.1.3 As in Section 6, each action has been given a grading of low, medium or high priority and the most appropriate delivery mechanism identified using the categories listed in para 6.1.4 above.

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, Forth Valley Royal Hospital) and changes in the nature of the services provided at each hospital (eg 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.

Analysis

- 7.2.3 As part of the RTS, an 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 10 hospitals considered are Borders General; Dunfermline Queen Margaret; Kirkcaldy Victoria; Dundee Ninewells; Forth Valley Royal Hospital; Livingston St John's; Edinburgh Royal Infirmary (ERI); Edinburgh Western General; and Edinburgh Sick Children's.

Action

- 7.2.4 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, as a **high priority** [TYPE 3]:
- work with bus operators to explore the potential to adjust existing bus routes to serve some of these areas¹; work with hospitals to provide public transport journey plans along with all appointments;
 - 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;
 - identify methods of managing parking to ensure the most efficient use of parking space at hospitals and maximise the use of public transport;
 - 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.
- 7.2.5 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. An Access to Health Working Group has been formed bringing together SEStran, the Health Boards and other relevant stakeholders (eg bus operators, local authorities, community groups, community transport providers, health staff). This group allows all issues related to access to health care to be discussed. Neighbouring RTPs may also need to be involved where hospitals attract significant users from outside the SEStran area.

- 7.2.6 An agreed Action Plan was formulated based on current issues that could be readily addressed but further work is required, aided by detailed accessibility modelling work². This will identify gaps in public transport provision which will be used as a basis for discussions with the bus and transport operators. The Access to Healthcare Working Group will consider regional access to health issues as they emerge over time, and take forward and monitor the agreed Action Plan.
- 7.2.7 In November 2009 the Scottish Government published a Healthcare Transport Framework to assess how NHS Scotland was meeting its commitment to deliver more accessible services. A Short Life Working Group provided recommendations and a toolkit for partners to take forward a partnership approach to providing adequate healthcare transport. Through our Access to Health Working Group it is intended to draw together a “partnership” to develop these recommendations in the SEStran area. The recommendations focus on instigating structured partnership working to provide a more integrated approach to the provision of health and social care transport.

7.3 Access to Employment Opportunities

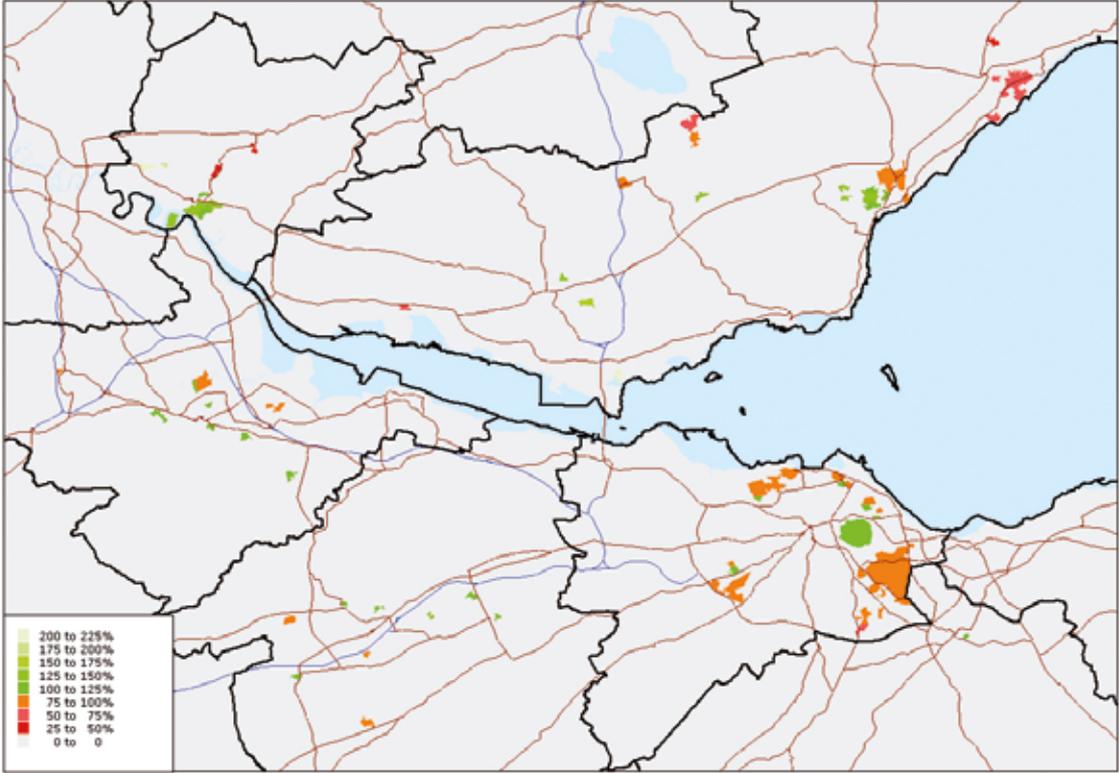
- 7.3.1 Poor public transport provision, in terms of accessing employment opportunities, is a significant contributor to social exclusion and deprivation, particularly for those without access to a car. If the range of employment opportunities is restricted, it affects people’s ability to (i) find work, 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 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 Index 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 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.

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

Figure 7.1 SIMD (2012) 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. This is monitored annually to ascertain changes in accessibility.

Action

7.3.7 The following actions have **high priority** [TYPE 3]:

- 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 areas³. 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.

7.3.8 Discussion with bus operators and other parties, mainly through our Bus Forum, will then take place with a view to altering existing bus routes, extending hours of operation, adding new bus routes or improving security 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. Initiatives for Specific Areas and Groups

- 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 eg 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, and a further option is the development of community car clubs. 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 a few services within the SEStran area which are open to all members of the general public.

Action

- 7.4.9 A thorough review of current Community Transport and DRT schemes operating in SEStran is necessary – **medium priority** [TYPE 3] – 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.

7.5 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, ie 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. Allied to this SEStran will be encouraging measures to reduce the need to travel by encouraging homeworking and the provision of localised facilities and remote work hubs 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;

7. Initiatives for Specific Areas and Groups

- 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, ie at the community level.

Table 7.1 Proposed Rural Transport Provision by Typology and Destination

Destination	Type of Area (see above)			
	1	2	3	4
Urban Area/Major Employment	Fixed route PT	Fixed route PT	Conventional PT with flexibility	Conventional PT with flexibility
	5	6	7	8
Accessible and Remote Small Towns (<10,000 population)	Fixed route PT	Conventional PT with flexibility	Community Transport/Taxi-bus	DRT/Taxi-bus
	Conventional PT with flexibility	Conventional PT with flexibility	Car Sharing/Lift-giving/Taxis/Sporadic PT provision ¹	Car Sharing/Lift-giving/Taxis/Sporadic PT provision
Key Service (hospital/higher education)	Taxis to PT corridors/Community Transport	DRT/Community Transport	Community Transport/Taxi-bus	DRT/Community Transport
	Taxis to PT corridors/Community Transport	DRT/Community Transport	Community Transport/Car Sharing/Lift-giving	Community Transport/Car Sharing/Lift-giving
Tourism/Leisure Travel	Fixed route PT	Fixed route PT	DRT/Taxi-bus	DRT/Taxi-bus
	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 (eg 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, eg post buses.

Action

7.5.8 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. **Medium priority** [TYPE 3]. The role of car clubs (see 6.16.8) should also be considered in providing a level of mobility without owning a car. This would move towards consistency of provision and equality of opportunity across the area. Linked to this is the promoting of electric vehicles and associated charging points. Car clubs are an excellent way to introduce drivers to the benefits of using electric vehicles.

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 with a realistic view of SEStran's capability to implement change.

7.6 Mobility impaired Travellers

- 7.6.1 Demand Responsive Transport (DRT) is clearly of particular relevance to mobility impaired travellers. SEStran recognises the need to improve the opportunities for travel by mobility impaired travellers, and this is reflected in the above measures. Other parts of the RTS are dealing with physical access, in terms of eg low floor buses etc, and the principles of the Equalities Act 2010 are embedded within the relevant RTS measures. Measures implemented in the RTS are also the subject of an Equalities Audit, see Appendix C.
- 7.6.2 SEStran's Equalities Forum has developed an Action Plan to identify issues which impact on mobility impaired people's ability to travel. SEStran will identify projects to take forward to address these issues. An example of the sort of project being promoted by this group is the introduction of Thistle Card which alerts bus drivers to the customer's disability and indicates the help required.

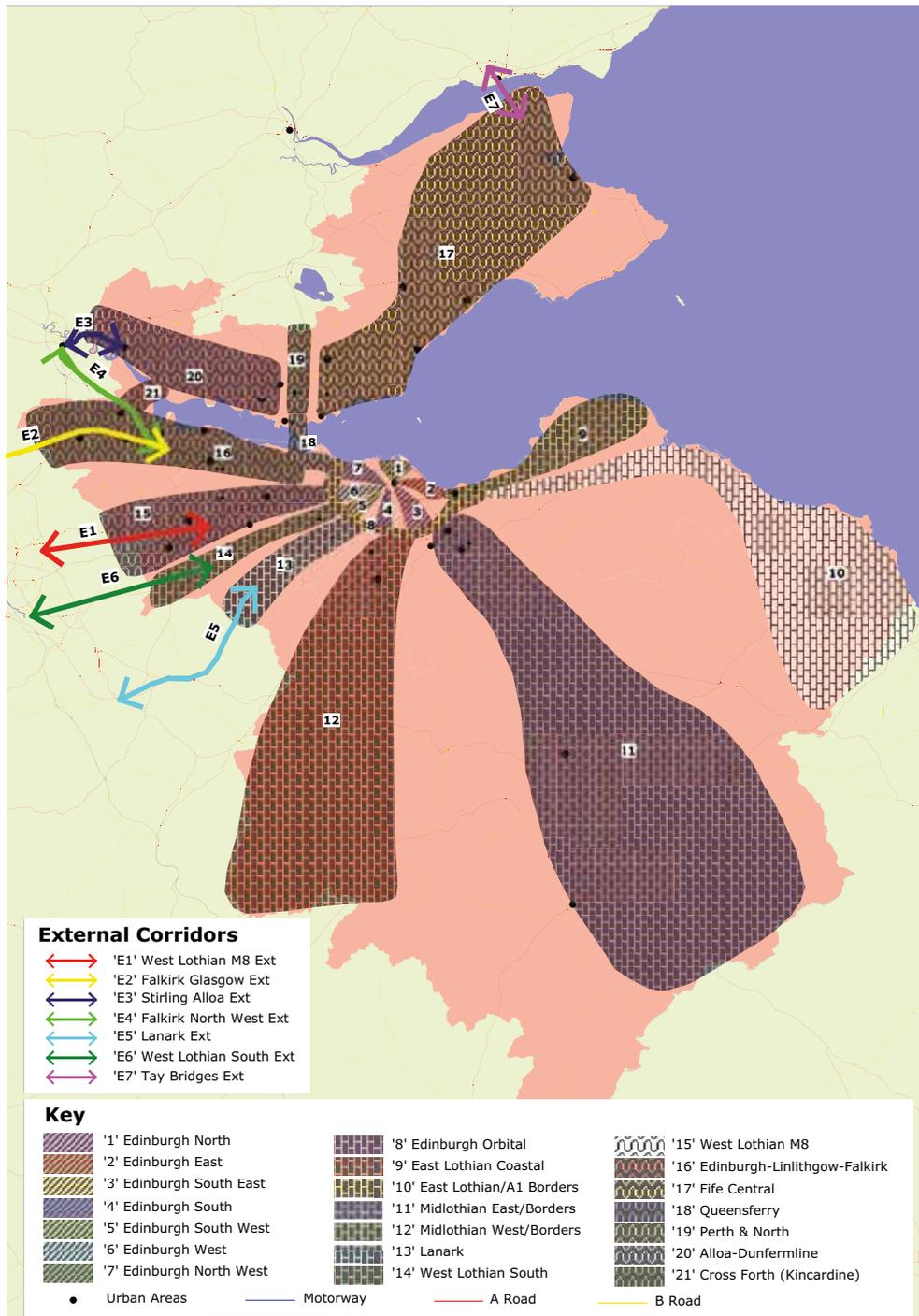
8. Regional Transport Corridors

8.1 Introduction

- 8.1.1 The third of the main RTS themes, 'Regional Transport Corridors', 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 employer's 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. This targeting is based on a quantified forecast of commuting demand, using current SESplan and TAYplan Strategic Development Plan (SDP) land-use allocations and demographic projections, and is aimed at encouraging and facilitating modal shift away from single occupancy cars.
- 8.1.3 Much of the analysis undertaken for the Regional Transport Strategy (RTS) and SDP used a defined set of 'corridors'. Figure 8.1 shows the extent of these RTS corridors. A more detailed description of each of the corridors is given in the Appendix.
- 8.1.4 Recent analysis of the transport modelling associated with the approved SESplan Strategic Development Plan including variations through the requirements associated with the Supplementary Guidance on housing allocations published in 2014 (SG), gives a good update on the travel implications of future development in the SEStran area. It does not, however, include forecasts of transport movements in the Edinburgh built-up area within the line of the Outer City Bypass (Corridors 1-7 in Figure 8.1). Issues in regard to this key area of transport demand are discussed further in para 8.2.9-12. It should also be noted that the SESplan area does not include Falkirk and Clackmannanshire Council areas, or the Northern part of the Fife Council area.
- 8.1.5 The remainder of this section describes the outputs and conclusions of the above modelling work. However, preparation is currently under way of the second SESPlan Strategic Development Plan (SDP2) which will update and roll forward the future housing requirements. This is expected to increase the long term land allocations required, especially within and adjacent to the urban area of Edinburgh which will inevitably put further pressure on the transport network. The preparation of SDP2 does not therefore invalidate the issues highlighted below, but is likely to further reinforce them.

8.1.6 In addition, a 'City Investment Plan' for the Edinburgh City Region has been developed as part of the Scottish Government's Agenda for Cities¹. This identifies a number of key strategic developments, with associated transport requirements which are likely to influence project priorities and funding for the future.

Figure 8.1 Regional Transport Corridors



1 <http://www.scottishcities.org/s/City-Investment-Plans-FINAL-vdng.pdf>

8.2 Transport Impacts of Strategic Development

SESplan area

- 8.2.1 At the SESplan level, the forecasts suggest that AM peak traffic levels in 2024 will be 26% higher than in 2007. This is the result of increases in forecast population, households and employment in the area (see Chapter 2), development in new locations leading to changes in travel patterns, and continuing trends in car ownership and usage. It should be noted that although general growth trends have slowed down in recent years and even reversed within Edinburgh, forecasts suggest that growth pressures, albeit at a lower rate, will resume with economic revival.
- 8.2.2 Given the congested state of the network in 2007, a 26% increase in AM traffic levels would be expected to have a significant impact on congestion, and indeed congestion (in terms of vehicle hours lost, (the time 'lost' when travelling in congested conditions compared to travelling at free-flow speeds)) is forecast to increase by 131% between 2007 and 2024.
- 8.2.3 For the original SESplan Strategic Development Plan predictions were made of the transport impacts in 2024 of the proposals, referred to as the 2024 (March 2012) Forecast. Following approval of the Plan in June 2012, a requirement for Supplementary Guidance was made by Scottish Government which identified a slight increase and redistribution of housing within the SESplan area. The changes in transport implications of these changes are included in the analysis described below. The change to the 2024 scenario through consideration of the Supplementary Guidance requirements does have some impact on traffic levels across the SESplan area, but this is small in magnitude compared to the overall changes in traffic and congestion that are forecast. Where traffic flows are forecast to change, the level of this change is typically less than 5% at the key locations. Detailed analysis of the 2024 scenarios is included in the Appendix.
- 8.2.4 The forecast increases in traffic levels and congestion of 26% and 131% respectively between 2007 and 2024 are caused by a predicted 22.3% increase in households being formed and forecast increase in population, combined with 'background' growth in traffic caused by changes to land use patterns and increases in prosperity bringing about higher levels of car ownership and a greater propensity to travel. If these demographic forecasts turn out to be less than forecast then the traffic and congestion increases will be less. Outside Edinburgh, the biggest increases in congestion are found in the A720, M8, Queensferry and A71 corridors.
- 8.2.5 Table 8.2 below summarises some of the issues highlighted by the forecasts. Note that this analysis remains a high level overview of network conditions at the SESplan level within the SEStran Regional Model.
- 8.2.6 The areas highlighted here as problematic will require more detailed consideration within the wider regional transport framework to establish the severity of these problems, to examine potential measures to mitigate them and to determine the priorities for whatever funding is available for transport investment . As such, this table should be seen as a way of highlighting some potential issues for further analysis.

- 8.2.7 In addition, SEStran is working with Transport Scotland and SESPlan to determine the cumulative, cross boundary impacts of travel between local authorities in the SESPlan area which results from the current SDP and associated Supplementary Guidance (approved in 2013). Furthermore this work is being undertaken in a way which would potentially lead on to the development of a contributions mechanism for transport infrastructure associated with new development. The latter will be a separate project and would not be led by Transport Scotland.
- 8.2.8 A range of transport interventions were identified in the RTS 2008-23, some of which have been implemented. The case for the remaining interventions is generally reinforced by the analysis in this RTS, and it is not evident that the case for any of the previous proposals has diminished or disappeared. Conversely, it is not considered that further specific interventions need to be added, although further analysis may identify alternative solutions to some of the issues raised in the Table below. It should be noted that inclusion of a scheme in Table 8.2, including those identified in the SDP Action Plan, does not imply the availability of funding or Scottish Government support.

Table 8.2 Summary of Transport Issues arising from SESplan forecasts

Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ('SDP': Identified in SDP Action Programme, Sept 2013)
8 – Edinburgh Outer Orbital	<p>Very poor overall level of service in the corridor</p> <p>A720 already operating at or near capacity in base year peak hours, significant further deterioration forecast</p> <p>Entire length of A720 between Old Craighall and M8 sees high levels of congestion</p> <p>Major junction delays at Old Craighall, Sheriffhall, Gilmerton, Dreghorn, including approach routes</p> <p>Very significant increase in delays forecast on eastern stretches of the A720 and associated junctions including Sheriffhall and Old Craighall</p>	<p>P&R outside bypass:</p> <p>Ingliston 1080sp</p> <p>Hermiston 495sp</p> <p>Straiton 600sp</p> <p>Newcraighall 600sp</p> <p>P&R inside bypass:</p> <p>Sherriffhall 560sp</p>	<p>'Cross Rail' rail services SDP</p> <p>Outer Orbital Bus service and infrastructure SDP</p> <p>Park and Ride at Lothianburn and Old Craighall</p> <p>Sherriffhall grade separation SDP</p> <p>Old Craighall junction improvements SDP</p> <p>M8/A720 Managed Motorway Study measures SDP</p> <p>Gogar (Edinburgh Gateway) rail interchange SDP</p> <p>Cross-boundary active travel measures</p>

8. Regional Transport Corridors

Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ("SDP": Identified in SDP Action Programme, Sept 2013)
9 – East Lothian Coastal	Reasonable overall level of service in the corridor Delays increasing at junctions on the A1 Old Craighall/Edinburgh Increasing congestion on A199 approaching and into Musselburgh and the junction to the east of the River Esk	N Berwick rail line. Stations at: N Berwick, Drem, Longniddry, Prestonpans, Wallyford, Musselburgh P&R: N Berwick stn 99sp Drem stn 78sp Longniddry stn 76sp Prestonpans stn 176sp Wallyford rail/bus 420sp Musselburgh stn 125sp Newcraighall stn 600sp	Musselburgh QBC Bankton P&R Station at East Linton SDP Additional station parking, especially outer stations Expansion of P&R sites Improved pedestrian and cycle access at Dunbar
10 – East Lothian central	Reasonable overall level of service in the corridor Delays increasing at junctions on the A1 Old Craighall/Edinburgh Delays on A1 from A199 junction eastbound in AM peak, approaching capacity west of Old Craighall	Dunbar ECML/N Berwick line. Stations at Dunbar, Drem, Longniddry, Prestonpans, Wallyford, Musselburgh P&R: Dunbar stn 89sp Drem stn 78sp Longniddry stn 76sp Prestonpans stn 176sp Wallyford rail/bus 420sp Musselburgh stn 125sp Newcraighall stn 600sp	Edinburgh-Berwick-upon-Tweed local rail service SDP Stations at East Linton and Reston SDP Additional station parking, especially outer stations Bankton P&R Old Craighall and Bankton junction improvements SDP A1 dualling and improvement SDP



Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ('SDP': Identified in SDP Action Programme, Sept 2013)
11 – Midlothian & Borders East	<p>Moderate overall level of service in the corridor</p> <p>Significant additional delays on A68, A7, A768, B704 approaches to Edinburgh</p> <p>Associated localised junction issues</p> <p>Some increase in delay on A699 (Selkirk – Kelso)</p> <p>A6091 and routes through Galashiels see an increase in delay</p>	<p>Borders rail line (from 2015).</p> <p>Stations at Tweedbank, Galashiels, Stow, Gorebridge, Newtongrange, Eskbank, Shawfair</p> <p>P&R:</p> <p>Sherriffhall (bus) 560sp</p> <p>Tweedbank stn 240sp</p> <p>Stow stn 28sp</p> <p>Gorebridge stn 73sp</p> <p>Newtongrange stn 55sp</p> <p>Eskbank stn 159sp</p>	<p>Park and Ride N of A68/A720 junction SDP</p> <p>Sherriffhall bus priority SDP</p> <p>Sherriffhall grade separation SDP</p> <p>Potential station at Redheugh on Borders Line SDP</p> <p>A7/A68 bus priority schemes SDP</p> <p>Tram line 3 to Dalkeith SDP</p> <p>Improvements to key routes (A7, A68, A697, A698, A699, A6105) SDP</p> <p>Improved pedestrian and cycle access to Midlothian and Scottish Borders stations</p> <p>Cross-boundary active travel measures</p>
12 – Midlothian & Borders West	<p>Moderate overall level of service in the corridor</p> <p>Increasing junction delays along A701 and especially at A701/A720 junctions</p> <p>Significant additional delay on A702 from Penicuik junction approaching Lothianburn and around the A702/A720 junction</p> <p>Mauricewood Road/A702 delays</p>	<p>P&R:</p> <p>Straiton (Bus) 600sp</p>	<p>Lothianburn P&R SDP</p> <p>A701 corridor proposals SDP</p> <p>Tram line 3 to Penicuik</p> <p>Improvements to key routes (A72, A701, A702, A703) SDP</p> <p>Cross-boundary active travel measures</p>
13 – West Lothian – Pentlands (inc Currie/Balerno)	<p>Reasonable overall level of service in the corridor</p> <p>Major increase in delays along A70 approaches to Edinburgh and junctions in Currie</p> <p>Poor access to A720 and to W Edinburgh area</p>	<p>Glasgow via Shotts rail line. Stations at Kirknewton, Curriehill</p> <p>P&R:</p> <p>Hermiston (bus) 495sp</p> <p>Curriehill stn 40sp</p> <p>Kirknewton stn 30sp</p>	<p>Currie/Balerno QBC</p>

8. Regional Transport Corridors

Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ("SDP": Identified in SDP Action Programme, Sept 2013)
14 – West Lothian – Calder	<p>Poor overall level of service in the corridor</p> <p>Increase in delays along A71 approaches to Edinburgh – junctions already at capacity Livingston-A720</p> <p>Increasing A71 junction delays W of Livingston</p> <p>Growth in congestion around Hermiston Gait and Calder Road junction</p>	<p>Ed-Gl via Shotts rail line. Stations at Fauldhouse, Breich, Addiewell, West Calder, Livingston S, Kirknewton</p> <p>P&R:</p> <p>Hermiston (bus) 495sp</p> <p>Kirknewton stn 30sp</p> <p>Livingston S stn 120sp</p> <p>West Calder stn 27sp</p>	<p>A71 Bus priority measures W of A720</p> <p>Additional parking at W Calder and Kirknewton stations SDP</p> <p>Improved pedestrian access at Addiewell and W Calder stations</p> <p>Cross-boundary active travel measures</p>



Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ('SDP': Identified in SDP Action Programme, Sept 2013)
15 – West Lothian Central	<p>Poor overall level of service in the corridor</p> <p>Generally high levels of congestion in base year in this area, forecast to deteriorate further</p> <p>Significant deterioration of level of service on M8</p> <p>Increased delays at junctions in Bathgate, Broxburn, Livingston, Whitburn and Blackburn</p> <p>AQMA in Broxburn</p> <p>A899 (Livingston spine), A71 and A89 all see increased delays</p> <p>Increased delays on A801 and A7066</p> <p>Increased delays on A8, Gogar, Edinburgh Park area</p> <p>Widespread and significant additional congestion across the modelled area of west Edinburgh</p>	<p>Ed-GI via Bathgate rail line. Stations at: Blackridge, Armadale, Bathgate, Livingston N, Uphall</p> <p>P&R: Ingliston (bus/tram) 1080sp</p> <p>Hermiston (bus) 495sp Armadale stn 187sp Bathgate stn 560sp Livingston N stn 270sp Uphall stn 282sp [Bathgate line stations not surveyed since Bathgate-Airdrie reopening]</p>	<p>Hub and spoke bus services in Livingston</p> <p>Bus improvements Livingston N station to employment locations</p> <p>Livingston bus priority measures</p> <p>Increased car parking at Uphall and Bathgate stations</p> <p>New bus P&R sites (Heartlands, Winchburgh, Beugh Burn, East Broxburn, Linlithgow) SDP</p> <p>A8 Newbridge-Gogar bus priority</p> <p>M8 hard shoulder bus lane SDP</p> <p>M8/A720 Managed Motorway Study measures</p> <p>Airport road links impts SDP</p> <p>A89 corridor bus priority and service impts</p> <p>Cross-boundary active travel measures</p> <p>A801 Avon Gorge improvements SDP</p> <p>West Edinburgh tram extension SDP</p>

8. Regional Transport Corridors

Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ("SDP": Identified in SDP Action Programme, Sept 2013)
16 – West Lothian – Forth – Falkirk	<p>Poor overall level of service in the corridor</p> <p>Substantial forecast increase in congestion</p> <p>General deterioration in level of service on M9/A904</p> <p>Significant capacity issues in and approaching west Edinburgh area significant</p> <p>Delays appearing through Kirkliston</p> <p>Increased junction delays in Linlithgow and at B8046/A904 junction</p>	<p>Ed-Gl via Falkirk High rail line. Stations at: Falkirk High, Polmont, Linlithgow.</p> <p>Stirling-Ed line. Stations at Larbert, Camelon, Falkirk Grahamston, Polmont, Linlithgow, Edinburgh Park</p> <p>P&R:</p> <p>Ingliston (bus/tram) 1080sp</p> <p>Falkirk High stn 282sp</p> <p>Polmont stn 188sp</p> <p>Linlithgow stn 189sp</p> <p>Falkirk Grahamston stn 380sp</p> <p>Larbert stn 324sp</p>	<p>Improved bus links to stations from Bo'ness, Grangemouth</p> <p>Additional car parking at Falkirk High</p> <p>M9 bus lane Linlithgow-Newbridge SDP</p> <p>Bus Park and Ride at Winchburgh</p> <p>New Winchburgh station inc car parking SDP</p> <p>M9 junction Winchburgh SDP</p> <p>M9 J3 Linlithgow W west facing slips SDP</p> <p>Forth crossing public transport package</p>



Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ('SDP': Identified in SDP Action Programme, Sept 2013)
17 – Mid Fife	<p>Moderate overall level of service in the corridor</p> <p>General deterioration of level of service on A92 west of A910 (Kirkcaldy)</p> <p>Increased delays on A92 through Glenrothes</p> <p>Increased delays in Redhouse roundabout area causing knock on delays on B981 in Kirkcaldy</p> <p>Increase in delay on A921 approaching Dalgety Bay/ Inverkeithing</p> <p>Cross Forth road and rail capacity issues</p> <p>Increased delays on A915 between Leven and Kirkcaldy</p> <p>Delays at A915/A916/A911 junction</p> <p>Delays on A915 east of Leven</p>	<p>Tay Bridge-Ed and Fife Circle rail lines. Stations at: Leuchars, Cupar, Springfield, Ladybank, Markinch, Glenrothes with Thornton, Cardenden, Lochgelly, Cowdenbeath, Kirkcaldy, Kinghorn, Burntisland, Aberdour, Dalgety Bay, Dunfermline QM, Dunfermline Town, Rosyth, Inverkeithing, N Queensferry.</p> <p>P&R:</p> <p>Halbeath (bus) 1000sp new</p> <p>Ferrytoll (bus) 1040sp</p> <p>Leuchars stn 159sp</p> <p>Cupar stn 70sp</p> <p>Markinch stn 148sp</p> <p>Glenrothes with Thornton stn 48sp</p> <p>Lochgelly</p> <p>Cowdenbeath nr stn 138sp</p> <p>Dunfermline QM stn 86sp</p> <p>Dunfermline Town stn 265sp</p> <p>Rosyth stn 135sp 65%</p> <p>Kirkcaldy stn 633sp</p> <p>Burntisland</p> <p>Aberdour stn 94sp</p> <p>Dalgety Bay stn 198sp</p> <p>Inverkeithing stn 425sp</p>	<p>A92 express buses plus bus priority in Dunfermline, Kirkcaldy, Glenrothes including network of PT hubs</p> <p>New stations at Kirkcaldy E, Newburgh, Wormit SDP</p> <p>Levenmouth line reopening with revised Fife circle services SDP</p> <p>Increased car parking at Leuchars station</p> <p>A92 Redhouse Interchange impts SDP</p> <p>A92 junction improvements at Bankhead, Preston SDP</p> <p>Dunfermline N Relief Road and BRT corridor SDP</p> <p>Dunfermline W Distributor Rd</p> <p>Dunfermline Junction improvements</p> <p>St Andrews Transport link</p> <p>St Andrews Outer Relief Rd</p> <p>Levenmouth Link road</p> <p>Halbeath Link road, Dunfermline</p> <p>Cupar Northern relief road</p> <p>A92 improvements</p> <p>Glenrothes – Tay Bridge</p> <p>Tay Bridgehead Park and Ride</p>

8. Regional Transport Corridors

Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ("SDP": Identified in SDP Action Programme, Sept 2013)
18 – Queensferry	<p>Moderate overall level of service in the corridor</p> <p>Significant delays on M9 spur</p> <p>Significant capacity limitations at Barnton junction</p> <p>Delays around A904/A90 junction</p> <p>Air pollution problems at Newton</p>	<p>Tay Bridge-Ed and Fife Circle rail lines.</p> <p>Stations at: Dunfermline QM, Rosyth, Inverkeithing, N Queensferry</p> <p>P&R:</p> <p>Halbeath (bus) 1000sp new</p> <p>Ferrytoll (bus) 1040sp</p> <p>Dunfermline QM stn 86sp</p> <p>Rosyth stn 135sp</p> <p>Inverkeithing stn 425sp</p> <p>New Queensferry crossing (no additional traffic capacity)</p>	<p>Cross Forth ferry SDP</p> <p>Expanded Park & Ride at Inverkeithing, Dalgety Bay stations, Rosyth SDP</p> <p>Dunfermline-Inverkeithing/ Dunfermline – Halbeath Bus Priority measures SDP</p> <p>Forth crossing public transport package</p> <p>Signalisation Pitreavie roundabout SDP</p> <p>A90 Northbound bus priority</p> <p>SITCoS bus priority network completion SDP</p> <p>Rosyth port rail link (freight)</p>
19 – M90	<p>Moderate overall level of service in the corridor</p> <p>Substantial increases in congestion forecast</p> <p>Increased congestion on southbound approaches to Forth on M90</p>	<p>Cross-Forth rail services.</p> <p>Stations at: Dunfermline QM, Inverkeithing, N Queensferry</p> <p>P&R:</p> <p>Halbeath (bus) 1000sp new</p> <p>Ferrytoll (bus) 1040sp</p> <p>Dunfermline QM stn 86sp</p> <p>Inverkeithing stn 425sp</p>	<p>Forth crossing public transport package</p> <p>Inverkeithing to Halbeath rail link including rail halt at Halbeath Park & Ride SDP</p>



Corridor (numbering as in Fig 8.1)	Forecast Road Transport issues 2007-24 (AM Peak)	Existing key infrastructure (P&R sites in bold generally close to full utilisation currently)	Possible improvement schemes ('SDP': Identified in SDP Action Programme, Sept 2013)
20 – Stirling Alloa Dunfermline	Poor overall level of service in the corridor Increase in junction delays and level of service in and around Dunfermline – especially north-west Dunfermline Increasing delays on A985 and A907	Alloa- Stirling – Glasgow line. Station at Alloa Dunfermline services on Fife circle line. Stations at Dunfermline QM, Dunfermline Town, Rosyth, Inverkeithing, N Queensferry P&R: Halbeath (bus) 1000sp new Ferrytoll (bus) 1040sp Alloa stn 65sp Dunfermline QM stn 86sp Dunfermline Town stn 265sp Rosyth stn 135sp Inverkeithing stn 425sp	West Fife QBC New station at Dunfermline West SDP New station at Cambus Extend Glasgow-Alloa trains to Dunfermline and Edinburgh Charleston rail chord Rosyth port rail chord Rosyth Bypass SDP
21 – Kincardine	Reasonable overall level of service in the corridor Pressure grows on junctions north of Kincardine Bridge	New Clackmannanshire Bridge	Minor adjustments to new road layouts

8.3 Edinburgh

- 8.3.1 Within Edinburgh, a strategic transport appraisal of the impact of new development within the City up to 2024 has been carried out for the City of Edinburgh Council. The Approved SDP requires the Council's Local Development Plan (LDP) to identify land for 3,000 houses in West Edinburgh and South East Edinburgh. The appraisal sets out the possible transport impacts the additional housing sites would have and the transport interventions needed to help mitigate any impacts additional to those resulting from previous local plans.
- 8.3.2 Very limited 'underlying' traffic growth is predicted within the City; most growth is anticipated to be the result of new development. However, taking account of transport interventions reasonably expected to be completed, traffic levels on some corridors within the City could increase by up to 30% by 2024. This does not allow for any additional pressure resulting from developments taking place outside the City.

- 8.3.3 Even with further interventions to mitigate the impacts of development, a number of key corridors are predicted to see significant traffic growth:
- Corridor 6 West Edinburgh – A8 Glasgow Road
 - Corridor 3 South East Edinburgh – A701 Liberton Road
 - Corridor 3 South East Edinburgh – A722 Gilmerton Road
- 8.3.4 The proposed developments also have an impact on the Outer City Bypass: this is included in the forecasts for the SESplan area described above.
- 8.3.5 The Council proposes a number of improvement measures on key corridors. However, the core of the Council's strategy for tackling these issues together with the wider vision for transport in the City is founded on promoting Active and Sustainable Travel. This is consistent with the Objectives and Policies of this RTS.
- 8.3.6 The City Investment Plan² developed as part of the Agenda for Cities sets out a number of key strategic developments: City Centre Public Realm; St Andrew Square and Register Lanes; St James Quarter; Fountainbridge; South East Edinburgh Regeneration; Waterfront Connectivity; Edinburgh International (West Edinburgh); Multi-Use Venue; Meadowbank. Several of these have significant transport implications. The Plan may therefore provide an opportunity for investment in some of the key projects identified in this RTS including tram extensions, public realm improvements benefitting pedestrians, city bypass improvements, West Edinburgh transport, and potentially some region-wide measures.

8.4 Outside SESplan

- 8.4.1 The northern part of the SEStran area lies within the TAYplan Strategic Development Plan area. The approved Strategic Development Plan includes projects to encourage sustainability and increased use of public transport. The projects include south of Tay park and ride sites, rail enhancements and local road additions related to proposed development. In general the proposed developments have localised impacts that do not impact significantly on the SEStran strategic transport network.
- 8.4.2 In the South West, SEStran has worked with SWestrans in providing comprehensive real time information.

8.5 Conclusion

- 8.5.1 The foregoing paragraphs give a comprehensive overview of the areas where it is anticipated there will be potential transport issues arising from proposed development. It also indicates potential improvement schemes that would go some way to mitigate the anticipated problems in each corridor. SEStran supports these improvement proposals subject to detailed evaluation and assessment but it is recognised that the projects are at various stages of development or assessment and uncommitted schemes are not yet supported by the Scottish Ministers. The details of these and other schemes included in this RTS will be outlined in a refreshed SEStran Delivery Plan.
- 8.5.2 It is notable that the most obvious network capacity problems are associated with the city bypass and its various junctions. The problems of the bypass need to be tackled through a multi-faceted approach – resolving the problems at one junction on its own will inevitably place greater pressure on the other junctions on the bypass and the associated link roads which are also already congested. SEStran supports an integrated approach to managing congestion on the A720 Edinburgh City Bypass that incorporates all the following:
- Encouraging the use of public transport through the provision of good quality public transport services and infrastructure – in particular:
 - a) measures based on the Orbital BRT proposals;
 - b) the maintenance and development of ‘Cross Rail’ services through Edinburgh.
 - Provision of additional Park and Ride;
 - The removal of obvious bottlenecks such as Sheriffhall through measures which are compatible with the capacity of the surrounding network and which also prioritise public transport, and
 - The use of up to date technology to maximise traffic flow and support bus priority.
- 8.5.3 The other corridors which are under considerable pressure are those coming in from the west, including the Queensferry corridor. Significant investment has taken place in the rail network in this corridor, with the introduction new and improved services. The maximisation of the benefits of these new services should be pursued with the provision of new stations along with improvements to station park and ride provision.
- 8.5.4 The potential of express bus services should be encouraged with increased bus priority on the motorway approaches to the west of Edinburgh and building on the benefits of the Forth Road Bridge being dedicated to bus services, on completion of the new road bridge. The tram route from Edinburgh airport gives a significant improvement of services from the west of Edinburgh into the city centre and to the employment centres of the Gyle and Sighthill. The development of a comprehensive tram network is seen as a major benefit to people travelling within the city and encouraging those coming into the city to use public transport for at least part of their journey.

8. Regional Transport Corridors

- 8.5.5 The analysis also indicates that there is pressure on the road network within most of the large towns within the SEStran area mainly through new development. The main challenge here is to ensure that new developments are sustainable and residents are able to travel without having to use a car. We are working with SESplan in identifying the most accessible and sustainable sites for new development.
- 8.5.6 The network analysis tends to focus on road network capacity. However, rail and bus networks are a key part of the solution to these issues and capacities for these modes are also of critical importance. SEStran will work closely with rail and bus industries, for example through the Rail and Bus forums.
- 8.5.7 For shorter journeys, Active Travel modes are crucial and should be promoted through design and implementation of all new development and transport interventions following the principles of 'Designing Streets'³.

9.1 Introduction

- 9.1.1 The previous version of the Regional Transport Strategy, through its associated Action Plan, identified where detailed strategies were required to provide the detail requirements for implementation. The following documents have been produced and approved by the SEStran Board and should be considered as part of the Regional Transport Strategy.
- 9.1.2 Also as part of the Strategy Development various detailed studies have been carried out to assess the viability of projects identified in the RTS. The results and recommendations of these studies have been reported and approved by the SEStran Board and define SEStran's position on promoting these projects.
- 9.1.3 It is recognised however that some conclusions of some of the studies may have been superseded due to changing circumstances or other developments. A particular example is the Edinburgh – Berwick upon Tweed local rail service (9.3.8/9 below) which was included in the Scotrail refranchising process: as a result, a two-hourly service will run on this route from 2016.

9.2 Bus

SEStran Bus Information Strategy

- 9.2.1 The information strategy for SEStran was developed from a review of acknowledged Best Practice, a review of existing information provision, research among the public and bus operators, consultation with stakeholders and the body of expertise existing within consultant and client teams.
- 9.2.2 The information strategy is set out under a number of headings generally corresponding with various types of information media, or methods of delivery, as follows:
- Timetable Leaflets and Travel Guides
 - Information at Bus Stops
 - Telephone Information
 - Maps of Bus Services
 - Websites – Traveline and Transport Direct
 - Websites – Provided by SESTRAN and/or Councils
 - Information via Mobile Devices
 - Real Time Information (RTI)
 - Information on Buses
 - Notifying Changes in Service
 - Distribution Points

Bus Initiatives Issue 1 – Alternative Fuels

- 9.2.3 Historically fuel research has been focused towards fossil based solutions with an aim to reduce tailpipe emissions locally and in particular Particulate Matter (PM) emitted from diesel engines. Over recent history, we have seen significant legislation introduced that has reduced emissions across the fuelling spectrum, and it can now be argued that diesel vehicles with after treatment are approximately as clean as alternative fuels, especially if the vehicle adheres to EEV regulations.
- 9.2.4 With this background in mind, renewable alternative fuels, electricity derived fuels and vehicle technology in forms such as hybridisation were compared, to understand what effects they would have on a market increasingly focused on sustainability.
- 9.2.5 The results suggest that the short to medium term strategy should be focused on hybridisation of the fleet, increased renewal rate of buses to remove those that do not meet the Euro III specifications, and retrofitting of Euro III buses where after treatment is not to the highest specification.
- 9.2.6 In the long term it is recommended that there is an investigation into using electricity as an alternative fuel through the uptake of a trolley bus network (possibly hybridised) on high density routes linked to the tram network.

Bus Initiatives Issue 2 – Bus Quality Strategy

- 9.2.7 The SEStran area is served by three major bus operators and several smaller but significant independent operators. The three major operators in the SEStran area run just under 1,500 vehicles and this comprises a wide range of types, ages and configurations.
- 9.2.8 The bus manufacturing industry has shortened the life spans of its vehicles in recent years, partly due to the need to meet legislative requirements but also to reflect changing tastes.
- 9.2.9 The aim of the study was to achieve a tiered set of standards applicable by route type developing over time to reflect emerging issues and aspirational standards for high quality public transport corridors.

Bus Initiatives Issue 3 – Value for Money (fares)

- 9.2.10 In order to evaluate value for money we undertook a mystery shopper survey of 243 journeys on a sample of routes by area, operator and distance. Journeys were rated against 32 criteria covering the total travel experience including waiting environment, vehicle presentation, information and driver standards.
- 9.2.11 The outcomes of this analysis highlights variances in the quality standard delivered. Transport law enshrines clear responsibilities for local authorities and bus operators in delivery of the bus services. Recommendations as to address poor value for money are covered in this report.

Bus Initiatives Issue 4 – Bus Stop Infrastructure

9.2.12 Bus Stop Infrastructure is generally the responsibility of local authorities, though bus operators have (or should have) an interest in the provision of information about the services using it. Stop infrastructure is rightly identified in the RTS as a key influencer on the decision to travel.

9.2.13 Research into Quality Bus Partnerships has confirmed that investment in bus stop signage and facilities has one of the highest paybacks in terms of additional patronage generated as a result of the investment made.

SEStran Clackmannanshire Bus Study

9.2.14 The Stirling – Alloa corridor is currently the subject of significant capital investment with the reopening of the Stirling – Alloa – Kincardine rail line. This has seen the resumption of direct rail passenger service between Alloa – Stirling – Glasgow, with good connection at Stirling and Larbert for onward travel to Edinburgh, although there are now a few direct services to Edinburgh.

9.2.15 An important element of the success of the new rail service is seen to be the integration between bus and rail in Alloa. A study was carried out to investigate how to improve access to Alloa and the rail network by bus, including what impact such changes or additions may have, and on the level of financial support that may be required.

9.2.16 This study, therefore, assesses the potential for linking local bus services with rail at the new Alloa station. It assesses what impact this may have on the bus network and existing passengers as well as what level of patronage is likely to interchange between bus and rail at Alloa.

9.2.17 Additionally, the study investigates the potential alterations to the management of the road network and the provision of bus infrastructure and facilities in Alloa town centre, to allow better integration between bus and rail and to improve access to the town centre by bus.

Edinburgh Orbital bus Project

9.2.18 The Edinburgh Orbital Bus Project (EOBP) was conceived as an important measure to link a number of key transport interchanges and employment areas in the vicinity of Edinburgh, thereby addressing two key issues in the SEStran Regional Transport Strategy (RTS):

- the requirement to provide enhanced transport links between the expanding employment areas to the West and South of Edinburgh and areas with expanding population to the East; and
- make these areas more accessible to those reliant on public transport.

9.2.19 A series of reports were produced covering:

- Pre feasibility,
- Traffic Engineering and Design,
- Environment,
- Capacity Analysis, and Appraisal.

9.2.20 The reports resulted in a recommended route and operation to maximise the benefits and viability of the service.

Real time Information Feasibility Report

9.2.21 This report explores the delivery options that exist, taking due account of:

- the aspirations of the various local authority and public transport stakeholders,
- real-time passenger information systems and products currently available in the marketplace,
- existing real-time passenger information systems throughout the area and within SEStran's immediate neighbours,
- existing schedule based passenger information system throughout the area and SEStran's immediate neighbours,
- the varied nature of public transport operations throughout the SEStran area
- existing communications platforms,
- existing data management systems,
- existing administrative arrangements, financial agreements and partnerships.

9.2.22 The report ultimately recommends an appropriate strategy to deliver effective, robust and economically viable RTPI across the SEStran area.

9.2.23 This report provided the basis for successfully bidding for European funding for the introduction of RTPI throughout most of the SEStran area and also on some external bus links. However, more funding is required in order to complete the originally planned roll-out of the system to cover all bus services operating within the SEStran area.

9.3 Rail

Levenmouth Sustainable Transport Study

9.3.1 The Queensferry and the Central Fife corridors are identified as having heavy commuter flows to Edinburgh. To allow greater use of public transport the potential for the introduction of passenger services to and from Levenmouth was examined, whilst also increasing the share of the freight transport market carried by rail.

9.3.2 A STAG-based study was carried out in 2008 to appraise proposals for improving services to the Levenmouth area. The reports set out the results of the STAG Appraisals of potential opportunities for improving public transport in the Levenmouth area. The STAG report was submitted to Transport Scotland for inclusion in future rail development plans.

9.3.3 The report recommended that the branch line to Levenmouth should be reopened to allow regular passenger services and improved freight access.

Clackmannanshire – Fife – Edinburgh Study

- 9.3.4 The inauguration of the Stirling to Alloa railway, which opened in 2008 to passenger services and freight, was the signal for this particular study to examine the benefits of extending rail networks further east and providing direct links to Edinburgh.
- 9.3.5 The STAG appraisal process considered a wide range of possibilities in addition to rail options, including road access improvement, water freight and bus-based public transport.
- 9.3.6 The report set out the results of the evaluation of the opportunities identified following the application of the STAG – based methodology, which examines the relative merits of investment in transport provision in the Clackmannanshire – Fife corridor, and to address the issues such investment may bring.
- 9.3.7 The recommendation is that there are benefits to reopening the line to passenger services and improving freight access to Rosyth.

Edinburgh – Dunbar – Berwick upon Tweed Study

- 9.3.8 East Lothian, GROS (General Register Office for Scotland) projections suggest that East Lothian will see the highest rate of growth in population of any Scottish local authority area to 2035. Peak hour North Berwick to Edinburgh trains currently operate at, or close to capacity near to Edinburgh. In the medium term, there is a high risk that the current level of train service provision would be unable to cope with the potential demand associated with this projected increase in East Lothian population, given the level of out commuting from East Lothian to Edinburgh.
- 9.3.9 The previous 2011 Study focussed on rail options in the corridor. This study, a STAG (Scottish Transport Appraisal Guidance) based and objective-led approach has been adopted to consider whether better coach or bus links to Edinburgh could provide a similar level of benefits to a rail-based solution at significantly lower cost. Subsequent reports have recommended the development of improved rail services on this line to serve local demand.

9.4 Freight

SEStran Freight Study and Action Plan

- 9.4.1 The main objectives of this study and action plan are:
- to promote efficient and effective distribution of freight movement in the SEStran area;
 - support the development of the transport network for the region, for distribution purposes;
 - produce tangible outcomes to localised freight transport problems;
 - promote sustainable distribution in the SEStran area, including greater use of environmentally friendly modes and development of inter-modal freight facilities;

- promote industry best practice initiatives; share information and increase knowledge of freight issues among SEStran local authorities and the freight sector;
- enhance understanding among different stakeholders and help to reach compromise where there are conflicting objectives.

9.4.2 The plan aims to provide; the maximum benefit to the region, be straight forward to implement with manageable costs, provide SEStran with high visibility outputs, promote Local Authority co-operation and provide common standards across the SEStran region.

Freight Routing Strategy

9.4.3 This study defines the existing freight distribution network in the South East of Scotland and identifies where improvements are required. It also seeks to establish the feasibility/viability of a Dryport in Scotland and examines the network impacts of potential locations for such a facility. Existing freight routing issues are examined in terms of freight distribution and the traffic impacts of various locations for a Dryport are considered.

SEStran Dryport Coatbridge

9.4.4 The Dryport Project has identified Freightliner Coatbridge as the location which best fulfils the role of a Dryport for Scotland serving the SEStran area. Coatbridge Dryport is Scotland's Gateway Terminal with direct rail access from across mainland UK, handling over nine daily rail import and nine export services up and down the length of the UK to include the four major deep sea UK container ports of Felixstowe, Southampton, Tilbury and Liverpool.

9.4.5 The use of rail freight as part of the supply chain, in contrast to road, can significantly reduce carbon output, while maintaining efficiency and getting goods to market in a timely manner. The Dryport Project carried out a comparison of the carbon output of containerised loads exported from Scotland via Coatbridge by: road, rail, short sea shipping or a combination of modes, to final destinations to connect with the deep sea global liners.

9.4.6 A reduction in road miles also means reduced fuel costs and a reduction in traffic congestion, benefiting businesses financially and improving the company's image in the eyes of an increasingly environmentally-aware consumer base.

Freight Flow Mapping

9.4.7 "Connecting Food Port Regions – Between and Beyond", is funded by the European Union under the Interreg IVB North Sea Region Programme with the specific aim of developing the North Sea Region as the best food cluster and hub in Europe for food products delivered via an efficient and sustainable transport system. This study followed a bottom-up approach by focusing on the demand side and undertaking detailed interviews or online questionnaires with key stakeholders from across the food and drink industry. Questions are specifically designed for gaining in-depth knowledge of the inter- and intra-regional food product flows and for receiving insights into the willingness to participate in an innovative logistics concept with its focus on (horizontal) collaboration between (competing) shippers.

9.5 Park and Ride

SEStran Park and Ride Strategy

- 9.5.1 The SEStran Regional Transport Strategy (RTS) committed SEStran to develop a Regional Park and Ride Strategy which would objectively review present-day park and ride provision and use in the SEStran area, and set a framework for developing and assessing future investment in park and ride.
- 9.5.2 The strategy is nested within the RTS objectives, and the role of park and ride in meeting these objectives has been considered. For the purposes of this analysis, the area has been considered in three broad corridors, North, West and South/East, and has considered park and ride issues relating to travel to all major destinations.
- 9.5.3 This study has a number of key analytical elements which are described below:
- Inventory of Sites
 - Catchment Area Analysis:
 - Economic Analysis
- 9.5.4 The study also identified the requirement to reduce the car element of the journey to a minimum taking into account journey time and cost. A Park and Ride web site has been developed using the information gathered during this study which allows the public to plan their journeys using suitable park and ride facilities.

South Tay Park and Ride Project

- 9.5.5 Rising employment in Dundee and a growing peripheral population requires increased transport investment, not least to control the high level of car use and the congestion problems this generates in Dundee itself. This is recognised in Dundee City Council's policy commitments to increase the use of public transport for journeys to, from and within Dundee.
- 9.5.6 The study examined the feasibility of a number of potential Park-and-Ride sites and their suitability in serving the Dundee area from the SEStran area. Fife and Dundee City Councils were also on the Steering Group for this commission.
- 9.5.7 The Cross Tay Sustainable Transport Study concluded that the development of a Park-and-Ride site on the approach to the Tay Road Bridge should be pursued.

9.6 Parking

SEStran Parking Standards

- 9.6.1 Eight council areas fall into the SEStran region (Fife, Clackmannanshire, Falkirk, West Lothian, Midlothian, City of Edinburgh, East Lothian and Scottish Borders). Our Regional Transport Strategy called for the creation of regional parking standards in order to provide cross regional consistency and to reduce unfair competition between different local authority areas.
- 9.6.2 These standards should therefore be considered as a detailed development of the Regional Transport Strategy and given due consideration by the constituent authorities. This document is restricted to a presentation of the standards themselves.

SEStran Parking Management Study

- 9.6.3 Parking is no longer a standalone issue, but has become a key aspect of both transport and land use planning. It must be integrated with all other aspects of urban policy, now that it is to be managed at levels below “unfettered demand”. This is necessary in order to promote and to support:
- Lifestyles that are less car-dependent;
 - Transport provision that is more socially inclusive;
 - Development that is more sustainable in terms of energy and pollution; and
 - Settlements which are more attractive and user-friendly.
- 9.6.4 Control over the availability of parking spaces is a key policy instrument in limiting car trips, and for the time being is the most widely available and readily accepted method of doing so. Even without control over private parking, strict control over public parking could have a major impact on travel choices. In most circumstances parking control is regarded as easier to implement and more appropriate than other measures such as road user charging.
- 9.6.5 As policy has moved from a “predict and provide” approach to one based on the achievement of wider objectives, the management of parking has become a more important part of national policy. It is becoming accepted that the unlimited growth of car use cannot be tolerated, as the infrastructure costs of providing the necessary road and parking space would be unacceptable in both financial and environmental terms.
- 9.6.6 The objective of this management strategy is to provide general guidance to constituent authorities a framework for managing parking to the benefit of residents, visitors and business users.

9.7 Sustainable Transport

Sustainable Development Guidance

- 9.7.1 The Regional Transport Strategy (RTS) highlights an anticipated increase in population of 10% and an increase of 22% in the number of households in the SEStran area by 2024. This will place pressure on the planning system which has a key role to play in the location of new development.
- 9.7.2 It is expected that development activity will occur across the SEStran area, and while this has the potential to lead to dispersed patterns of residential and employment location, it also presents an opportunity to develop in a more sustainable way. It is vital that new development takes account of sustainable travel.
- 9.7.3 A guidance document was developed on planning and providing sustainable transport for new development in the SEStran area at three levels:
- **Strategic:** highlighting the key transport planning considerations and elements of sustainable development within the national and regional planning context which can be taken forward to inform the Regional Transport Strategy and the Strategic Development Plan.

- **Local:** provision of guidance to assist planners and transport planners at the site specific level within development plans which can act as a bridge between strategic objectives and the implementation through the development management process.
- **Development Management:** provision of guidance to local authorities and developers in the roles and management of development management to ensure that this last link in the planning chain can operate effectively in delivering on the ground sustainable solutions within the strategic and local planning contexts.

Strategy for Developing the Urban cycle Network

- 9.7.4 The RTS placed a high priority on the promotion of commuter cycling. Whilst there are many agencies involved in promoting cycling and providing cycle related infrastructure, SEStran is in the position to provide a strategic overview for the regional transport area in order to assist in the provision of facilities, the enhancement of existing infrastructure and the general promotion and encouragement of commuter cycling.
- 9.7.5 Networks that permit the efficient interface with transport interchanges, particularly rail stations are also a priority for SEStran because they enhance and extend the commuter network. In relation to this study there is a focus on cycle routes and facilities that were in parallel with the Regional Transport Commuter Corridors as defined in the RTS. Within those corridors, urban areas deemed to be relevant for investigation were those with a population greater than 10,000 people.
- 9.7.6 SEStran has provided grants to local authorities and other bodies to implement various projects which promote the implementation of this strategy.

Car Sharing Guide for Businesses

- 9.7.7 The projected increases in population and households will have pronounced effects on the transport system with greatly increased congestion. Potential delays in journey times coupled with increased fuel prices and parking spaces which are already at a premium, mean that car drivers have every reason to think carefully about sharing their journey to work.
- 9.7.8 More car sharers will mean fewer cars on the road, leading to reduced congestion, less delays, faster journey times and saving money for individuals. Car sharing will save both employers and employees time and money, will contribute to a more pleasant and efficient commute to and from work, and will improve the wellbeing of staff. This guide outlines the different measures needed to manage a successful car share scheme and provides advice on how to implement these measures in a way that will maximise success.
- 9.7.9 The successful promotion of car sharing through Tripshare SEStran has seen an increase in membership to over 7000 car sharers in the SEStran area.

Cramond Bridge feasibility Study

9.7.10 Consultants were commissioned by SEStran to undertake a review of reinstating a direct pedestrian and cycle link between Cramond and the Dalmeny Estate. This report draws out the findings of that review. It outlines the objectives for the enhancement, gives the findings of a review of the feasibility of a new bridge and shows how public and stakeholder consultation informed the development of options.

Cycling to Work for Beginners

9.7.11 Cycling is often the fastest, always the healthiest and, apart from walking, the most environmentally sustainable form of transport. SEStran is trying to get more people cycling more often, particularly for trips to the shop, work or school.

9.7.12 Cycling also helps to achieve a number of important local, regional and national targets. For example, cycling:

- enables many people without a car to find and get to work;
- helps the government to fulfil its climate change obligations
- reduces air pollution from traffic;
- improves road and community safety and health;
- reduces travel-related pollution and noise; and
- generally increases transport choices and
- reduces dependency on the private car.

9.7.13 The guidance gives good practical advice on planning your journey by bike.

Cycling Infrastructure and Design

9.7.14 The guide offers cycle infrastructure design guidance to help Local Authorities, developers and other stakeholders involved in providing new cycling infrastructure; whether specifically for cycling or for taking cycling into account for all forms of transportation infrastructure.

Newcraighall sustainable access study.

9.7.15 Consultants were commissioned by SEStran to undertake a feasibility study into a potential footpath/cycle path across the railway line to the south side of Newcraighall Rail Station.

9.7.16 This potential route will provide a more direct link between the station's platform and Park & Ride site on the west of the railway line and the National Cycle Network Route 1 (NCN 1), Newcraighall Park and beyond to Queen Margaret University (QMU) to the east.

9.7.17 At the present time it is recognised that the provision of any new route would be of most benefit to those travelling to and from QMU, which already has a number of issues with overspill car parking into nearby residential streets.

Dunfermline BRT and LRT Project

- 9.7.18 SEStran appointed consultants to carry out a high-level evaluation of potential options for a Bus Rapid Transport (BRT) system in the first instance, which could be upgraded in the longer term to Light Rail Transport (LRT) system, linking into the new crossing of the Forth Estuary in the Queensferry Area.
- 9.7.19 The study area for this appraisal is the Dunfermline area, which includes Dunfermline and the surrounding Bridgehead, Inverkeithing, Rosyth including Rosyth Port and links across the Forth.
- 9.7.20 This area falls within the “Queensferry” corridor, characterised by high volumes of commuter tidal flow between the Dunfermline area (and its hinterland) and Edinburgh. This report sets out the results obtained on the relative merits of both a new BRT and a new LRT system linking the area.

Taxicard Review

- 9.7.21 Consultants were commissioned by SEStran to consider the establishment of a regional taxicard that would allow holders to undertake a limited number of journeys, without the need to have direct access to a private car whilst providing consistency of provision and equality amongst all SEStran constituent authorities, specifically for the mobility impaired.
- 9.7.22 This is the final report for the SEStran Taxicard Review; and is an updated version of the briefing paper previously issued in March 2008.

9.8 Summary

- 9.8.1 The following documents should be considered as part of the detailed strategy development of the RTS and therefore included in the revised RTS:
 1. SEStran Bus Information Strategy
 2. Bus Initiatives Issue 1 – Alternative Fuels
 3. Bus Initiatives Issue 2 – Bus Quality Strategy
 4. Bus Initiatives Issue 3 – Value for Money
 5. Bus Initiatives Issue 4 – Bus Stop Infrastructure
 6. Real Time Information Feasibility Report
 7. SEStran Freight Study and Action Plan
 8. Freight Routing Strategy
 9. Freight Flow Mapping
 10. SEStran Park and Ride Strategy
 11. SEStran Parking Standards
 12. SEStran Parking Management Study

13. Sustainable Development Guidance
 14. Strategy for Developing The Urban Cycle Network
 15. Car Sharing Guide for Business
 16. Cycling to work for Beginners
 17. Cycle Infrastructure and Design
 18. Taxicard Review.
- 9.8.2 The following should be considered as detailed development of strategy to implement RTS Strategy and therefore the conclusions and recommended projects should be included in the revised RTS.
1. Levenmouth Sustainable Transport Study
 2. Clackmannanshire- Fife-Edinburgh Study
 3. SEStran Clackmannanshire Bus Study
 4. Edinburgh Orbital Bus Project
 5. Edinburgh –Dunbar- Berwick upon Tweed Study
 6. SEStran Dryport Coatbridge
 7. South Tay Park and Ride Project
 8. Cramond Bridge Feasibility Study
 9. Dunfermline BRT and LRT Project
- 9.8.3 Full versions of all the above strategies and studies are available on the SEStran web site.

10.1 Introduction

- 10.1.1 The Transport (Scotland) Act 2005 gives 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 is a protracted process and therefore would not be pursued unless there were definable benefits to SEStran and the partners
- 10.1.2 *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. 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 of 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.

10.3.5 The principles of Scottish Transport Appraisal Guidance (STAG) have been used to inform the selection of some interventions outlined in this RTS, and have therefore fed in to some of the strategies listed in Chapter 9.

Supporting Constituent Authorities

10.3.6 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.

10.3.7 For SEStran to implement the identified strategy projects and initiatives, there is no need to transfer any powers from local authorities to SEStran, but there could be potential benefits in taking on parallel powers to ensure that the strategy is delivered in accordance with the delivery plan if resources became available.

10.4 Funding

- 10.4.1 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.
- 10.4.2 The Scottish Regional Transport Partnerships have been included in the schedule of the Public Services Reform (Scotland) Act 2010. The act requires annual publication of certain information which is included in our Annual Report.
- 10.4.3 Public bodies are required to publish as soon as is reasonably practicable after the end of each financial year a statement of any expenditure they have incurred during that financial year on or in connection with the following matters:
- Public relations;
 - Overseas travel;
 - Hospitality and entertainment;
 - External consultancy;
 - Payments with a value in excess of £25,000
 - Members or employees who received remuneration in excess of £150,000

Other requirements include reports on:

- Sustainable growth
- Promoting and increasing sustainable growth through the exercise of its functions

10.5 Existing Funding

- 10.5.1 This section outlines the current funding arrangements for SEStran.

Revenue

- 10.5.2 The recent financial constraints on the public sector have impacted on SEStran revenue budgets. The approved 2014/15 core (net) revenue budget is set at £451k of which £252k is from Scottish Government Grant and the remainder from council requisitions. This represents a considerable reduction on initial budgets, (in 2007 the initial revenue budget was £615k). It is unlikely in the foreseeable future that the current level of revenue budget will change significantly so it is important that any available revenue funding is focused on priority projects/initiatives which provide good value for money.
- 10.5.3 The current Revenue Projects Budget includes EU projects Food Port, Lo Pinod, I Transfer, Chums, Nwewride and Weastflows which provide considerable income (as well as expenditure) to SEStran, through a fifty percent contribution from the EC's Interreg programme. The total life cycle value of these projects, which contribute significantly to the sustainability aims of the RTS, is almost £1.5m. One further project, "Chums" under the Intelligent Energy Europe programme has recently begun and will end in 2015. Over time these projects will be completed and hopefully replaced by others, but care has to be taken that the commitment to European Projects does not outstrip the resources available and the projects fully reflect our Policies and Objectives.

Capital

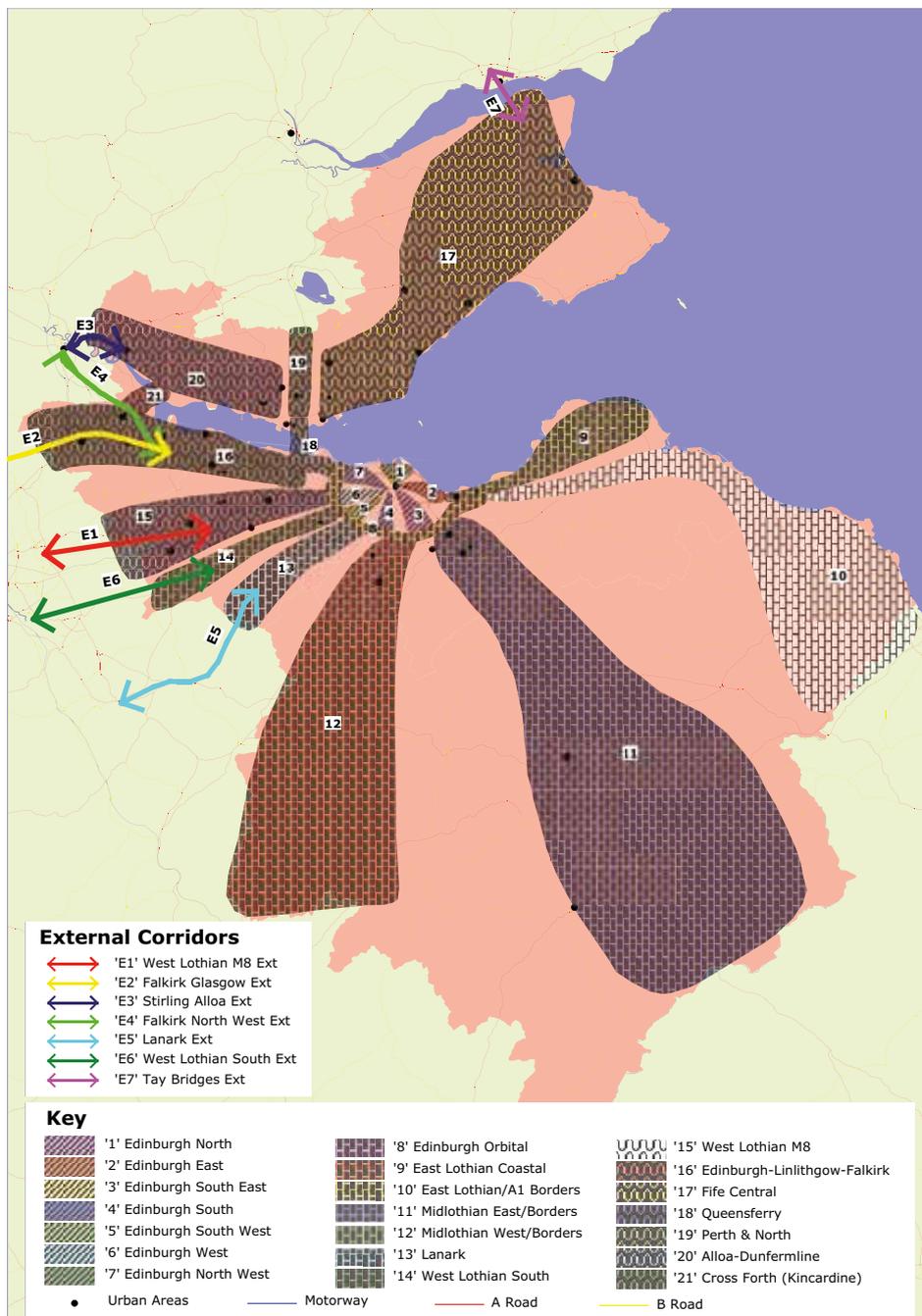
- 10.5.4 SEStran has no direct capital monies available to allocate to capital projects. However there is some capital expenditure by Transport Scotland and the constituent councils which reflects priorities within our Strategy, as well as potential private sector funding resulting from new development and from partnership initiatives such as the Scottish Cities Alliance (SCA, see para 8.1.6). As at January 2015, the SCA is developing an 'investment roadmap' linked to the City Investment Plan that could address some RTS measures.
- 10.5.5 The main Capital Budget Expenditure project is currently Real Time Passenger Information (RTPI) provision aimed at providing RTPI throughout the SEStran area. Funding is through the European Regional Development Fund, ERDF (£1.323m), the Scottish Government's Bus Investment Fund, BIF (£1m) with contributions from SEStran (1.306m), Partnership Councils (£0.48m), bus operators (£0.047m) and adjacent Regional Transport Partnerships (£0.1m) involved in the proposal.
- 10.5.6 A further bid, of value £0.5m, in relation to RTPI, has been made to Scottish Enterprise (SE). The proposal is an internet based signing approach which offers a bespoke real-time bus information service. The service combines relevant live bus information with other location specific and customer specific content for individual commercial or public sector premises, all of which can be viewed on a television screen. The bid has successfully passed to the second stage of the process and SE will now assign personnel to assist SEStran in preparing a robust business case to take the project forward.
- 10.5.7 On completion of this project capital expenditure will reduce dramatically reflecting the lack of capital monies available directly to SEStran. It is not anticipated that this situation will improve significantly in the foreseeable future. However, further bids to the Bus Investment Fund are envisaged, as opportunities arise

10.6 RTS Funding Summary

- 10.6.1 The RTS has laid out a comprehensive policy framework for the SEStran area. The policies, targets, initiatives and proposed projects in this RTS reflect the current financial constraints and resources.
- 10.6.2 The revised Delivery Plan will provide a detailed plan on how this strategy will be implemented over the strategy period, to achieve our targets. It will identify the status, required level of appraisal, lead responsibility and the funding position of each project identified throughout the RTS together with SEStran's role in delivery.
- 10.6.3 The annual Business Plan indicates the proposed expenditure and priorities for the forthcoming year and the Annual Report reviews the budgets and provides a Monitoring report on our Key Objectives. Through these annual reports a clear indication is given on budget proposals and monitoring, along with progress on identified priorities.

A.1 Much of the analysis undertaken for the Regional Transport Strategy (RTS) and the Strategic Development plans used the defined set of ‘corridors’ as shown below. Table 1 shows the extent of these RTS corridors. The results of recent analysis given in Figure A.4 shows AM Peak hour traffic levels in these RTS corridors for 2007, 2024 (March 2012 SDP forecasts) and 2024 (SG: Supplementary guidance allocations). **Note that internal Edinburgh corridors are not included in the graphics which follow.**

Figure A.1 Regional Transport Corridors

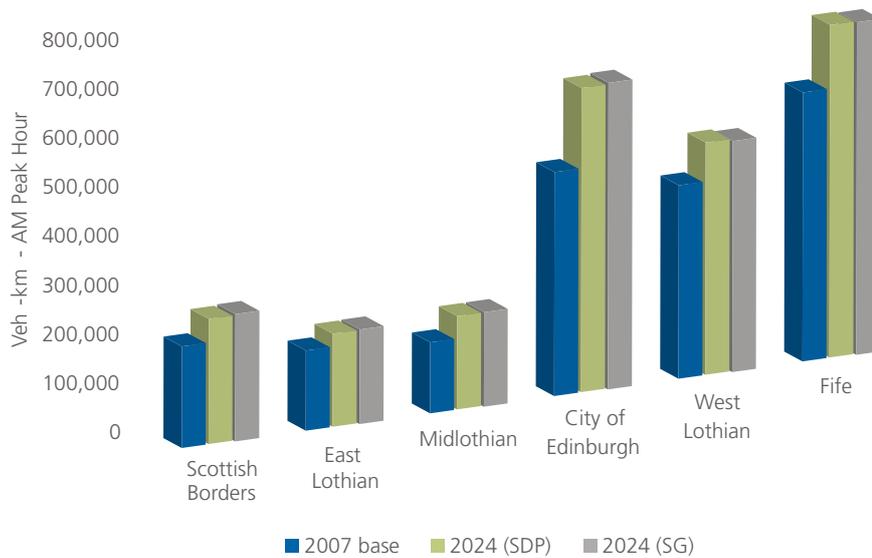


A.2 The Strategic Development Plans have come forward with proposed new development sites in the SEStran area which will have an impact on certain corridors.

Local Authority Level

A.3 Figure A.2 below shows the absolute traffic volumes (AM peak) for each local authority for 2007, 2024 (March 2012 SDP) and 2024 (SG).

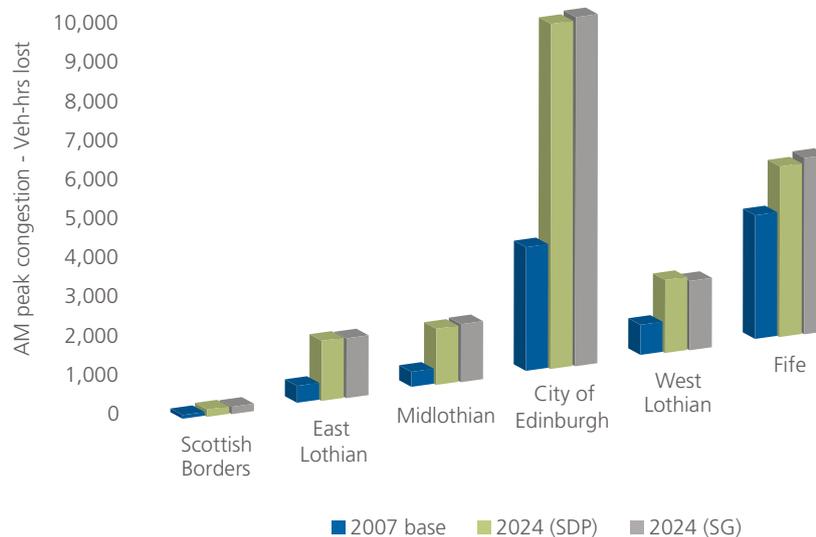
Figure A.2 AM Peak Vehicle kms (2007, 2024 (March 2012) & 2024 (SG))



A.4 At the local authority level, the largest increases over time are forecast in Edinburgh and Midlothian. Scottish Borders is forecast to see the lowest increase at 19%.

A.5 The changes in traffic between the two 2024 forecasts generally reflect the changes in population distribution between the two forecasts, eg population and traffic both go down slightly in West Lothian, and both go up slightly in Scottish Borders, East Lothian and Midlothian. All changes in traffic at the local authority level are between -2.5% and +2.5% though.

Figure A.3 AM Peak Hrs Lost to Congestion (2007, 2024 (March 2012) & 2024 (SG))



- A.6 Figure A.3 now shows congestion indicators (total time lost due to congestion) in the same way. This underlines how the majority of the congestion in the area is found in the City of Edinburgh where population density is highest. Although the City of Edinburgh is forecast to see the largest absolute increase in congestion between 2007 and 2024, the percentage increases in East Lothian and Midlothian are actually higher.
- A.7 The changes to congestion between the two 2024 forecasts are greater than the impacts on traffic volumes – ie small increases in traffic on congested networks lead to greater increases in congestion. The biggest percentage increase is in Midlothian and West Lothian sees a reduction in congestion compared to 2024 (March 2012 forecast). East Lothian sees a slight reduction in congestion, despite an increase in traffic overall. This will be the result of a change in traffic patterns where the higher volumes are seen in less congested parts of the network.

Regional Transport Strategy Corridor Level

A.8 Between 2007 and 2024, the corridors which are forecast to see the largest increases in absolute terms over time are M9/E&G, Fife Central and M8/Bathgate Line. In percentage terms Queensferry (+46%) and the Edinburgh City Bypass corridors (+40%) are amongst the biggest increases. This would be anticipated as they are two of the most congested routes in the area at present and any additional traffic will create disproportional increases in congestion. In addition, the definition of these corridors is narrow compared to some other corridors (ie the corridors as defined contain few uncongested links). Figure A.5 below shows the time lost due to congestion per kilometre travelled for all three scenarios in the AM Peak. This reflects the level of congestion experienced by individual vehicle occupants (ie as opposed to total congestion which can reflect higher traffic levels).

Figure A.4 RTS Corridor – AM Peak Traffic (veh kms)

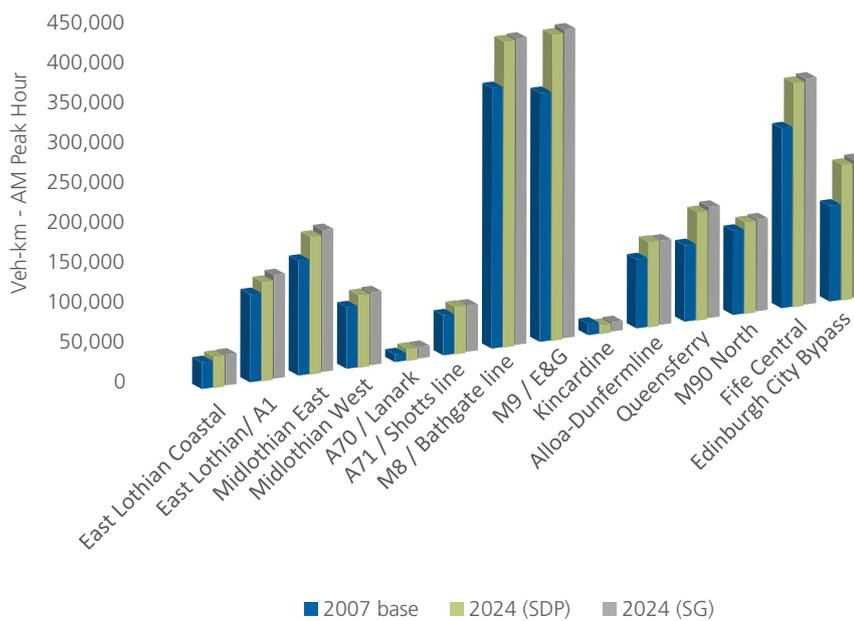


Figure A.5 RTS Corridor – AM Peak Congestion (mins/km lost)

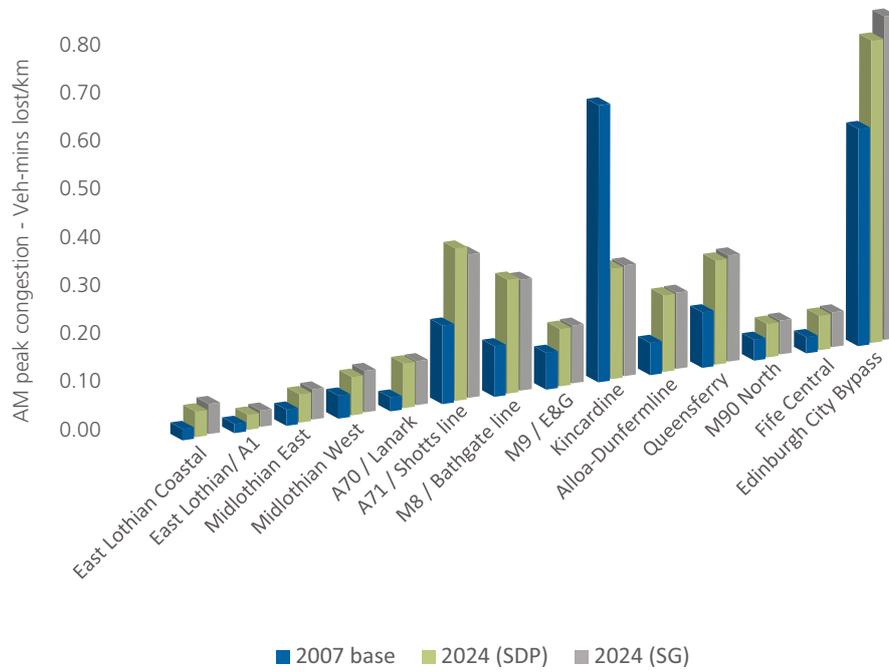


Table A.1 RTS Corridors

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/Borders	A701, A702, A703
13 – Lanark	A70
14 – West Lothian south	A71, Shotts Line
15 – West Lothian M8	M8, A89, A899, Bathgate Line
16 – Edinburgh-Linlithgow-Falkirk	M9, A904, Edinburgh – Falkirk Line
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



- A.9 When viewed in these terms, the Edinburgh City Bypass corridor sees the largest increase by some margin between 2007 and 2024. The West Lothian corridors of A71/Shotts and M8/Bathgate also see significant increases over time. Congestion in the Kincardine corridor reduces as a consequence of the opening of the Clackmannanshire Bridge and its associated road/junction improvements.
- A.10 Comparing the two 2024 forecasts, the City Bypass corridor is forecast to see a small increase in congestion with 2024 (SG), and congestion is also forecast to increase slightly in the Queensferry and Midlothian West corridors. The A71/Shotts and M8/Bathgate Line corridors are forecast to see slight reductions in congestion as a result of this change.
- A.11 There is a mixture of traffic increases and reductions relative to 2024 (March 2012) which broadly reflect the population changes. These figures will reflect traffic originating/destined for these areas and also through traffic, so a direct relationship between overall traffic and population changes would not be anticipated. In absolute terms, the biggest increases are seen in Dalkeith/Gorebridge area and Musselburgh/Tranent. Central Borders and Glenrothes/Kirkcaldy also see significant increases in line with population increases. The West Lothian and M8 Corridor SAAs see reduction in traffic, mirroring the reduced population there. In terms of percentage change, traffic in Edinburgh Waterfront reduces by 9% whilst the Dalkeith/Gorebridge areas sees a 4% increase. All other changes are within these bounds.

Network Level Results

- A.12 The network level reporting of results has focussed on junction and link based delays and how these change over time.
- A.13 In line with this, the following graphics have been produced here which show:
- Figure A.7 – AM Peak hour link delays, 2007
 - Figure A.8 – AM Peak hour link delays, 2024 (SG)
 - Figure A.9 – AM Peak hour junction delays, 2007
 - Figure A.10 – AM Peak hour junction delays, 2024 (SG)
- A.14 These graphics therefore show the impact of increased traffic levels on link and junction delays between 2007 and 2024; and the impact of the change in housing data on flows and delays on the network, based on the underlying assumptions and the approach taken here

Figure A.7 2007 Link delay

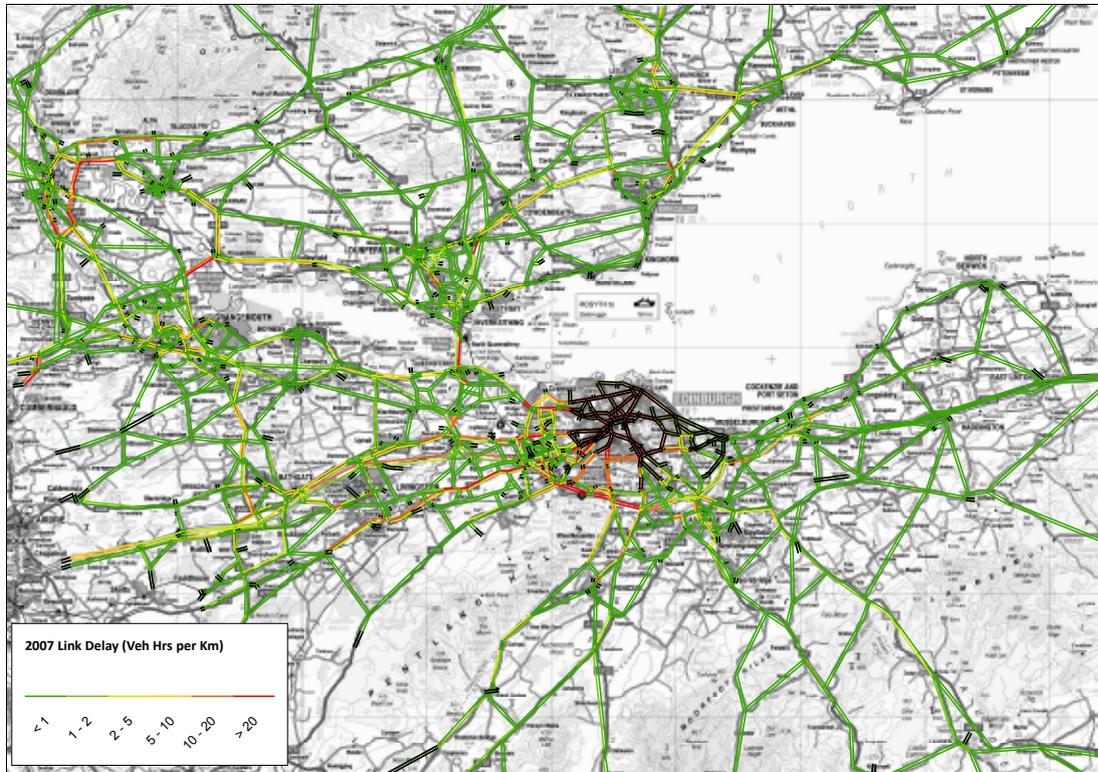


Figure A.8 2024 Link delay

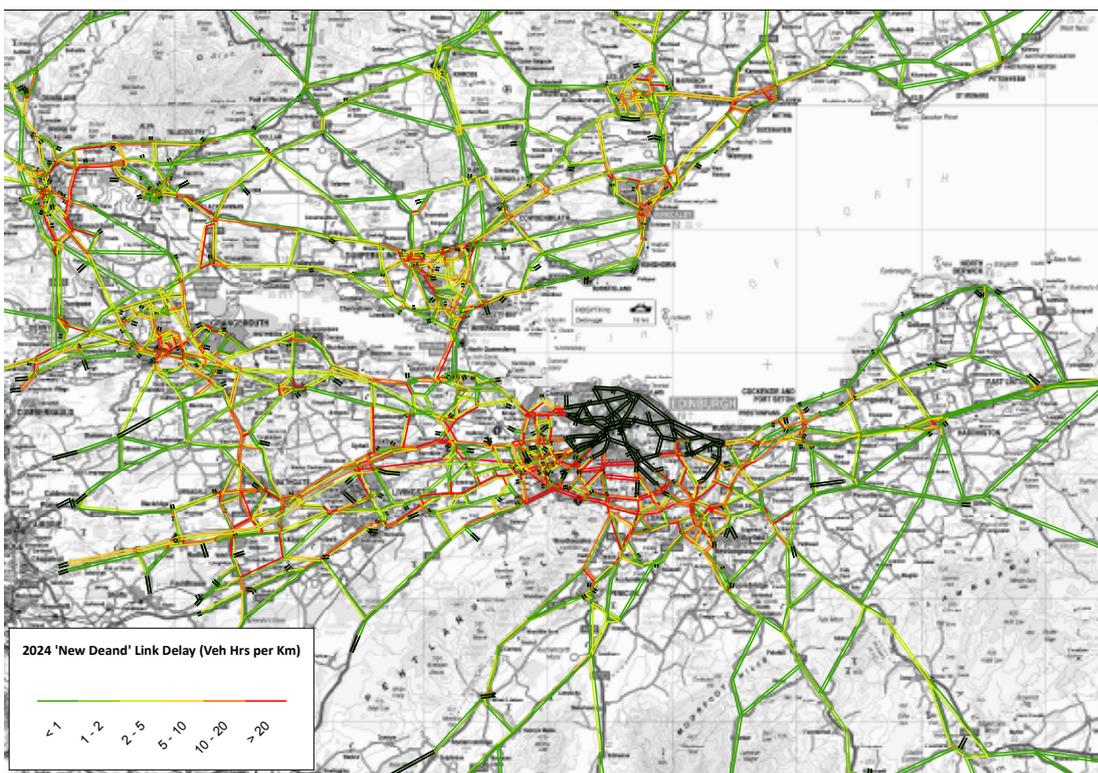


Figure A.9 2007 Node delay

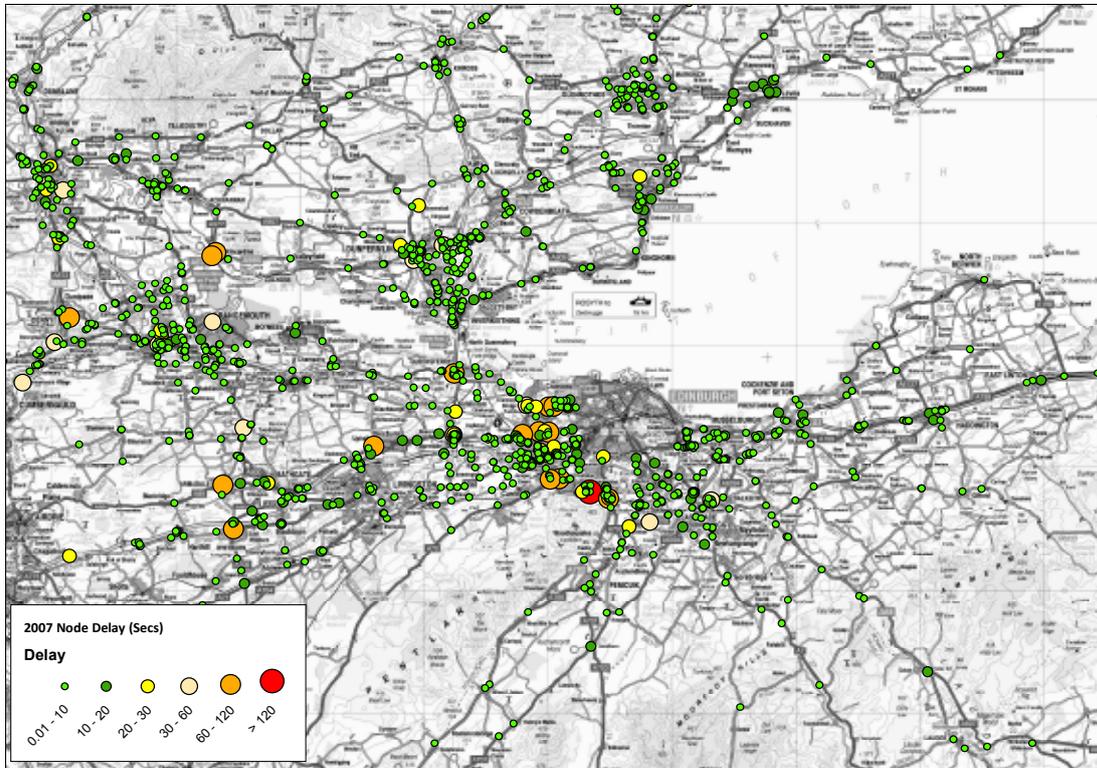
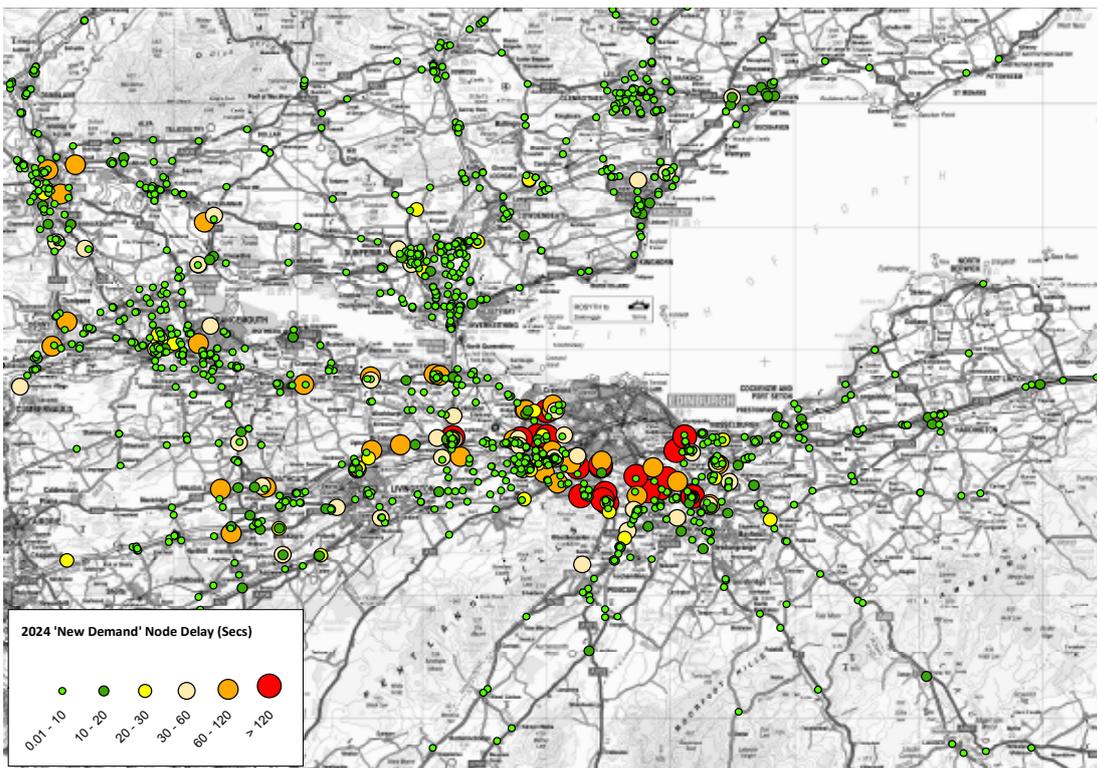


Figure A.10 2024 Node delay



B.1 This Appendix supplements the information in Chapter 4 of the main RTS document.

Targets for Economy

B.2 The **economy** targets are particularly aimed at reducing congestion, widening labour markets and ensuring key economic transport links are maintained and developed.

B.3 The objectives are therefore focused on accessibility to maximise catchment areas, on connectivity to facilitate economic activity, on congestion to minimise disruption and unreliability of journeys, and on integration with land use and economic development strategies to ensure synergy with transport objectives.

B.4 Each RTS objective is now considered in turn.

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

B.5 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.

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:

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

Progress

B.6 An initial target of an increase in accessibility of 3% over the first five years was partially met with changes in accessibility within 30mins travel time catchment varying between +1% and -2% and a general increase in accessibility within 60mins catchment from +8% to -3%. The reasons for the changes in accessibility in some areas could be associated with bus rescheduling and improvements to rail infrastructure e.g. the Airdrie –Bathgate line

B.7 A further set of key secondary employment centres may also be defined in the context of this target, to provide greater geographical coverage.

Monitoring: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information measures this.

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

B.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.

B.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.

Target: To improve ‘connectivity’ to a range of key internal and external destinations – mainly indirectly via influencing other bodies such as bus and train operators, airport operators, other RTPs and Transport Scotland. SEStran has been working with Edinburgh Airport in developing its Airport Surface Access Strategy to ensure good quality public and sustainable transport is built into their strategy.

Progress

B.10 As monitored in 2012, increases in connectivity to international destinations i.e. no of flights from Edinburgh Airport are as follows, -4 for local flights for less than 30mins travel time and +29 for longer distance flights. Coach and Rail services within the SEStran area and to the rest of Scotland varied significantly with the number of local SEStran coach services reducing by 53 and increases of 309 in longer distance coach services and all train services

Monitoring: Annual count of the number of direct rail and coach/bus services per day:

- Between main SEStran settlements;
- To major Scottish settlements;
- To major non-Scottish settlements;
- Also the number of domestic and international flight destinations are monitored.

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

B.11 No quantitative target possible – only demonstrable synergies with other strategies, through new working relationships and structures.

Target: Demonstrable progress in collaborative working between SEStran, SESplan, planning authorities, economic development agencies and other appropriate stakeholders. For example, SEStran has become a Key agency in the planning process in relation to Strategic and Local Development Plans. In the longer term, an RTS target (10 year) is to identify the transport infrastructure and services required to meet the relevant development plan requirements.

Progress

- B.12 Statutory consultee in all Local Authority Development Plans and have worked closely with SESplan in developing their Strategic Development Plan.

Monitoring: qualitative – demonstrable progress in collaborative working.

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

- B.13 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 compared to a 'do nothing' scenario. 'Time lost to congestion' is regularly monitored on the busier parts of the trunk road network by the Scottish Government, as are road user perceptions of congestion, and reported annually. At present, congestion is not measured in a consistent, quantitative way in the wider SEStran area. However, although new technology in the future may dramatically improve the potential to measure congestion consistently, this is not yet available. SEStran will seek to make use of these new data as and when it becomes available, and will update its target accordingly.

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); (ii) Over the period of the strategy, reduce (after 15 years) time lost due to congestion across the SEStran trunk road network; (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.

Progress

- B.14 Monitoring in 2012 indicated a general reduction in congestion since 2007 varying from 9 hr/annum reduction at the Kincardine Bridge to an increase of 2 hr/annum at the Forth Bridge, Car driver/passenger mode share for travel to work has reduced by 1% and the proportion of car drivers affected by congestion has reduced by 19%. The level of concern about traffic growth has reduced by 7%.

Monitoring: (i) Use of Census data once every 10 years, use of Scottish Household Survey Travel Diary reporting on car availability, car driver/passenger mode share, frequency of driving in congestion, car trips reportedly affected by congestion and the level of concern about traffic growth.(ii) Scottish Government's Trunk Road Local Congestion Monitoring at the key key locations:

- Forth Bridge approaches
- Kincardine Bridge approaches
- A1- Macmerry
- A720 – City Bypass
- M9 – Claylands
- M8 – Baillieston to Hermiston Gait

Targets for Accessibility

- B.15 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.

Objective 2.1 – to improve access to employment

- B.16 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.

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% after 15 years).

Progress

- B.17 From the 2012 monitoring results accessibility has been improved from the selected areas to employment by 5.7% which exceeds the initial 5yr target of 3%

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.

Objective 2.2 – to improve access to health facilities

- B.18 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).

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

Progress

- B.19 The 2012 monitoring results indicate the number of households in this category (access hospital <60 mins) has changed by +1.6% and -5.9%

Monitoring: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information measures this. The hospitals monitored are:

- Borders General Hospital
- Dunfermline Queen Margaret
- Victoria Hospital Kirkcaldy
- Edinburgh Western General
- St Johns Hospital Livingston
- (Falkirk and District Royal Infirmary)
- (Stirling Royal Infirmary)
- Dumfries and Galloway Infirmary
- Perth Royal Infirmary
- Dundee Ninewells Hospital

Falkirk and District Royal Infirmary and Stirling Royal Infirmary have now been replaced by the Forth Valley Royal Infirmary.

- B.20 Also monitoring looks at the frequency of use of a car to visit GPs and ease of access to GPs without a car.

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

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).

- B.21 Note that improvements to public transport targeted at those >60 minutes from key services will in many cases also benefit those living closer.

Progress

- B.22 The 2012 monitoring indicated that the change in percentage of households with poor access varied from +2.2% to -7.5%

Monitoring: Annual accessibility mapping exercise using standard software and bus and rail timetable and Census information will be able to measure this. For monitoring purposes access to the following is being measured

- Colleges (7-10am)
- Universities (7-10am)
- Leisure centres (swimming Pools) (10am-4pm)
- Job centres (10am – 4pm)
- Retail Centres (10am – 4pm) for the following groups of locations
- Primary centres
- Major centres
- Regional towns
- Urban centres
- Local centres
- Rural Centres
- Factory outlet centres
- Retail parks, Supermarkets

B.23 Also monitored is the ease of use of public transport, walking and cycling to access small shops, supermarkets, town shopping, evening leisure, friends, GPs and library

Objective 2.4 – to make public transport more affordable and socially inclusive

B.24 There are a range of barriers to the use of public transport which the RTS is setting out to address.

Targets: (i) By, or before the end of the RTS, seek to monitor the implementation of all DDA requirements regarding accessible buses and all public transport complies with the requirements of the Equalities Act2010. (ii) Identify high fare ‘anomalies’ in the SEStran area by the end of the RTS period, relative to 2007 (iii) Seek to influence national policy in relation to the procurement of bus services, if necessary to meet other RTS targets.

Progress

B.25 The percentage of people who consider bus fares good value has reduced by 8% to a value of 61%

Monitoring: Information from bus and rail operators on DDA compliant routes. Monitor the % of people who consider bus/train fares are good value and the use of concessionary fares in the Scottish Household Survey.

Targets for Environment

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

B.26 Reducing the level of road traffic is central to the goal of cutting greenhouse gas emissions.

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.

Progress

B.27 2012 monitoring results indicate a 2.9% reduction in traffic levels and a 4% reduction in petrol and diesel consumption.

Monitoring: Scottish Government published statistics on traffic levels in the SEStran area. Also monitored is the change in petrol and diesel consumption in the SEStran area.

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

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.

Monitoring: No practical monitoring available.

Objective 3.3 – to promote more sustainable travel

B.28 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'.

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

Progress

B.29 The monitoring to 2012 indicates very little change to the mode share figures but with significant membership of TripshareSEStran, nearly 7,000 members and large increases in the number of people entering and exiting SEStran stations (5,644,728)

Monitoring: Through the Scottish household survey monitor modal share of various journeys and information. Also monitor the use of Liftshare and car clubs. Also monitor the number of passengers entering and leaving stations in the SEStran area. SEStran has its own TripshareSEStran Scheme covering the SEStran area, to increase travel choices and reduce the need to own a car. This is monitored on a regular basis.

Objective 3.4 – to reduce the need to travel

B.30 Advances in technology are creating opportunities for reducing the amount of travel undertaken, eg home working, tele-conferencing, internet shopping etc.

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.

Progress

B.31 No discernable change.

Monitoring: Scottish Household Survey and Travel Diary on the numbers of adults working from home and the number of trips using motorised transport

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

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

Progress

B.32 General increase in all indicators with a slight drop (2%) in the public's perception of the convenience of public transport.

Monitoring: Scottish Household Survey on the frequency of driving, proximity to public transport, perceptions of public transport and use of public transport

Targets for Safety and Health

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

Targets: (i) By 2020, to cut the number of killed by 40% and seriously injured casualties by 55% and child killed by 50% and seriously injured by 65% from a 2004 -2008 base. There is also a target to reduce the slight casualty rate by 10% (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).

Progress

B.33 For the 10 yr period up to 2010, on a national basis there has been a 41% reduction in KSIs, 65% reduction in child KSIs and 38% reduction in slight casualties. On a SEStran basis reductions are well within targets. Passenger perception of safety dropped by approx 3% but train passengers perception of safety rose by 3%

Monitoring: National Road Casualty Statistics. and SHS survey into perception of safety on public transport.

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

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. Cycling Action Plan for Scotland has a vision of 10% of all journeys will be by bike by 2020.

Progress

B.34 The 2012 monitoring indicated changes between -1% and +8% in walking and cycling

Monitoring: Scottish household survey data on number of bikes/household and number of trips by bike and foot.

Objective 4.3 – to meet or better all statutory air quality requirements

Target: To contribute to meeting the national targets for air quality.

Progress

B.35 A general increase in the number of AQMAs

Monitoring: The Number of Air Quality Management Areas in the SEStran area.

Objective 4.4 – to reduce the impacts of transport noise

B.36 The Scottish Government undertook a 'noise mapping' exercise which, based on 2005 traffic levels, identified 'hot spots' of transport related noise. No further action has been taken on this subject.

Target: No quantitative target possible.

Equalities Audit (Policy 25)

- C.1 SEStran, as a Regional Transport Partnership, has a statutory requirement to comply with requirements associated with Equality legislation and also tackle discrimination on age, religious and sexuality grounds.
- C.2 An Equality Scheme for SEStran has been published on the website. The scheme provides clear cross referencing to other approved and published SEStran documents so that anyone wishing to establish our position on equity issues can find it. A key element of the scheme is the establishment of an Equalities Forum which meets on a three monthly basis, involving local equalities groups, to discuss the work that SEStran is doing and how it operates, to get feedback and suggestions on how we can usefully improve on equalities issues.
- C.3 The implementation of equalities policies is an ongoing process rather than simply the requirement to publish a specific scheme. Equal Opportunities is at the heart of the SEStran ethos and we intend to meet our statutory duties in this regard.
- C.4 The Regional transport Strategy is at the core of the Equalities Scheme and the review was carried out, taking on board the actions identified in the Outcome Report.

Strategic Environmental Assessment (SEA)

- C.5 The South East Regional Transport Partnership (SEStran) produced a Regional Transport Strategy (RTS) in 2007 which covered the years 2008 – 2023. In accordance with the Environmental Assessment (Scotland) Act 2005 the strategy was subject to a strategic environmental assessment (SEA) which was presented as an Environmental Report and published along with the strategy. Both reports are currently available on our web site.
- C.6 The review has not significantly changed the strategies objectives or policy, with most changes related to SEStran's reduced ability to directly influence or implement the measures identified in the strategy.
- C.7 Therefore it is proposed under the Environmental Assessment (Scotland) Act that the reviewed plan has no modification to the SEA that is likely to have significant environmental effects as prescribed in Section 8(1) of the Act.

Access to Healthcare Audit

- C.8 In line with policies 24 and 25 and the actions outlined in 7.25 SEStran has been developing an audit of Access to Healthcare through its Access to Healthcare Working Group.
- C.9 One of the key elements in auditing Healthcare access was a report by the Scottish Government on Healthcare Transport Short Life Working Group which gave general outlines of where progress needed to be made to address this issue. SEStran subsequently arranged a meeting of Health Board, Scottish Ambulance and Community transport managers to agree a way forward. The outcomes of this workshop are given below and will form the basis of an agreed strategy.
- The group agreed that the workshop would be the beginning of an inter-agency process to improve access to health and social care which would aid learning from shared experience, co-ordination of action and development of appropriate solutions and appropriately inform service users.
 - The group agreed to develop a region-wide inter-agency action plan to improve access to health and social care, identifying where joint working will add value over and above activities that would otherwise occur. SEStran will arrange a meeting to develop this action plan set objectives and timescales.
 - In advance of that, a visit will be held to NHS Lothian's transport hub, and maybe also NHSFV's booking system and East Lothian Council's integrated transport service, in order to share lessons about these examples of good practice.
- C.10 Other identified actions are:
- For NHS Boards to complete their Health and Social Care Transport Toolkit responses.
 - Collate information from Boards regarding spend on HTCS to evaluate patients' awareness of the scheme.
 - Gain a more comprehensive understanding of problems affecting people accessing health/social care.
 - Obtain further information on the GG & Clyde Health Board transport booking system and the impact therein of providing service users with public transport travel arrangements.
 - Assess the potential of trialling within the SEStran area the opportunity to provide service users with public transport and travel arrangements when being booked for health and social care appointments.
 - Obtain further information on how health and social care systems are promoting changes to patient transport arrangements and how they are effectively keeping the public informed.

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