



WORKING FOR YOU IN TRANSPORTATION

# Local Transport Strategy 2008 - 2011



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## Foreword

Transport is not a stand-alone policy area and does not recognise boundaries. Transport related issues cross all aspects of society, and making effective travel choices is becoming an increasingly important aspect of day-to-day life. This strategy seeks to identify and address transportation related issues at a local level in East Renfrewshire, whilst complementing wider regional, national and even global goals.

Much has been achieved in East Renfrewshire since the original Local Transport Strategy was published in 2000. Our road infrastructure has been enhanced by the construction of the M77 extension and the Glasgow Southern Orbital, and there have been significant efforts to improve the network, make roads safer and to encourage cycling, walking and the greater use of public transport. However, we recognise that in an evolving world with changing priorities there is still much to be done.

This Strategy covers the 3 year period from 2008 to 2011, with a vision far beyond. It has been developed through meaningful engagement with stakeholders and requires effective Partnership working for its delivery. It aims to support the sustainable economic development of East Renfrewshire by providing access for all to jobs and services, with a transport infrastructure that is fit for purpose. It is also about delivering genuine travel choices, by providing safe, reliable and integrated alternatives to the private car, which will help us to reduce congestion and recognise our obligations in relation to climate change.

It is important to recognise that East Renfrewshire Council cannot deliver this Strategy alone. I would encourage you to consider the issues raised in this document which I commend, either as an individual, group, or organisation, and to think how you can help achieve the aims of this Strategy and what its delivery will mean for you.

A handwritten signature in black ink that reads "Edmund Phillips". The signature is written in a cursive, slightly slanted style.

Councillor E. Phillips  
Convener for the Environment



# Executive Summary

## Setting the Scene

The new Local Transport Strategy (LTS) has been developed to replace the first document published in 2000. The strategy covers a 3-year period from 2008 to 2011. The Council published a consultative draft of the LTS in August 2007 to allow the views of the public and other industry bodies to be gathered to inform the final LTS. The LTS sits in a hierarchy of transport plans beneath the National and Regional Transport Strategies.

## The Problems We Face

East Renfrewshire faces a number of transport related issues which the LTS seeks to address. Car ownership levels are amongst the highest in Scotland, although this varies across the authority with the Barrhead area exhibiting lower levels of car ownership than other parts, particularly Newton Mearns. This has led to high levels of car usage with the congestion and environmental problems that accompany this. Congestion is a problem at peak times and can be a particular issue around schools. Levels of public transport usage vary depending on journey origins and destinations. People travelling to Glasgow are much more inclined to use public transport than people going elsewhere. Public transport links need strengthened both in terms of services to surrounding areas and local services within East Renfrewshire. Links by public transport between the east and west of East Renfrewshire have been identified as a particular problem. There are limited services and employment opportunities within East Renfrewshire itself with people consequently having to travel to locations in the surrounding area for these purposes. Road maintenance needs improved along with enforcement of existing parking and traffic management measures. Problems have also been identified in relation to safety and security on transport networks and services.

## The Changes We Expect

People travel to get from one place to another with one end of the journey frequently being a person's home. Where we locate different facilities affects how and where people want to travel. As East Renfrewshire is primarily a residential area the location of housing is an important issue. Significant new housing developments at Auchenback, Barrhead and Greenlaw, Newton Mearns are expected during the lifetime of the LTS. These will generate an increased demand for transport that needs to be considered. The Council is pushing forward with the regeneration of Barrhead. This will generate more jobs and a consequent increased demand to travel to and from Barrhead which must be taken into consideration. Changes in the surrounding area will also have an impact on travel demands in East Renfrewshire. The Silverburn retail development at Pollok will generate significant demand for access from East Renfrewshire and there is continuing demand for travel to Braehead Shopping Centre as well. In addition, access to Glasgow City Centre will continue to be a key priority.

## What We Want To Achieve

Given these issues the Council has identified a number of objectives to address the transport problems currently being faced. These objectives have been used to help develop the detailed elements of the LTS including the identification of policies and actions. The objectives of the LTS are to:

1. Reduce the need to travel and stimulate sustainable economic development in the local area.
2. Reduce car dependency and stimulate modal shift to walking, cycling and public transport.
3. Enhance access to jobs and services by a variety of modes of transport for all members of society.
4. Reduce the negative environmental impacts of transport.
5. Reduce congestion on all transport modes and services.
6. Improve safety and security on transport networks and services.
7. Enhance integration and efficiency of transport networks, infrastructure and services.
8. Promote awareness of alternatives to the private car.
9. Maintain roads and other transport infrastructure in a condition that ensures it is fit for purpose.

## How We Will Achieve It

To achieve the desired changes to transport the Council has prepared a strategy focused upon 5 key themes. These are:

- **Modal Shift & Demand Management:** Encouraging modal shift from cars to more sustainable alternatives like walking, cycling and public transport along with associated demand management measures, if necessary, to help reduce car use.
- **Transport & Land-use:** Greater integration between transport and land-use will reduce the need to travel and encourage local economic activity.
- **Accessibility & Social Inclusion:** Improvements to accessibility will facilitate social inclusion for people who experience barriers to transport.
- **Network Management:** This is important to ensure safe, efficient and effective operation of the existing transport network.
- **Environment:** The relationship between transport and the environment and how these issues can be reconciled.

Some of the key elements we will seek to progress through the LTS include:

- Improvements to bus services through liaison with SPT and operators including consideration of using the statutory powers available to the Council to do this.
- Improvements to rail services to reduce overcrowding and increase their attractiveness to people including enhancements to Park & Ride where possible.

- Investigation of improved public transport links into Newton Mearns.
- Consideration of demand management measures where appropriate.
- The use of Transport Assessments, Travel Plans and other measures to ensure transport considerations are taken into account when planning new developments.
- Improved access to local and surrounding areas of economic activity.
- Contribution to the regeneration of Barrhead and other parts of East Renfrewshire through complementary transport schemes including a new link road between Barrhead and the M77 along with south facing slip roads at Junction 4 of the M77.
- More accessible transport infrastructure and services for people who experience particular difficulties in using these facilities.
- Improvements in the condition and management of the road network.
- A safer and more secure environment for people when travelling.
- Reducing environmental impacts, particularly air quality and greenhouse gas emissions.
- Supporting freight transport and ensuring that it is carried out in a manner that minimises impacts on local residents.

To help realise the LTS an Action Plan has been developed although the extent to which it can be implemented is dependent upon the levels of funding that can be obtained. The Council is committed to a number of schemes to manage, maintain and improve the network through its existing Capital and Revenue programmes however a number of other schemes, which we would like to take forward if funding was available, have also been identified.

### **Monitoring Our Progress**

To assess how successful we are in achieving what we have set out to do in the LTS a number of performance indicators and associated targets have been established. Progress toward these will be monitored on an annual basis along with a review of the Action Plan to see what's changed, how we can improve and if anything needs amended.

### **Further Information About the LTS**

Further details about the LTS as well as downloadable copies of the strategy and associated documents can be obtained from the Council's website at [www.eastrenfrewshire.gov.uk/lts](http://www.eastrenfrewshire.gov.uk/lts). If you would like further information please phone 0141 577 3417 or e-mail us at [LTS@eastrenfrewshire.gov.uk](mailto:LTS@eastrenfrewshire.gov.uk).

This document can be explained to you in other languages and can be provided in alternative formats such as large print and Braille. For further information please contact Customer First on 0141 577 3001 or email [customerservices@eastrenfrewshire.gov.uk](mailto:customerservices@eastrenfrewshire.gov.uk).

SECTION 1

# Introduction





### 1.1 Introduction

East Renfrewshire Council strives to deliver a transport network which caters for the needs of everyone, supports the economic prosperity of the area and minimises negative environmental impacts. To do this it is important to plan strategically for transport and the production of a Local Transport Strategy (LTS) is fundamental in facilitating this. The LTS acts as the framework within which transport schemes and initiatives will be taken forward. It covers the period from 2008 to 2011 but also takes into account the fact that there is a need to plan for the long-term as well. The LTS sits within a hierarchy of strategies and has been prepared taking into cognisance the National Transport Strategy and Strathclyde Partnership for Transport's (SPT) Regional Transport Strategy.

### 1.2 Roles and Responsibilities

The Council is the responsible authority for the local road network within its boundaries. It has a statutory duty to maintain and manage these roads in a suitable manner. Connect Roads are responsible for maintaining and operating the A726 Glasgow Southern Orbital on behalf of the Council. Transport Scotland is responsible for the Trunk Road network which consists of the M77 within East Renfrewshire. Transport Scotland also has powers in relation to the rail network including management of the franchise contract with First ScotRail as well as specifying and funding improvements to the network in Scotland to be carried out by Network Rail, the non-profit company responsible for maintaining the rail network. SPT has a statutory duty to prepare a Regional Transport Strategy as well as powers to subsidise commercially unviable bus services where they can be justified through a social need, and is partially responsible for bus stop maintenance. The bus services that do not require subsidy are operated by private companies. There are subsequently a number of key organisations responsible for delivering transport which necessitates the need for effective partnership working.

### 1.3 Background

In 2006, East Renfrewshire had an estimated population of 89,290 resident in 35,532 households. Situated to the south of Glasgow and with good transport links into the city it is an attractive location for commuters. The close proximity of the international airports at Glasgow and Glasgow Prestwick also increase the attractiveness of the area. The authority covers an area of approximately 174 square kilometres with suburban residential housing in the northeast and the town of Barrhead situated in the Levern Valley in the northwest. A significant rural hinterland to the south incorporates a number of small settlements including Neilston, Eaglesham, Waterfoot and Uplawmoor.

The Council produced its first Local Transport Strategy in 2000. The production of a Local Transport Strategy is not a statutory requirement but is strongly encouraged.







Much has changed since the publication of the first LTS and the Council has responded to this by producing a new Local Transport Strategy. In addition, the Council has a statutory responsibility to produce a Road Traffic Reduction Act Report to accompany the LTS.

The Scottish Government has produced a National Transport Strategy (NTS) and has established a new agency entitled Transport Scotland responsible for delivering major infrastructure schemes. Transport Scotland is also responsible for undertaking the Strategic Transport Projects Review which will identify future schemes with a national impact.

The Transport (Scotland) Act 2005 established seven statutory Regional Transport Partnerships across Scotland. East Renfrewshire Council is a member of the Strathclyde Partnership for Transport (SPT) along with 11 other local authorities in the west of Scotland. The creation of SPT saw the amalgamation of the West of Scotland Transport Partnership (Westrans) and Strathclyde Passenger Transport along with their respective responsibilities, with the exception of rail powers which were transferred to Transport Scotland. The primary function of the new body is to produce a Regional Transport Strategy (RTS) and this was submitted to Scottish Ministers at the end of March 2007. The LTS both contributes to and complements the National and Regional Transport Strategies.

The Environmental Assessment (Scotland) Act 2005 places a responsibility on the Council to undertake a Strategic Environmental Assessment (SEA) of its Local Transport Strategy. This ensures that environmental issues are fully taken into account during its preparation. As part of this process an Environmental Report has been produced which was subject to consultation along with the draft LTS. The LTS has also been subjected to an Equality Impact Assessment.

The LTS has been developed in accordance with the Scottish Government Guidance issued in February 2005 and follows the methodology outlined in the Scottish Transport Appraisal Guidance (STAG).

#### 1.4 Progress since LTS 2000

There has been considerable progress made since the publication of the first LTS. The most notable achievements are the construction of the M77 extension from Malletshead to Fenwick and the Glasgow Southern Orbital (GSO) route between Maidenhill and Philipshill linking the M77 to the A726 at East Kilbride. These routes provide important links in the strategic road network for local and long-distance traffic and have contributed to environmental improvements by reducing through traffic in Eaglesham, Clarkston and Busby. The Council has adopted a policy to resist development along the GSO to maintain its functionality as a strategic route for through traffic and thus limit the number of local trips made on it. The GSO is now designated as the A726 with the former A726 through Clarkston and Busby being reclassified as the A727.





With the construction of the M77 extension the existing A77 is no longer a Trunk Road and is now the responsibility of East Renfrewshire and East Ayrshire Councils. The A77 has had a cycle lane installed between Fenwick and Malletsheugh which links to the existing cycle facilities through Newton Mearns to Eastwood Toll. Cycle lanes have also been introduced on the B764, Davieland Road and Fenwick Road. Advanced stop lines for cyclists have been installed at around half of the approaches to traffic signals. To complement these facilities cycle stands have been installed in key locations adjacent to shops, public buildings and at railway stations with extensive cycle parking provision also being introduced to schools. The Council provides cycling proficiency training at Primary Schools and ran a cycle training course for adults in Rouken Glen Park in 2005 and 2006.

A programme of replacement and refurbishment of structures is undertaken by the Council to ensure they remain fit for purpose. Bridges have been replaced at Maryville Avenue (Giffnock), Dunbeath Avenue (Newton Mearns) and Lochbroom Drive (Newton Mearns) and are all now capable of carrying 40 tonne vehicles.

On the local road network outdated traffic signal units have been replaced with new state of the art facilities to improve their operational reliability. New pedestrian crossing facilities have been provided at various locations. The Council has installed 10 Speed Information Display Signs across the area including in Newton Mearns, Waterfoot and Eaglesham. There are also 8 vehicle-activated signs that provide details of the speed limit which have been installed in Newton Mearns, Neilston, Barrhead and Shillford. Traffic calming measures have been introduced across the Council area where road safety problems have been identified.

Public transport improvements include the extension of the Council's car park near Barrhead Station to provide additional Park & Ride capacity. Clarkston Station has had a new ramp constructed to improve access for the mobility impaired with an associated puffin crossing installed between the ramp and adjacent disabled parking bays. Several stations have had enhancements to footways and footpaths undertaken, with a number also benefiting from CCTV, help-points and improved lighting. Disabled parking provision has also been improved at a number of stations.

SPT implemented platform extensions on the East Kilbride line in 2004 at Busby, Clarkston, Giffnock and Thornliebank to allow the operation of longer trains. Recently refurbished trains have been utilised to extend existing services from 4 to 6 cars. SPT is developing proposals to implement a Glasgow Crossrail scheme which would involve the construction of new track and stations to link the southwest rail network to the northeast rail network. The implementation of Crossrail would create opportunities for some services from the southwest to be rerouted via Glasgow Queen Street low level providing greater integration and opportunities for interchange. Among the services that may be rerouted are those from Barrhead and East Kilbride. Network Rail is progressing a scheme to remove long-standing speed restrictions on the Neilston branch line whilst also developing proposals to increase the capacity of the rail line between Barrhead and Kilmarnock.





Bus stop infrastructure has been upgraded by the introduction of new kerbs and surfacing at 10 stops whilst 90 stops have benefited from enhanced road markings to discourage the misuse of bus stops. 8 bus stops in Barrhead have had raised kerbs installed to assist boarding and alighting for those with mobility problems. These measures are currently being rolled out across Barrhead and to other areas. A programme is in place for bus shelter renewals and the installation of new shelters at existing stops where merited. SPT have embarked upon a 5-point Action Plan for buses to ensure regulations are adhered to and to facilitate improvements in services.



The Council is a major employer with around 4,500 staff members. This generates a considerable amount of travel to and from the workplace as well as work related trips. To encourage this travel to be undertaken by sustainable means the Council has developed a Travel Plan for its employees. It aims to discourage use of the car where feasible and promote walking, cycling and public transport as healthier and more environmentally friendly alternatives. Targets for modal shift which have been set are to:

- Increase the proportion of employees travelling by public transport, bike or walking to/from work from 14% to 18% by December 2008;
- Reduce the proportion of employees driving to/from work as a single occupant from 74% to 72% by December 2008.



Schools have been actively developing Travel Plans. Presently two primary schools have developed Plans and another ten are in the process of doing so. These aim to encourage pupils to travel to school by sustainable means and reduce problems associated with the "school run". The Council is in the midst of a programme to introduce part-time 20mph speed limits around schools. So far fourteen part-time 20mph zones around schools have been implemented. The walking environment around schools is being improved by reconstructing footways and installing bollards to prevent inappropriate parking. These measures complement and support the objectives of the School Travel Plans.



The Society of Chief Officers of Transportation in Scotland (SCOTS) is promoting a coordinated approach to road asset management to facilitate a consistent level of road maintenance across Scotland. They undertake surveys of the road network to ascertain the scale of the maintenance requirement facing local authorities.

At a national level a Concessionary Travel Scheme for people over 60 and the disabled came into operation in April 2006. This allows free bus travel across the whole of Scotland regardless of the time of day. A Young Persons Concessionary Travel scheme began operation in January 2007 which allows 16 – 18 year olds and full-time volunteers up to the age of 25 concessionary travel on buses, trains and ferries. SPT administers these schemes in the west of Scotland on behalf of its constituent Councils.

SECTION 2

# Policy Context





## 2.1 Transport Policy

Transport policy at a national and international level is aimed at encouraging sustainable travel by reducing dependence on motorised transport and encouraging the use of alternatives. This is to reduce the negative environmental impacts of transport, particularly road transport, which is a significant and growing source of greenhouse gases and ultimately reduce climate change. The Kyoto Agreement committed the UK to a target of reducing greenhouse gas emissions by 12.5% below 1990 levels between 2008-12. The UK Government has set its own, more ambitious target, to reduce Carbon Dioxide emissions by 20% by 2010 and 60% by 2050 in comparison to 1990 levels. The Scottish Government is also considering introducing a statutory target to cut emissions by 80% by 2050. The LTS can help to achieve these targets by facilitating local changes in travel behaviour.

EU transport policy seeks to enable free trade to flourish by ensuring transport networks are of a suitable standard to allow efficient movement of goods. As such, it has designated a Trans-European Network of transport infrastructure which includes the Glasgow & South Western Railway and the M77.

The UK Government has established 5 key objectives for transport which are environment, economy, safety, integration and accessibility. The Scottish Government set out its detailed national transport objectives in 2004 in the white paper entitled "Scotland's Transport Future" which have subsequently been confirmed in the National Transport Strategy. These are to:

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

The NTS elaborated on these objectives by establishing 3 strategic outcomes which contribute to their achievement. These include:

- Improve journey times and connections;
- Reduce emissions; and
- Improve quality, accessibility and affordability of public transport.

In association with the NTS 3 Action Plans, which elaborate on particular issues in relation to Buses, Railways and Freight in more detail were also published.





The Scottish Government has also recently established 5 strategic objectives which influence all public policy. These are:

- *Wealthier and Fairer:* Enable businesses and people to increase their wealth and more people to share fairly in that wealth.
- *Healthier:* Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.
- *Safer and Stronger:* Help local communities to flourish, becoming stronger, safer place to live, offering improved opportunities and a better quality of life.
- *Smarter:* Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements.
- *Greener:* Improve Scotland's natural and built environment and the sustainable use and enjoyment of it.

Transport Scotland has commenced the Strategic Transport Projects Review which will identify the major investment schemes across Scotland for the period from 2012 to 2022. These schemes will be consistent with the policy and actions identified in the NTS and its Action Plans, and will consider both infrastructure and non-infrastructure measures. Work on this is scheduled to be complete by the summer of 2008.

SPT has developed a Regional Transport Strategy for the west of Scotland. Its objectives are:

- To improve safety and personal security on the transport system;
- To increase the proportion of trips undertaken by walking, cycling and public transport;
- To enhance the attractiveness, reliability and integration of the transport network;
- To ensure the provision of effective and efficient transport infrastructure and services to improve connectivity for people and freight;
- To promote and facilitate access that recognises the transport requirements of all;
- To improve health and protect the environment by minimising emissions and consumption of resources and energy by the transport system;
- To support land-use planning strategies, regeneration and development by integrating transport provision.

The Regional Transport Strategy identifies a core strategy centred around 4 elements including planning and delivery of SPT's "Core Activities", 18 specific Action Plans, a Target Programme for major initiatives and "Snapshots" of specific strategy elements.

Network Rail is required to produce Route Utilisation Strategies (RUS) to cover the UK rail network in accordance with the Railways Act 2005. The Scottish RUS identifies a number of schemes which have implications for the operation of the network within East Renfrewshire.





## 2.2 Corporate/Community Plans

The Community Plan gives direction to subsidiary plans like the Local Transport Strategy and is currently being updated. The Community Plan consultative draft identified the need for good public transport as a key issue identified by local people. It also established 11 core outcomes, one of which is to “enhance transport provision in East Renfrewshire to improve access to key services, including health care services, leisure facilities and employment opportunities.” This is identified as a long-term goal to be addressed through the LTS.

The Council’s Corporate Statement 2007 – 2011 outlines how the Council will work to improve and maintain an attractive, safe local environment, where everyone has the opportunity to benefit from an enhanced quality of life. This vision directs all the work of the Council. One of the key objectives is to improve the condition of the road network and encourage the use of sustainable modes of transport.

In addition, the Council has a Policy & Financial Plan which articulates specific objectives and actions for each service in accordance with principles set down in the Community Plan and Corporate Statement. Key objectives for the Roads Planning and Transportation Service are to improve road safety, reduce congestion, promote alternatives to the car, maintain transport infrastructure and to promote an integrated approach to resolving transport problems.

## 2.3 Land-use Planning

The Scottish Parliament has approved amendments to the land-use planning system through the Planning Etc. (Scotland) Act 2006 which will see the abolition of Structure and Local Plans and their replacement with Strategic Development Plans and Local Development Plans respectively. These reforms also make the National Planning Framework a statutory document with the power to specify major infrastructure schemes including transport. The first statutory National Planning Framework is due to be published in the autumn of 2008. Commencement Orders will be implemented over the next 2 to 3 years to bring these arrangements into being although in the interim period the existing arrangements remain relevant.

The first National Planning Framework produced in 2004, which is not a statutory document, provides the strategic land-use planning context for Scotland. The existing NPF strives to support the sustainable development of Scotland to facilitate economic prosperity acknowledging the key role transport has to play and that investment will be required in transport networks. The NPF places the emphasis on city regions as the drivers of economic growth. East Renfrewshire is an important part of the Glasgow city region.

The Glasgow & Clyde Valley Structure Plan was published in 2000. It has subsequently had 3 alterations submitted, 2 of which have been approved whilst 1 is awaiting approval. It has therefore been replaced with a consolidated plan. The alteration has made provision for an increase in housing development by 19,400 units to 113,100 in the period to 2018 and has also designated Barrhead as a





Strategic Industrial and Business Location. Within East Renfrewshire 1,500 houses are programmed for construction in the period between 2004 and 2011 with a further 1,050 due for construction between 2011 and 2018. This is an increase of 300 houses in the period between 2011 and 2018 from the allocations originally set out in the Structure Plan 2000. Whilst the additional housing release in East Renfrewshire is small the overall increase across the Glasgow & Clyde Valley area is significant and will have considerable implications for transport. The Structure Plan has also established a hierarchy of transport modes comprising walking, cycling, public transport and motor vehicle to be considered sequentially. For freight, preference should be given to transferring goods by rail or water rather than road. It also outlines a number of transport proposals to be investigated to support the land-use plan which include:

- Safeguarding and investigating radial and orbital mass transit systems on key corridors including:
  - Giffnock/Newton Mearns – Glasgow
  - East Kilbride – Clarkston/Giffnock – Paisley
  - East Renfrewshire, Lanarkshire, Inverclyde & Renfrewshire – Ayrshire
- Public transport schemes including:
  - Links to Newton Mearns
  - Barrhead to Kilmarnock rail link
  - Development of a new station at Auchenback (Barrhead)
- Improvements to M77 Junction 4
- A Motorway Service Area at M77 Junction 5

East Renfrewshire Council's Local Plan was adopted in November 2003 and is currently being reviewed. The Final Draft is due to be published in 2008. The Local Plan articulates a local perspective to the strategy in the Structure Plan and evaluates its proposals in more detail. It complements the policy established in the Structure Plan by seeking to promote sustainable development, reduce the need to travel and promote a modal shift from cars to walking, cycling and public transport.

The Council is taking forward the regeneration of Barrhead, which has suffered from a decline in traditional industries and the economic repercussions of this. These proposals have implications for transport in the area and could see, amongst other developments, the creation of a new supermarket, the construction of a new road roughly following the alignment of Glen Street and changes to the operation of traffic on Main Street.

The Land Reform (Scotland) Act 2003 requires the preparation of a Draft Core Paths Plan by February 2008. This will provide a framework of routes giving the public reasonable access throughout the area and will also link into wider path networks. It will be based on the results of public consultation and will provide routes for walking, cycling and other non-motorised transport ensuring connections between communities and across local authority boundaries.







The relationship between land-use and transport planning is strengthened by planning policy document SPP 17 – Planning for Transport and its supporting document PAN 75. The Council is required to consider the transport implications of a proposed development against the policy established in these documents.

## 2.4 Economic Development

The Scottish Government published the Framework for Economic Development in Scotland in September 2004. It identifies the need for highly developed and effective transport and communications infrastructure to support its 4 objectives which include:

- Economic growth – with growth accelerated and sustained through greater competitiveness in the global economy;
- Regional development – with economic growth a pre-requisite for all regions to enjoy the same economic opportunities, and with regional development itself contributing to national economic prosperity;
- Closing the opportunity gap – with economic growth a pre-requisite for all in society to enjoy enhanced economic opportunities, and with social development in turn contributing to national economic prosperity; and
- Sustainable development – in economic, social and environmental terms.

It identifies a need for a clear focus on improved strategic planning, infrastructure investment, reducing road congestion and improving public transport. It also outlines a number of market failures in the transport sector that require public sector intervention to provide a transport system capable of promoting economic development.

In addition, the Council has an economic development strategy aimed at harnessing the economic potential of East Renfrewshire and promoting local employment opportunities. Emphasis is placed upon creating an enterprising and entrepreneurial culture but this has to be supported by appropriate infrastructure including a transport network which provides sustainable access to business locations. Residents also need access to opportunities to benefit from, and foster, economic growth in the area. The quality of existing transport links has been identified as a barrier that currently hinders the realisation of this goal.

## 2.5 Social Inclusion

The Scottish Government introduced “Closing the Opportunity Gap” aimed at reducing poverty and promoting social inclusion. 6 objectives have been identified which include improving access to high quality services for the most disadvantaged groups and individuals in rural communities to improve their quality of life and enhance their access to opportunity. Transport has a key role to play in achieving this objective. In particular, there is a requirement to promote accessibility by public transport for those without access to a car.





Linked to social inclusion is the need to stimulate regeneration in deprived areas. The Scottish Index of Multiple Deprivation (SIMD) is used to gauge levels of deprivation. Levels of deprivation in East Renfrewshire are minimal with only Barrhead showing as small pockets of deprivation according to the SIMD.

Groups like the elderly, mobility impaired, young people and minority groups often experience particular difficulties in accessing transport. The Mobility and Access Committee Scotland has produced guidance on developing transport strategies that take account of these issues. In particular, it advocates that the needs of the disabled are considered and integrated into every aspect of the transport strategy.

## 2.6 Environment

Transport has a major impact on the environment and its contribution to pollution, particularly air pollution, is continuing to increase. Sustainable development is the key principle underpinning environmental policy which seeks to ensure that actions taken now do not limit the ability of future generations to meet their needs. The Scottish Government's sustainable development strategy, "Meeting the Needs ... Priorities, Actions and Targets for Sustainable Development in Scotland" outlines the need to plan communities to minimise travel by providing more mixed-use developments and encouraging travel by alternative means to the car. The notion of sustainable development has been integrated into local policy through the Council's Sustainability Strategy which identifies a link between the environment and quality of life issues like access to transport. One of the core commitments in the Sustainability Strategy is to minimise reliance on non-renewable resources through such measures as the promotion of sustainable modes of transport like walking, cycling and public transport and material recycling.

Transport is a major contributor to air pollution. The Council monitors the air quality at key locations across the authority in accordance with the requirements of the Environment Act 1995 with the results set out in the Local Air Quality Management Updating Screening and Assessment 2006 report.

## 2.7 Health

A physical activity strategy, entitled "Lets Make Scotland More Active", has been produced which aims to reverse the trend toward inactivity and the deterioration in health that is commensurate with it. Physical activity can take many forms including active travel where the benefits of using walking and cycling as a mode of transport make a positive contribution to an individual's wellbeing. It has been identified that 72% of women and 59% of men in Scotland are not active enough to sustain their health. A key objective of the strategy is to raise levels of physical activity and to integrate the concept of physical activity more widely into disciplines like transport planning and delivery.





## 2.8 Safety

A national strategy for road safety entitled "Tomorrow's Roads – Safer for Everyone" was published in March 2000 and established several targets to reduce the number of casualties on the road network. The key targets are, in comparison with the average for 1994-98, to realise a:

- 40% reduction in the number of people killed or seriously injured in road accidents by 2010;
- 50% reduction in the number of children killed or seriously injured by 2010; and
- 10% reduction in the slight casualty rate by 2010, expressed as the number of people slightly injured per 100 million vehicle kilometres.

In addition to the national strategy the Council has also produced its own Road Safety Plan which adopts the national targets as a minimum. Actions are focussed upon four key areas including Education, Engineering, Enforcement and Encouragement. The Council is currently in the process of developing a new Road Safety Plan which is closely aligned with the LTS.



SECTION 3

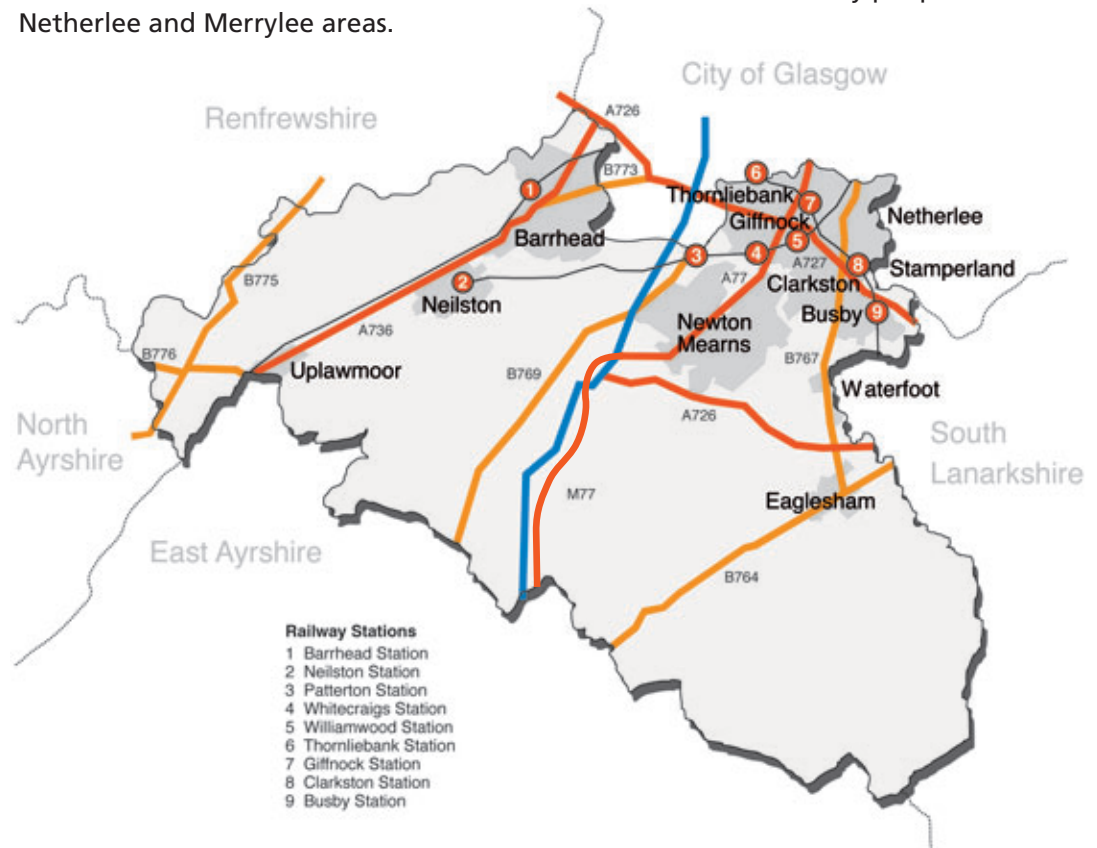
# Transport Issues & Trends





### 3.1 Transport Network

East Renfrewshire is served by a well-developed road network and a commuter rail network which links the area to Glasgow city centre. The existing transport network is shown on the map below. In addition, Muirend Station is located just outwith East Renfrewshire on the Neilston line and is the closest station for many people in the Netherlee and Merrylee areas.



### 3.2 Road Network

The road network can be segregated into a hierarchy of routes which all perform different functions. Principal roads cater for long-distance traffic and are the preferred routes for freight. They can also perform more localised roles in some instances, although this can lead to conflicts. These routes are essential for providing links to nearby centres of economic activity and connections to other strategic routes giving access to wider markets. The principal road network of East Renfrewshire include the:

- A736 linking Glasgow to Irvine via Barrhead
- M77 linking Glasgow to Kilmarnock via East Renfrewshire
- A726 Glasgow Southern Orbital linking the M77 to East Kilbride
- A727 linking Busby and Clarkston to Lanarkshire and Renfrewshire
- A77 linking Glasgow to Kilmarnock via Newton Mearns and Giffnock (although predominantly used for local access from East Renfrewshire to Glasgow)





All of these roads cater for strategic and localised traffic as well as access to local communities. It is important to ensure their dual role is taken into consideration when planning for the network.

Distributor roads provide important connections to the principal road network for local communities and cater for more localised traffic movements. They also link communities to services and employment opportunities in larger settlements. These include the:

- B764 linking Eaglesham to East Kilbride
- B767 linking Eaglesham, Waterfoot and Busby to the A726 GSO and to Clarkston and it's surrounding areas in the north
- B771 linking Barrhead to Paisley via the A726
- B773 linking Barrhead to the A726 and the motorway network
- B769 linking Newton Mearns to Thornliebank and beyond

The remaining roads largely perform local functions connecting housing areas and providing local access. However, there are exceptions where a road performs an important role which they were not originally designed to do. The most notable example is Aurs Road which links Barrhead to Newton Mearns but is poorly aligned, with weight and height restrictions which lead to safety concerns. It is subsequently unsuitable for large volumes of traffic. It also acts as a link between Barrhead and the M77 but is unsuitable for this critical function.

SCOTS (Society of Chief Officers Transportation in Scotland) has undertaken the Scottish Road Maintenance Condition Survey to identify the maintenance backlog facing local authorities. It has been identified that 62% of the local road network in East Renfrewshire should be considered for maintenance. The Council has insufficient funding to address this problem and must prioritise investment toward the areas most in need. Subsequently, the condition of the local road network is slowly deteriorating. Considerable investment is required to maintain the network in a suitable condition and remove the backlog of maintenance.

Some localised congestion problems have begun to develop on the road network although this is small compared to congestion in Glasgow. Analysis of data from the Transport Model for Scotland has indicated that congestion may become a problem in some locations if action is not taken. These include:

- At M77 Junction 4
- On Crookfur Road and Firwood Road in Newton Mearns linking to M77 Junction 4
- At M77 Junction 5
- On A727 between Spiersbridge roundabout and Sheddens roundabout
- At the junction between Mearns Road and A726

Congestion often occurs on the M77 during peak periods but tends to be mainly outwith East Renfrewshire. The construction of the M74 completion may help to ease these problems. Congestion problems can be temporarily exacerbated by route switching from parallel roads when roadworks and other disruptive activities are taking place.





The Council road network includes a number of structures, comprising various bridges, culverts, retaining walls and footbridges. A wide range of materials and structural form is evident from the table below although it does not include culverts with spans under 1.8m or structures owned by Network Rail or British Rail Property Board. The number and location of retaining walls is not accurately known.

Structure Form	Material	Type	Number
Arch	Masonry / Brick	Bridge	64
Slab	Concrete	Bridge	20
Pipe	Concrete	Culvert	6
Slab	Metal	Bridge	9
Pipe	Metal	Culvert	3
Truss	Timber	Footbridge	1
Box	Concrete	Culvert	1
Slab	Metal	Footbridge	5

### 3.3 Rail Network

East Renfrewshire is served by 3 railway lines and 9 stations. This includes the:

- Glasgow to East Kilbride line with stations at Thornliebank, Giffnock, Clarkston and Busby
- Glasgow to Neilston line with stations at Muirend (just outwith East Renfrewshire), Williamwood, Whitecraigs, Patterton and Neilston
- Glasgow & South Western (G&SW) line with a station at Barrhead

It is not generally used for freight although the G&SW line is a diversionary route for the West Coast Main Line.

Patronage on the rail network has grown over the last few years. The following table illustrates the change at the 9 stations across East Renfrewshire and the current service frequency to and from Glasgow. It can be seen that all 9 stations have experienced a growth in patronage. The highest growth in percentage terms has been at Barrhead, Whitecraigs and Thornliebank with the highest absolute growth occurring at Barrhead. Service levels have remained constant over the past few years which suggests other factors are influencing demand for rail travel. The rail network is an important part of the local transport infrastructure and additional capacity may be required to sustain and grow patronage.





### Passengers at stations

Station	2003	2006	Absolute Change	% Change	Off peak frequency per hour To Glasgow	Off peak frequency per hour From Glasgow
Barrhead	413,778	511,073	97,295	23.5	3	3
Neilston	411,096	450,903	39,807	9.7	2	2
Clarkston	363,186	401,312	38,126	10.5	2	2
Patterton	286,411	307,972	21,561	7.5	2	2
Whitecraigs	225,394	278,279	52,885	23.5	2	2
Williamwood	238,388	255,323	16,935	7.1	2	2
Giffnock	231,616	244,667	13,051	5.6	2	2
Thornliebank	76,244	95,431	19,187	25.2	2	2
Busby	90,136	94,433	4,297	4.8	2	2

Source: 2003 – Strategic Rail Authority, 2005  
2006 – Office of Rail Regulation, 2007

Park & Ride facilities play an important role in encouraging train use. First ScotRail provides Park & Ride facilities at the majority of stations, including Whitecraigs and this is augmented by Council car parks at Barrhead, Clarkston and Williamwood with ownership of the car park at Giffnock split between the two parties. A survey of Park & Ride facilities was undertaken in May 2006 with the results detailed below. This identified that Park & Ride facilities are operating at capacity at all stations and in many instances cars were overflowing. The only station not suffering from overflowing is Busby. Expansion of Park & Ride facilities or management of existing spaces is required to cater for increased demand and encourage the use of trains. There are currently no charges for using Park & Ride facilities in East Renfrewshire.

### Park & Ride Utilisation at Stations

Station	Spaces	Usage	Disabled Spaces	Usage of Disabled Spaces	Cars Overflowing
Barrhead	78	100%	8	88%	27
Busby	9	78%	0	N/A	0
Clarkston	30	100%	2	0%	12
Giffnock	104	98%	5	100%	20
Neilston	32	94%	2	50%	16
Patterton	47	98%	2	100%	15
Thornliebank	0	N/A	0	N/A	N/A
Whitecraigs	166	99%	2	50%	28
Williamwood	48	94%	0	N/A	14

Source: East Renfrewshire Council, 2006







There are a number of infrastructure constraints, both within and outwith East Renfrewshire, which affect the capacity of the rail network. Peak utilisation levels of the rail network serving East Renfrewshire are shown below. The Neilston branch line operates significantly under practical capacity at peak times although where it joins others approaching Glasgow levels, of utilisation increase considerably. The G&SW line between Barrhead and Kilmarnock is operating at 133% practical capacity at peak times and inhibits the introduction of a half hourly service to and from Kilmarnock. Service levels on the East Kilbride branch line are constrained by the single line section between Busby junction and East Kilbride which operates at 100% practical capacity during peak periods.

#### Peak Utilisation of Rail Network serving East Renfrewshire

Section	Peak Utilisation
Barrhead – Kilmarnock	133%
Busby – East Kilbride	100%
Muirhouse South Junction – Busby Junction	82%
Cathcart West Junction – Neilston	36%
Busby Junction – Barrhead	36%

Source: Scotland Route Utilisation Strategy: Appendix A Baseline Report, Network Rail, 2007

Constraints also apply to trains themselves as limitations on platform lengths, rolling stock availability and the track capacity issues outlined above restrict capacity which can lead to overcrowding occurring at peak times. Analysis by Network Rail identified that some services in East Renfrewshire suffer from overcrowding at peak times. The table below illustrates the current and projected loadings on services on the East Kilbride and G&SW line. No overcrowding is currently experienced on the Neilston line. Overcrowding problems are worst on the East Kilbride line and services on both lines will come under further pressure in the future although services on the Neilston line are predicted to remain within capacity.

#### Morning Peak Load Factors

Service	2004/05	2011	2016	2026
East Kilbride	94%	94%	97%	106%
Kilmarnock / Barrhead	78%	78%	80%	87%

Source: Scotland Route Utilisation Strategy, Network Rail, 2007

### 3.4 Buses

Since deregulation bus services have been largely operated by private companies which makes obtaining information about their usage difficult due to commercial sensitivities. Bus mileage has remained fairly constant since 2000 with the decline witnessed since 2000/01 being reversed in 2006/07. Whilst the degree of subsidised





mileage is comparatively small it can be seen that it has grown as a percentage of the total mileage over the period until 2006/07 when it drops off again.

#### Annualised Bus Mileage in East Renfrewshire

	Unsubsidised	Subsidised	Total	% Subsidised
2000/01	2,271,163	150,946	2,422,109	6.23
2001/02	2,015,829	130,459	2,146,289	6.08
2002/03	2,093,088	148,643	2,241,731	6.63
2003/04	2,109,382	152,479	2,261,861	6.74
2004/05	2,176,701	175,117	2,351,817	7.45
2005/06	2,188,411	181,814	2,370,226	7.67
2006/07	2,412,373	152,301	2,564,674	5.94

Source: SPT, 2007

East Renfrewshire's residents do not use bus services as frequently as the Scottish average although this varies across the authority area. Bus use is partly dependent upon the origin and destination of the journey with areas not directly linked by rail services more likely to have higher levels of bus usage. There is a high level of bus usage for trips between Barrhead and Paisley. Buses are also well utilised for journeys to Glasgow. Overall, the highest levels of bus usage are in Barrhead, Thornliebank, Netherlee and Stamperland.

Analysis of the combined capacity of bus and rail services within East Renfrewshire has shown that there is considerable spare capacity on services in the eastern part of the authority but those in the western part are operating close to capacity. The problem is most acute at the northern Council boundary where patronage exceeds capacity on services.

### 3.5 Access to Public Transport

Accessibility to train services varies dramatically between areas with Neilston displaying the highest levels although the number of services is limited. Clarkston, Giffnock, Thornliebank, Busby and Newton Mearns all have regular services but levels of accessibility vary due to the geographic location of stations. Newton Mearns has particularly low levels of accessibility due to the location of Whitecraigs and Patterton Stations on the outskirts of the urban area. Eaglesham is not connected to the rail network and therefore there is no walk-in catchment.





**Accessibility within 800m of a train station between 7.45 – 9.15  
(% of total population)**

Location	Train services per hour		
	1	2	4
Barrhead	25%	25%	0%
Newton Mearns	7%	7%	7%
Clarkston, Giffnock, Thornliebank, Busby	59%	59%	59%
Eaglesham	N/A	N/A	N/A
Neilston	69%	69%	0%

Source: East Renfrewshire Accession Model

Three quarters of East Renfrewshire’s population is within 6 minutes walk of the nearest bus stop which is lower than the national equivalent. The service frequency is perceived to be fairly irregular although a third of people are unaware of it. This may be representative of East Renfrewshire’s residents’ tendency to use their car and not consider public transport alternatives. This makes no provision for the accessibility of the buses themselves which is crucial for people with mobility problems. It also takes no account of the fact that whilst services may be available they may not serve desirable locations.

**Walking time to nearest bus stop (% of households)**

	Up to 3 mins	4 – 6 mins	7 – 13 mins	14+ mins	Don’t know	No service
East Renfrewshire	36	42	18	4	1	0
Scotland	55	31	9	3	1	1

Source: Transport across Scotland in 2003 and 2004: some Scottish Household Survey results for parts of Scotland, Scottish Government, 2006

**Frequency of bus service at nearest bus stop (% of households)**

	Up to 13 mins	14 – 26 mins	27 – 63 mins	64+ mins	Don’t know
East Renfrewshire	24	28	15	0	33
Scotland	24	24	24	4	23

Source: Transport across Scotland in 2003 and 2004: some Scottish Household Survey results for parts of Scotland, Scottish Government, 2006





Accessibility to bus services varies depending upon location, service frequency and time of day. The Clarkston, Giffnock, Thornliebank and Busby area demonstrates the lowest levels of accessibility in both the AM peak and evening. Accessibility during the AM peak remains reasonably constant in relation to the number of services although significant drop-off occurs in Newton Mearns and Eaglesham at a frequency of 6 buses per hour. Clarkston, Giffnock, Thornliebank and Busby exhibit a slower drop off as service frequency increases. However, accessibility to bus services fluctuates much more significantly in the evening depending upon location and frequency of service. Neilston has particularly limited access to regular bus services.

**Accessibility within 400m of a bus stop between 7.45 – 9.15 (% of total population)**

Location	Buses per hour			
	1	2	4	6
Barrhead	91%	91%	90%	83%
Newton Mearns	82%	79%	72%	27%
Clarkston, Giffnock, Thornliebank, Busby	74%	74%	69%	54%
Eaglesham	80%	80%	80%	0%
Neilston	83%	82%	82%	81%

Source: East Renfrewshire Accession Model

**Accessibility within 400m of a bus stop between 18.00 – 23.00 (% of total population)**

Location	Buses per hour		
	1	2	3
Barrhead	83%	74%	24%
Newton Mearns	72%	63%	0%
Clarkston, Giffnock, Thornliebank, Busby	69%	56%	44%
Eaglesham	80%	30%	0%
Neilston	81%	0%	0%

Source: East Renfrewshire Accession Model

**3.6 Cycling**

Cycling is rarely used as a means of travel in East Renfrewshire with 98% of people never using cycling for this purpose. Recreational cycling levels are slightly higher with 3% of people cycling for pleasure. High levels of car ownership combined with the large numbers of commuters who travel outwith the Council area to work may contribute to the low use of cycling. These trends are not unique to East Renfrewshire and are replicated across much of the country. Nonetheless, it has been observed that improved cycling infrastructure has led to an increase in local levels of cycling.





### 3.7 Walking

Some people regularly walk as a means of transport or for recreational reasons but there are a significant number of people who do neither. 66% of East Renfrewshire's residents regularly walk as a mode of transport which is slightly above the 64% for Scotland as a whole. They are, however, slightly less inclined to walk for recreational reasons, with 42% walking for pleasure or fitness compared to 44% at a national level. Given the prevalence of car use it is perhaps surprising that levels of walking as a means of transport are not lower. However, as levels of walking to work are low these must be trips other than to and from work. As a compact authority there is scope to increase walking to work although this may be hampered by the lack of economic activity in the area. The propensity to walk also has implications for wellbeing as a lack of physical exercise can contribute to deterioration in health.



### 3.8 Safety & Security

Road safety levels have improved over the last decade and have now met the targets set by the Government. These targets are a 40% reduction in the "killed & seriously injured" rate, 50% reduction in the "child killed & seriously injured" rate and 10% reduction in the "slight" casualty rate per 100 million vehicle kilometres compared with the 1994 – 1998 average. As well as the human costs each casualty also incurs a monetary cost through insurance settlements and lost productivity and therefore the cost saving of reducing casualties can be calculated and related to the cost of implementing road safety schemes to ensure value for money is obtained.



**Casualties in East Renfrewshire**

1994-1998 average			2001-2005 average		
Killed	Killed & Serious	Slight (per 100 million veh km)	Killed	Killed & Serious	Slight (per 100 million veh km)
6	58	40	3	33	26

Source: Road Accidents Scotland 2005, Scottish Government, 2006

Absolute Difference			Percentage Difference		
Killed	Killed & Serious	Slight (per 100 million veh km)	Killed	Killed & Serious	Slight (per 100 million veh km)
-3	-25	-14	-50%	-43%	-35%

**Children Killed & Seriously Injured in East Renfrewshire**

1994-1998 average	2001-2005 average	Absolute Difference	Percentage Difference
11	5	-6	-55%

Source: Road Accidents Scotland 2005, Scottish Government, 2006



Safety needs to be considered for all road users with cyclists and pedestrians being particularly vulnerable groups. Casualty rates for motorcyclists have remained broadly constant whilst all other groups have declined.

Personal security concerns can act as a barrier to using public transport. Almost a third of residents of East Renfrewshire have concerns about the safety of using bus and train services.

### 3.9 Car Ownership & Usage

In 2001, over 80% of households in East Renfrewshire owned at least 1 car which is up from 75% in 1991. This is considerably higher than the national average. There are also more households owning 2 or more cars in East Renfrewshire than there are for Scotland as a whole.

Car Ownership (% of households)

	No Car	1 Car	2 Cars	3+ Cars
East Renfrewshire	19.8	43.4	31.4	5.4
Scotland	34.2	43.4	18.6	3.8

Source: Census 2001

These high levels of car ownership are not uniformly distributed across the authority area though. Car ownership is lower in the Barrhead and Neilston area than it is in the rest of East Renfrewshire. Areas in the suburban northern part of the authority, which tend to be better served by public transport, also have lower levels of car ownership. The highest levels of ownership are exhibited in the most affluent areas, particularly Clarkston and the Greenfarm and Broom areas of Newton Mearns. This wide variation reflects relative affluence but also the quality of public transport services available. An exception seems to be Eaglesham, which with its rural location and limited public transport services may be expected to have a very high rate of car ownership but there is a significant minority of households that do not own a car.

Car Ownership by ward (% of households)

	No Car	1 Car	2+ Cars
Auchenback	43.8	41.2	15.0
Barrhead Central	38.1	44.8	17.1
Barrhead East	47.8	36.2	16.0
Barrhead North	15.0	47.3	37.7
Broom	4.5	30.8	64.7
Busby	25.4	49.0	25.7
Clarkston	6.7	43.9	49.4
Crookfur	11.6	40.4	48.0





### Car Ownership by ward – CONTINUED

	No Car	1 Car	2+ Cars
Eaglesham	16.9	44.1	39.0
Giffnock North	18.8	40.0	41.1
Giffnock South	7.9	41.8	50.3
Greenfarm	4.7	36.8	58.5
Kirkhill	10.6	45.1	43.3
Liboside	18.2	44.3	37.5
Mearns	18.1	34.8	47.1
Merrylea Park	18.9	50.7	30.4
Netherlee	16.1	47.3	36.6
North Neilston & West Arthurlie	37.9	42.8	19.3
Stamperland	13.7	53.2	33.1
Thornliebank	24.5	48.9	26.6

Source: Census 2001

High levels of car ownership also result in high levels of car usage. The table below illustrates East Renfrewshire's dependence on car use compared to Scotland as a whole. The percentage of people who possess a full driving licence is higher than the national average but the most alarming trend is the high number of people who use their car every day.

### Frequency of driving by people aged 17 + (% of people)

	Every Day	Per week		Per month			Has full licence but never drives	Total with a full driving licence	Does not have a full driving licence
		At least 3 times	Once or time	At least 2-3 times	At least once	Less than once			
East Renfrewshire	54	10	5	0	1	1	3	75	25
Scotland	42	11	6	1	0	2	4	65	35

Source: Transport across Scotland in 2003 and 2004: some Scottish Household Survey results for parts of Scotland, Scottish Government, 2006

This has also been reflected by growth in traffic levels. Growth has been most pronounced on the trunk road network which now carries 132% more traffic than it did in 1996. Traffic on the trunk roads grew by 23% at the national level whilst traffic on local authority roads grew by 13% with an overall growth of 16%. Traffic growth on East Renfrewshire's trunk road network vastly exceeds that at a national



level whilst growth on the local roads is less pronounced but still outstrips the national average. This suggests much of the growth is a result of through traffic generated outwith East Renfrewshire.

**Traffic Growth in East Renfrewshire between 1996 and 2006 (million vehicle km)**

	1996	2006	Difference	% Change
Trunk Roads	81	188	107	132
Local Authority Roads	456	578	122	27
All Roads	537	766	229	43

Source: Updated Scottish Transport Statistics No. 25 Tables, Scottish Government, 2007.

East Renfrewshire exhibits a greater reliance on the car than is generally the case in Scotland. Given the environmental concerns associated with car use and the limited capacity of the road network it is clear that a priority for the LTS is to address this situation and to foster a transfer to more sustainable modes of transport.

**3.10 Travel Patterns**

The majority of journeys are made for commuting and shopping purposes with these accounting for almost half of all journeys by East Renfrewshire’s residents. The remaining trips are spread fairly evenly between purposes. The results for East Renfrewshire correlate closely with those of Scotland as a whole.

**Journeys by Purpose (%)**

	East Renfrewshire	Scotland
Commuting	28	25
Business	4	4
Education	4	3
Shopping	19	23
Visit hospital or other health	2	3
Other personal business	6	6
Visiting friends or relatives	9	11
Eating/drinking	3	4
Sport/entertainment	8	6
Holiday/day trip	4	4
Other	4	3
Escort	10	8

Source: Scottish Household Survey Travel Diary results for 2004, Scottish Government, 2006







### 3.11 Travel To Work

Analysis of travel to work patterns shows that the vast majority of residents travel outwith the authority to work or study. Just 30% of residents work or study in East Renfrewshire with 45% travelling to Glasgow, 9% to Renfrewshire and 6% to South Lanarkshire. This highlights how dependent residents of East Renfrewshire are on employment opportunities in the surrounding area and the need for good transport links to them.

Six wards account for 25% of all journeys to work or study by residents of East Renfrewshire. 17.5% of trips from residents of East Renfrewshire are destined for the wards of either Anderston or Merchant City. The majority of these trips are generated in the eastern part of the authority area. The other 4 wards which account for the remainder of the top 25% of journeys are all within East Renfrewshire although high levels of home-working is partly accountable for this trend. Trips to Glasgow city centre display noticeably higher shares for public transport than those to other destinations. Indeed 64% of all journeys to work or study by rail are destined for Anderston or Merchant City.

Destinations not located along an axis of public transport have much lower modal shares for bus and rail with commensurate increases in car usage. Levels of single occupancy car use also far outweigh trips made as a passenger. Trips destined for South Lanarkshire exhibit some of the highest levels of single occupancy car usage whilst destinations south of the river in Glasgow tend to have higher car modal shares than those north of the river. Some of the highest levels of bus usage are for trips to Paisley although car usage dominates for other destinations in Renfrewshire. Where a high quality public transport service exists, people are willing to use it, otherwise the car is the preferred option.

Very few people commute into East Renfrewshire with 65% of those who work or study in the area coming from within the Council boundary itself. Glasgow contributes 15%, Renfrewshire 6% and South Lanarkshire 5% of those working or studying in East Renfrewshire.

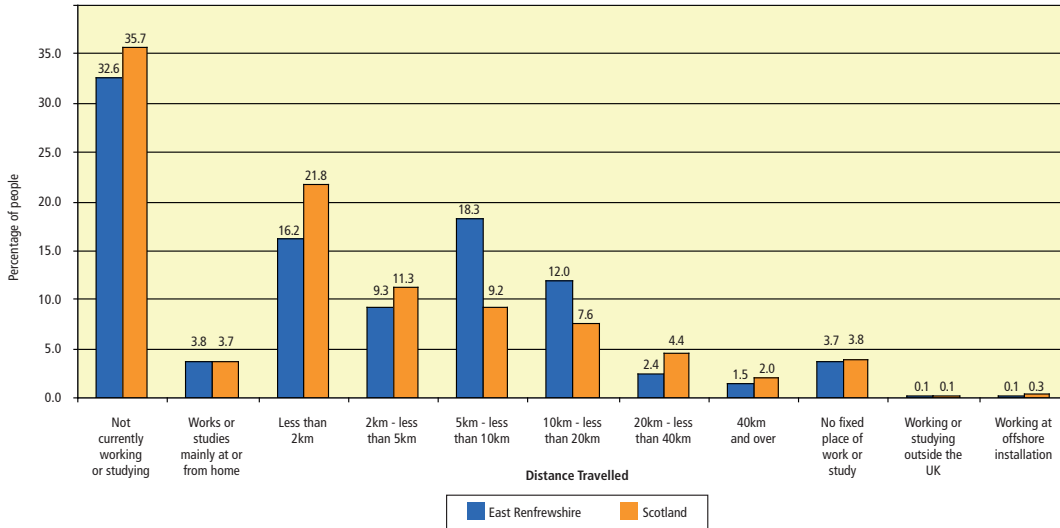
### 3.12 Distance Travelled

People are increasingly inclined to travel further to access services and employment opportunities as improvements to transport have made this possible without significantly increased journey times. Inhabitants of East Renfrewshire tend to travel further to work or study than the national average although less people travel in excess of 20km than in Scotland as a whole. The high numbers of people travelling between 5km and 20km illustrates how dependent East Renfrewshire is upon employment opportunities in Glasgow and the surrounding area.





### Distance Travelled to Work or Study



Source: Census 2001

### 3.13 Access to Services

Accessibility from East Renfrewshire to services like supermarkets, doctors, schools, hospitals and key shopping locations varies depending upon people's location within the area, the time of day and the mode of transport used. It can be seen that greater accessibility is always afforded by using a car and that accessibility can vary dramatically depending upon the destination in question. Accessibility to local services like doctors and schools is the best with more dispersed and unique locations suffering from poorer accessibility. There are particular accessibility issues associated with Braehead and, to a lesser extent, Glasgow City Centre and Silverburn. Accessibility by public transport in the evening is generally slightly worse than it is during the day whereas this has no impact on accessibility by car.

#### Access to Key Destinations from East Renfrewshire between 8.00-18.00 (% of pop)

Destination	Car				Public Transport			
	<15 mins	15-30 mins	30-60 mins	>60 mins	<15 mins	15-30 mins	30-60 mins	>60 mins
Supermarkets	100%	0%	0%	0%	68%	30%	1%	1%
Doctors	100%	0%	0%	0%	91%	9%	0%	0%
Glasgow City Centre	0%	95%	5%	0%	0%	0%	97%	3%
Secondary Schools	100%	0%	0%	0%	84%	15%	1%	0%
Primary Schools	100%	0%	0%	0%	97%	2%	1%	0%
Hospitals	100%	0%	0%	0%	6%	77%	16%	1%
Braehead	0%	0%	100%	0%	0%	0%	7%	93%
Silverburn	100%	0%	0%	0%	1%	35%	63%	1%

Source: East Renfrewshire Accession Model





### Access to Key Destinations from East Renfrewshire between 18.00-23.59 (% of pop)

Destination	Car				Public Transport			
	<15 mins	15-30 mins	30-60 mins	>60 mins	<15 mins	15-30 mins	30-60 mins	>60 mins
Supermarkets	100%	0%	0%	0%	65%	33%	1%	1%
Doctors	100%	0%	0%	0%	91%	8%	1%	0%
Glasgow City Centre	0%	95%	5%	0%	0%	0%	93%	7%
Secondary Schools	100%	0%	0%	0%	65%	34%	0%	1%
Primary Schools	100%	0%	0%	0%	95%	4%	1%	0%
Hospitals	100%	0%	0%	0%	3%	65%	31%	1%
Braehead	0%	0%	100%	0%	0%	0%	0%	100%
Silverburn	100%	0%	0%	0%	1%	25%	70%	4%

Source: East Renfrewshire Accession Model

### 3.14 Environment

Transport is a major contributor to environmental problems, particularly air pollution. No exceedences of the UK Air Quality Standards are predicted for NO<sub>2</sub> and PM<sub>10</sub>, although a near-exceedence in PM<sub>10</sub> (17.8µg/m<sup>3</sup> against a threshold of 18µg/m<sup>3</sup>) has been predicted for Sheddens Roundabout on the A727 in 2010. It is not clear whether future trends will increase or decrease concentrations as the opening of the new Glasgow Southern Orbital is expected to reduce traffic flows on the A727, whilst the relocation of Williamwood High School may increase the traffic flow through Sheddens Roundabout. NO<sub>x</sub> emissions in East Renfrewshire, as tonnes of NO<sub>2</sub>, are estimated at 926.5 tonnes in 2003 with 617.9 tonnes attributable to emissions from road transport. PM<sub>10</sub> emissions are estimated to be 82.2 tonnes with 28.8 tonnes of this from road transport emissions. CO<sub>2</sub> emissions are estimated to be 87,571.6 tonnes with road transport being responsible for 34,038.2 tonnes.

East Renfrewshire accounted for just 1.3% of the total consumption of oil by Scottish road traffic in 2002 and again in 2005. Petrol cars account for over 56% of oil consumption by road traffic in East Renfrewshire in 2002 but this decreased to 52% in 2005. Personal travel consumed almost 3 times as much fuel as freight traffic in both 2002 and 2005. At a national level, personal travel accounts for about double the consumption as freight traffic which illustrates the high levels of private vehicle use in the area relative to the rest of the country.





### Energy Consumption by road traffic in 2002 and 2005 (thousands of tonnes of fuel)

Mode	2002		2005	
	East Renfrewshire	Scotland	East Renfrewshire	Scotland
Buses	3.1	157.3	3.2	151.2
Diesel Cars	4.1	297.4	5.2	383.0
Petrol Cars	23.8	1,710.0	22.2	1,590.1
Motorcycles	0.1	8.8	0.1	8.8
HGVs	5.2	621.0	5.5	671.4
Diesel LGVs	5.0	414.5	5.8	477.9
Petrol LGVs	0.8	62.8	0.6	44.0
Personal	31.1	2,173.5	30.7	2,133.0
Freight	10.9	1,098.3	11.9	1,193.4
Total	42.1	3,271.8	42.6	3,326.4

Source: Department for Business, Enterprise & Regulatory Reform, 2007

Other environmental issues associated with transport such as noise and water pollution are considered not to be of concern at this time but will continue to be monitored by the Council.

### 3.15 Freight

Road freight data is not readily available at local authority level although some limited statistics for East Renfrewshire are shown below. However, aggregated data is available for Inverclyde, Renfrewshire and East Renfrewshire which gives an indication of freight traffic in the area. The area is largely self-contained and the freight that does travel outwith the area predominantly stays within the Central Belt. Road freight originating in the area totalled 4,527,090 tonnes whilst the amount destined for it amounted to 6,121,430 tonnes. It is apparent then that the area is a net importer of road freight with 1,594,340 tonnes more road freight imported than exported in 2004.





### Road freight originating in Inverclyde, Renfrewshire & East Renfrewshire in 2004

	Destination	Thousand tonnes	% of total
1	Inverclyde, East Renfrewshire and Renfrewshire	1449.49	32.02
2	East Ayrshire and North Ayrshire Mainland	456.03	10.07
3	Falkirk	443.52	9.80
4	East and West Dunbartonshire, Helensburgh and Lomond	442.95	9.78
5	Glasgow City	431.59	9.53
6	North Lanarkshire	243.29	5.37
7	Lochaber, Skye & Lochalsh and Argyll and the Islands	177.82	3.93
8	South Lanarkshire	165.24	3.65
9	Calderdale, Kirklees and Wakefield	93.47	2.06
10	Clackmannanshire and Fife	93.38	2.06

Source: DfT, 2005

### Road freight destined for Inverclyde, Renfrewshire & East Renfrewshire in 2004

	Origin	Thousand tonnes	% of total
1	Inverclyde, East Renfrewshire and Renfrewshire	1449.49	23.68
2	North Lanarkshire	981.41	16.03
3	East and West Dunbartonshire, Helensburgh and Lomond	710.46	11.61
4	Falkirk	455.50	7.44
5	Glasgow City	382.72	6.25
6	South Lanarkshire	344.34	5.63
7	East Ayrshire and North Ayrshire Mainland	318.97	5.21
8	Clackmannanshire and Fife	282.59	4.62
9	South Ayrshire	188.16	3.07
10	West Lothian	167.37	2.73

Source: DfT, 2005





The table below shows road freight to and from East Renfrewshire in 2004 and 2005. Road freight originating in and destined for East Renfrewshire both increased considerably between 2004 and 2005 which has implications for the road network its ability to cope with this demand.

**Road Freight To and From East Renfrewshire in 2004 & 2005**

Survey Year	Origin	Destination	Goods Lifted (tonnes)	Goods Moved (tonne km)	Vehicle Kilometres
2004	East Renfrewshire	East Renfrewshire	62,033	856,874	255,231
	East Renfrewshire	Other Destinations	477,491	75,320,248	7,366,828
	East Renfrewshire	All Destinations	539,524	76,177,121	7,622,059
	Other Origins	East Renfrewshire	774,454	54,600,031	5,811,579
	All Origins	East Renfrewshire	836,487	55,456,904	6,066,810
2005	East Renfrewshire	East Renfrewshire	91,861	6,893,892	2,050,643
	East Renfrewshire	Other Destinations	743,235	61,562,898	6,836,814
	East Renfrewshire	All Destinations	835,096	68,456,791	8,887,457
	Other Origins	East Renfrewshire	933,271	87,632,161	7,797,089
	All Origins	East Renfrewshire	1,025,132	94,526,053	9,847,731

Source: DfT, 2007

### 3.16 Overview

The most notable issue facing East Renfrewshire is dependence upon the car. This is manifested in high levels of car ownership and usage, although considerable variations exist across the authority area. Two issues surround these car ownership trends which include:





- The environmental concerns associated with car usage and the subsequent requirement to encourage a transfer to alternative modes of transport.
- The social exclusion issues that can result for people who do not have access to a car and are subsequently dependent on public transport for access to services and employment opportunities.

Residents are heavily dependent upon employment opportunities in the surrounding areas with 70% working outwith East Renfrewshire. The majority of these out-commuters take up opportunities in Glasgow which is generally well served by public transport. However, car use dominates for journeys outwith Glasgow city centre as public transport services are more sporadic. In addition, there is a significant minority of people who think it is unsafe to travel by public transport which inhibits the scope for modal shift.

A trend toward increasing journey distances is apparent. Reducing the need to travel will be dependent upon providing local opportunities that negate the need to travel elsewhere to access services and employment. Shorter journeys are also more conducive to being undertaken by sustainable modes like walking and cycling.

Constraints exist on the transport network which inhibit its ability to cater for the needs of everyone. Analysis has shown that the passenger rail network is coming under pressure from overcrowding and infrastructure constraints. In addition, in some instances public transport does not offer an attractive option to potential users. The area also experiences a high degree of through traffic which the Council has no control over. Consequently, there are considerable barriers to encouraging a shift to sustainable modes of travel.



SECTION 4

# Land-use & Transportation Changes







#### 4.1 Introduction

People travel so they can access a land-use in another location. Land-use and transport are thus inextricably linked and their relationship acts as a driver of the demand for travel. This relationship is fundamental in determining travel patterns and influencing how journeys are undertaken. Co-ordinated planning of land-uses can reduce the need to travel and encourage trips to be undertaken by more sustainable modes. The influence of major land-uses spans across local authority boundaries, which is of particular relevance for a small authority like East Renfrewshire situated close to major attractions in neighbouring areas. As such, it is important to have an understanding of the prevailing and projected land-use conditions to gain an insight into the conditions occurring on the transport network. However, there are other factors that influence demand for travel as well which also have to be taken into account.

#### 4.2 Demographic Trends

The population of East Renfrewshire has grown from 85,770 in 1991 to 89,311 in 2001 with the latest estimate being 89,290 in 2006. This trend is expected to continue with General Register Office for Scotland (GROS) estimates putting the population at 90,594 in 2010 rising to 91,387 in 2015. The population is also moving toward a more aged profile as people live longer and birth rates decline. This presents different transport challenges in terms of encouraging active travel and accessibility to services although there is still a strong working age population in the area due to its popularity as a residential location for the labour market of Glasgow. A growth in population will increase the burden upon the transport network serving the area and this must be taken into account when planning for the future.

The number of households has also grown as the trend toward smaller household sizes continues to exert its influence. The number of households in East Renfrewshire has grown from 32,212 in 1991 to 35,024 in 2001 with estimates of the number of households in 2006 at 35,532. Projections expect the number of households to rise to 36,680 by 2010 and then to 38,080 in 2015. The greater the number of households the more trip generation there will be per person as trips such as shopping for food need to be duplicated more often.

Although the average household size in East Renfrewshire is higher than the national average, and is projected to remain so, it is likely that it will continue to move toward convergence with it. This suggests there will be continuing pressure for housing development in the area which must be located sympathetically in relation to public transport facilities to reduce the impact it has on the transport network.

#### 4.3 Housing Allocations

The Effective Housing Land Supply makes provision for housing and allows for the development of 1,613 additional houses between 2005 and 2012 of which 1,500 would be from private developments. The majority of these houses are programmed





for construction during the lifetime of the LTS and thus must be taken into consideration when planning for future transport conditions. Analysis using the Department for Transport's TEMPRO model has suggested this could generate in excess of 4,300 additional trips per weekday which will have implications for the transport network in the vicinity of the developments.

The location of housing developments has implications for how these trips will be undertaken as locations adjacent to good public transport facilities are less likely to generate trips by car. The majority of the houses will be released in Newton Mearns, an area where car dominance is already heavily entrenched and with limited public transport penetration. A large proportion of this development is related to the Strategic Urban Expansion Area in the Greenlaw area which will see the development of up to 350 houses with associated ancillary facilities. There is also a Strategic Urban Expansion Area planned for Auchenback, Barrhead where public transport provision is limited and of a varying standard. The new trips generated by these developments are likely to be largely undertaken by car unless measures to encourage public transport usage are introduced.

#### Trip Productions on an Average Weekday (All Modes)

	2006 HHs	Effective Housing Land Supply Additional Households	2012 HHs	Additional Trips per Average Weekday	Additional Trips per Average Weekday pro rata
Newton Mearns	19,458	850	20,494	2,814	2,309
Giffnock		23			62
Clarkston		163			443
Eaglesham	10,114	92	10,220	-18	-15
Neilston		14			-3
Barrhead	6,678	471	7,149	1,542	1,542
Total	36,250	1,613	37,863	4,339	4,339

Source: Effective Housing Land Supply & TEMPRO

The Structure Plan alteration has made provision for additional housing in surrounding local authorities which could increase the number of through trips in East Renfrewshire. Housing allocations between 2004-2011 in Renfrewshire have been increased by 400 to 4,050 and in South Lanarkshire by 1,950 to 10,100. Of particular interest is that 500 houses of the additional allocation in South Lanarkshire have been allotted to the East Kilbride area which increases the number of houses proposed to 2,500. This could have repercussions for East Renfrewshire and could result in increased traffic on the Glasgow Southern Orbital and the A727. It also has to be noted that a new Structure Plan is under development for Ayrshire which pursues an agenda of housing led growth taking advantage of the





employment opportunities available in the Glasgow area and the improved transport linkages between it and Ayrshire. This will again have implications for the number of through trips in East Renfrewshire with the biggest impact likely to be on traffic flows on the M77.

#### 4.4 Industrial and Commercial Developments

There is unlikely to be any significant industrial developments in East Renfrewshire during the period covered by the LTS. Any developments that do occur are likely to involve the reuse of existing brownfield land and be of a limited scale. A site for a high amenity industry has been safeguarded in the Structure and Local Plan at Pollok / Ryat on the west of the M77 adjacent to Newton Mearns. This was originally intended to cater for inward investment but the importance of sites like these has diminished as the profile of inward investment in Scotland has altered over the past few years. It is therefore unlikely that the development of this site will be brought to fruition during the life of the LTS.

The Strategic Urban Expansion Area at Greenlaw incorporates mixed-use development that allows for up to 10 hectares of Class 4 business development. There is also scope for the development of a range of community and leisure facilities. These proposals could generate local employment opportunities with the potential for up to 3,000 jobs to be created. This may reduce commuting to employment locations elsewhere.

Planning permission has been granted for a Motorway Service Area (MSA) at the junction of the M77 and GSO. This development would be unlikely to induce additional traffic as it is intended to cater for the needs of existing users although it may alter the flows of vehicles on the network to some extent.

Industrial and commercial developments in the surrounding area will influence movements on the transport network. Glasgow city centre will remain an attractive location for employment, shopping and recreational pursuits and will continue to have a considerable influence over travel patterns in East Renfrewshire. Proposals to regenerate the Clyde waterfront area will only increase the attractiveness of the area. The Structure Plan has identified Paisley and East Kilbride as Strategic Business Centres intended to cater for service and knowledge based industries. These developments could enhance their attractiveness as employment locations for residents of East Renfrewshire and thus increase the number of orbital transport movements occurring.

#### 4.5 Barrhead Regeneration

The Council has approved a masterplan to regenerate Barrhead that will have implications for the spatial distribution of land-uses within the town as well as the transport infrastructure that serves it. The key developments in the town centre include a new college, health and social care centre, supermarket, other retail and





commercial developments and new housing. These will have implications for traffic movement and desire lines as well as parking. As such, a transport assessment of the town centre has been commissioned to quantify these impacts. The new supermarket is expected to have a minimum requirement of 390 parking spaces. Moreover, it is intended to realign Glen Street to improve access to the new developments and ease existing traffic problems in the town centre. Amendments to Main Street will be made to make pedestrian movement around the town easier and improved access to development opportunities on Blackbyres Road will also be provided.

Another significant land-use change in Barrhead is the development of the Strategic Urban Expansion Area at Springfield Road which could accommodate up to 280 houses and a new railway station with associated park and ride facilities which will also serve the Dams to Darnley Country Park.

#### 4.6 Other Local Land-use Drivers

Williamwood High School has been relocated from Seres Road in Clarkston to Eaglesham Road on the outskirts of Clarkston. This was done to allow an expansion of the facilities available and will inevitably alter the local trip patterns. In particular, trips by car may increase as the school is now located more peripherally to the residential area it serves than before. There is already congestion in the centre of Clarkston during peak periods, with particular problems at Sheddens Roundabout, which may be exacerbated by this development.

The largest onshore windfarm in Europe will be developed at Whitelee near Eaglesham. The windfarm will comprise 140 separate turbines and is due to become operational in 2008. The development will include a Visitors' Centre with associated paths and cycle routes. The main transport implications will be during the construction phase, which could cause localised disruption, and then from people attracted by the Visitors' Centre which will increase traffic movements in the vicinity.

The Council is working with Glasgow City Council to develop a Country Park in the Dams to Darnley corridor. A masterplan has been prepared and is currently being developed in more detail. Proposals centre upon improvements to paths, accesses, car parking and signage to increase the accessibility and awareness of the amenities available. There will also be improvements to the facilities in the park with associated promotion of the enhanced attractions. This is likely to increase the number of visitors to the site and may require improvements to the transportation facilities that serve it.

#### 4.7 Wider scale Land-use Drivers

The legacy of past land-use policies will continue to have a considerable influence over where and how people want to travel. The segregation of land-uses, by locating housing away from industrial and commercial facilities, has encouraged increased journey lengths and the use of the car. Transport improvements have also





contributed by facilitating increased mobility and reducing journey times which encouraged people to travel further to undertake activities they would previously have done locally. It will take a considerable time to mitigate this legacy and provide the conditions that encourage travel by sustainable means.

Developments such as the Silverburn and Braehead shopping centres, although outwith East Renfrewshire, have significant influence upon decisions of residents due to their size and proximity, are heavily dependent upon car access and can be very difficult to get to without one. The centralisation of shopping facilities like this has implications for the viability of traditional town centre shopping areas and can cause accessibility problems for those without access to a car. Reducing the need to travel, encouraging modal shift from the car and promoting accessibility for all will be dependent upon future land-use developments which are planned more sympathetically in relation to these goals. Greater mixed-use development within existing settlements may reduce the desire to travel elsewhere to access services and foster more sustainable travel patterns. There will be some instances where journeys to larger shopping centres will be unavoidable and good access by alternative means to the car will be necessary.

Access to the central belt airports, namely Glasgow, Glasgow Prestwick and Edinburgh is also important. These are significant trip generators and this will be exacerbated by the growth in air travel. Surface access to these airports has implications both in terms of trips made by residents and also people travelling through the area to access these facilities. In particular, journeys on the M77 will increase if Glasgow Prestwick continues to expand as anticipated. A rail link to Glasgow Airport is under development and already exists at Glasgow Prestwick although services from East Renfrewshire are extremely limited and often involve several changes. A new tramline will serve Edinburgh Airport.

#### 4.8 Transport Drivers

The cost in real terms of owning and running a car has fallen over the past few decades whilst the real cost of using public transport has increased over the same period. This trend is set to continue unless measures are taken to intervene in the market and alter this relationship but this cannot be done at a local level. Therefore, car ownership levels are likely to continue rising with local action being targeted at influencing usage of cars rather than ownership.

The tendency to travel further has been influenced by decreasing travel costs and has been exacerbated by transport schemes which foster mobility and quicker journeys. People have subsequently been inclined to travel greater distances. Schemes that enhance general mobility benefited those with access to a car most. This benefits the most affluent groups at the expense of those dependent upon public transport which can lead to social exclusion occurring. Reducing the need to travel and the occurrence of social exclusion is thus dependent upon refocusing investment on enhancing accessibility rather than mobility.





The introduction of the national concessionary travel scheme for the elderly and disabled people has the potential to significantly increase the amount of travel they undertake. This may have adverse implications for the capacity of bus services at peak times which could be exacerbated by the trend toward an ageing population. Nonetheless, the scheme is likely to contribute to social inclusion and active participation in society.

#### 4.9 Other Drivers

Improvements in information and communications technology (ICT) can potentially influence the amount of travelling that needs to be undertaken. Recent research has identified that e-working and ICT can increase flexibility and improve efficiency for both firms and individuals and could enable travel demand reductions of up to 11% in Scotland if complemented by demand management measures. The highest incidence of home working occurs in managerial, professional, administrative and skilled occupations which constitutes 73% of the working population of East Renfrewshire. This suggests there is scope to reduce the amount of travel in the area through this means. Quantitative evidence of the effect of ICT and e-working on travel demand is minimal and there are a number of theories about its potential impacts. These include the possibility that reductions in work related trips are compensated for by more leisure trips and that the competitive advantages offered can actually stimulate travel. It is clear though that there are opportunities to influence travel demand if a co-ordinated approach is employed that ensures the benefits are not lost through compensatory action by other individuals.

#### 4.10 Overview

The land-use developments in and around East Renfrewshire are likely to consolidate existing trends of out-commuting to employment and shopping facilities in neighbouring authorities. Housing developments and population growth will increase the number of trips made which will put increased pressure on the transport network. Journeys to Glasgow City Centre are well served by public transport but destinations in other neighbouring local authorities and outwith the centre of Glasgow are less well served and thus car use will dominate for access to land-use developments in these areas. Developments in information and communications technology offer potential to reduce the demand for travel although the scale of this reduction has still to be established.



SECTION 5

# Consultation





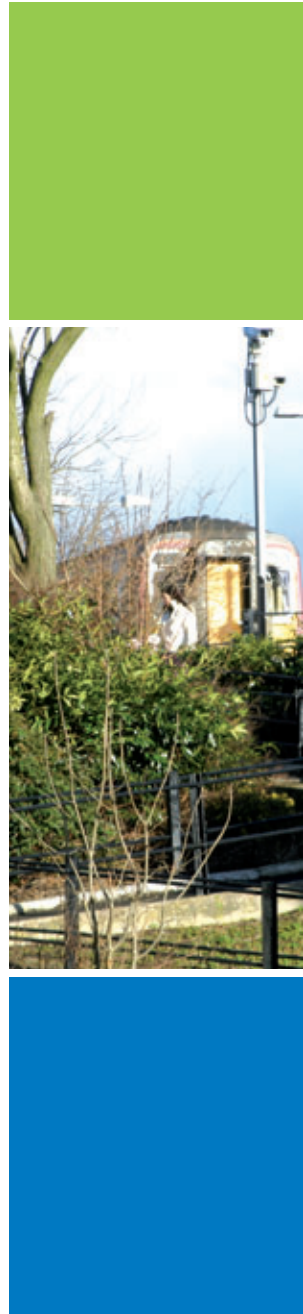
## Consultation

Preliminary public consultation on the LTS was undertaken in April 2006 with the publication of an issues and objectives leaflet. This was followed by the publication of a Consultative Draft in August 2007 which was made available through libraries, area fora, sports centres, school boards and council offices as well as being circulated to politicians, all council departments and industry stakeholders. An Equality and Diversity Impact Assessment of the Strategy can be found on the LTS website. A dedicated section on the Council's website was set up which included a downloadable copy of the Consultative Draft and its supporting documentation. A freepost address and dedicated e-mail address were established for responses. Publicity was arranged in the form of a press release, public exhibitions and exposure on the Council's website. The consultation lasted for a period of 8 weeks but the response rate was surprisingly disappointing with only a handful of formal responses received.

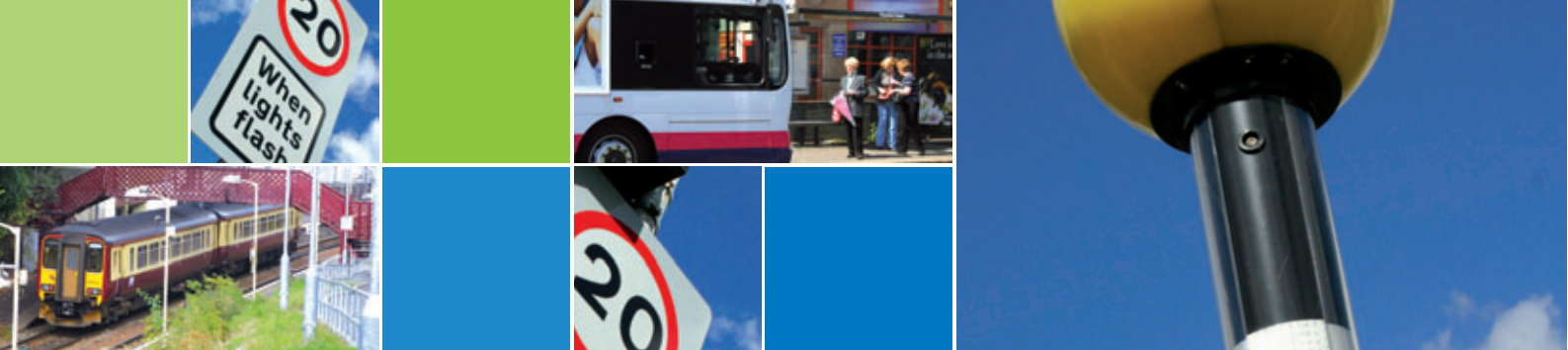
The results of these consultation exercises, however, have been augmented by several other consultations undertaken by the Council with the public and relevant stakeholder bodies. In addition to these consultations there was also further consultation undertaken internally in the form of two workshops for staff in the Roads Planning and Transportation Service of the Council. These were intended to allow the active involvement of all different sections within the service in the development of the strategy.

A summary of the responses received to the consultative draft strategy and the actions taken in response is shown in the table below. More detail about the comments received through the consultation exercises is available in Technical Papers 8 and 9. Details of how these can be obtained are outlined in Appendix C.

The results of all these consultation exercises have been used to help develop the final LTS.







### Summary of key issues from responses to the Consultative Draft Strategy

Topic	Issue Highlighted	Number of respondents	Action taken
Objectives	Support objectives	9	Noted.
	Don't support objective 1	1	None – only objection received so majority support retention of the existing objective.
	Amendment to objective 4	1	Existing objective amended.
Actions	Lack of clarity in Actions	2	Clarity of Actions improved.
Funding	Lack of funding to implement the LTS	1	None – the need for additional funding to implement the LTS has already been highlighted.
Buses	Improvements to bus services (including on specific routes)	6	Proposals incorporated into LTS as appropriate.
	Quality of buses operating is poor	2	None – already highlighted as a problem in the LTS.
	Support for a bus station in East Renfrewshire	2	Noted.
	Poor bus links to Mearnskirk, Newton Mearns	2	Problems affecting Mearnskirk are highlighted more specifically in the LTS.
	Need for partnership working to improve bus services	3	None – already included in the LTS.
	Reforms to bus regulatory regime	2	Noted.
	Publicity of Dial-a-Bus and demand responsive bus services is insufficient	1	None – need for increased marketing and travel awareness is included in the LTS.
Trains	Support for a new station at Auchenback	3	Noted.
	New rail station between Muirend and Williamwood stations	1	Proposal incorporated into the LTS for further investigation.
	Refer to Muirend Station serving residents in East Renfrewshire	1	Included in LTS.





### Summary of key issues from responses to the Consultative Draft Strategy – CONTINUED

Topic	Issue Highlighted	Number of respondents	Action taken
Public Transport Integration	Improved integration between buses and trains	3	None – already included in the LTS.
Park & Ride	Support for improvements to Park & Ride (both bus and rail based)	5	Noted.
	Proposal to explore Park & Cycle schemes	1	None – unlikely to be successful in an area like East Renfrewshire
	Proposal to charge for parking at existing Park & Ride sites	1	None – proposal to advocate charging for Park & Ride rejected at this time although this will be kept under review.
General Public Transport	Lack of orbital public transport services (including between east and west of East Renfrewshire)	4	None – already included in LTS.
	Mass transit issues	4	Consideration of environmental mitigation measures and alternative proposal included in the LTS.
Roads	Enforcement of traffic management measures	3	Strengthened policy on enforcement of traffic management measures.
	Importance of M74 completion in relieving congestion on M77	1	Noted.
	Road maintenance issues	4	None – already included in LTS.
Barrhead	Link Road & M77 J4 Support proposal	2	Noted.
	Don't support proposal	1	Noted.
Demand Management	Support for a national road charging scheme	1	Noted.





### Summary of key issues from responses to the Consultative Draft Strategy – CONTINUED

Topic	Issue Highlighted	Number of respondents	Action taken
Land-use planning	Need for links between land-use and transport planning	5	None – already included in LTS.
	Need to consult public transport operators when planning new developments	2	Strengthened policy on involving public transport operators in development control process.
	Barrhead regeneration issues	2	Updated sections in LTS that deal with Barrhead regeneration.
	Impact of land-use developments in surrounding areas	1	Updated “Land-use and Transportation Changes” chapter.
	Support for policy on developer contributions to transport schemes	1	Noted.
	Support for Development Control policies	3	Noted.
	Shouldn’t define minimum parking standards for new developments	1	None – decision regarding whether to set minimum parking standards will be left open pending the findings of the review of parking standards being undertaken.
Safety	Road safety issues	4	Concerns regarding the speed limit on the A77 are noted, as are the concerns regarding different types of pedestrian crossing. Support for the East Kilbride – Strathaven safer signed route is noted. Improvements to Stewarton Road will be carried out through the Greenlaw development.
	Personal security issues	3	None – already included in the LTS. The steps taken to address this by one bus operator are noted.
Walking & Cycling	Support measures to encourage walking and cycling	4	Need for improved facilities for cyclists in Barrhead included in the LTS. Support for other proposals is noted.





**Summary of key issues from responses to the Consultative Draft Strategy – CONTINUED**

Topic	Issue Highlighted	Number of respondents	Action taken
Walking & Cycling <i>continued</i>	Don't support measures to encourage walking and cycling	2	Noted.
Access to healthcare	General access to healthcare issues	3	Reference to Hairmyres Hospital included in LTS. Support for active travel and bus operator desire to be involved in improving access to healthcare facilities is noted.
	Poor access to Glasgow Southern General Hospital by public transport	2	None – already included in LTS.
Freight	General freight issues	1	Reference made to freight in the Executive Summary. Proposals outlined in Freight Action Plan more closely integrated into the LTS.
Disabled Access	Issues concerning access to transport for the disabled	5	Concerns regarding access to Williamwood Station are included in the LTS. Issues relating to disabled access to buses and trains are already included in the LTS.
Environment	Air quality issues	3	Concerns that buses are less environmentally friendly than cars are noted. Proposals for improving air quality incorporated into the LTS.
	Support for policies to protect the historic and built environment	1	Noted.
	Water quality issues	1	Noted.
School Travel	General school travel issues	5	Concerns regarding traffic and safety issues around Our Lady of the Missions Primary School and in Busby are noted. General concerns about safety around schools are noted and are already included in the LTS.
Soft Measures	Support for Travel Awareness	1	Noted.



SECTION 6

# Transport Problems & Constraints





## 6.1 Problems

A hierarchy of problems has been identified that extends from the national through to regional and local levels. These ultimately manifest themselves as network and service specific problems. The LTS focuses upon the local and network levels but acknowledges the national and regional issues that underpin local problems.

### National & Regional Problems

- Increasing trend toward car ownership and usage at the expense of other modes.
- A trend towards smaller households demanding more housing and subsequent trip generation around these new developments.
- Economic development leading to increased movement of people and goods.
- Changes in logistics resulting in a considerable growth in the number of light goods vehicles being used.
- Societal changes creating increased leisure time and more disposable income for expenditure on leisure activities which often generates additional travel.
- Willingness by people to travel further to undertake tasks that would previously have been done locally.
- Falling cost of owning a car in real terms compared with the rising cost of using public transport.
- Discrepancy between the private costs of motoring and the external costs in terms of pollution, maintenance requirements, delays and accidents which drivers do not currently pay for in their totality.
- Increasing trend toward a 24-hour economy and the implications this has for the movement of goods and people.
- Concerns regarding the safety and security of using public transport services.
- Taxation systems that do not reflect variations in use of the road network by different users.
- Increasing instability in the labour market leading to less people moving home to be close to their job and a willingness to commute further and for longer to work.
- A legacy of land-use development that has created a dependency on cars access.
- The privatisation or deregulation of public transport provision which has led to profit maximisation being the priority rather than provision of a range of services that cater for the needs of all members of society.
- Lack of public sector control over public transport provision, particularly in the case of the bus industry, making it difficult to respond to the needs of the public.
- Insufficient resources to maintain transport networks in an appropriate condition. Discrepancy between the funds available for expenditure on infrastructure and those for maintaining it.





### Local Problems

- High car ownership and usage especially in Newton Mearns and the suburban northern part of the authority area.
- Dispersed employment locations, mostly outwith the local authority area, often not readily accessed by means other than car. Particular problems exist in relation to Silverburn, Braehead, Phoenix Retail Park and Hillington Industrial Estate.
- Lack of local economic activity to provide jobs and services for residents.
- High dependency on surrounding areas, particularly Glasgow City Centre, for employment and services.
- Limited opportunities for modal interchange and a lack of integration between modes.
- Significant numbers travelling distances to work that make walking or cycling unfeasible.
- Lack of incentive to switch from car to alternative modes.
- Considerable contrasts in the socio-economic profile, demands and requirements of the suburban area and the rural and Levern Valley areas of the authority.
- Arbitrary council boundary which does not reflect Travel To Work Areas.
- Lack of facilities for freight interchange.
- New and Larger Supermarket to be located in Barrhead.

### Road Network Problems

- Lack of south facing ramps at M77 Junction 4 restricts traffic movements.
- M77/M8 northbound junction has insufficient capacity for volumes of traffic using it causing congestion on the M77.
- Northbound congestion on the A736 in Barrhead during the AM peak especially at Allan's Corner roundabout.
- Congestion on the A727 in Giffnock and around the centre of Clarkston, especially at Sheddens roundabout, particularly during peak periods.
- Through traffic on the M77 adding to congestion and environmental problems.
- Through traffic in Barrhead and on the A727 through Giffnock, Clarkston and Busby causing severance and localised pollution problems.
- Safety on rural sections of the road network with poor alignment such as the A736 south of Barrhead, Aurs Road between Barrhead and Newton Mearns and Malletsheugh Road.
- Altered traffic patterns created by the relocation of Williamwood School.
- Links from Barrhead to the motorway network are poor.
- The condition of roads and footways needs improved.
- A backlog of road maintenance with limited resources to address this leading to a general decline in the condition of the road network.
- Lack of enforcement of speed restrictions.
- Congestion and safety problems resulting from the school run (particularly a problem for Giffnock, Clarkston and Newton Mearns).
- Change in school transport criteria leading to an increase in traffic undertaking the "school run".





- Abuse of 20mph speed limits and rat-running to avoid traffic (particularly a problem in Clarkston, Giffnock and Newton Mearns).
- Unregulated parking encouraging car use.
- Lack of enforcement of parking restrictions, particularly around the shopping areas in Barrhead, Giffnock and Clarkston.
- Lack of disabled parking and abuse of existing spaces.
- Ineffective traffic calming measures.
- Localised air and noise pollution from traffic.

#### Rail Network & Service Problems

- Overcrowding on trains to and from Glasgow at peak times particularly on the Barrhead and East Kilbride lines.
- Single line section between Barrhead and Kilmarnock.
- Single line section between Busby and East Kilbride.
- Park & Ride capacity at railway stations and lack of Park & Ride facilities at Thornliebank station.
- Location of stations in relation to settlements, especially Patterton, Whitecraigs and Barrhead.
- Limited capacity at Glasgow Central station and its approaches affecting the number of trains that can use it.
- Lack of integration between southwest and northeast rail networks in Glasgow hinders interchange opportunities.
- Frequency of train services, particularly between Barrhead and Kilmarnock.
- Platform lengths constrain the length of the trains that can be operated.
- Disabled access to stations (particularly Busby and Williamwood).

#### Bus Service Problems

- Off peak bus frequencies do not provide an adequate level of service, especially in Eaglesham and Neilston.
- The coverage of bus services, in terms of the routes they serve, is insufficient. In particular buses do not connect Clarkston to Giffnock, services between the east and west of the authority are only hourly and a number of services only operate part route.
- There are no bus services in the Mearnskirck area of Newton Mearns.

#### General Public Transport Problems

- Limited public transport penetration into Newton Mearns.
- Poor public transport linkages between Barrhead/Neilston area and Newton Mearns/Giffnock/Clarkston area.
- Access to healthcare by public transport (especially to Glasgow Southern General Hospital from Newton Mearns, Clarkston & Giffnock).
- Poor public transport links to Glasgow and Glasgow Prestwick Airports.







- Overcrowded public transport services especially at peak times on services to and from Glasgow.
- Lack of, or perceived lack of, public transport services in some areas.
- Fixed public transport routes and facilities that do not necessarily serve centres of population or desired lines of travel.
- Security concerns, especially in the evening, regarding the use of public transport services and facilities (including Park & Ride).
- Poor quality public transport services discouraging potential users.
- Lack of orbital public transport services between East Renfrewshire and surrounding areas.
- Problems for disabled people accessing public transport services and infrastructure associated with non-compliance with the requirements of the Disability Discrimination Act 2005.
- The affordability of public transport for those on low incomes and without transport alternatives available to them. This can also discourage car users from transferring to public transport.
- A lack of information about public transport services.

## 6.2 Constraints

The constraints to addressing the identified problems take a number of forms some of which the Council can influence, internal constraints, and some which they cannot, external constraints.

### External Constraints

- A legislative and operational framework which confers powers and responsibilities upon a number of different bodies which can make implementation and integration of transport infrastructure and services problematic.
- Limited or no powers over certain aspects of transport provision including the specification of public transport services.
- Capacity of transport infrastructure including physical limitations on the ability to expand infrastructure.
- Availability and acquisition of land for transport schemes.
- Length of time it takes to deliver strategic, and some local, transport schemes.
- Priorities of some bodies involved in transport may differ to those of the Council.
- Lack of a co-ordinated approach by local authorities to issues such as demand management and public transport service provision.
- Limitations on the data available resulting from commercial sensitivities and difficulties in collection which restricts the ability to garner a comprehensive understanding of prevailing transport conditions.



### Internal Constraints

- Limited staff and financial resources to implement schemes and develop proposals to the point of implementation.
- Limited financial resources for the maintenance of infrastructure.
- Lack of integration between policy areas including land-use planning, economic development, education, health and the environment.
- Lack of communication between key bodies in the transport sector.
- Limited traffic count data for the local road network.
- The ability to model and appraise future transport scenarios is limited.
- A lack of professional skills and shortage of labour for construction.



SECTION 7

# Objectives





## Objectives

The setting of objectives is fundamental to the strategy development process. Objectives should be SMART (Specific, Measurable, Achievable, Relevant, Time-bound) wherever possible. In the setting of objectives the prevailing problems and issues, as detailed in Chapter 7, have been taken into account along with the Government's 5 key objectives of Environment, Economy, Safety, Integration and Accessibility & Social Inclusion. In addition, the objectives have been formulated to be consistent with national and regional objectives whilst articulating a local perspective. The objectives of the LTS are to:

### 1. Reduce the need to travel and stimulate sustainable economic development in the local area.

This is to mitigate the trend toward out-commuting from the authority to employment opportunities in the surrounding area. The provision of more local economic opportunities will reduce the requirement to travel elsewhere for employment and thus realise a reduction in the amount of travel undertaken. Shorter journeys are also more likely to be undertaken by sustainable means which will reduce dependence on the car.

### 2. Reduce car dependency and stimulate modal shift to walking, cycling and public transport.

In order to reduce the environmental impact of transport and alleviate congestion problems that hinder economic activity, a shift from dependence on the car is required. Active travel such as walking and cycling has health benefits which are also partially realised by using public transport as it usually involves walking at one end of the journey at least.

### 3. Enhance access to jobs and services by a variety of modes of transport for all members of society.

Accessibility to jobs and services is essential in the prevention of social exclusion. Promoting access by a variety of modes of transport ensures those without access to a car are not marginalised. This also helps encourage access by sustainable means and subsequently reduces the environmental impact of transport. The accessibility of transport for the mobility impaired is also an important consideration.

### 4. Prevent and reduce the negative environmental impacts of transport.

The negative environmental impacts of transport, particularly motor vehicles, are well recognised as contributing to both localised and cumulative environmental problems. Transport directly contributes to air, noise and water





pollution and also has a number of indirect environmental impacts such as landscape degradation and community severance. The contribution of transport to air pollution is rising as a result of increases in motor vehicle usage and aviation. It is subsequently important to attempt to mitigate, reduce and remove these impacts wherever possible.

**5. Reduce congestion on all transport modes and services.**

Congestion manifests itself at various parts of the transport network on both roads and railways as pinch points affecting the available capacity. This reduces the efficiency of the network and causes delays which have a negative impact on economic productivity. Congestion on public transport services leads to overcrowding and discourages potential passengers.



**6. Improve safety and security on transport networks and services.**

Creating a safer road network and reducing the number of casualties will help to reduce the human and economic costs associated with this and contribute to a safer environment for all. Concerns regarding security on public transport services have been identified as a significant barrier to encouraging modal shift. Enhancing the perceived and actual security of public transport is thus important. The safety of public transport infrastructure is also an important issue affecting how willing people are to use it. This can include the maintenance of facilities and their appropriateness for people with mobility problems as well as security issues associated with waiting at stations and bus stops.



**7. Enhance integration and efficiency of transport networks, infrastructure and services.**

Integration reduces inefficiencies in the transport system and provides an improved travelling experience for users. Greater integration of public transport services can encourage a modal shift by reducing journey times and making it a more attractive option for potential users. Improvements in integration are not limited to physical measures but can also take the form of improved arrangements for ticketing and information provision. Maintenance of the road network in an appropriate condition is also a key consideration in ensuring the efficient operation of transport networks and services.



**8. Promote awareness of alternatives to the private car.**

The provision of information regarding alternatives to the car can help people make a more informed decision about how to undertake their journey. Some people may not be fully aware of the alternatives available to them and may



have a perception that there is no other option than to use their car. Making people aware of the services available may encourage them to use public transport as an alternative to their car.

**9. Maintain roads and other transport infrastructure in a condition that ensures it is fit for purpose.**

Maintenance of existing infrastructure is a fundamental requirement to ensure it is safe, efficient and capable of meeting the demands placed upon it. This is not just limited to the road network, although this is an important element, but also cycleways, cyclepaths, footpaths, footways, lighting, structures, car parks and verges. The maintenance requirements of new transport infrastructure also have to be taken into account when implementing schemes.



SECTION 8

# Strategy Options & Appraisal





## 8.1 Overview

The LTS has been prepared utilising a STAG based approach. Analysis of the problems, issues and constraints previously identified was undertaken to ascertain what the strategy needs to address. Two distinct themes underpinning the transport issues facing East Renfrewshire were identified. These have been categorised as modal and spatial issues and are defined below.

### Modal Issues

- These concern the modes of transport used to undertake the movement of people and goods. These include walking, cycling, public transport and motorised vehicles in the case of people movement, and rail, water and motorised vehicles for goods.

### Spatial Issues

- These concern the relationship between transport and land-use and the extent to which access to particular areas or land-uses is given priority. This reflects the considerable influence that the location of land-uses has on the demand for travel.

These umbrella issues were used as the foundation upon which strategy options have been developed. Initially ten high-level strategy options were identified. Further information about these options can be found in Technical Paper 5, details of which are in Appendix C. Sifting of these high-level options identified three to be taken forward to STAG Part 1 appraisal. An Appraisal Summary Table for the preferred strategy is attached as Appendix B. Further details about the appraisal are outlined in Technical Papers 6 and 7.

## 8.2 The Preferred Strategy

The preferred strategy is the Integrated Modal & Spatial strategy which takes a coordinated approach to the above issues. The core of the strategy is to improve accessibility and connectivity to services and employment within East Renfrewshire and the surrounding area in a sustainable manner. This requires the implementation of measures that encourage modal shift to reduce car dependence and to improve the accessibility of key locations by a variety of transport modes. Concerns regarding the environmental impacts of transport underpin the agenda of encouraging modal shift and reducing the need to use private transport wherever possible. A coordinated approach to land-use and transportation issues will contribute to this by making services and employment more accessible and less dependent upon car access.







Enhanced integration and accessibility will also contribute to growth in local economic activity and to providing links to key economic locations in the surrounding area. Transport services and infrastructure that meet these needs for all users are required to reduce social exclusion. To do this consideration must be given to the services to which people require access, and the barriers that can prevent such access, with particular reference to minority groups who may experience particular problems not normally faced by others. Appropriate management, maintenance and enhancement of transport networks and services is subsequently required to bring these aspirations to fruition.

### 8.3 Implementing the Preferred Strategy

This overarching vision forms the basis upon which the policies and interventions can be developed. Subsequently, 5 key themes have been identified which have been used to formulate the strategy. These are:

- Modal Shift & Demand Management
- Transport & Land-use
- Accessibility & Social Inclusion
- Network Management
- Environment



SECTION 9

# Modal Shift & Demand Management





## 9.1 Overarching Issues

The LTS acknowledges the need to facilitate a modal shift from private transport, in particular cars, to alternative modes in order to reduce the environmental impact of travel and minimise the occurrence of congestion which impinges upon economic activity. In order to facilitate this it is important to bring forward policy that supports alternative modes of transport and manages the use of private transport to reduce the number of car trips.

### Modal Shift & Demand Management Policies

- MS1: A hierarchy of modes has been identified acknowledging that some modes will not be appropriate in particular circumstances but that should be applied wherever practical. The hierarchy is as follows:
  - Walking
  - Cycling
  - Public Transport
  - Car

## 9.2 Walking

Walking is at the top of the transport hierarchy as it is the most environmentally friendly mode and should be first choice for short journeys. Most journeys involve walking at some stage whether it is for the entire journey, for access to another mode of transport to continue the trip or at the final destination. A high-calibre walking environment with good quality and well-maintained facilities is a vital component of the transport network. Pedestrians need to feel safe and secure when using the network which needs to be considered when developing new facilities and reviewing the existing network. Continual inspection of walking networks along with information provided by the public helps to ensure they are maintained in a suitable condition.

The walking network comprises a mixture of footways, footpaths and shared use facilities used by both pedestrians and cyclists. It caters not only for pedestrians but also those in wheelchairs, people with other impairments, people with prams and buggies and sometimes cyclists and equestrians. The network has to be responsive to the needs of all users and to minimise conflicts between them. Where the walking network intersects the road network safe and convenient crossing facilities must be provided. This is often achieved by the installation of dropped kerbs and pedestrian guardrails although where traffic levels are high, dedicated facilities such as Puffin crossings can be installed. Pedestrian crossing phases are also integrated into traffic signals where merited.

Although walking is an important mode of transport, many people also enjoy walking as a recreational activity. The Land Reform (Scotland) Act 2003 gives people wide access to the countryside as long as it is done in a responsible manner. The





Council's Outdoor Access Strategy has a key role to play in facilitating this as well as identifying a Core Path Network. Nonetheless, whether undertaken as a recreational activity or used as a mode of transport it has important health benefits for the individual.

Good pedestrian links are important in ensuring accessibility and social inclusion. People without access to private transport often rely on walking to undertake their daily activities or access public transport. Important facilities that require good pedestrian access include local shopping facilities, schools, libraries, community centres, healthcare facilities, railway stations and bus stops.

#### Walking Policies

- W1: Encourage people to use walking as their preferred mode of transport wherever possible whilst undertaking their daily activities.
- W2: Promote the health benefits of walking.
- W3: Encourage walking as a recreational activity.
- W4: Continue to review and, where appropriate, improve the existing walking network and pedestrian crossing facilities.
- W5: Consider the needs of pedestrians when designing new infrastructure and cater for these demands wherever possible.
- W6: Address the real and perceived barriers to walking including security issues.

### 9.3 Cycling

Cycling is the next most environmentally friendly mode after walking. It is particularly appropriate for journeys that are too long to be realistically undertaken on foot but are short enough not to require a car or public transport. It is also an extremely efficient mode generating very little environmental impact and requiring minimal space when in transit and parked. Bicycles are also affordable and easily maintained making them attractive for those without access to a car thus facilitating social inclusion. Moreover, cycling, like walking, is not only an effective mode of transport but also a popular leisure pursuit as well. Levels of cycling are currently very low which reflects a number of factors including high levels of car ownership, a lack of local services and jobs, a climate that is not conducive to cycling and a perception amongst potential cyclists that it is unsafe. Cycling is consequently being encouraged on the basis of environmental, health, social inclusion and network efficiency grounds.

On roads cyclists can experience safety problems where traffic volumes are very high or the road characteristics do not suit cyclists. There are particular concerns about the vulnerability of cyclists when negotiating junctions, particularly roundabouts. This sometimes necessitates provision of dedicated cycle facilities either upon the existing road network or segregated cyclepaths. In general most on-road cycle facilities are provided for commuting and other trips undertaken for a purpose whilst segregated routes are predominantly for leisure purposes. Both on and





off-road facilities have safety and security issues associated with them. On-road facilities do not entirely remove the conflict between cyclists and motorised vehicles. This can be partially addressed by providing facilities such as Advanced Stop Lines at traffic signals and road markings which raise the awareness of drivers to the presence of cyclists in the area. However, there are also concerns about off-road facilities as they are often secluded with limited surveillance. There is consequently no definitive solution and each situation must be considered in relation to its individual characteristics. The provision of adequate cycle parking facilities located in safe and convenient positions is also important.

Education of cyclists, and of other road users who may have to interact with cyclists, can help to develop a greater understanding of the needs, issues and frustrations that affect each group. This leads to a better understanding by all resulting in greater consideration and awareness of other users of the road network.

#### Cycling Policies

- C1: Encourage people to use cycling as a mode of transport.
- C2: Promote the health benefits of cycling.
- C3: Encourage cycling as a recreational activity.
- C4: Review and, where appropriate, improve the existing on and off-road cycle network.
- C5: Investigate and, where appropriate, introduce new cycle routes.
- C6: Seek to address the real and perceived safety and security issues associated with cycling.
- C7: Review and, where appropriate, improve cycle parking provision.
- C8: Promote awareness of cyclists amongst other road users.
- C9: Promote education of cyclists and other road users.
- C10: Consider the needs of cyclists when designing new infrastructure and attempt to cater for these needs wherever possible.

#### 9.4 Buses

Buses are an extremely important mode of public transport as they are flexible and can easily respond to changes in demand without the need for considerable investment in additional infrastructure. Although bus patronage has been steadily declining over the past few decades it remains the most popular mode of public transport. Fluctuations in levels of bus usage are apparent across East Renfrewshire which can be broadly related to variations in levels of car ownership, proximity to the rail network and the destination of the trip. In particular, buses have a high modal share for journeys between Barrhead and Paisley as car ownership is low in Barrhead and no direct rail link exists, whereas bus usage in Newton Mearns is low due to high levels of car ownership. Nonetheless, buses offer a significant opportunity to encourage modal shift as well as providing vital links for those without access to a car.





Bus services are provided on a commercial basis with the Council having very little control over bus operators and the routes they operate. There are around 16 bus operators in East Renfrewshire, ranging from national through to local companies, although this number is subject to fluctuation. Where services are required for social inclusion purposes but are not profitable, SPT can subsidise it although resources for this are limited. Bus routes in East Renfrewshire tend to be part of longer routes serving Glasgow, Paisley and East Kilbride with few solely local services. This ensures good connections to surrounding areas but does not always provide good local linkages. In particular, bus services between the west and east parts of the authority are poor and, generally, orbital bus services are less comprehensive than those on radial routes into Glasgow. In addition, services are limited at off-peak periods, especially after 6 o'clock in the evening. Eaglesham and Neilston are particularly affected. Frequent timetable changes and service withdrawals along with a lack of enforcement to ensure services operate as intended also cause difficulties for passengers. The Scottish Government has its intention to encourage greater regulatory enforcement of bus operators and to relate funding for bus services more closely to their performance. In addition, SPT is seeking to facilitate greater enforcement, earlier notification of service changes and to limit timetable amendments to 4 per annum to improve stability within the industry.

The Council seeks to improve bus services by working with bus operators but this is dependent upon their cooperation. Proposals to introduce Regional Bus Forums have been brought forward by the Scottish Government which could help facilitate partnership working between relevant bodies. In addition, the Council has statutory powers, along with SPT, in the form of Quality Partnerships and Quality Contracts that can be utilised to facilitate improvements in bus services. The Bus Action Plan published alongside the NTS outlined proposals to review the legislation associated with Quality Partnerships and Quality Contracts. It is possible that Quality Partnerships will be strengthened to deal more readily with issues like the frequency and punctuality of services whilst the process to introduce a Quality Contract may be simplified. The Council will seek to improve bus services through partnership working with relevant bodies. Consideration will also be given to whether a Quality Partnership (or Quality Contract) is an appropriate mechanism to achieve this. The Council will also work with SPT to deliver SPT's "A Step Change for Bus" Action Plan outlined in the RTS. The Council has signed up to undertake a 5-point Action Plan for buses along with SPT which will see greater enforcement of regulations and steps taken toward improving the services in the area.

Whilst buses benefit from the flexibility of being able to use the road network this can also be a significant disadvantage where the network is congested. Delays from congestion discourage the use of buses as they're perceived to offer no benefit over the car. Bus priority measures can overcome this problem and increase their attractiveness to potential users. Bus stop infrastructure is also a crucial component of an attractive public transport service. Bus shelters make the waiting environment more acceptable and are provided where usage is high and funds permit. The installation of raised kerbs at stops and the use of low floor buses improves





accessibility for those with mobility impairments. Timetable information at bus stops is of fundamental importance but is frequently found to be out of date or not available at all. SPT has agreed with First to provide timetable information on their behalf at stops. They are seeking to extend this arrangement to other operators and also intend to produce best practice guidelines on bus infrastructure.

There are real and perceived concerns about the quality of buses which can act as a deterrent to potential users. Buses are often regarded as smelly, dirty and unreliable, in terms of both maintaining timetables and breakdowns. In some instances this perception is accurate as, given the deregulated bus market, operators can utilise whatever buses they wish provided they are roadworthy. It is subsequently at the discretion of the passenger as to whether they wish to use a given service. The quality of buses that operate in East Renfrewshire varies considerably and the Council, along with SPT, is taking steps to facilitate improvements in the bus fleet.

Concerns also exist regarding security when waiting for and on-board the bus. This affects all users but particularly the mobility impaired, elderly, young people, women, ethnic minorities, and lesbian/gay etc. groups. Enhanced security on services is at the discretion of operators although the Council can contribute to a safer waiting environment by appropriate positioning of bus stops ensuring surveillance and lighting are maximised.

Streamline is a priority bus system in Glasgow and West Dunbartonshire which provides improved journey times and reliability on key routes. It is delivered through a partnership between Glasgow City Council, West Dunbartonshire Council, SPT and First. Enhanced bus stop infrastructure and bus priority measures along with high quality buses, CCTV and real time information are characteristic of Streamline routes. There are currently 8 Streamline corridors in Glasgow with some services extending into East Renfrewshire. The current Streamline partners are looking to extend the scheme and the Council is investigating the opportunities to facilitate this in detail.

SPT operates a Dial-a-Bus scheme for people who are unable to or have difficulty using standard buses and who meet certain criteria. Dial-a-Bus is a demand responsive service which can be used for journeys to go shopping, visit friends, attend local clubs, access doctors and health centres and for visiting people in hospital. All of East Renfrewshire is covered by Dial-a-Bus. SPT also provides Ring'n'Ride services which are also demand responsive but can be used by anyone. Only the rural hinterland in the southwest of East Renfrewshire is covered by Ring'n'Ride. Amendments to the Bus Service Operators Grant, which subsidises fuel duty paid by bus operators, will allow it to cover fully flexible bus services like Ring'n'Ride, which could support further extension of these services.

Bus stations act as a focal point for public transport services and can allow interchange between services as well as between different modes of transport. SPT has committed itself to investigating opportunities for new bus stations across the region and is encouraged to consider whether a bus station or layover facility in East Renfrewshire would be beneficial.



## Bus Policies

- B1: Encourage people to use buses.
- B2: Work in partnership with bus operators and SPT to promote improved bus services across East Renfrewshire including between the west and east parts of the authority and to locations in the surrounding area.
- B3: Consider the appropriateness of introducing a Quality Partnership or Quality Contract in East Renfrewshire giving due cognisance to any legislative changes that may be brought forward.
- B4: Consider where bus priority measures may be beneficial.
- B5: Improve bus stop infrastructure where appropriate.
- B6: Work with operators and SPT to encourage the provision of up to date timetable information at bus stops.
- B7: Encourage operators to improve the quality of their buses.
- B8: Foster security when using buses by considerate positioning of bus stops.
- B9: Encourage operators to take measures to improve security on their bus services.
- B10: Investigate the extension of the Streamline initiative to East Renfrewshire.
- B11: Consider, along with SPT, whether extensions to or amendments to existing demand responsive bus services would be beneficial.
- B12: Consider, along with SPT, where new or amended subsidised bus services may be required.
- B13: Encourage SPT to explore whether benefits can be gleaned from the construction of a bus station in East Renfrewshire.

## 9.5 Rail

The rail network and services are provided by private companies with the Council having no direct control over them. First ScotRail provides passenger services whilst there is very little rail freight in East Renfrewshire. Trains are an important mode of public transport although levels of usage vary across the area. Modal shares are highest for journeys to and from Glasgow city centre reflecting its importance for employment and services, and that the rail lines have Glasgow Central as their terminus. Forecasts have predicted that patronage in East Renfrewshire would increase dramatically over the next 10 to 20 years if unconstrained conditions were available. Opportunities therefore exist to encourage greater use of trains, particularly for journeys to and from Glasgow but also for more localised journeys as well. Trains are often regarded as more attractive than buses by more affluent groups which is important given the relative prosperity of East Renfrewshire.

The capacity of the rail network within the Council boundaries is affected by a number of external constraints that limit the services that can operate in East Renfrewshire. Restrictions at Glasgow Central station are a particular issue along with the lack of integration between the southwest and northeast rail networks in Glasgow. There is also a capacity constraint between Barrhead and Kilmarnock which limits the number of services that can operate over this section. Scottish







Ministers have committed to resolving this by April 2009 to allow a half hourly service between Glasgow and Kilmarnock to be introduced. A single-track section between Busby and East Kilbride restricts capacity on the East Kilbride line. As a result of these restrictions some peak hour services suffer from overcrowding with the most acute problems on the Glasgow bound services from Barrhead and on the East Kilbride line during the AM peak period. Capacity and service enhancements are consequently required to alleviate these problems and increase the attractiveness of trains for potential users. The Council therefore supports the Glasgow Airport Rail Link, Glasgow Crossrail, Glasgow & South Western passing loop and platform extensions, East Kilbride line infrastructure improvements, electrification of the Glasgow & South Western and East Kilbride lines, various timetable amendments and Glasgow Central signalling enhancement schemes which are being promoted by SPT and other industry partners to help address these problems.



There is potential to develop a new station on the Neilston line in the Auchenback area of Barrhead. This would improve links between Barrhead and Newton Mearns as well as providing better access to Glasgow for local residents who are some distance from the existing station in Barrhead. The case for this scheme is strengthened by the Springfield Road urban expansion area adjacent to the line which will increase the population catchment in the area. Other opportunities for new and enhanced stations will also be explored and promoted, particularly the potential to develop a station between Williamwood and Muirend stations on the Neilston line.



Train services are provided by a variety of different types of rolling stock with a number being old and inaccessible for those with disabilities, particularly mobility problems. The requirements of the Disability Discrimination Act 1995 (amended in 2005) make it illegal for the operators of transport vehicles to discriminate against disabled people. New rolling stock is compliant with these requirements but as it will take time to replace the fleet, trains will remain inaccessible for many disabled people in East Renfrewshire for the foreseeable future. Swift introduction of new rolling stock would address this problem and also make trains more attractive for those without disabilities too. It is also important to ensure stations are accessible and the Council encourages the relevant industry bodies to ensure that this is the case.



Safe access to stations is important in encouraging greater use of trains. Improvements in lighting and CCTV coverage can help to facilitate this. Security on trains themselves is also crucial in determining people's willingness to use the services. Like buses, this tends to be more of an issue for particular groups and also late at night.

Enhanced integration between modes can contribute to the creation of a seamless journey and reduce the inconvenience and delay incurred by waiting on public transport. Improved facilities for integration between modes at stations can help to realise this although coordination of bus and train services is dependent upon the decisions of operators who are often competing with one another for passengers.



### Rail Policies

- R1: Encourage people to use train services.
- R2: Promote network capacity improvements that release additional network capability for trains that service East Renfrewshire.
- R3: Encourage operators to improve train services operating in East Renfrewshire.
- R4: Promote the introduction of new and enhanced stations, as appropriate, and in particular at Auchenback (Barrhead) and between Williamwood and Muirend.
- R5: Seek to reduce overcrowding on peak hour services.
- R6: Encourage the introduction of modern rolling stock compliant with the Disability Discrimination Act 1995 (amended 2005) requirements.
- R7: Support enhanced accessibility to stations for those with disabilities.
- R8: Facilitate secure access to stations.
- R9: Encourage operators to take measures to improve security on train services.
- R10: Seek enhanced integration between modes particularly at stations.
- R11: Support proposals being taken forward by SPT and other industry stakeholders to enhance capacity and relieve bottlenecks that affect the rail network in East Renfrewshire.

### 9.6 Park & Ride

Park & Ride facilities can be a vital component in encouraging people to use public transport for at least part of their journey. Although there are no bus-based Park & Ride facilities in East Renfrewshire all the train stations, with the exception of Thornliebank, have facilities which are all well used and frequently operating over capacity. Careful consideration has to be given to the development of Park & Ride facilities as poorly located developments can encourage people to drive there when they may have walked, cycled or used another form of public transport previously. It is also important to ensure that sufficient additional capacity is available on services before extending Park & Ride facilities.

Opportunities to introduce new, or expand existing, Park & Ride provision will be kept under review and there are a number of schemes which the Council would seek to implement. Opportunities exist to develop Patterton Station into a multi-modal interchange, including extended Park & Ride facilities, which would serve Glasgow bound commuters from the Newton Mearns area. This is related to the Greenlaw development which will increase the population in the vicinity of the station. In addition, if the development of a new station at Auchenback or between Muirend and Williamwood stations is found to be viable consideration should be given to appropriate Park & Ride facilities. Possibilities for Park & Ride improvements at other stations are inhibited by land restrictions although there is potential to introduce decked car parks if sufficient demand exists. The Council will continue to explore opportunities to expand Park & Ride provision at stations in conjunction with relevant industry bodies.





In conjunction with the Patterton Interchange development, scope also exists to develop a bus-based Park & Ride at M77 Junction 5 where the Glasgow Southern Orbital and M77 meet. Commercial interest in the development of such a facility exists when combined with a Motorway Service Area and this proposal has been supported in the new Local Plan consultation document. The development of a Park & Ride at this location could serve people travelling to Glasgow from Lanarkshire and Ayrshire as well as a more localised market thus reducing congestion in Glasgow and on the M77 north of Junction 5. However, there are also opportunities to develop Park & Ride facilities elsewhere on the M77 and the Council would subsequently encourage SPT to investigate the most appropriate location(s).



In order to encourage the use of Park & Ride as a means to increase public transport use it is considered that parking charges should be resisted wherever possible with all expenses incorporated into the price of the public transport fare. Where Park & Ride facilities are being used by people who aren't using the public transport service then a small fee refunded upon purchase of a ticket may be appropriate. Where Park & Ride facilities are under pressure from excessive demand attempts should be made to expand facilities.



#### Park & Ride Policies

- PR1: Encourage the appropriate use of Park & Ride facilities by those without alternative means of accessing public transport facilities.
- PR2: Investigate and promote, where appropriate, extensions to existing Park & Ride facilities, particularly at Patterton Station.
- PR3: In conjunction with the Patterton Interchange, promote or support new Park & Ride facilities as appropriate including at Auchenback and on the M77.
- PR4: Explore opportunities to extend Park & Ride provision at stations.
- PR5: Resist charging for the parking element of Park & Ride facilities within East Renfrewshire unless exceptional circumstances can be demonstrated.



### 9.7 Mass Transit

Mass Transit can be defined as a public transportation system designed to move large numbers of passengers and can take numerous forms including traditional buses, guided buses, tram-style buses, trams, light rapid transit and traditional heavy rail. SPT has identified the need to safeguard rail solums for mass transit routes and has also outlined a number of potential mass transit corridors in the RTS, including some linking through the south side of the conurbation to East Renfrewshire, which should be explored in more detail. In addition, proposals for mass transit systems are currently being developed by neighbouring local authorities and have also historically been considered for parts of East Renfrewshire, particularly Newton Mearns. This area has been identified as suffering from a lack of public transport penetration and high levels of car dependency which could warrant the introduction of some form of mass transit. There exists scope to convert the Neilston railway line



to light rail operation along with the Newton line and Cathcart Circle, which would offer an opportunity to construct a spur into Newton Mearns, and this is one option that may be explored in more detail by the Strategic Transport Projects Review being undertaken by Transport Scotland. An alternative proposal involves the use of purpose built "Metro" trains which would be able to run more frequently within the current infrastructure constraints. In addition, a scheme that uses existing routes would minimise environmental impacts. Mass transit proposals will need to be developed in partnership with neighbouring local authorities, SPT and Transport Scotland due to their cross boundary operation and proposals will be kept under review. In the interim period, recent appraisal work identified options to improve bus service provision in Newton Mearns and the Council is currently exploring opportunities to bring this to fruition with some improvements having already been achieved.

#### Mass Transit Policies:

- MT1: Work with SPT to investigate the potential mass transit corridors identified in the RTS in more detail ensuring that proposals for mass transit in the south side of the Glasgow conurbation take into consideration opportunities to include links to East Renfrewshire.
- MT2: Support the safeguarding of rail solums for mass transit routes.
- MT3: Investigate and promote, where appropriate, opportunities to introduce mass transit facilities in Newton Mearns.
- MT4: Explore opportunities to enhance bus service provision in Newton Mearns.

#### 9.8 Taxis & Private Hires

Taxis and private hires can play an important role in filling gaps in transport provision for those who cannot readily access a car or suitable public transport facilities. There are currently 458 private hires and 77 taxis licensed in East Renfrewshire with the number of taxi licenses being restricted to 77 and the number of private hires being unrestricted. Taxis are required to meet certain standards to ensure they are accessible for the disabled whereas these restrictions do not apply to private hires. The positioning and number of taxi ranks is an important factor in determining how easily accessed they are.

#### Taxis & Private Hire Policies

- TP1: Ensure an appropriate number of taxi and private hire licenses are provided by keeping them under review.
- TP2: Promote the widespread implementation of accessible taxis and private hires in order to meet the needs of disabled users.
- TP3: Ensure appropriate ranks for taxis are provided and that they are suitably located.





### 9.9 Powered Two Wheelers

This category covers all forms of motorised two wheeled vehicles including mopeds, scooters and motorcycles. These forms of transport take up less roadspace than other motorised vehicles and subsequently do not create a significant congestion problem. They also use minimal space when parked which makes them an attractive alternative to cars in heavily congested and densely urbanised areas. As a result of these advantages powered two wheelers are sometimes allowed the use of reallocated roadspace, such as bus lanes, to encourage their increased use instead of cars.

Riders of powered two wheelers are a particularly vulnerable group of road users. They are the only group of road users in Scotland who have not seen a significant decline in casualty rates over the past decade. It is therefore of fundamental importance that particular consideration is given to their safety requirements and how casualty rates can be reduced. Education of riders and other road users can play an important role in fostering greater understanding between these groups, thereby improving safety.

EU directive 87/56 imposes strict limits on noise emissions from powered two wheelers and this controls the type of exhaust that can be fitted during manufacturing. In some instances they are modified following manufacture to introduce custom exhausts, which has led to issues associated with the occurrence of excessive noise and the associated nuisance this entails.

#### Powered Two Wheelers Policies

- PT1: Consider the safety needs of riders of powered two wheelers and how these can be addressed.
- PT2: Promote greater understanding and appreciation of issues between riders of powered two wheelers and other road users.
- PT3: Consider allowing powered two wheelers the use of any reallocated roadspace within East Renfrewshire.
- PT4: Review and amend, if appropriate, the parking provision for powered two wheelers.
- PT5: Encourage enforcement of the legislation governing noise emissions from powered two wheelers.

### 9.10 Demand Management

Stimulation of modal shift is likely to be most successful if a combination of improvements in alternative modes and measures to discourage car use are employed. Demand management measures can take many forms including road user charging, parking restrictions, parking charges and the reallocation of road space to alternative modes in order to reduce capacity for cars. These measures are primarily aimed at creating disincentives to car use to encourage people to travel by more sustainable modes of transport.





Within East Renfrewshire's boundaries there are limited major services and employment opportunities. It is inevitable therefore, given the highly qualified population resident in the area, that there will be a high degree of travel to surrounding areas to access the services and employment opportunities they offer. It is acknowledged that public transport links within East Renfrewshire could be improved and that residents often have to rely on their cars to reach the facilities in the surrounding area. The Council has no control over policies pursued by neighbouring local authorities toward demand management and thus residents of East Renfrewshire may feel penalised by any measures they introduce when viable alternatives for their journey are not available. Glasgow City Council have adopted parking controls as their primary means of managing demand and this has implications for commuters across the region including East Renfrewshire. As such, a regional approach to demand management is required that reconciles the interests of all users of the network and the Council would advocate that this is taken forward by SPT as a priority. In particular, a regional approach to car parking is regarded as a crucial issue, as this is the most popular method of demand management currently employed by local authorities in the west of Scotland. As a first step SPT has outlined that it intends to introduce region wide maximum parking standards paying due heed to the variations that exist across the region. Nonetheless, the Council is committed to pursuing modal shift and improvements in public transport provision and, given prevailing circumstances, will also give due consideration as to whether demand management measures are appropriate within East Renfrewshire itself.

The Council firmly believes that there is no justification for investigating the implementation of road user charging as congestion and environmental problems within East Renfrewshire are not sufficiently acute to merit this at this time. It is also regarded that the existing legislation covering road user charging is difficult to effectively implement, as it does not allow the charging of Trunk Roads and is predicated upon alleviating congestion rather than making motorists pay for the full costs of their car use. The Council would urge the Scottish Government to review the legislation covering road user charging and to consider, in consultation with the Council when appropriate, if the introduction of a national scheme would be more suitable than the piecemeal implementation of local road user charging regimes.

The regulation of car parking can be used to manage car travel and offers considerable flexibility as a demand management tool. There are currently no charges for parking in Council controlled car parks, as problems have not become critical enough to merit this. Some localised parking problems exist and the Council will keep these under review. In areas adjacent to key retail facilities it is important to encourage short-stay parking, rather than long-stay commuter parking, to foster economic activity and maintain the vitality of existing service centres. However, the impact of any parking restrictions, in terms of overflow parking in surrounding areas, has to be carefully considered prior to their introduction and monitored following implementation to ensure problems are not displaced to surrounding areas. A lack of public sector control over private non-residential parking facilities





can cause problems in relation to the supply of parking and its use as a demand management tool although this is of less concern in East Renfrewshire as such facilities are relatively limited. The Council can decriminalise parking if it wishes to take responsibility for enforcement of parking restrictions rather than relying upon the Police to do so. Charges for car parking are often introduced along with decriminalised parking to offset the costs involved in enforcing the regime. The viability of exercising these powers in East Renfrewshire has been investigated and found unlikely to be worthwhile at this time although this situation may alter in the future and will therefore be kept under review.

The reallocation of road space can be used as a means to make alternative modes of transport more attractive and as a demand management measure by reducing the roadspace available to motorised traffic. This dual role will be taken into consideration when investigating the suitability of reallocating roadspace to alternative modes of transport.

#### Demand Management Policies

- DM1: Work with SPT to develop a regional approach to demand management, and particularly parking policy.
- DM2: Resist the implementation of road user charging in East Renfrewshire unless congestion and environmental problems become sufficiently acute to warrant considering it.
- DM3: Work with the Scottish Government to investigate the merits of introducing a national road user charging scheme.
- DM4: Encourage the Scottish Government to consider amending the legislation governing road user charging to allow the charging of Trunk Roads.
- DM5: Review and amend, if appropriate, parking restrictions adjacent to key retail facilities to encourage short-stay parking rather than long-stay commuter parking.
- DM6: Consider and monitor the impact of any overflow parking that occurs as a result of any amendments to parking restrictions.
- DM7: Review whether decriminalised parking and/or parking charges are appropriate within East Renfrewshire and take action if necessary.
- DM8: Consider how the reallocation of roadspace in certain areas, if introduced, can be used as a demand management mechanism as well as a means of improving conditions for alternative modes of transport.

#### 9.11 Ticketing

Ticketing arrangements play an important role in determining the attractiveness of public transport services. Fares and ticketing structures are set by operators and can sometimes lead to confusion if overly complex or not clearly conveyed to the public. When interchange between various modes of transport or between services provided by different operators is required, these problems can be even more significant and may discourage the use of public transport. Integrated ticketing arrangements can help to reduce this confusion and create a more seamless journey





for public transport users. Transport Scotland intend to explore the possibility of introducing a pilot integrated ticketing scheme across all modes.

The Transport (Scotland) Act 2001 conferred powers upon SPT to determine what ticketing arrangements should be available on local bus services within the SPT area and to implement this through voluntary partnerships with operators. In the event that voluntary arrangements cannot be established then these conditions can be imposed via a ticketing scheme. To fulfil these obligations SPT has prepared an Integrated Ticketing Strategy which details what SPT expects of bus operators within its boundaries. SPT already provides integrated ticketing facilities, with the most notable being the Zonocard, which enjoy considerable support from public transport operators although this is on a voluntary basis. SPT also intends to investigate the possibility of introducing a 1-day Zonocard. In the future there exists scope to introduce integrated ticketing arrangements that cover the whole of Scotland. This would encourage people to undertake longer trips by public transport and increase connectivity across Scotland.

SPT are taking forward the implementation of Smartcards in the west of Scotland. Smartcards are electronic integrated tickets that cover a variety of transport operators and/or modes and eliminate the need for change for fares. The implementation of Smartcards could offer significant benefits for passengers and may encourage modal shift to public transport as well.

Ticket fraud can be a considerable drain upon the revenue generated by public transport services. First ScotRail has taken measures to reduce ticket fraud on trains through enhanced enforcement. Ticket fraud on buses is less pronounced as passengers are required to produce a valid ticket or purchase one when boarding although in some instances tickets are purchased which do not cover the full extent of the journey made. Reducing the occurrence of fraud will generate increased revenue which can then be reinvested in improvements to public transport services.

#### Ticketing Policies

- T1: Support Transport Scotland and SPT in the implementation of integrated ticketing arrangements.
- T2: Encourage the introduction of a Scotland wide integrated ticketing scheme.
- T3: Encourage public transport operators to simplify ticketing structures, where appropriate, and clearly advertise fares.
- T4: Support the development of Smartcards.
- T5: Support operators in reducing the occurrence of ticket fraud.

#### 9.12 Travel Information

Regardless of the mode of transport used it is essential that good travel information is available to allow an informed decision about when and how to undertake the journey. The provision of real-time traffic information can reduce congestion and delays thereby increasing the efficiency of the road network. Traffic Scotland







provides real-time traffic information on Trunk Roads across Scotland by a variety of media. It also provides details of any planned interruptions on the Trunk Road network, such as scheduled maintenance works, to allow this to be taken into consideration when planning a trip.

Journey planners like Transport Direct and Traveline allow comparison between a variety of modes of transport for a given journey. Facilities such as these can help to encourage a modal shift by highlighting the public transport alternatives that are available for a particular journey which some people may not be aware of. They are also useful for establishing the most efficient means or route for a journey and can be particularly helpful when visiting unfamiliar destinations.

Improvements in the quality and coverage of public transport information may also help to stimulate a modal shift. In the case of buses, this can be as simple as ensuring up to date timetable data is available at bus stops, or more sophisticated such as real-time information systems that monitor whether or not a bus service is running on time and displays this information directly to the waiting passengers. Bus operators are responsible for providing accurate timetable information whilst SPT must make provision for the display of such information at bus stops. Some problems have been identified with changes in bus services being introduced without associated updating of the relevant timetable information on affected routes. Real-time information tends to be of most benefit where buses are likely to be subject to delay and is therefore usually best suited to urban areas although it can also be beneficial in rural locations where services are infrequent and people can spend a long time waiting for a late running or cancelled bus. The Scottish Government is keen to see an expansion of the provision of Real Time Information. For trains, Customer Information Systems are provided at railway stations in East Renfrewshire which detail the scheduled train arrivals and departures and whether they are running on time. First ScotRail intends to introduce state of the art flat screen customer information facilities at Clarkston and Giffnock stations. There are also opportunities to make public transport information more accessible by the use of mobile and innovative technology.

Travel information also includes walking and cycling routes and how they link to other key locations such as local shops and public transport facilities. The simplest way to display this is often by the production of a map. Good awareness of walking and cycling routes can encourage people to use these modes rather than driving when accessing facilities in the local area or when interchanging between modes.

It is important to take into consideration the end user of travel information and any special needs that particular groups may have to assist them in accessing such information. Making travel information available in a variety of formats can assist in facilitating this. In particular, it is important to take into consideration the needs of those with disabilities and those whose first language is not English.

#### Travel Information Policies

- TI1: Support the provision of real-time traffic information, particularly on key Trunk Road routes.





- TI2: Promote the use of journey planning facilities, particularly Traveline and Transport Direct.
- TI3: Consider the appropriateness of introducing real-time information at bus stops and any other appropriate locations in East Renfrewshire.
- TI4: Encourage the provision of up to date timetable information at bus stops and other appropriate locations.
- TI5: Promote the provision of public transport information through all appropriate mechanisms including innovative and mobile technologies.
- TI6: Provide information, as appropriate, regarding the walking and cycling networks available in East Renfrewshire.
- TI7: Encourage the provision of travel information in a variety of formats and media to ensure it is accessible to all including those with special needs.

### 9.13 Soft Measures

Travel behaviour can be influenced by measures which restrict the use of certain modes and routes thus forcing people to travel in the desired way although this tends to be less popular than if people take a decision to change their own travel behaviour. Soft measures can help to encourage people to voluntarily change their travel habits without imposing change upon them. Travel Plans are one of the most commonly used soft measures and are typically separated into workplace, school and personalised travel plans although others are also available. The Council's policy on workplace travel plans is discussed in Chapter 10.5.

The "school run" is a significant source of congestion and contributes to a vicious circle of concern about the safety of children in the vicinity of schools due to high levels of traffic. This subsequently discourages parents from allowing children to make their own way to school and they exacerbate the traffic problem by driving them instead. The "school run" has also been identified as a contributory factor in the increasingly inactive lives being led by children and the associated concerns regarding health and disease. A School Travel Coordinator has been appointed as part of the Scottish Government's drive to promote safe, healthy and sustainable transport for children. The School Travel Coordinator provides guidance and resources in order to facilitate the development of individual School Travel Plans, which are a mechanism to facilitate more sustainable access to schools and to alleviate these problems. They can encompass a wide range of measures including walking buses, park & stride schemes, pedestrian crossings, traffic calming, educational campaigns and cycling schemes such as the Cycling Proficiency Test.

Personalised Travel Plans have been pioneered in Scotland by the now defunct Stepchange project. They involve assessing the travel needs of individuals by discussing their routine journeys and how they are undertaken and developing a sustainable alternative for that particular individual. Whilst the Stepchange project has now been discontinued it did identify the benefits that can be accrued from schemes of this nature although it is resource intensive and may be best taken forward at a regional level for this reason.





Educational programmes like the now defunct “Choose Another Way” campaign have been progressed by the Scottish Government to encourage people to alter their travel behaviour with mixed success. Consideration is currently being given to whether national travel awareness campaigns are a worthwhile exercise or if greater benefits can be accrued from alternative approaches. Subsequently, the Council will continue to review the appropriateness of educational schemes such as these.

Improvements in telecommunications technology have increased the opportunities for more flexible and home working practices as well as offering scope for reducing the number of face to face meetings required. Whilst the extent to which this can contribute to reducing the need to travel has still to be definitively identified it is likely to have a role to play as part of a coordinated approach to this issue. Where these developments cannot completely eradicate the need to undertake a trip, in some instances they may allow it to be undertaken outwith peak periods which reduces the demand on the transport network when it is most under pressure. Technological innovations such as these subsequently offer considerable opportunities to contribute to a reduction in the need to travel and increase the efficiency of the network.



Car sharing initiatives and car clubs can help reduce the number of single occupancy car trips occurring whilst still allowing people to have the flexibility and freedom provided by cars. They are often cheaper for the people involved as running costs for car sharers are usually shared. Sometimes finding people with compatible travel patterns can be the most significant barrier to car sharing. SPT has been investigating options to introduce a car sharing scheme for the west of Scotland, which would help people find others with similar travel patterns for car sharing, and the Council will work with SPT to continue to take this forward.



The National Transport Strategy identified proposals to take forward sustainable travel demonstration towns and villages across Scotland to test different approaches and illustrate best practice techniques. The Council is keen to investigate the opportunities this may present for East Renfrewshire and will explore this along with SPT and the Scottish Government.



#### Soft Measures Policies

- SM1: Continue to support schools in the development of School Travel Plans and encourage parents and pupils to travel to school by means other than car.
- SM2: Continue a programme of road safety education in schools.
- SM3: Work with SPT to take forward initiatives to support the development of Personalised Travel Plans.
- SM4: Support travel education campaigns as appropriate.
- SM5: Encourage increased flexible, home and tele-working.
- SM6: Work with SPT to develop a car sharing scheme for the west of Scotland.
- M7: Investigate opportunities to pilot a sustainable travel demonstration town or village in East Renfrewshire.

SECTION 10

# Transport & Land-use





### 10.1 Overarching Issues

The interaction between transport and land-use has been identified as a key determinant in travel patterns. The Structure and Local Plans establish the land-use framework within which the LTS operates. Facilitating sustainable access to new developments from the outset is fundamental in ensuring travel patterns do not become entrenched and subsequently much more difficult to influence. Consideration of the transport requirements of proposed developments at the earliest possible stage is therefore of crucial importance. This requires coordination between land-use and transport planning as well as the identification of any transport measures that may be required to support a proposed development. Potential development sites should be considered from a “first principles” approach to identify whether they are appropriate in transport terms as opposed to analysing the transport requirements of a site following its selection.

The Local Plan is pursuing a strategy of economic consolidation and regeneration which has identified the need for improvements in connectivity to increase the attractiveness of the area for economic investment. Transport improvements are sometimes required to unlock the development potential of key sites by opening them up to wider markets. In particular, connectivity to the strategic transport infrastructure which links East Renfrewshire with surrounding areas and beyond is a key issue in facilitating economic prosperity and investment.

#### Transport & Land-use Policies

- TL1: Support the land-use proposals being brought forward in the Structure and Local Plan through appropriate transport schemes.
- TL2: Facilitate integration between transport and land-use planning.
- TL3: Encourage the consideration of the transport requirements of a development at the earliest possible stage.
- TL4: Encourage the consideration of the transport implications of a development as a crucial factor when selecting preferred sites.
- TL5: Pursue enhancements in connectivity to facilitate economic development in the local area.

### 10.2 Access to Strategic Economic Locations

Residents of East Renfrewshire are often dependent upon developments in the surrounding area for services and employment opportunities due to the predominantly residential nature of much of the development within the Council boundaries. Whilst it is desirable to attempt to minimise the need to travel to economic locations in the surrounding area as much as possible it is unfeasible to expect all economic activity by residents of East Renfrewshire to be undertaken within the Council boundaries. Subsequently, where people are required to travel to strategic economic locations in the surrounding area it is desirable to encourage this to be undertaken by sustainable means wherever possible.





Glasgow, Paisley and East Kilbride are the key town centres in the surrounding area which are most commonly utilised by residents of East Renfrewshire to access services and employment opportunities. These centres are already served by public transport services although the extent to which these cater for the needs of potential users can vary considerably as service frequencies, routes, operating hours and other factors can all affect whether they offer an attractive option for a particular journey. The car is often regarded as the most desirable mode of transport to these locations which creates problems both within East Renfrewshire and in neighbouring authorities. It is subsequently important to encourage a modal shift to more sustainable modes of transport and, in particular, to pursue enhancements in public transport services to these centres. The development of 2,500 houses in the vicinity of Eaglesham Road, East Kilbride could present opportunities to enhance public transport links in the vicinity of Eaglesham.

Out of town centres in the surrounding area, like Braehead Shopping Centre, Phoenix Retail Park, Hillington Industrial Estate and the Silverburn Centre, are an important source of jobs and services for residents of East Renfrewshire. However, access to out of town centres tends to be much more difficult by sustainable means than by car as they are often outwith practical walking or cycling distances and poorly served by public transport. This can lead to social exclusion for those without access to a car and can also create considerable localised congestion and environmental problems. To overcome these problems it is important to improve access by sustainable means to these locations and, particularly, to improve public transport links. A particular issue which tends to affect locations such as these more than in town developments is the patterns of shift workers and their need for access at times outwith normal business hours. Improvements in off-peak public transport services to out of town centres are subsequently required.

International transport links are of vital importance to the wider economy and can be a considerable source of employment. Glasgow and Glasgow Prestwick Airports are key facilities in this regard although surface access from East Renfrewshire is predominantly dependent upon use of the car. A similar situation exists with regard to the west coast ports. Improved links by sustainable means to these locations will not only encourage a modal shift for people travelling through them to international destinations but would also open up access to employment opportunities at these locations for those who do not have access to a car. Moreover, in the case of Glasgow Prestwick Airport there is considerable traffic travelling through East Renfrewshire via the M77 in order to access it, which has negative environmental implications for people in its vicinity. Promoting access by alternative modes will help to reduce these impacts and enhance quality of life for the residents of East Renfrewshire.





#### Access to Strategic Economic Locations Policies

- AS1: Minimise the need to travel to economic locations outwith the Council area wherever possible.
- AS2: Work with neighbouring authorities and SPT to promote sustainable access, particularly public transport enhancements, to strategic economic locations in the surrounding area.
- AS3: Work with neighbouring authorities and SPT to encourage enhancements in off-peak public transport services to strategic economic locations in the surrounding area, particularly to out of town centres.
- AS4: Work with neighbouring authorities and SPT to promote sustainable access to international transport infrastructure, particularly the west coast ports as well as Glasgow and Glasgow Prestwick Airports.

#### 10.3 Supporting Local Economic Activity

Local service centres are an important source of economic activity and jobs so it is consequently of vital importance that their economic vitality and viability is maintained. People in East Renfrewshire tend to undertake their convenience shopping, for items like food, locally whereas they often purchase comparison goods, like clothes and electrical goods, outwith the authority. Local economic activity is subsequently primarily focused upon the market for convenience shopping. Good access from local neighbourhoods can help to support local shops and services with high quality walking and cycling routes subsequently being of crucial importance. However, it is also important to ensure that short-stay parking is available in close proximity to shops and services for those who have difficulty in reaching them by alternative means and to accommodate passers-by who may wish to stop, although it is important to minimise the number of short car journeys to local facilities as these involve the most inefficient use of cars and are the easiest trips to transfer to alternative modes. Local shops and services thus have to be accessible by a range of modes to facilitate their continuing prosperity without contributing to environmental and congestion problems.

Links between the east and west parts of East Renfrewshire have been identified as requiring improvement in order to facilitate greater integration within the Council area and to increase the economic interaction that occurs across the authority. A lack of public transport links across the authority area has been identified as a particular problem that requires attention, with policy in relation to this outlined in section 9.4.

#### Supporting Local Economic Activity Policies

- SL1: Support the continuing viability and vitality of existing town and neighbourhood centres through complementary transport measures.
- SL2: Promote enhanced integration between the east and west parts of East Renfrewshire.





## 10.4 Regeneration

The new Local Plan has shifted its focus away from expansion of urban areas toward improving and strengthening existing urban areas with those identified for action including Barrhead, Newton Mearns Town Centre, Giffnock Town Centre, Clarkston Town Centre, Neilston Village, Thornliebank Neighbourhood Centre and Busby Neighbourhood Centre. A Regeneration and Consolidation of Communities Strategy has been identified to help bring this to fruition with the key aspects of this strategy being to:

- facilitate the regeneration and renewal of existing town centres
- complete the established Urban Expansion Areas at Greenlaw and Auchenback
- provide additional housing in accordance with the Structure Plan alteration
- provide affordable housing
- rationalise business and industrial land
- promote Barrhead as a Strategic Industrial and Business Location
- construct a link road between Barrhead, the M77 and Newton Mearns
- construct a new rail station at Auchenback
- provide a Motorway Service Area at M77 Junction 5
- protect and enhance important urban greenspace
- protect and enhance the Greenbelt and Countryside Around Towns area
- implement the Dams to Darnley Country Park project
- improve community facilities

Transport improvements will have a role to play in helping to achieve this strategy, as identified above, although the extent to which this is the case will vary from place to place. Although not identified in the strategy the development of a multi-modal interchange at Patterton Station would also be of benefit. The approach being taken by the Local Plan will contribute to the aspirations of the LTS by reducing the need to travel and stimulating local economic development.

A separate initiative, which has been developed from the Barrhead Regeneration Framework and Barrhead Town Centre Masterplan, is being progressed to facilitate the regeneration of Barrhead. Key elements of this regeneration strategy include:

- additional housing including affordable housing at a number of town centre locations
- a new supermarket with an associated decked car park and petrol station
- new retail units
- the formation of a Town Centre Partnership
- the creation of Commercial Enhancement Zones
- a new civic square
- enhancement of green spaces
- relocation of the existing health centre
- the construction of a new college and associated facilities
- relocation of industry from inappropriate locations
- improvements to on-street parking and pedestrian crossing facilities on Main Street
- realignment of Glen Street and closure of Carlibar Road at Cross Arthurlie Street







The regeneration of Barrhead will help foster economic activity in the area thus reducing the need to travel elsewhere to access services and employment opportunities. Local transport enhancements as part of this scheme will also contribute to the efficient and safe operation of the network.

#### Regeneration Policies

- RE1: Support the Regeneration and Consolidation of Communities strategy outlined in the Local Plan.
- RE2: Support the regeneration of Barrhead and pursue the transport improvements required to bring this to fruition.

#### 10.5 Development Control

Transport Assessments are an important mechanism used to assess the transport impacts of a proposed development and to help identify what measures are required to ensure the transport network is not adversely affected by it. They are also useful in ensuring that developments are accessible by a range of transport modes, that road safety standards are maintained or improved and, in particular, in facilitating access by sustainable means. Consultation with public transport operators throughout the preparation of proposals for a new development assists in ensuring that they are accessible by sustainable transport. Developers will be expected to meet the costs of any transport schemes required as a result of their development and will need to demonstrate that efforts have been made to minimise the number of trips made by car as a result of it. For larger schemes, which may have wider transport impacts outwith the locality of the development, developers may be expected to contribute to strategic transport schemes in the wider area. The Scottish Government has outlined development size thresholds which trigger the need to undertake a Transport Assessment although the Council may specify the need to prepare a Transport Assessment for any development which it feels will have significant transport implications. All non-householder planning applications are assessed to determine whether a Transport Assessment is required. However, when a householder makes a planning application, there may also be a requirement to assess the implications of the proposed changes on the road network. Whilst this is unlikely to require a Transport Assessment the applicant may be asked to provide detailed drawings of their proposals which will help to determine the suitability of the application to meet the Council's roads standards.

Travel Plans are used as a means to influence how people access a particular development and thus to minimise the traffic generated by it through promotion of alternative modes of transport. The Council may specify the need to develop a Travel Plan for any development deemed to have significant transport implications and will require a Travel Plan for all developments that have undergone a Transport Assessment. Travel Plans should set realistic targets for encouraging travel by alternative modes to the car and be reviewed regularly to assess the extent to which they are achieving these targets. The Council will monitor these findings and seek amendments to Travel Plans, as necessary, to improve their performance.





Scottish Planning Policy 17 established national maximum car parking standards, minimum disabled parking standards and minimum cycle parking standards which must be applied to new developments. The Council is currently reviewing its parking standards taking into cognisance those set out within SPP 17 and SPT's proposed regional parking standards and will decide whether to set its own standards following this review. In the interim period the Council will apply the national parking standards as detailed in SPP 17 to new developments.

#### Development Control Policies

- DC1: Ensure new developments are accessible by a range of transport modes.
- DC2: Involve public transport operators in the development of transport solutions for new developments.
- DC3: Require a Transport Assessment to be undertaken for all significant trip-generating developments.
- DC4: Require developers to mitigate the transport impacts of their development and to demonstrate that attempts have been made to minimise any traffic generation resulting from their development.
- DC5: Seek developer contributions to transport schemes required as a result of their development and, where appropriate, to strategic transport schemes.
- DC6: Require the preparation of a Travel Plan for all significant trip-generating developments.
- DC7: Monitor the performance of Travel Plans and seek amendments where necessary.
- DC8: Apply the national parking standards set out in SPP 17 to new developments until such time as the Council adopts its own parking standards.
- DC9: Review and adopt, if appropriate, new parking standards taking into account the national parking standards set out in SPP 17 and any regional parking standards established by SPT.

#### 10.6 Strategic Road Development

In order to support the land-use policies being brought forward in the Local Plan, particularly with regard to the regeneration of Barrhead and the potential to develop a high amenity site at Pollok/Ryat, it has been identified that improvements in connectivity to the strategic road network are required. In particular it has been found through STAG appraisal that an improved road link between Barrhead and the M77 along with south-facing ramps at M77 Junction 4, which currently only has north-facing ramps, could assist in the regeneration of Barrhead and in stimulating local economic activity. A new link road would remove the need to use the unsafe and unreliable Aurs Road thus improving connectivity between Barrhead and the M77 as well as internal links with Newton Mearns. This would likely be accompanied by measures to improve public transport as well. The Council is currently developing this proposal in detail whilst liaising with Transport Scotland and will continue to do so.





SPT has outlined proposals to seek powers to manage Trunk Roads, in conjunction with member Councils, where this would improve the effectiveness of the network. The Council will liaise with SPT to identify the appropriateness of this proposal and whether it can deliver benefits for the road network in East Renfrewshire.

#### Strategic Road Development Policies

- SR1: Investigate and promote accordingly the implementation of a new link road between Barrhead and the M77 along with south facing ramps at M77 Junction 4.
- SR2: Support SPT in investigating whether management of Trunk Roads at a sub-national level could provide improvements in effectiveness of the network.



SECTION 11

# Accessibility & Social Inclusion





### 11.1 Overarching Issues

Accessibility refers to the relationship between people and places in terms of the ease with which people can gain access to the facilities that they need to go about their daily lives. It is important to differentiate between connectivity and accessibility as improvements in connectivity, such as a new road link, will not always translate into improvements in accessibility for certain people, for example, those without the use of a car. Accessibility can therefore only be improved by understanding the relationship between the people in question and the facilities they need access to and then identifying where transport improvements are required to address shortcomings in this relationship. Particular groups and geographic areas can be more inclined to suffer accessibility problems than others, as current transport provision does not cater sufficiently for their needs.

East Renfrewshire generally does not suffer from significant deprivation problems although pockets of deprivation have been identified in Barrhead, particularly the Crossmill area, and Neilston through the Scottish Index of Multiple Deprivation (SIMD). However, this is not to say that problems of poor accessibility are not occurring in the area. Poor accessibility can lead to the occurrence of social exclusion and the associated problems that this entails. It is consequently important to measure levels of accessibility to ascertain where problems may be occurring.

#### Accessibility & Social Inclusion Policies

- A1: Investigate, appraise, identify and pursue improvements in accessibility for the residents of East Renfrewshire as appropriate.
- A2: Identify social groups and geographic areas suffering from poor accessibility and pursue improvements as appropriate.
- A3: Promote measures and initiatives that facilitate improvements in accessibility, especially for those most at risk of isolation, disadvantage and social exclusion.

### 11.2 Accessible Transport

Some groups within society can experience particular difficulties in using transport services and infrastructure. These include the mobility impaired, mentally impaired, elderly, young, lesbian/gay etc., women and ethnic minority groups. It is important to reduce or remove the barriers to transport for these groups and the Council subsequently seeks to ensure that transport is accessible to everyone in order to allow them to actively engage in society and reduce the occurrence of social exclusion. Promoting accessibility for all is also important in reducing economic inactivity and subsequently facilitating economic prosperity in the area.

For the mobility impaired and elderly the barriers to transport are often physical ones which can be overcome by designing transport infrastructure and services that take into consideration the needs of these groups. Measures such as raised kerbs at bus stops, low floor buses, well maintained and obstacle free footways, dropped kerbs at pedestrian crossings, ramps at train stations and accessible trains are all enhancements that can improve accessibility to transport for the mobility impaired



and elderly. Improvements like these are also often of benefit to other users of transport facilities as well. In addition to the actual barriers to transport for the elderly and mobility impaired there are also perceived barriers that can discourage people from attempting to travel. Therefore, effective communication of the facilities available to assist these groups when using transport can help to overcome this issue.

The provision of accessible and understandable transport information is a key issue for the mentally impaired. It is subsequently important to provide clear and concise travel information that avoids the use of jargon and extraneous information. It is also important to ensure that staff who have to deal with people who may have difficulty understanding travel information are given suitable training to allow them to respond effectively to their needs.

Young people tend to be more reliant on walking, cycling and public transport as they are less likely to have direct access to a car. Making sure that young people have good access to these modes not only ensures that they can go about their daily lives at the time but may also instil these as their preferred modes of transport into adulthood subsequently fostering sustainable travel patterns. Removing the barriers to transport experienced by young people can also encourage them to participate more actively in society thus reducing the likelihood of delinquent behaviour.

Lesbian/gay and other groups are inclined to experience similar barriers to transport which are frequently in the form of discrimination and anti-social behaviour. Fear of such behaviour can in itself act as a barrier to transport for these groups. The creation of a more secure transport environment accompanied by measures to encourage equality and tolerance can help to overcome these barriers.

Personal security concerns have been identified as a particular issue for women using transport. These concerns are heightened during the hours of darkness and when travelling alone. Evidence has been presented that suggests women are more dependent upon public transport than men which underlines the importance of facilitating waiting and travelling environments that are safe and secure.

Ethnic minorities can be subjected to discrimination on the basis of their race, creed or colour. Fostering greater understanding and tolerance can help to reduce this problem. It is also important to ensure that ethnic minorities are not excluded as a result of a lack of suitable travel information which may require the publication of some information in several different languages.

#### Accessible Transport Policies

- AT1: Encourage relevant industry partners to provide transport infrastructure and services which are accessible to the elderly and mobility impaired.
- AT2: Provide, where appropriate, transport infrastructure and facilities which assist accessibility for the elderly and mobility impaired.
- AT3: Seek to address both the real and perceived concerns of the elderly and mobility impaired with regard to transport networks and services.
- AT4: Take into consideration the needs of the elderly and mobility impaired when designing new or amending existing transport infrastructure and services.





- AT5: Encourage the provision of transport information that minimises the use of jargon and extraneous information and which is available in a variety of formats.
- AT6: Encourage relevant industry partners to undertake training to enable their staff to deal effectively with the needs of those with mental disabilities.
- AT7: Promote measures to reduce the barriers and encourage access to transport for young people, in particular walking, cycling and public transport.
- AT8: Seek to address the real and perceived barriers to transport experienced by lesbian/gay etc. groups.
- AT9: Seek to address the real and perceived security issues which discourage women from using transport networks and services.
- AT10: Promote the provision of transport information in a variety of languages where appropriate.
- AT11: Seek to remove the barriers to transport in terms of discrimination and security concerns experienced by ethnic minorities.

### 11.3 Access to Services

Access to employment opportunities and essential services such as healthcare, education and retail facilities is fundamental in facilitating social inclusion and active participation within society along with economic prosperity. It is important that facilities like these are accessible by sustainable means to ensure those without access to a car are not disadvantaged and to reduce the environmental impact of travel to these locations. Good access to both local and wider services is subsequently crucial for residents of East Renfrewshire given the limited services available within the authority itself and the need to maintain the vitality and viability of existing local services and facilities.

#### *Healthcare*

Access to healthcare facilities has to take into account links to local facilities such as GP surgeries and dentists as well as to hospitals. Residents of East Renfrewshire must travel outwith the authority area to hospitals in the surrounding area and problems have been identified in relation to access to these hospitals, particularly the Glasgow Southern General, Victoria Infirmary, Hairmyres and Royal Alexandra, for those without the use of a car. Public transport trips can be long and involve numerous interchanges between services with service patterns that are often not reflective of visiting and appointment times. This can be particularly problematic when people are suffering and may not be able to undertake seemingly arduous journeys to hospital by public transport. The provision of more direct public transport services, which are sympathetic to the needs of patients and visitors alike, is subsequently important. However, access to local health services by public transport can also be a problem as bus routes and frequencies are not always reflective of the needs of local residents. Minor amendments to routes and service frequencies may often be sufficient to provide significant enhancements in accessibility to local healthcare facilities. Therefore, enhanced public transport services taking into consideration these accessibility issues are advocated although this is at the discretion of public transport operators.



### *Education*

It is of fundamental importance that all residents of East Renfrewshire have equality of access to primary, secondary and tertiary education. Primary and secondary education facilities are provided within the Council boundaries whereas individuals progressing onto college and university must travel to facilities in the surrounding area, although this may change given the proposals to develop a college in Barrhead. It is important that all education facilities are accessible by a variety of modes to ensure people without the use of a car are not disadvantaged and that the impact of travel to these facilities in terms of congestion and environmental problems is minimised. This is particularly important given that education facilities are primarily used by young people who have limited access to a car which necessitates good pedestrian, cycling and public transport links. It is also important to reduce the occurrence of the "school run" to minimise the concerns associated with this and encourage more active lifestyles for children by the use of sustainable modes of transport. Levels of education attained vary across the authority area with Barrhead having noticeably lower levels of college and university educated people, accompanied by low car ownership levels, than other parts of East Renfrewshire. It is therefore important to promote improvements in accessibility, particularly by public transport, from Barrhead to tertiary education facilities to mitigate the occurrence of social exclusion in this area.

### *Employment*

Without good accessibility to employment opportunities economic inactivity can prevail. The majority of employment opportunities for residents of East Renfrewshire are available in surrounding areas and it is consequently important to ensure that people can take advantage of these jobs without transport acting as a barrier. One of the most common transport barriers to employment opportunities is a lack of access to a car, which consequently limits the locations where a given individual can work. It is therefore important to pursue improvements in alternative modes of transport, particularly public transport, to key employment centres in order to enhance accessibility for these people. Accessibility problems to key employment locations currently not well served by public transport have already been identified in Chapter 10.

### *Shopping*

Access to retail facilities is important to allow consumer choice and to support continuing economic activity. The trend toward situating retail outlets in locations that are not readily accessed by means other than the car, such as the Silverburn Centre, Phoenix Retail Park and Braehead Shopping Centre, has led to accessibility problems for those without the use of a car. This limits consumer choice and can lead to disadvantage for those who cannot make a genuine choice about their retail expenditure as a result of transport barriers. This issue is also related to that of gaining access to employment opportunities in surrounding areas. However, it is also important to have good local accessibility to retail facilities to ensure they remain viable. Simple measures like the provision of pedestrian crossing facilities in the vicinity of local shops can improve the accessibility of these facilities.







### Access to Services Policies

- AC1: Encourage enhanced accessibility to essential services and employment opportunities for those with limited transport options and who are at most risk of social exclusion.
- AC2: Promote the introduction of enhanced public transport links to hospitals in the surrounding area as well as local service amendments that improve access to local healthcare facilities.
- AC3: Encourage sustainable access to primary, secondary and tertiary education facilities in the local and wider area, as appropriate, with particular reference to the public transport links to tertiary education from Barrhead.
- AC4: Pursue measures to reduce the occurrence of problems associated with the “school run”.
- AC5: Identify, promote and implement, where appropriate, improvements in accessibility, particularly by sustainable means, to employment locations in the local and wider area for those who are limited in their employment opportunities by transport barriers.
- AC6: Identify, promote and implement, where appropriate, enhanced accessibility, particularly by sustainable means, to retail facilities in the local and wider area.

### 11.4 Rural Accessibility

The majority of people live in urban areas within the northern part of East Renfrewshire but there is also a significant rural hinterland which is home to about 20% of the population. Rural accessibility is therefore an issue of considerable importance. People in rural areas frequently have to travel to services and jobs in more urbanised areas which can lead to problems for people who do not have access to a car. Public transport provision becomes sparse where population densities are lower as it is more difficult to justify services on a commercial basis. Bus services tend to be the main mode of public transport available, although Neilston has a rail link, but services are often infrequent with a lack of provision outwith peak periods, particularly in the evenings and at weekends. SPT provides subsidised bus services but these frequently only provide a baseline level of service. A coordinated approach between all those involved in providing rural public transport services is required to maximise the benefit to rural inhabitants and ensure that those without the use of a car are not disadvantaged. In particular, there is a need for enhanced bus service frequencies and operating hours.

#### Rural Accessibility Policies

- RA1: Take into consideration rural accessibility issues when implementing transport schemes in rural areas.
- RA2: Encourage operators to enhance bus service frequencies and operating hours in rural areas.
- RA3: Consider, along with SPT, where new or amended subsidised bus services may be required in the rural parts of East Renfrewshire.
- RA4: Encourage coordination between all those involved in providing rural public transport services.





### 11.5 Voluntary & Community Transport

Voluntary and Community Transport services perform an important role in providing public transport facilities where traditional public transport provision is inadequate or not appropriate for the journey in question, for example, when attending hospital appointments. They are often provided in response to a perceived shortfall in transport provision and users frequently state that without such services, they would not be able to undertake their daily activities. Continuing provision and improvement in these services is therefore of critical importance. However, there is evidence to suggest that, given the considerable array of groups involved in delivering voluntary and community transport, duplication and inefficiencies are a problem. Enhanced coordination between these groups is being pursued through the Community Planning Partnership with a view to making the best use of the available facilities and reducing the occurrence of duplication. Furthermore, SPT have indicated that they will endeavour to coordinate the booking of vehicles used for school transport, additional needs provision, community transport, health care transport, social work transport and demand responsive transport to facilitate greater efficiency of delivery. In addition, there is considerable interest in the role that Community Transport can play in the rural parts of East Renfrewshire where transport provision is not of the same standard as the more urbanised areas and scope exists to provide more comprehensive transport coverage through locally run schemes.

#### Voluntary & Community Transport Policies

- VC1: Work through the Community Planning Partnership and SPT to identify where voluntary and community transport services can be improved and pursue this as appropriate, with particular reference to the rural areas of East Renfrewshire.
- VC2: Work with SPT to provide enhanced coordination between voluntary and community transport operators.

### 11.6 Concessionary Travel

Concessionary travel arrangements are an important mechanism in facilitating social inclusion for groups who may experience barriers to undertaking their daily activities as a result of the costs incurred from travelling. It is therefore important that concessionary travel regimes are targeted appropriately to provide the maximum benefit to the groups who have the greatest need. Whilst means testing concessionary travel entitlement may not be practical, in some instances there may be a case for using criteria in the selection of people that qualify for an entitlement although this is outwith the control of the Council. The national concessionary travel scheme for the elderly and disabled has been operational since April 2006 while the scheme for young people has only been in place since January 2007. There is subsequently limited evidence regarding the contribution to accessibility and social inclusion that these measures are actually making. The Scottish Government is considering extending the concessionary travel scheme for the elderly and disabled to flexible, demand responsive and community transport services which could offer





significant improvements in accessibility for some particularly vulnerable groups. Continuing review of concessionary travel schemes is therefore of crucial importance to ensure they are offering genuine benefits as intended and that the best use of public funds is being made. It is also important to ensure that the concessionary fares offered by public transport operators are appropriate and cater for the needs of the public.

#### Concessionary Travel Policies

- CT1: Support national and regional concessionary travel arrangements.
- CT2: Encourage the relevant industry partners to undertake continuing review and amendment, if necessary, of concessionary travel regimes to maximise the benefit accrued from these schemes.



SECTION 12

# Network Management





### 12.1 Overarching Issues

The Council is responsible for much of the local transport network within its boundaries and where responsibility lies with other parties it seeks to ensure the best possible provision for residents and visitors to the area by working in partnership with the relevant bodies. It is important to ensure that the transport network is capable of meeting the demands placed upon it and that it is fit for purpose. Maintenance and monitoring of the transport network is consequently vital to ensure its continuing functionality in a safe and efficient manner.

#### Network Management Policies

- NM1: Provide safe, efficient and effective operation for all users of the transport network.



### 12.2 Road Maintenance

East Renfrewshire Council, as the local Roads Authority, is subject to statutory obligations contained in numerous items of legislation, in particular the Roads (Scotland) Act 1984, which place a duty upon the Council to manage and maintain the local public road network. Maintenance of the road network is important to ensure the safe and convenient movement of pedestrians and vehicles. The Council provides road maintenance in accordance with the principles and recommendations of the Code of Practice for Highway Maintenance Management entitled "Well Maintained Highways" with all work undertaken in accordance with established Health and Safety procedures.

Good awareness of the extent and usage of the existing network is essential to allow efficient and effective maintenance to be carried out. In addition, it is important that an understanding of the current condition of the network is developed. Road condition surveys allow the collection of data on the condition of the road network to assist in the prioritisation and programming of maintenance works on a needs related basis. Machine based road network surveys are undertaken annually as part of the Scottish Road Maintenance Condition Survey. These are supplemented by visual surveys carried out by experienced technical staff and information provided by the public through the Council's Customer First service. Safety, lighting and utility inspections are undertaken at set frequencies, or more regularly if deemed necessary, with repairs prioritised based upon severity of risk. Maintaining an accurate record of the maintenance work that has been undertaken is also important to ensure that an audit trail from notification to completion is available.



The maintenance programme is funded from two sources, the Revenue Works programme, which is a three-year rolling programme and the Capital Works five-year programme. The Revenue Works programme facilitates routine maintenance such as gully cleaning, grass cutting, potholing, minor patching, winter maintenance and so forth which is undertaken in accordance with the recommendations of the Code of Practice. The Capital Works programme includes major reconstruction or asset improvement works. All named schemes within these



programmes are prioritised based upon an objective assessment of prevailing infrastructure conditions and are identified in consultation with relevant parties including elected members, Area Forums and Community Councils.

Maintenance is provided in accordance with the principles of best value with benchmarking against other local authorities undertaken to ensure efficient delivery of the function. Road maintenance is undertaken by the Council's Roads Contracting Unit unless the works cannot be undertaken in-house in which case they are subjected to competitive tender. These contracts are all awarded in accordance with the Council's Standing Orders and Financial Regulations. Despite the mechanisms in place to ensure efficient delivery of maintenance activities, it has been identified that current funding levels are not sufficient to maintain the whole network in an acceptable condition and as such a backlog of maintenance has developed. Additional funding is therefore required to address this situation and reduce the maintenance backlog that has emerged.

All road improvement schemes including traffic management schemes and minor works are designed to facilitate future maintenance and thus sustainability of the network. The material arising from maintenance activities is recycled wherever possible to reduce the demand for natural resources and the occurrence of transport related waste. In addition, recycled materials are also used in the construction of schemes where possible. All maintenance works are also undertaken giving due regard to the needs of all users including minority groups such as cyclists, the disabled, the visually impaired and other vulnerable road users.

Winter maintenance is provided to ensure roads and footways are kept as free from ice and snow as is reasonable within the resource limitations. This is fundamental in ensuring the network is safe for users and that its operation is not compromised by winter weather conditions. Technological developments such as satellite tracking of gritters and route optimisation to increase efficiency and response times have been introduced to improve service efficiency.

It is recognised that concerns exist regarding disruption to the network and road users in terms of time taken and the quality of reinstatements undertaken by utilities companies. Coordination of maintenance and utility works undertaken by various parties is also recognised as a problem as prolonged disruption can occur in a given area when different companies carry out works in close succession. Inspections, coring and the reporting of defects along with regular meetings and liaison with utilities companies through the Roads Authorities and Utilities Committee (Scotland) is undertaken to minimise this disruption.



#### Road Maintenance Policies

- M1: Undertake maintenance activities in accordance with the established Code of Practice for Highway Maintenance and Health and Safety procedures.
- M2: Establish a network inventory including all assets relating to the carriageway, footway and cycleway network using a Geographical Information System.



- M3: Clearly define a road network hierarchy on the basis of the type of traffic usage.
- M4: Continue to undertake machine based and visual road condition surveys as well as safety, lighting and utility inspections.
- M5: Implement a Roads Management System to maintain a record of maintenance work undertaken.
- M6: Continue to fund a programme of maintenance activities taking into account the principles of best value and seek additional funding to address the maintenance backlogs as appropriate.
- M7: Consult all appropriate parties on maintenance issues.
- M8: Take future maintenance requirements into consideration when undertaking transport schemes.
- M9: Recycle all material arising as a result of maintenance works wherever possible.
- M10: Use recycled materials in the construction of schemes where possible and practical.
- M11: Take the needs of all users into account in relation to maintenance activities.
- M12: Continue to undertake winter maintenance activities.
- M13: Attempt to coordinate maintenance activities and minimise the disruption they cause wherever possible.

### 12.3 Structures

Structures form an important part of the road network and include bridges, culverts, retaining walls and footbridges. Any failure of a structure has a serious detrimental effect on the local network, causing delays and frustration to drivers and is costly to local businesses and the economy. It is thus important to maintain all structures to ensure that a failure is a rare event. Maintenance works are consequently required to sustain the integrity of the structures and therefore the network as a whole. These works are programmed to cause minimum disruption to users, use environmentally friendly materials, be sympathetic to the original design and provide value for money.

The need for maintenance is identified through regular inspections at specified intervals. A General Inspection is carried out on all structures on a two yearly programme. This inspection checks the condition of easily accessible parts of the structure and is primarily intended to note any obvious defects that may lead to premature failure. A Principal Inspection of major structures (those with spans over 1.8m) is undertaken on a six yearly programme. This inspection involves a close examination of all parts of the structure, which may include, where necessary, the use of specialist access equipment. Testing of various components may also be undertaken. Special Inspections are carried out at structures previously identified as requiring more stringent monitoring. These may be undertaken at more frequent intervals, perhaps even monthly, depending on the individual circumstances. Special Inspections tend to be undertaken on weak bridges or after flooding events at bridges identified as being at risk of scour.



The inspections highlight any works required on the bridges. The assessments and inspections carried out to date have identified that the bridge stock is in a 'fair' to 'poor' condition, particularly on the minor routes. To facilitate the necessary maintenance to bridges the Council includes an allowance in the Capital Programme for bridge refurbishment, pointing works and major works at individual bridges where required. This allows much of the necessary work to be carried out including pointing of masonry, minor concrete repairs and repairs to parapets. Works such as these have allowed a number of bridges to be strengthened to accommodate 44 tonne vehicles, the maximum permitted weight for a vehicle in the UK. Bridges that have not been strengthened have weight restrictions imposed upon them until such time as they can be brought into compliance with the regulations.

#### Structures Policies

- S1: Continue to monitor the condition of structures in East Renfrewshire.
- S2: Maintain structures in a condition that ensures they are fit for purpose.
- S3: Strengthen bridges which currently have weight restrictions imposed upon them to allow the carriage of 44 tonne vehicles.
- S4: Attempt to minimise the disruption caused as a result of maintenance works to structures.

#### 12.4 Lighting

The Council has a duty to provide and maintain lighting for roads under section 35 of the Roads (Scotland) Act 1984. This includes the control, design, delivery and maintenance of 14,327 street lighting units. It also has a responsibility under The Electricity at Work Regulations to maintain the electrical integrity of the lighting network. Faults are reported directly to the Council or when out of hours via the Roads And Lighting Faults (RALF) centre which makes use of a free phone number. From September to April a night inspector surveys every street in the area on a fortnightly basis to check for any defects.

The maintenance term contractor, as instructed by the lighting staff, undertakes programmed and reactionary maintenance works including electrical testing. The identification of faults, issuing of instructions to fix them and subsequent payments are managed using a specialised lighting computer package. The term contractor provides emergency cover for incidents 24 hours a day. Outwith normal working hours reporting of incidents is covered jointly between Strathclyde Police and RALF who communicate directly with the contractor. Generally the performance against the targets for repair is high with over 98% of dark lamp failures being repaired within 7 days.

The Council carries out the design, specification and installation checking of all related development works undertaken on its roads. Where a developer applies for construction consent, the lighting installation requires to be designed and installed to the Council's specification. The design, lighting calculations and material specification are checked before construction consent is granted. The on site installation is monitored by the lighting inspector to ensure compliance with standards.







In recent years there has been a move towards improved quality lighting from the orange coloured, low-pressure sodium light source to high-pressure sodium, which moves more into the white lighting spectrum. These light sources have been installed on most major routes within the area. There are various light sources that can be utilised giving warm through to white light. The advantages of the different sources varies although the whiter the light source, the more effective the identification of incidents using C.C.T.V. units.

The provision and maintenance of street lighting is affected by 3 main factors:

- 5th Core Cable Supply
- Age of Lighting Network
- Funding of replacement equipment and energy costs

#### *5th Core Cable Supply*

Forty percent of the underground cable network that powers the street lighting network is fed by Scottish Power's 5th core cable system, which does not meet modern standards. A major contributor to faults in the lighting system is the existence of this network which was installed around 60 years ago. It is in such a poor condition that when a problem occurs replacement with the Council's own cable system, rather than repair by Scottish Power, is the only reliable option. The majority of lighting related capital expenditure by the Council funds the replacement of this system.

#### *Age of Lighting Network*

The lighting network is ageing and given that the average life expectancy of a street lighting column is 25-30 years this puts approximately 71% of the existing columns beyond the age at which they should be replaced. The lanterns are replaced under a planned maintenance regime or when they are no longer serviceable. Additional and replacement lighting units and cabling are provided from the lighting capital budget. At the present rate of capital funding the stock will be replaced every 84 years. With the life expectancy of a lighting column being 25 to 30 years, it is clear that columns are remaining in place beyond their serviceable life which has implications in terms of increased maintenance costs.

#### *Funding of Replacement Equipment and Energy Costs*

The third main factor is the costs associated with the supply of energy for street lighting, traffic signals and other similar facilities. Every three years, East Renfrewshire Council together with other councils in West / Central Scotland prepare a contract for the supply of electricity for street lighting through the Authorities Buying Consortium. This contract includes a percentage of renewable energy with a discount for the Climate Change Levy. In common with domestic energy costs recent discussions with the energy companies have suggested that the annual charge to the Council for providing the necessary power could increase by around 28%. This will in turn require savings to be made elsewhere to offset these costs. As part of the drive towards reducing energy costs, investigations will be made into the savings that can be made through the installation of new energy efficient light sources.





### Lighting Policies

- L1: Continue a programme of 5th core cable network replacement.
- L2: Investigate the savings that can be made by buying new energy efficient light sources and, where practical, install the most energy efficient light source available.
- L3: Continue a programme of street lighting column replacement.
- L4: Require developers to install new lighting to a standard appropriate to the functionality of the column.
- L5: Require underground cable reinstatement as part of streetscape schemes.
- L6: Continue a programme of improved lighting quality towards whiter light sources.

### 12.5 Traffic Engineering & Road Safety

The Road Traffic Regulation Act 1984 places a duty upon the Council to secure expeditious, convenient and safe movement of traffic on the local road network. The aim of Traffic Engineering and Road Safety is therefore to adapt and manage the road network so that it can efficiently and safely meet the needs of all road users including pedestrians and cyclists. Due to the ever increasing use of the network, mostly by vehicular traffic, and the fact that East Renfrewshire has the highest car ownership in the west of Scotland there is a need to implement various traffic schemes to address congestion, speeding and safety. These schemes are held on a list, and are studied and prioritised, but current funding only permits the implementation of approximately one or two in a year. There is a high public expectation to implement schemes like these but insufficient is funding available to satisfy demand. Nonetheless, the management of the network is monitored on a constant basis by considering aspects including:

- Road layout in relation to road safety.
- Road signs and markings.
- Traffic regulation orders.
- Speed control & traffic calming.
- Traffic signal & pedestrian crossing facilities (including school crossing patrols).
- Accident investigation and prevention including safety audits of new schemes.
- Road safety education and encouragement.

#### *Road Layout in relation to Road Safety*

The layout and operation of the road network is monitored to identify whether improvements are required. This can include various measures ranging from alterations to kerblines to the implementation of cycle lanes. Where it is proposed to alter the layout of a road, this is designed in accordance with the standards set out in the appropriate national guidance.

#### *Road Signs and Markings*

All road signs and markings require to be appropriately installed and maintained and the Council is developing a computerised maintenance system which will record the position, condition and inspection times of all signs and lines. However, due to the multitude of lines and signs this is an extensive exercise that is anticipated to take around 5 years to complete.





### *Traffic Regulation Orders*

Traffic regulation orders are the legal mechanism to control the direction in which vehicles can travel, prohibitions on movement and waiting and loading restrictions. The promotion of traffic regulation orders is a lengthy process and will only be undertaken if the Police Chief Constable is agreeable to enforcing the proposed restriction. For this reason, waiting restrictions within residential areas are almost never proposed as the ability of Strathclyde Police to enforce these regulations, in addition to their other duties, is limited. Lack of enforcement of existing TROs can sometimes be a problem and can lead to inefficient operation of the road network.

Where temporary works are taking place it may be necessary, for health and safety reasons, to promote a temporary order to either close a section of road or limit the speed of traffic travelling through the works. If in agreement, the Council carries out the promotion of such Orders on behalf of utility companies and private contractors on a rechargeable basis.

### *Speed Control & Traffic Calming*

Whilst it is the responsibility of the driver to adhere to the speed limits taking cognisance of surrounding conditions, it is recognised that there are instances where the driver has to be reminded of the appropriate speed limit. This can be achieved through either signage or physical traffic calming measures.

The Twenty's Plenty initiative was developed to address concerns being raised in residential areas where speeds were often inappropriate rather than illegal. In 1997, in response to this growing unease, pilot Twenty's Plenty schemes were introduced and have consequently now become mainstream. Twenty's Plenty areas have advisory 20mph speed limits which are not supported by any other measures and are thus intended to be self enforcing. As such, their effectiveness relies on the co-operation and support of local people. Within East Renfrewshire most residential roads that do not have traffic calming measures are designated as part of a Twenty's Plenty area.

Road humps are an effective way in which to slow the speed of traffic. A prioritisation system has been developed to objectively assess all roads considered suitable for traffic calming. This priority system considers factors such as traffic speeds, volumes, injury accident occurrences and key local land-uses such as the presence of schools. Although not all the surveys required to compile the priority list are updated annually, the priority list is revised on a yearly basis.

Until recently traffic calming usually took the form of signing a "Twenty's Plenty" zone or physical measures such as road humps. However, the introduction of humps is not always appropriate and trials have found that interactive speed display signs can be very effective at bringing down speeds in non-residential areas or on distributor roads. Therefore, the Council has started to use Speed Information Display (SID) signs to influence driver behaviour along routes that are considered unsuitable for vertical traffic calming measures such as road humps. To ensure that these are distributed to areas with greatest need a prioritisation system has been developed similar to that used for speed humps.





The requests for traffic calming measures far outweigh the financial resources that the Council has available to provide such facilities. As funding is limited only one or two schemes can be brought forward for implementation per annum. However, where additional money is made available, for example through a specific project, it may be that an area wide scheme can be implemented. An example of this is likely to be in the Auchenback area of Barrhead where money may be made available through the regeneration fund to allow speed humps to be installed.

*Traffic Signals & Pedestrian Crossing Facilities (including School Crossing Patrols)*

There are 16 sets of traffic signals and 38 separate signal controlled pedestrian crossing facilities in East Renfrewshire. A maintenance term contractor undertakes programmed and reactionary maintenance works to these facilities. The term contractor provides emergency cover for incidents 24 hours a day. Outwith normal working hours reporting of incidents is covered jointly between Strathclyde Police and RALF who communicate directly with the contractor. Generally the performance against the targets for repair is high with over 94% of faults being repaired within 2 days. However, this statistic is variable and can be particularly effected by a fall in the number of faults detected combined with an increase in the number of repairs taking more than 2 days. In addition, the maintenance contractor is developing a remote monitoring system. Under this system, the traffic signal will automatically advise the Council and contractor that a fault has been detected and the nature of that fault. The Council also maintains a programme of traffic signal upgrades and new pedestrian crossing installations. However, the priority at present is to upgrade the signals at Mearns Cross and it is anticipated that this work will require the majority of the capital funding allocated to traffic signals during the 2006-8 financial years.

*Accident Investigation and Prevention including Safety Audits of new schemes*

Travel awareness, the promotion of safe travel and road safety engineering measures that target specific areas where accidents occur all contribute to the target for reducing accident casualties. The Road Traffic Regulation Act 1984 and Road Traffic Act 1988 provide statutory powers, responsibilities and duties for the Council in conjunction with Strathclyde Police to promote road safety. The 1984 Act requires the Council to "carry out studies into accidents arising out of the use of vehicles on roads (and) to take such measures as appears appropriate to prevent such accidents". In accordance with this requirement the road network is regularly inspected and the casualty statistics are monitored to identify lengths of road that may require to be treated to prevent accidents. This may include identifying lengths of road where it is necessary to lay anti skid material or install new warning signs to advise drivers of a hazard ahead.

*Road Safety Education and Encouragement*

To achieve a high level of road safety education and encouragement there is a requirement for partnership working between the Council, Strathclyde Police, neighbouring authorities (through the West of Scotland Road Safety Forum), the Society of Chief Officers of Transportation in Scotland (SCOTS) and Road Safety Scotland. The means to facilitate this is laid out in the Council's Road Safety Plan where the principal aims are to draw attention to the level of casualties which occur at present on the roads of East Renfrewshire as well as providing a framework





within which policies and action plans can be developed by all relevant parties in order to improve safety for road users. Prevention is preferable to reactive treatment and the educational programmes developed by the Road Safety Training Officer and School Travel Plan Coordinator illustrate the proactive approach undertaken by the Council. Engineering resources are usually prioritised and targeted towards those areas where injury incidents are prevalent. Future Road Safety Plans will review the progress made on these initiatives and, as necessary, develop new initiatives to ensure that continuing efforts are maintained in the drive to reduce road casualties.

#### Traffic Engineering & Road Safety Policies

- TE1: Continue to monitor the network and bring forward improvements as considered necessary and as funding permits.
- TE2: Continue to monitor the network and implement either Twenty's Plenty schemes, physical traffic calming measures or SID signs as appropriate and as funding permits.
- TE3: Encourage greater enforcement of existing Traffic Regulation Orders and other restrictions.
- TE4: Continue to achieve a high traffic signal repair target.
- TE5: Prepare a programme of traffic signal upgrades.
- TE6: Prepare a programme of locations suitable for new controlled pedestrian crossings.
- TE7: Prepare or review safety audits for all new transport schemes.
- TE8: Identify lengths of road that may require to be treated to minimise the risk of accidents.
- TE9: Continue to undertake road safety training initiatives.

#### 12.6 Parking

There are 12 off-street car parks operated by the Council which collectively provide 622 spaces. The Council currently does not charge for parking in any of the car parks that it operates. In addition, there are a number of private car park operators providing parking at key locations such as The Avenue Shopping Centre in Newton Mearns and at Clarkston shops. There are also 6 park and ride car parks adjacent to railway stations.

##### *Off-street Car Parks*

A Traffic Regulation Order controlling the majority of the Council operated off-street car parks is in place to manage the type of vehicles that can park and the manner in which these vehicles must be parked. However, this Order does not cover the most recently constructed Council operated car parks. It is therefore necessary to review the Traffic Regulation Order governing the off-street car parks to ensure that all Council operated car parks fall under its powers and that the terms of the Order reflect current best practice.





### *On-street Parking*

The number of on-street parking spaces is difficult to estimate. This is because any street that does not have parking restrictions, including housing areas, is available for parking as long as vehicles are not causing an obstruction and are parked in a safe manner. Consequently there are a substantial number of on-street spaces available. Whilst no charge is made for parking there are instances of time-limited controls. However, it is the responsibility of Strathclyde Police to enforce the on-street parking regulations through the Traffic Warden service. Unfortunately, due to the constraints on the Police and Warden service, this can lead to widespread abuse of the restrictions. The introduction of decriminalised parking enforcement, whereby the Council would control all parking enforcement, has been investigated. However, this was rejected on the basis of the high costs that would be incurred by the Council in setting up the organisation required to administer and control the parking enforcement regime. The situation with regard to decriminalising parking control will be kept under review in accordance with Policy DM7. On-street parking arrangements in Barrhead will be reviewed to complement the regeneration initiatives being taken forward.

### *Town and Shopping Centres*

In Barrhead there are significant development proposals to regenerate the town centre. As part of this redevelopment it will be necessary to review all waiting and loading restrictions within the town centre to ensure that they are consistent with the town centre plan.

In Giffnock the development of a large supermarket together with other ancillary land uses may require the alteration of the on-street waiting and loading restrictions. Once detailed proposals for the supermarket development have been brought forward for consideration a review of the waiting and loading restrictions within the town centre will take place to ensure that they are consistent with the revised traffic patterns.

It is important to ensure that there is adequate parking within town and shopping centres to enable them to continue to be competitive. Therefore for all new retail developments an assessment of the number of car parking spaces required will be made against the Council's guidelines. This will take into account the location of the proposed development, the way in which it is intended to function within a town centre and the opportunities to travel to the centre by modes other than car. Similarly specific parking areas for new business developments will generally be required. However all applications for change of use to business premises will be assessed on their merits and opportunities to travel to the business by modes other than car will be taken into account when advising on the number of spaces to be provided. Further details on the transport requirements of new developments are provided in Section 10.5.

### *Housing*

It is recognised that there is high car ownership within East Renfrewshire and it is unlikely that this will change significantly during the life of the LTS. Therefore, it is important to ensure that there are sufficient parking spaces available within





residential developments to accommodate parking demand by both residents and visitors. This applies to both extensions to existing properties and to new developments.

#### *Disabled Parking*

All new non-residential developments will be required to provide off street disabled persons parking as per the national guidelines. Where on-street parking is concerned, the Council will continue to consider providing advisory parking bays in residential areas. The policy on the provision of such spaces has been agreed and applicants must meet stringent criteria, which are assessed by both Roads Planning and Transportation and Social Work Services.

#### Parking Policies

- P1: Review and promote a revised off-street car parking Traffic Regulation Order.
- P2: Review, as necessary, current on-street waiting and loading restrictions to address changing patterns of demand.
- P3: Review on-street parking arrangements in Barrhead.
- P4: Review all waiting and loading restrictions within Barrhead town centre and bring forward revised proposals consistent with the Regeneration Framework.
- P5: Review on-street waiting and loading restrictions within Giffnock town centre and bring forward revised proposals consistent with the development proposals.
- P6: Off-street parking areas will be laid out efficiently and, where possible, be lit from a landlord's supply.
- P7: On-street, the Council will continue to consider providing advisory disabled parking bays in residential areas.
- P8: Developers will be required to meet the national standards for the provision of off-street disabled parking.

### 12.7 Freight

East Renfrewshire is neither a major generator of nor destination for freight, although its key location to the south of Glasgow means there is considerable freight through traffic. Almost all of the freight traffic travelling through the area is roads based which can have a significant impact on local communities and residents if not undertaken appropriately. It is consequently important to ensure that freight traffic uses suitable routes and to work with the industry to facilitate this. Freight Quality Partnerships (FQP) between the public and private sectors are a mechanism frequently used for this purpose and SPT have recently established a FQP for the west of Scotland. The Council will explore, through the FQP, mechanisms to ensure freight traffic use appropriate routes and consider them accordingly. One such mechanism that could be utilised is the development of an agreed routes map for freight. The Scottish Government has developed the Safe and Fuel Efficient Driving (SAFED) scheme to reduce the environmental impact of road freight traffic although





it is also desirable to pursue a modal shift for freight from roads to alternative modes of transport in order to further reduce the local and wider environmental impacts of freight traffic. The Council will support modal shift for freight through the work of the FQP. The Scottish Government has also published a Freight Action Plan which seeks to enhance competitiveness, develop the freight industry and improve accessibility for rural and remote areas, minimise the impact on the environment and facilitate policy integration.

Local freight traffic is mostly related to the servicing of shops and other similar facilities but also includes home deliveries. The servicing of shops and other facilities is key to supporting their continuing vitality and viability and thus requires consideration of the particular loading and access requirements of a given development along with any time curfews that may be imposed on deliveries. For new developments this is considered as part of the planning process although it is important to review how well this is operating after implementation. The continuing review of waiting and loading restrictions in the vicinity of existing shops and any delivery curfews that may be imposed is therefore also valuable. A trend towards more home deliveries, predominantly due to an increase in internet shopping, has fuelled a growth in Light Goods Vehicles and the need for access to properties for deliveries. The implications of this have still to be clearly identified and it may be necessary to provide measures to facilitate deliveries in locations where this is problematic and demand is high.

#### Freight Policies

- FR1: Participate in the west of Scotland FQP established by SPT.
- FR2: Consider developing an agreed routes map for freight traffic.
- FR3: Support the Safe and Fuel Efficient Driving (SAFED) scheme.
- FR4: Support initiatives to encourage modal shift for freight from road to alternative modes of transport.
- FR5: Support the Scottish Government, Transport Scotland and SPT in the delivery of the Freight Action Plan.
- FR6: Take loading and servicing requirements, including curfews, into consideration when appraising the transport needs of new developments.
- FR7: Review waiting and loading restrictions as per Policy P2 along with loading bay provision and delivery curfews as appropriate.
- FR8: Monitor the implications of growth in home deliveries and take action as appropriate.





SECTION 13

# Environment





### 13.1 Overarching Issues

Transport can have significant effects on the environment both in a local and global sense. From a local perspective transport can cause disruption and environmental problems both during construction and once operational. In a global sense transport related emissions have been identified as a major contributor to climate change. In recognition of these issues, a number of mechanisms have been developed to ensure that environmental considerations are taken into account when developing transport schemes and proposals. At a strategic level, transport strategies, policies and plans are subjected to a Strategic Environmental Assessment which ensures that environmental considerations are taken into account during the development of these documents. The LTS has been subjected to a Strategic Environmental Assessment and the results have been used to inform the development of the strategy as detailed in the next section. At a scheme specific level all major transport infrastructure developments are subjected to an Environmental Impact Assessment in accordance with the Environmental Impact Assessment Regulations (Scotland) 1999 to ensure that decisions are made about a scheme in full knowledge of any likely significant effects on the environment. In addition, for road schemes procedures for environmental assessment are set out in the Design Manual for Roads and Bridges. The application of these mechanisms therefore ensures that environmental considerations are fully integrated into transport decision-making processes.

#### Environment Policies

- E1: Take environmental issues into consideration when developing and implementing transport strategies and schemes through the application of Strategic Environmental Assessment and Environmental Impact Assessment as appropriate.

### 13.2 Strategic Environmental Assessment & Environmental Mitigation

The Strategic Environmental Assessment (SEA) has identified that the LTS has the potential to have significant negative environmental impacts on biodiversity, water quality and the natural landscape with scope for insignificant negative environmental impacts on geological features, the historic environment, the built environment, material assets and sustainable resources. Significant positive effects are predicted in relation to human health and wellbeing, air quality and sustainable transport with insignificant positive effects on noise and vibration, access to open air and greenspaces, environmental equality and greenhouse gas emissions. The rest of this chapter sets out how particular environmental issues will be addressed taking into account the findings of the SEA. However, this detailed discussion is preceded by a number of general environmental mitigation measures that will be applied when implementing the LTS.





### Environmental Mitigation Policies

- EM1: Seek to protect biodiversity within designated and important habitats as well as the wider environment.
- EM2: Provide compensation and creation of additional habitats where negative effects are unavoidable.
- EM3: Use Sustainable Urban Drainage Systems (SUDS) and/or similar stormwater treatment to minimise adverse effects on surface and groundwater quality.
- EM4: Ensure sympathetic design and compatibility of infrastructure with local townscape character.
- EM5: Minimise the negative effect on landscape character by the use of measures such as visual screening, planting and the integration of schemes with the surrounding landscape.

### 13.3 Climate Change

Climate change is a global problem which affects everyone. Transport is a major contributor to the energy consumption and resultant emissions which are stimulating climate change. The Scottish Government has identified that transport accounts for 17% of greenhouse gas emissions, second only to energy production which contributes 37%. Transport emissions in Scotland have increased by 6% between 1990 and 2003, the largest growth witnessed in any sector. Reducing the environmental impact of the transport sector is therefore imperative. The Scottish Government has indicated that it intends to prepare a carbon balance sheet to illustrate the performance of the transport sector in relation to emissions and identify areas that need to be targeted for action. At a local level the impact felt can be minimal and the contribution made to this problem may seem insignificant on a global scale. However, it is through the cumulative impact of local action that significant progress can be made toward mitigating climate change.

Facilitating increased awareness of the environmental consequences of travel is crucial to ensuring that people take into consideration the impacts that their choices make and how small changes in travel patterns can realise a significant benefit when their cumulative impact is considered. At a local level this can be done by raising awareness of the transport alternatives available to people through publicity of walking, cycling and public transport facilities. Outlining the environmental impact of undertaking a journey by different modes of transport can also help to highlight how the choices of individuals can make a difference and thus encourage a voluntary change in travel behaviour as a result.

The EU has established an emissions trading scheme that sets quotas for the production of greenhouse gases and also allows trade between sectors in order to maintain these quotas. Transport is currently not included within the emissions trading scheme although the UK Government, backed by the Scottish Government, is pushing for its inclusion in the future. Whilst emissions trading is not a solution to climate change in itself, it does allow progress to be made toward reducing greenhouse gas emissions without placing excessive constraints upon particular sectors as well as allowing for some leeway between sectors that are performing





well in reducing their environmental impact and those which require more time to put mechanisms in place to realise their target levels.

Transport is a major consumer of fossil fuels which are both a finite resource and a major contributor to greenhouse gas emissions. It is consequently of vital importance that alternative fuels are introduced to ensure that contributions to climate change are reduced and that transport networks can continue to operate once the fossil fuel resource has been expended. Alternative fuels exist and are currently available commercially although their provision is limited. In some instances specialist vehicles or significant adaptations to existing vehicles are required to allow the use of alternative fuels although some, such as biofuels, can be introduced without modifications to existing vehicles. The UK Government has established a target, which has been endorsed by the Scottish Government, under the Renewable Transport Fuels Obligation of 5% of all fuels sold on UK forecourts to be biofuels by 2010. This is a useful first step although more widespread change will be required, in terms of the production of alternative fuels and the transformation of transport fleets to allow their usage, to convert the transport sector from fossil fuels to alternatives. The Council already leads by example with regards to alternative fuels by using LPG (Liquid Petroleum Gas) powered vehicles in its fleet with a commitment to replacing life expired diesel vehicles with LPG powered ones.

Emissions increase as vehicle speeds increase due to the additional fuel consumption required to power the vehicle. The Scottish Government is investigating stricter adherence to speed limits on Trunk Roads and Motorways as a means of reducing the emissions from road traffic. The Council will review the outcomes of these investigations and consider whether they have any implications for the local road network.

Traditionally there has been a correlation between economic growth and increased travel, with the negative environmental impacts this entails. It is important to try and decouple economic growth from the increased movement of people and goods in order to facilitate a reduction in transport's contribution to climate change without hindering economic performance. Whilst some degree of travel will always be required, managing and reducing this to that which is essential is fundamental in realising a break between economic activity and travel demand. This can be partly facilitated by technological improvements, particularly in the telecommunications sector, that reduce the need to travel but this must be accompanied by the provision of local economic opportunities that provide jobs locally as well as more sustainable access to existing and future employment locations to minimise the environmental impact of travel.

#### Climate Change Policies

- CC1: Support the Scottish Government in establishing a carbon balance sheet for transport.
- CC2: Promote the importance of local action in facilitating a global impact on climate change.
- CC3: Promote awareness of the environmental impact of transport and how this can be reduced.
- CC4: Support the inclusion of transport within the EU emissions trading scheme.





- CC5: Encourage the uptake of alternative fuels.
- CC6: Support compliance with the Renewal Transport Fuels Obligation.
- CC7: Continue to promote the use of alternative fuels by using them within the Council's own vehicle fleet.
- CC8: Consider stricter adherence to speed limits on local roads as a mechanism to reduce emissions paying heed to the research being undertaken by the Scottish Government.
- CC9: Encourage a decoupling of economic growth and increased travel.
- CC10: Support local economic development.

### 13.4 Air Quality

Transport is a major contributor to air pollution, both in a localised and global sense, and is the only sector which is increasing its share of emissions, primarily as a result of continuing growth in road traffic and aviation. Heavily trafficked roads can be a source of harmful emissions that have the potential to damage health for those living or working in close proximity to them. It is important therefore to take air quality into consideration when developing transport proposals in order to mitigate any adverse impacts that may arise and ensure that people are not exposed to dangerous levels of pollutants as a result of the scheme. It is also important to protect areas where air quality is currently good. Stimulation of modal shift to more sustainable modes of transport is also a key mechanism in reducing emissions from transport and minimising air pollution. However, when buses gather in numbers they can actually cause localised air pollution problems. This can be mitigated by ensuring buses are equipped with Euro Standard IV Engines which produce less emissions or by preventing the clustering of buses using Traffic Regulation Conditions.

The Environment Act 1995 and subsequent regulations have placed a responsibility on the Council to review and assess air quality in relation to objectives established for seven different pollutants with levels of ozone being monitored at a national level. As East Renfrewshire has very little industrial activity within its boundaries, the main source of air pollution is transport, particularly road transport. The most recent assessment has found that there is no potential for exceeding the target levels for Carbon Monoxide, Benzene, 1,3-butadiene, Lead, Nitrogen Dioxide or Sulphur Dioxide in East Renfrewshire although it has been found that levels of Benzene will need to be closely monitored if a petrol station is developed at M77 Junction 5 as is currently proposed. However, the assessment has identified that there is a risk of exceeding the PM10 annual mean objective at Sheddens Roundabout, Clarkston in 2010. This situation will be kept under review and may be alleviated by the transfer of more traffic from the A727 to the Glasgow Southern Orbital.

#### Air Quality Policies

- AQ1: Encourage a modal shift from road transport to more sustainable modes of transport.
- AQ2: Attempt to minimise local air quality problems from buses.
- AQ3: Take air quality implications into account when implementing transport schemes.



- AQ4: Protect existing good air quality wherever possible.
- AQ5: Continue to monitor air quality levels in relation to transport and take action if necessary.
- AQ6: Seek to ensure that national air quality thresholds are not exceeded in East Renfrewshire as a result of transport.
- AQ7: Monitor the situation at Sheddens Roundabout, Clarkston and take action to reduce air pollution levels if necessary.

### 13.5 Water Environment

If not properly catered for, surface run off from roads can pollute nearby watercourses and surrounding land. It is important therefore to ensure that measures are put in place to control surface run off and allow it to be treated before being allowed to mix with existing groundwater. Sustainable Urban Drainage Systems (SUDS) are an important mechanism in facilitating this as they control the water quantity, quality and amenity of the run off site. SUDS employs measures such as filter strips, filter drains, infiltration devices, basins, ponds and wetlands to manage surface run off and can consequently significantly reduce the levels of polluted run off. All new roads schemes incorporate SUDS measures.

#### Water Quality Policies

- WQ1: Take water quality into account when developing and implementing transport schemes.
- WQ2: Implement SUDS as appropriate to manage surface run off and pollution from transport facilities.

### 13.6 Noise

Transport related noise can be a nuisance for people who live or work close to heavily trafficked roads or railway lines. There is not considered to be a significant transport related noise problem in East Renfrewshire although if traffic levels continue to increase this situation may change. The construction of the GSO, and to a lesser extent the M77 extension, has altered traffic flows and the locations that may be affected by traffic noise. However, traffic levels have not reached a point where significant noise nuisance is being generated although the Council will continue to monitor this situation. The Council also has a duty to predict traffic noise generation from new or altered roads and to provide insulation or funding for such works for properties where certain thresholds are breached.

The Environmental Noise (Scotland) Regulations 2006 required strategic noise mapping to be undertaken for large urban areas, major roads, railways and airports. A two-stage process is outlined with the first stage being the production of strategic noise maps. The second stage involves developing Actions Plans to manage noise with a target completion date of July 2008. These will provide more detailed analysis and outline any measures required in East Renfrewshire.





### Noise Policies

- N1: Minimise disturbance as a result of transport related noise wherever possible.
- N2: Take noise pollution into account when developing transport schemes.
- N3: Continue to monitor the implications of strategic noise mapping and take action as appropriate.

### 13.7 Light Pollution

Light pollution from low-pressure sodium streetlights has been identified as a problem, particularly in urbanised areas where the cumulative impact can be significant. The Council has pursued a programme to introduce white light sources on major routes which improves visibility whilst reducing the occurrence of light pollution. Opportunities to extend the provision of white light streetlights will be kept under review and taken forward as appropriate. The Scottish Government has produced a guidance note entitled "Controlling Light Pollution and Reducing Lighting Energy Consumption" which the Council will apply wherever possible.

### Light Pollution Policies

- LP1: Continue to review and extend the provision of white light streetlights as appropriate and in accordance with Policy L6.
- LP2: Reduce the occurrence of light pollution wherever possible.

### 13.8 Visual & Landscape

East Renfrewshire benefits from an attractive rural setting which enhances the overall character of the area as well as providing a valuable recreational resource for local residents. Transport infrastructure can be visually intrusive and, if inappropriately sited, may degrade the visual amenity of the landscape. Planting of trees and shrubs can help to screen transport facilities when combined with design that is sympathetic to the topography of the area. However, new infrastructure schemes will inevitably have an impact upon the landscape in their vicinity and it is important to attempt to minimise this impact wherever possible in order to preserve the environmental setting of East Renfrewshire.

### Visual & Landscape Policies

- VL1: Take the visual and landscape impacts of transport schemes into account and attempt to minimise these impacts when developing and implementing transport schemes.

### 13.9 Natural Environment

East Renfrewshire has a number of sites designated as being of particular environmental significance including 6 Sites of Special Scientific Interest (SSSI) and 106 Sites of Importance for Nature Conservation (SINC). In addition, much of the rural area of East Renfrewshire is designated as Greenbelt, which is intended to stop





the coalescence of settlements and maintain the integrity of the natural landscape. The more remote rural area southwest of Eaglesham is covered by Countryside Around Towns designation. Transport developments can have significant impacts on the natural environment if not carefully planned and it is consequently important to ensure that these environmental assets are maintained to the fullest extent possible when taking forward transport schemes. It is particularly important to ensure that sites which enjoy nationally recognised designation, such as SSSIs, are not significantly adversely affected by transport developments. The implications of transport schemes on biodiversity, soils and geology also have to be taken into consideration. Existing transport corridors can be a vital link between habitats thus helping to sustain biodiversity although major new schemes will inevitably cause some disruption to biodiversity during construction. These problems can be offset by planting along the new route and other mitigation measures that ensure habitats and species are not lost.

#### Natural Environment Policies

- NE1: Take the natural environment into account when developing transport schemes.
- NE2: Minimise the land designated as being of particular environmental significance lost to transport developments.
- NE3: Attempt to maintain and, where possible, enhance biodiversity when developing and implementing transport schemes.
- NE4: Take soil and geology issues into account when developing and implementing transport schemes.

#### 13.10 Historic & Built Environment

Protection of the historic and built environment is an important consideration when taking forward transport proposals which may have implications for one or both of these. East Renfrewshire has 5 conservation areas, 132 listed buildings and 4 scheduled ancient monuments within its boundaries which must be protected in accordance with statutory obligations. Transport can have adverse effects on the historic and built environment by emissions-related damage to properties as well as undermining the amenity of attractions through noise and severance. In addition, impacts on archaeology also have to be taken into consideration when developing transport proposals in order to avoid destruction of features of archaeological significance. Careful consideration of these issues when developing transport schemes can reduce or remove these problems.

#### Historic & Built Environment Policies

- HB1: Take into consideration impacts on the historic and built environment when developing and implementing transport schemes.
- HB2: Minimise transport related impacts on the historic and built environment wherever possible.





SECTION 14

# Action Plan & Implementation





### 14.1 Introduction

In order to fulfil the objectives and implement the policy outlined in the LTS an Action Plan of schemes, measures, interventions and projects that contribute to achieving the strategy has been prepared. The Action Plan will be reviewed on an annual basis to ensure it remains relevant and to provide an update on any actions that have been taken forward.

The Action Plan has been separated into two different plans to reflect the fact that the Council has established programmes for roads and transportation investment and aspirational schemes that it would like to take forward if funding were available. Subsequently, the Action Plan has been split into a Committed Investment Plan and a Strategic Implementation Plan. The Committed Investment Plan details expenditure to which the Council is committed to making whilst the Strategic Implementation Plan outlines interventions the Council would wish to take forward if additional funding were to become available.

### 14.2 Committed Investment Plan

The Council's committed expenditure on roads and transportation is separated into Capital and Revenue investment. Capital investment is provided for schemes whilst Revenue investment is predominantly for maintenance of existing facilities. The Capital Investment Plan is detailed in Table 14.1. This is accurate at the time of publication and will be reviewed annually to ensure it stays up to date.



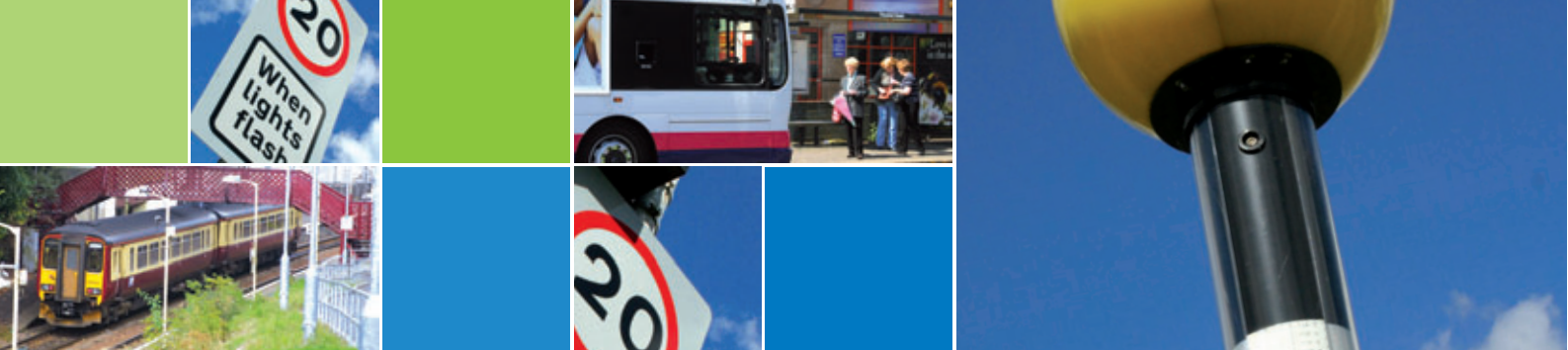


Table 14.1: Capital Investment Plan

Project	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Lighting 5th core cable	£80,000	£80,000	£80,000	£80,000	£80,000	£80,000	£480,000
Lighting equipment replacement	£80,000	£80,000	£80,000	£80,000	£80,000	£80,000	£480,000
Bridges refurbishment	£28,000	£28,000	£28,000	£28,000	£28,000	£28,000	£168,000
Bridges pointing works	£25,000	£25,000	£25,000	£25,000	£25,000	£25,000	£150,000
Traffic calming	£20,000	£20,000	£20,000	£0	£0	£0	£60,000
Bridges Principal Inspections	£21,000	£21,000	£21,000	£21,000	£21,000	£21,000	£126,000
Glasgow Southern Orbital	£1,548,000	£870,000	£0	£0	£0	£0	£2,418,000
Cycling, walking and safer streets	£165,000	£0	£0	£0	£0	£0	£165,000
Speed limits around schools	£211,000	£0	£0	£0	£0	£0	£211,000
Traffic light refurbishment	£41,000	£40,000	£0	£0	£0	£0	£81,000
A736 Lochlibo Road reconstruction	£0	£185,000	£0	£0	£0	£0	£185,000
Greenfarm Road reconstruction	£91,000	£0	£0	£0	£0	£0	£91,000
A727 Eastwoodmains Road reconstruction	£0	£0	£175,000	£132,000	£330,000	£0	£637,000
Waterfoot Road reconstruction	£175,000	£150,000	£158,000	£0	£0	£0	£483,000
A727 Rouken Glen Road reconstruction	£0	£171,000	£150,000	£129,000	£0	£0	£450,000
Fenwick Drive, Barrhead reconstruction	£0	£0	£75,000	£75,000	£0	£0	£150,000
Mearns Road – footway opposite Eaglesham Road	£0	£50,000	£0	£0	£0	£0	£50,000
Cross Arthurlie Street traffic management	£0	£15,000	£35,000	£0	£0	£0	£50,000
B771/B774 Cross Stobs	£0	£80,000	£145,000	£0	£0	£0	£225,000
Car park refurbishment (including lines)	£0	£0	£0	£20,000	£0	£0	£20,000
Eaglesham - Strathaven safer signed route	£0	£0	£0	£5,000	£0	£0	£5,000
Neilston Road / Lochlibo Road junction improvement	£0	£0	£0	£50,000	£0	£0	£50,000
Kelburn Street (Neilston Road / Kirkton Avenue)	£0	£0	£0	£20,000	£0	£0	£20,000
New speed limit signs at rural / urban gateways	£0	£0	£0	£5,000	£0	£0	£5,000
Stewarton Road (Spiersbridge to Capelrig)	£0	£0	£0	£180,000	£0	£0	£180,000
Braidbar Road / Braidholm Road junction improvement	£0	£0	£0	£50,000	£0	£0	£50,000
Netherplace Road reconstruction	£0	£0	£0	£73,000	£0	£0	£73,000
Aurs Road bridge replacement	£0	£0	£0	£0	£100,000	£0	£100,000
Eastwood Crescent reconstruction	£78,000	£0	£0	£0	£0	£0	£78,000
Kennishead Road reconstruction	£56,000	£0	£0	£0	£0	£0	£56,000

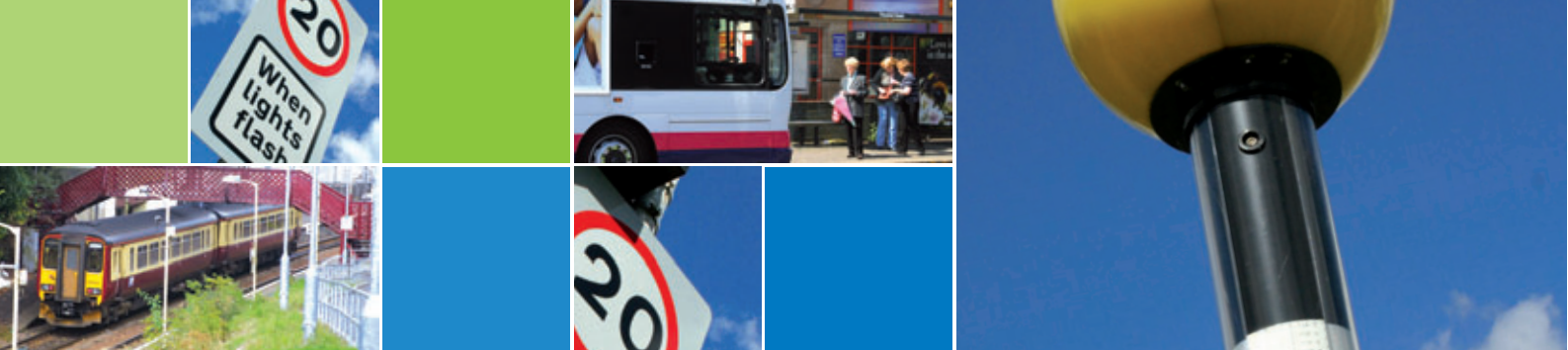




Table 14.1: Capital Investment Plan – *CONTINUED*

Project	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	Total
Lochiel Road reconstruction	£159,000	£0	£0	£0	£0	£0	£159,000
Fereneze Road reconstruction	£60,000	£0	£0	£0	£0	£0	£60,000
Shilford Road reconstruction	£65,000	£0	£0	£0	£0	£0	£65,000
Rhinopatch equipment	£100,000	£0	£0	£0	£0	£0	£100,000
Traffic management improvements – Giffnock	£25,000	£125,000	£0	£0	£0	£0	£150,000
Barrhead junction improvements	£350,000	£420,000	£0	£0	£0	£0	£770,000
Glenburn Road bridge - deck replacement	£0	£47,000	£39,000	£0	£0	£0	£86,000
Devil's Bridge deck replacement	£0	£38,000	£7,000	£0	£0	£0	£45,000
New / upgraded pedestrian crossings	£0	£30,000	£30,000	£0	£0	£0	£60,000
20mph at schools - part time enforceable	£0	£25,000	£25,000	£0	£0	£0	£50,000
Road safety measures / equipment at schools	£0	£25,000	£25,000	£0	£0	£0	£50,000
Safe Routes to School	£0	£25,000	£25,000	£0	£0	£0	£50,000
Cycling	£0	£10,000	£10,000	£0	£0	£0	£20,000
Merrylee Park Avenue reconstruction	£0	£120,000	£45,000	£0	£0	£0	£165,000
Aurs Road re-alignment	£0	£0	£2,000	£227,000	£55,000	£0	£284,000
Grahamston Road / Blackbyres Road junction improvement	£0	£0	£0	£0	£165,000	£0	£165,000
Glen Street bridge replacement	£0	£0	£0	£0	£220,000	£0	£220,000
Traffic calming schemes	£0	£0	£0	£0	£96,000	£0	£96,000
Traffic reduction schemes	£0	£0	£0	£0	£0	£170,000	£170,000
C9 Aurs Road	£0	£0	£0	£0	£0	£180,000	£180,000
Mearns Road reconstruction	£0	£0	£0	£0	£0	£180,000	£180,000
Ralston Road / Springhill Road junction improvement	£0	£0	£0	£0	£0	£65,000	£65,000
Springhill Road (Springfield Road to Ralston Road)	£0	£0	£0	£0	£0	£50,000	£50,000
Uplawmoor Road, Neilston	£0	£0	£0	£0	£0	£50,000	£50,000
Kingston Road, Neilston	£0	£0	£0	£0	£0	£50,000	£50,000
B775 Gleniffer Braes	£0	£0	£0	£0	£0	£40,000	£40,000
A727 Sheddens to East Kilbride	£0	£0	£0	£0	£0	£50,000	£50,000
B769 Stewarton Road (rural)	£0	£0	£0	£0	£0	£50,000	£50,000
B767 Eaglesham Road	£0	£0	£0	£0	£0	£50,000	£50,000
C9 Humbie Road	£0	£0	£0	£0	£0	£31,000	£31,000
<b>TOTAL</b>	<b>£3,378,000</b>	<b>£2,680,000</b>	<b>£1,200,000</b>	<b>£1,200,000</b>	<b>£1,200,000</b>	<b>£1,200,000</b>	<b>£18,998,000</b>





The Revenue Investment Programme is set annually following the preparation of the Council's overall budget. The Revenue Investment Programme for 2007/08 is detailed in Table 14.2. This will be updated on an annual basis following the review of the Action Plan. The LTS assumes that revenue expenditure will remain stable and thus consistent with the expenditure profile exhibited in previous years.

**Table 14.2: 2007/08 Revenue Investment Programme**

Description	Allocation
<i>Structural Maintenance</i>	
Footway resurfacing & patching (including Quality of Life)	£491,000
Carriageway resurfacing & patching (including repairs & renewals)	£1,078,000
<b>Sub-total</b>	<b>£1,569,000</b>
<i>Routine Maintenance</i>	
Pothole patching	£150,100
Verge maintenance	£65,000
Weed control	£25,000
Gully emptying	£60,000
Bridge maintenance	£32,500
Drainage	£85,000
Flood Prevention	£10,000
Works arising from safety inspections	£199,000
Emergency Incidents	£15,000
Road Markings Maintenance	£25,000
Traffic Signals Maintenance	£55,000
Traffic Signs Maintenance	£30,000
Vehicle Safety Fence Maintenance	£10,000
Pedestrian Guardrail Maintenance	£8,000
Street Lighting Maintenance	£430,000
Car Park Maintenance	£17,000
Miscellaneous	£25,000
Area Forum works	£40,000
<b>Sub-total</b>	<b>£1,281,600</b>
<i>Winter Maintenance</i>	
Gritting and presalt	£350,000
Snow Clearing	£25,000
Winter Patrol and Standby	£50,000
<b>Sub-total</b>	<b>£425,000</b>
<b>Total</b>	<b>£3,275,600</b>



The Structural Maintenance Revenue Investment Programme is further subdivided as shown in Table 14.3 below.

**Table 14.3: 2007/08 Structural Maintenance Revenue Investment Programme**

Description	Allocation
<i>Footway Resurfacing</i>	
Neilston Road, Uplawmoor (part)	£42,000
Rockmount Avenue, Thornliebank (part)	£40,000
Netherplace Road, Newton Mearns (part)	£30,000
Larchfield Avenue, Newton Mearns (Shaw Rd – Firwood Rd)	£45,000
Percy Drive, Giffnock	£45,000
Carlibar Road, Barrhead (part)	£43,000
<b>Sub-total</b>	<b>£245,000</b>
<i>Footway Patching</i>	
Footway patching	£90,000
<b>Sub-total</b>	<b>£90,000</b>
<i>Footway Quality of Life</i>	
Rockmount Avenue, Newton Mearns (part)	£15,000
Larchfield Avenue, Newton Mearns (Firwood Rd – Knowes Av)	£40,000
Easterton Avenue, Busby (part)	£30,000
Netherplace Road, Newton Mearns (part)	£13,000
Lea Avenue / Hillside Road, Neilston	£58,000
<b>Sub-total</b>	<b>£156,000</b>
<i>Carriageway Resurfacing</i>	
B767 Clarkston Road, Clarkston (part)	£50,000
Arthurlie Street, Barrhead (Aurs Dr – Weir Av)	£100,000
B767 Glasgow Road, Waterfoot (At Barlae Av)	£100,000
Crookfur Road, Newton Mearns (part)	£50,000
C2 Kingston Road, Neilston (part)	£100,000
Capelrig Road, Newton Mearns (part)	£50,000
Mearns Road, Newton Mearns (part)	£30,000
Holehouse Brae, Neilston (Millview Meadows – Main St)	£33,000
B775 Glenifer Road, Barrhead	£32,000
Stewarton (Dodside) Road, Rural (south of Bannerbank)	£40,000
Anti-skid surface treatment	£10,000
<b>Sub-total</b>	<b>£595,000</b>
<i>Carriageway Patching</i>	
Proprietary patching	£143,000
Carriageway patching	£90,000
<b>Sub-total</b>	<b>£233,000</b>





**Table 14.3: 2007/08 Structural Maintenance Revenue Investment Programme – CONTINUED**

Description	Allocation
<i>Additional Carriageway Resurfacing</i>	
Holehouse Brae, Neilston (Millview Meadows – Main St)	£10,000
Stewarton Road, Newton Mearns (South of Bannerbank)	£10,000
Brownmuir Avenue / Bartland Place, Eaglesham	£85,000
Castleton Drive, Newton Mearns	£55,000
Balgray Crescent / Glanderston Avenue, Barrhead	£45,000
Moorburn Avenue / Orchard Drive, Giffnock (part)	£45,000
<b>Sub-total</b>	<b>£250,000</b>
<b>Total</b>	<b>£1,569,000</b>

### 14.3 Strategic Implementation Plan

The Strategic Implementation Plan has also been separated into sub-plans to reflect the numerous stakeholders involved in implementing transport schemes. As such, a Council-led Strategic Implementation Plan where the Council would act as lead body in taking forward the actions identified, and a Stakeholder-led Strategic Implementation Plan where other industry bodies, sometimes in partnership with the Council, would act as lead partner in taking forward the actions, have been identified. The Council-led Strategic Implementation Plan is detailed in Table 14.4 with the Stakeholder-led Strategic Implementation Plan outlined in Table 14.5. These are presented in no particular order and will be taken forward as and when opportunities arise. This is dependent on a variety of factors including funding availability, the priorities of other industry stakeholders, project lead-in times, public priorities and staff resources.

Progression of many of the actions in the Strategic Implementation Plan will be dependent upon undertaking studies and STAG appraisals to first develop them in more detail. As such, a list of studies and STAG appraisals has been identified. Funding to undertake these will be sought as appropriate. Again these have been separated into studies and STAG appraisals where the Council would act as lead partner, shown in Table 14.6, and those where the Council will look to industry stakeholders to act as lead partner, shown in Table 14.7. These lists are not prioritised and are presented in no particular order. The Council makes no commitment to progressing any of the studies and STAG appraisals outlined below and any that are taken forward may not necessarily lead to the implementation of a particular scheme or solution.

The solutions within the Strategic Implementation Plan that are geographically specific are shown on two key diagrams. Key Diagram 1 shows the measures from the Council-led plan whilst Key Diagram 2 shows those from the Stakeholder-led plan.





**Table 14.4: Council-led Strategic Implementation Plan**

No.	Scheme	Description	Link to Policies
<i>Walking &amp; Cycling</i>			
1	Cycling Action Plan	Develop a comprehensive, coordinated and costed plan to improve cycling provision and encourage an increase in cycling taking into consideration the schemes outlined elsewhere in the Action Plan.	MS1, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, R10, DM8, TI6, NM1
2	A77 Fenwick Road cycle route	On road cycle lane linking existing cycle lanes on A77 as far north as Eastwood Toll to cycle lanes between Braidholm Road and the Council boundary (route carries on to Shawlands).	MS1, C1, C3, C4, C5, C6, C8, C10, E1, EM1, EM2, EM3, EM4, EM5, AQ1, WQ1, WQ2, NE1, NE3, NE4, HB1, HB2
3	Barrhead cycle improvements	Improved cycle facilities within Barrhead including advanced stop lines, cycle lanes and paths and potential links to existing networks in surrounding areas.	MS1, C1, C3, C4, C5, C6, C8, E1, AQ1, HB1, HB2
4	Cycle routes to stations	Implement improved cycle links to stations in East Renfrewshire.	MS1, C1, C4, C5, C6, R1, R8, R10, AQ1, HB1, HB2
5	Cycle map	Publish a map outlining all the cycle lanes and paths together with the location of other key facilities e.g. cycle parking.	MS1, C1, C2, C3, C8, TI6, TI7, AQ1
6	Walking map	Publish a map outlining key walking routes in a specific area taking into consideration the Core Paths network.	MS1, W1, W2, W3, TI6, TI7, AQ1
7	Promote health benefits of cycling & walking	Promote cycling and walking as leisure activities and modes of transport by publicising the health benefits they can have for people. Potential to tie in with the publication of the Cycling Map and Walking Map.	MS1, C1, C2, C3, W1, W2, W3
<i>Bus</i>			
8	Streamline extension	Extend the Streamline bus priority scheme into East Renfrewshire. Potential corridors include A77, A727, A736, B774 and Mearns Road / Clarkston Road. Potential improvements include real time information at bus stops, bus priority measures, raised kerbs at bus stops and high quality buses with low floor access. Linked to the development of Quality Partnerships.	MS1, B1, B2, B4, B5, B6, B7, B8, B10, TI3, AS2, E1, AQ1, AQ3, HB1, HB2
9	Install raised kerbs at bus stops	Bus stop improvements at bus stops located outwith Streamline corridors.	MS1, B1, B5, AT2
10	Reallocation of road space	Installation of bus and/or cycle lanes both on Streamline corridors and other key locations. Potentially allow PTWs the use of any reallocated road space as appropriate.	MS1, C1, C4, C5, C6, C8, C10, B1, B4, PT3, AQ1, AQ3







**Table 14.4: Council-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies
<i>Development Control</i>			
11	Green Travel Plans	Require Green Travel Plans for significant trip generating developments. Monitor established Green Travel Plans on a regular basis.	MS1, DC1, DC4, DC6, DC7, AQ1
12	Transport Assessments	Require Transport Assessments for significant trip generating developments to identify impact on the network and improvements / mitigation measures required. Developers will fund transport improvements required as a result of their development.	MS1, TL3, DC1, DC2, DC3, DC4, DC5, DC8
13	Promote mixed use developments	Through the land-use planning process attempt to encourage more mixed use developments to stimulate local economic activity and reduce the need to travel.	MS1, TL1, TL4, AS1, DC1, AC1, AC5, AC6, CC9, CC10, AQ1
14	Accessible developments	Through the land-use planning process, site local facilities (shops, schools, etc.) and new developments where they're easily accessed by walking, cycling and public transport. Improve transport links to developments as appropriate.	MS1, TL1, TL3, TL4, AS2, AS3, DC1, DC2, DC3, DC4, DC5, A3, AC1, C1, W1, B1, R1, AQ1
15	Parking standards	Adopt and apply maximum parking, minimum disabled parking and minimum cycle parking standards for new developments.	MS1, DM5, DM6, DC4, DC8, DC9, AQ1
<i>Roads</i>			
16	Enhanced road capacity at key locations as required	Local road capacity improvements to respond to congestion problems as and when they develop. Potential locations include Clarkston Toll and Sheddens Roundabout.	SL1, RE1, NM1, TE1, AQ7, E1, WQ1, WQ2, VL1, HB1, HB2
<i>Network Management</i>			
17	Traffic management review	Monitor the effectiveness of existing traffic management measures (e.g. waiting and loading restrictions, on-street parking provision, etc.) and identify any amendments that may be required to improve operation of the network. In particular, review on-street parking, waiting and loading restrictions in Barrhead and Giffnock. Also, continually review on and off-street disabled parking provision. Review the provision of taxi ranks and parking provision for PTWs.	TP3, PT4, DM5, DM6, SL1, RE1, RE2, AC5, AC6, NM1, TE1, TE2, TE3, TE6, P1, P2, P3, P4, P5, P7, P8, FR7
18	Maintenance	Maintain a programme of Structural, Routine and Winter maintenance and seek additional funding to reduce the backlog of road maintenance. Establish a network inventory and road hierarchy to inform this programme and the preparation of an Asset Management Plan for maintenance. Recycle materials where possible.	NM1, M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, S1, S2, S3, S4, L1, L2, L3, L6, TE4, TE5, TE8, LP1, LP2





**Table 14.4: Council-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies
<i>Network Management – continued</i>			
19	Road safety initiatives	Road safety initiatives aimed at increasing safety on the network for all users (e.g. Safer Routes to Schools, School Travel Plans, 20mph zones, traffic calming, education programmes). Treatment of road safety priority sites identified through analysis of crash records.	W6, C6, C9, PT1, PT2, AT3, NM1, TE1, TE2, TE3, TE4, TE6, TE7, TE8, TE9, FR2, S1, S2
20	Rural Corridor management	Monitor and review rural corridors including the A736 south of Barrhead, B767, B769 and B775 to identify where remedial safety measures and other improvements may be required.	W4, C4, C5, C6, NM1TE1, TE2, TE8, FR2, RA1
21	Traffic Signals	Install new traffic signals and pedestrian crossings as appropriate. Maintain operation of Remote Operating System for traffic signals.	NM1, TE4, TE5, TE6
22	Traffic Management	Taking into consideration the results of the traffic management reviews, introduce new and amended traffic management measures at key locations as required. Consideration to be given to amending local car parking controls to encourage short stay rather than long stay trips in commercial areas. Investigation of whether parking charges and/or decriminalised parking should be introduced will also be undertaken. Opportunities exist to tie in amendments to traffic management with improvements for walking, cycling and public transport, particularly through schemes such as the extension to Streamline or through new cycling routes.	W4, W5, C4, C10, B4, TP3, PT3, PT4, DM5, DM6, DM7, DM8, TL3, TL4, SL1, RE2, DC4, AC5, AC6, NM1, M13, S4, TE1, TE2, TE3, TE4, TE6, P1, P2, P3, P4, P5, P7, FR6, FR7, FR8, AQ7
<i>Miscellaneous</i>			
23	Soft Measures	Promote uptake of workplace, school and personalised travel plans. Publish environmental impact information. Undertake travel awareness and behavioural change campaigns (initially in Newton Mearns). Improve the availability of transport information in a variety of formats that are accessible to all. Publicise journey-planning facilities like Traveline and Transport Direct.	MS1, W1, W2, W6, C1, C2, C6, C9, B1, R1, TI2, TI7, SM1, SM2, SM3, SM4, SM5, DC6, DC7, FR2, CC2, CC3, AQ1
24	Safety & Security	Enhance lighting, CCTV coverage and supervision of transport facilities. Sympathetic location and design of transport infrastructure taking into consideration security.	W6, C6, B8, R8, PT1, PT2, SM2, AT3, AT7, AT8, AT9, AT11, NM1, AQ1





**Table 14.4: Council-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies
<i>Miscellaneous – continued</i>			
25	Accessibility	Improve access to services, both within and beyond East Renfrewshire, and to transport for all members of society. Support the provision of accessible taxis, buses, trains and other facilities (including transport infrastructure). Improve accessibility to services, education and employment opportunities in the local and wider area. Attempt to reduce the need to travel by facilitating local economic development and through close involvement in the land-use planning system. Identify geographic areas and social groups that suffer from poor accessibility and target them accordingly. In particular, explore how improvements can be made to rural accessibility.	MS1, B5, R6, R7, TP2, T17, TL2, TL3, TL4, TL5, AS1, AS2, AS3, AS4, SL2, DC1, A1, A2, A3, AT1, AT2, AT5, AT6, AT7, AT8, AT9, AT10, AT11, AC1, AC2, AC3, AC5, AC6, RA1, RA2, RA3, RA4, VC1, VC2, CT1, CT2

**Table 14.5: Stakeholder-led Strategic Implementation Plan**

No.	Scheme	Description	Link to Policies	Partner(s)
<i>Walking &amp; Cycling</i>				
26	Paisley to Barrhead cycle route	Cycle route linking Barrhead and Paisley and connecting to the National Cycle Network (NCN Route 75).	MS1, C1, C3, C4, C5, C10, E1, EM1, EM2, EM3, EM4, EM5, WQ1, WQ2, VL1, NE1, NE3, NE4, HB1, HB2	Renfrewshire Council / SPT / Sustrans
27	East Kilbride cycle route	New cycle route linking East Renfrewshire to East Kilbride. Potentially linking into existing routes in East Kilbride and existing routes to Glasgow and Strathaven.	MS1, C1, C3, C4, C5, C10, E1, EM1, EM2, EM3, EM4, EM5, WQ1, WQ2, VL1, NE1, NE3, NE4, HB1, HB2	South Lanarkshire Council / SPT / Sustrans
28	Out of Town Centres	Walking and cycling links to out of town centres (Hillington Industrial Park / Phoenix Retail Park / Braehead Shopping Centre / Silverburn Shopping Centre)	MS1, W1, W3, W4, W6, C1, C4, C5, C6, C7, T16, AS2, A1, AC1, AC5, AC6, AQ1, WQ1, WQ2	Renfrewshire Council / Glasgow City Council / SPT



**Table 14.5: Stakeholder-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies	Partner(s)
<i>Bus</i>				
29	Quality Partnership	Development of a statutory Quality Partnership with bus operators to deliver improved bus services and infrastructure in East Renfrewshire. This will be used as a mechanism to deliver many of the bus related actions outlined in the LTS and will be tied into the extension of Streamline.	MS1, B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B13, T3, T13, T14	Bus Operators / SPT / Other Local Authorities
30	Bus service improvements	Work with operators to improve bus service provision including consideration of frequencies, operating hours, capacity of services, quality of buses, security, fares and service coordination. It is intended to develop a core bus network that identifies the ideal bus network for East Renfrewshire. Key considerations for this ideal network include radial improvements (ERC - Glasgow), orbital improvements (Paisley – Barrhead - Newton Mearns - East Kilbride), local improvements (Clarkston - Giffnock, Clarkston - Newton Mearns, Eaglesham - Newton Mearns, lack of services in Mearnskirk area) and east-west links (Barrhead / Neilston - Newton Mearns / Clarkston / Giffnock / Busby). Improved access to hospitals and healthcare facilities, to Airports (Glasgow, Prestwick & Edinburgh) and to out of town centres (Hillington Industrial Park / Phoenix Retail Park / Braehead Shopping Centre / Silverburn Shopping Centre) will also be considered. Continuing review and amendment of subsidised bus services will also be undertaken.	MS1, B1, B2, B12, MT1, MT3, MT4, TL1, TL5, AS1, AS2, AS3, AS4, SL1, SL2, RE1, RE2, DC2, A1, A2, A3, AC1, AC2, AC3, AC5, AC6, RA1, RA2, RA3, AQ1	Bus Operators / SPT / NHS / Other Local Authorities
31	Accessibility	Increased provision of low floor, DDA compliant buses by operators. Greater understanding by operators of the needs of specialist groups.	MS1, B1, B7, A3, AT1, AT6, AT7, AT8, AT9, AT11	Bus Operators
32	Bus station	Development of a new bus station / layover facility in East Renfrewshire. Potential search area includes Barrhead and Newton Mearns.	MS1, W5, C10, B1, B5, B8, B13, RE2, AT1, AT2, AT4, E1, AQ2, AQ3, WQ1, WQ2, N1, N2, EM1, EM2, EM3, EM4, EM5, VL1, NE1, NE3, NE4, HB1, HB2	SPT / Bus Operators





**Table 14.5: Stakeholder-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies	Partner(s)
<i>Rail</i>				
33	Line Capacity Improvements	Improvements between Barrhead and Kilmarnock on the G&SW line. This is likely to involve the extension of the existing passing loop at Lugton. Platform lengthening on the G&SW line to enable longer trains to operate and reduce overcrowding. Increased rail capacity on single line section south of Busby junction to allow more trains to operate. Electrification of the East Kilbride and G&SW lines to improve efficiency, operational flexibility and reduce pollution. The Glasgow Airport Rail Link and Glasgow Crossrail projects will both provide additional capacity for the network in the vicinity of East Renfrewshire. Capacity improvements at Glasgow Central would allow more services to use it.	MS1, R1, R2, R5, R11, MT1, TL1, TL5, AS2, AS4, RE1, RE2, A1, A2, A3, E1, AQ3, WQ1, WQ2, N1, EM1, EM2, EM3, EM4, EM5, NE1, NE3, NE4, HB1, HB2	Network Rail / SPT / Transport Scotland / First ScotRail
34	Accessibility	Install ramps and other measures to enhance accessibility at stations. Increased provision of DDA compliant trains. Greater understanding by operators of the needs of specialist groups.	MS1, R1, R5, R6, R7, A3, AT1, AT2, AT4, AT6, AT7, AT8, AT9, AT11	Network Rail / First ScotRail
35	Auchenback Station	Construction of a new station on the Neilston line near the Auchenback area of Barrhead. This is linked to the Springfield Road Strategic Urban Expansion Area to be developed adjacent to the proposed station.	MS1, W5, C10, R1, R4, PR3, AS2, SL2, RE1, RE2, A1, A2, A3, N1, N2, AT1, AT2, AT4, E1, AQ1, AQ3, WQ1, WQ2, EM1, EM2, EM3, EM4, EM5, VL1, NE1, NE3, NE4, HB1, HB2	Network Rail / SPT / Transport Scotland / First ScotRail / Developer
36	New station between Williamwood and Muirend	Construction of a new station on the Neilston line between Williamwood and Muirend stations.	MS1, W5, C10, R1, R4, AS2, SL2, RE1, A1, A2, A3, AT1, AT2, AT4, N1, N2, E1, AQ1, AQ3, WQ1, WQ2, EM1, EM2, EM3, EM4, EM5, VL1, NE1, NE3, NE4, HB1, HB2	Network Rail / SPT / Transport Scotland / First ScotRail





**Table 14.5: Stakeholder-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies	Partner(s)
<i>Rail – continued</i>				
37	Train service improvements	Increased train service frequency on the lines serving East Renfrewshire. Linked to the line capacity improvements outlined.	MS1, R1, R3, TL1, TL5, AS2, AS3, AS4, SL2, RE1, RE2, DC2, A1, A2, A3, AC1, AC3, AC5, AC6, RA1, AQ1	First ScotRail / SPT / Transport Scotland
<i>General Public Transport</i>				
38	Mass Transit	Enhanced public transport linkages to Newton Mearns and on other mass transit corridors serving the south side of Glasgow and into East Renfrewshire. Consideration of light rail conversion on the Neilston line as part of a programme in the south side of Glasgow and the opportunities to improve public transport provision in East Renfrewshire this would present, particularly the construction of a spur into Newton Mearns. Also consider whether the introduction of a "Metro" system or other mass transit mode would be more appropriate. Safeguard routes for mass transit corridors through the land-use	planning system. MS1, B10, R2, R3, R4, MT1, MT2, MT3, MT4, TL1, TL5, AS2, AS4, RE1, A1, A2, AT4, E1, EM1, EM2, EM3, EM4, EM5, AQ1, AQ3, WQ1, WQ2, N1, N2, VL1, NE1, NE3, NE4, HB1, HB2	Transport Scotland / SPT / Glasgow City Council / Network Rail / Glasgow & Clyde Valley Structure Plan
39	Integration	Improve coordination of public transport services and interchange opportunities. Enhanced bus stop infrastructure and Park & Ride provision at stations. Development of a multi-modal interchange at Patterson (linked to implementation of south facing ramps at M77 Junction 4). Bus based Park & Ride on the M77. Resist charging for Park & Ride where possible.	MS1, W1, W4, W5, W6, C1, C4, C5, C6, C7, B1, B2, B5, R1, R10, PR1, PR2, PR3, PR4, PR5, TP3, AS2, RE1, RE2, RA4, AQ1	Network Rail / SPT / Transport Scotland / Bus Operators
40	Ticketing	Widespread implementation of Smartcards and other innovative ticketing techniques. More widespread introduction of integrated ticketing. Reduce the occurrence of ticket fraud. Continuing review of concessionary travel arrangements.	MS1, B1, R1, T1, T2, T4, T5, AQ1	Scottish Government / Transport Scotland / SPT / Bus Operators / First ScotRail





**Table 14.5: Stakeholder-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies	Partner(s)
<i>General Public Transport – continued</i>				
41	Unconventional Public Transport	Review Community Transport provision and coordination and attempt to identify where any improvements could be made or efficiencies gained. Explore opportunities to increase the provision of unconventional public transport services like Demand Responsive Transport (Dial-a-Bus / Ring'n'Ride).	MS1, B1, B11, AS2, AS3, SL1, SL2, A1, A2, A3, AC2, AC3, AC5, AC6, RA1, VC1, VC2, AQ1	Community Planning Partnership / Community Transport Operators / SPT / Bus Operators
<i>Road</i>				
42	Traffic Management	Greater enforcement of existing traffic management measures to ensure compliance and that they produce the intended benefits for the road network.	SL1, RE1, RE2, AC4, NM1, TE3, CC8, AQ2	Strathclyde Police
43	Parking	Establishment of a regional car parking policy to ensure consistency across the SPT area.	DM1, DC8, DC9, AC4, NM1	SPT
44	Barrhead to Newton Mearns link road and south facing ramps at M77 Junction 4	Construction of a new link road between Barrhead and the M77 to remove the need to use Aurs Road. This will also provide an enhanced link between Barrhead and Newton Mearns with associated opportunities for improved bus services. Construction of south facing ramps at M77 Junction 4 to improve access to the south and the GSO. Will also create opportunities to develop a multi-modal interchange at Patterton.	B2, PR2, SL2, RE2, SR1, TL5, E1, EM1, EM2, EM3, EM4, EM5, AQ3, WQ1, WQ2, N1, N2, VL1, NE1, NE3, NE4, HB1, HB2	Transport Scotland
<i>Miscellaneous</i>				
45	Soft Measures	Investigate the development of a regional car sharing scheme and the implementation of a pilot sustainable travel demonstration town or village in East Renfrewshire. Encourage the adoption of flexible and e-working as well as other measures to encourage peak spreading. Promote travel planning facilities like Traveline and Transport Direct. Work to provide widespread Personalised Travel Planning. Support appropriate concessionary travel schemes.	MS1, B1, R1, TI2, SM3, SM4, SM5, SM6, SM7, AS1, AC4, CT1, CT2, CC3, AQ1	Scottish Government / SPT / Local Employers





**Table 14.5: Stakeholder-led Strategic Implementation Plan – CONTINUED**

No.	Scheme	Description	Link to Policies	Partner(s)
<i>Miscellaneous– continued</i>				
46	Information	Improve road, walking, cycling and public transport information provision through a variety of media that ensures it is accessible for all. Publish local public transport information leaflets outlining the services available in the local area (Newton Mearns, Clarkston, Giffnock, Busby, Thornliebank, Neilston, Barrhead, Eaglesham & Waterfoot). Ensure timetable information is up to date at bus stops.	MS1, W1, W2, W3, C1, C2, C3, B1, B6, R1, PR1, TI1, TI3, TI4, TI7, SM4, AT5, AT10, AC4, CC2, AQ1	SPT / Bus Operators / First ScotRail / Scottish Government / Transport Scotland
47	Freight	Participate in the West of Scotland Freight Quality Partnership. Develop a Preferred Routes Map for freight traffic. Support widespread implementation of the national Freight Action Plan.	NM1, FR1, FR2, FR3, FR4, FR5, FR8	SPT / Freight Operators / Other Local Authorities
48	Safety & Security	Work with public transport operators to improve safety and security on their services. Greater enforcement of existing road safety measures.	MS1, B1, B8, B9, R1, R8, R9, PT1, AT3, AT7, AT8, AT9, AT11, TE3, AQ1	First ScotRail / Bus Operators / Strathclyde Police
49	Land-use planning	Land-use and transport planning integration to reduce the need to travel, stimulate local economic development and plan new developments taking into account their transport impacts and requirements. Safeguard routes for future transport schemes.	MS1, B1, R1, R4, MT3, TL1, TL2, TL3, TL4, TL5, AS1, DC1, DC2, DC3, DC4, DC5, DC6, DC7, DC8, DC9, A1, AC1, CC10, AQ1	Scottish Government / Glasgow & Clyde Valley Structure Plan
50	Alternative Fuels	Support the uptake of alternative fuels like biofuels, LPG, electric, hydrogen cells and other emerging fuels. Support introduction of the infrastructure to dispense these fuels and encourage the public to switch to them.	CC2, CC3, CC5, CC6, CC7	Scottish Government / SPT







**Table 14.6: Potential Studies and STAG appraisals which the Council would act as lead partner upon**

Study	Description	Link to Schemes
Park & Ride	To investigate the scope and requirement for enhanced Park & Ride provision at stations including Barrhead, Neilston, Whitecraigs, Williamwood, Giffnock, Clarkston and Busby. Also evaluate the requirement for new Park & Ride facilities, potential locations and whether they should be bus and/or rail based. Particular consideration will be given to opportunities to develop a multi-modal interchange at Patterton.	39
Modal Integration at Stations	Examine the scope to improve facilities for buses at railway stations (including Barrhead, Neilston, Patterton, Whitecraigs, Williamwood, Thornliebank, Giffnock, Clarkston and Busby) in order to facilitate modal integration. Investigate where improved cycling and walking links to stations may be beneficial. Also consider where works may be required to improve accessibility for the mobility impaired.	4, 9, 30, 34
Streamline	Explore the extension of Streamline corridors into East Renfrewshire and the measures that would be required on each corridor. Potential measures include bus lanes, bus priority, raised kerbs at bus stops, real time information, traffic management measures and improved facilities for pedestrians and cyclists. Corridors to be considered include A77, Mearns Road & Clarkston Road, A727, A736 and B774. Investigate the Quality Partnership requirements that would be associated with this.	8, 10, 29, 30, 31
Orbital Public Transport	Building upon the findings of SPT's Glasgow Orbital Transport Study and Public Transport in the Conurbation Study to consider the potential for improved orbital public transport links, particularly between a) East Kilbride – Newton Mearns – Paisley – Braehead, b) Barrhead – Paisley and c) Barrhead/Neilston – Newton Mearns/Clarkston/Giffnock/Busby. This would seek to identify enhanced public transport services that cater for movements that are not focussed upon Glasgow city centre.	30, 37, 38
Rural Corridor Management	Investigate how safety and efficient operation of rural roads can be improved on key routes including A736 south of Barrhead, B764, B767, B769 and B775.	19, 20
Demand Management	Investigate whether demand management is required and, if so, the most appropriate mechanism to be implemented. This is likely to include consideration of reallocation of road space, TROs that restrict access and car parking controls amongst other things. It is also likely to incorporate a review of car parking supply and any amendments that may be required to existing provisions.	10, 17, 22
Unconventional Public Transport	Investigate whether unconventional public transport services like Demand Responsive Transport could offer a more attractive alternative to traditional public transport services in parts of East Renfrewshire. Opportunities to improve the coordination and coverage of community transport services could also be explored. An assessment of the requirements of stakeholders would be a prerequisite in this process.	41





**Table 14.6: Potential Studies and STAG appraisals which the Council would act as lead partner upon – CONTINUED**

Study	Description	Link to Schemes
Freight	Review the requirements of freight transport including loading and delivery restrictions and consider the scope to encourage modal shift for freight to more sustainable modes of transport. Investigate measures to promote the use of the most appropriate routes for freight traffic including the possibility of preparing an agreed routes map. Review delivery curfews and whether any amendments to these are required.	17, 22, 47
Links to Airports	Investigate enhanced links to Airports from East Renfrewshire including better road links, increased bus services and improved rail services (to Glasgow Prestwick Airport).	16, 25, 30, 33, 37
Access to Healthcare	Identify where accessibility to healthcare facilities is currently poor with accessibility analysis and examine how access can be improved for residents of East Renfrewshire. Explore in particular accessibility by public transport to hospitals in the surrounding area including the Glasgow Southern General, Hairmyres, Victoria Infirmary, the Royal Alexandra and Leverdale hospital.	25, 30
Access to Service Centres	Investigate measures that improve access to existing regional service centres in the surrounding area (including Glasgow, Paisley and East Kilbride) to ensure access to opportunities for residents of East Renfrewshire and also to local service centres (including Barrhead, Newton Mearns, Giffnock and Clarkston) in order to help support their continuing viability.	13, 14, 25, 28, 30, 33, 37, 38, 41, 49
Bus Service Enhancements	Develop a core network of bus services. This would take into consideration service frequencies, operating hours, capacity, quality of buses, security, fares and service coordination. Key route considerations would include radial improvements (ERC - Glasgow), orbital improvements (Paisley – Barrhead - Newton Mearns - East Kilbride), local improvements (Clarkston - Giffnock, Clarkston - Newton Mearns, Eaglesham - Newton Mearns, lack of services in Mearnskir area) and east-west links (Barrhead / Neilston - Newton Mearns / Clarkston / Giffnock / Busby). A review of subsidised bus services would also be undertaken.	30
Safety & Security Enhancements	Consider opportunities to improve safety and security on transport networks and services including identification of where enhanced lighting and CCTV coverage could be provided.	19, 24, 48





**Table 14.6: Potential Studies and STAG appraisals which the Council would act as lead partner upon – CONTINUED**

Study	Description	Link to Schemes
Soft Measures	Explore measures which could be used to influence travel behaviour and how they could be implemented in East Renfrewshire. Consideration will be given to promotion of workplace, school and personalised travel plans as well as car sharing initiatives, peak spreading and encouraging the adoption of flexible and e-working practices. The scope for public awareness campaigns of the health benefits of sustainable transport, the environmental impacts of transport and providing better information about the transport options available to people would also be explored.	7, 11, 23, 45, 46
Barrhead link road & M77 Junction 4 improvement	STAG Part 2 appraisal of options to implement an improved link between Barrhead and the M77 and Newton Mearns as well as enhancing Junction 4 of the M77 with south facing ramps.	44
Network Modelling	Transport modelling to forecast future conditions on the network and identify where potential problems may develop. Testing of potential solutions and schemes which may be introduced to manage traffic movements, increase capacity and promote modal shift.	2, 10, 16, 30, 44
Land-use & Transport Planning Integration	Explore how transport can contribute to local planning priorities and facilitate greater integration between land-use and transport in the area. Identify where transport improvements may be required to allow land to be safeguarded for their development as appropriate.	13, 14, 49
Barrhead Transport Assessment	Review the transport implications of the Barrhead regeneration initiative including the demand for parking.	10, 16, 17, 22
Cycling Action Plan	Develop a comprehensive and coordinated plan to improve cycling provision and encourage an increase in cycling including detailed consideration of the schemes outlined in the Council-led Strategic Implementation Plan. Development of a cycle map.	1, 2, 3, 4, 5, 26, 27, 28
Parking Standards	Taking into consideration the national maximum parking standards and any regional standards that may be set, investigate the appropriateness of setting local parking standards for new developments. This would include consideration of maximum parking, minimum disabled parking and minimum cycle parking standards.	12, 14, 15, 43

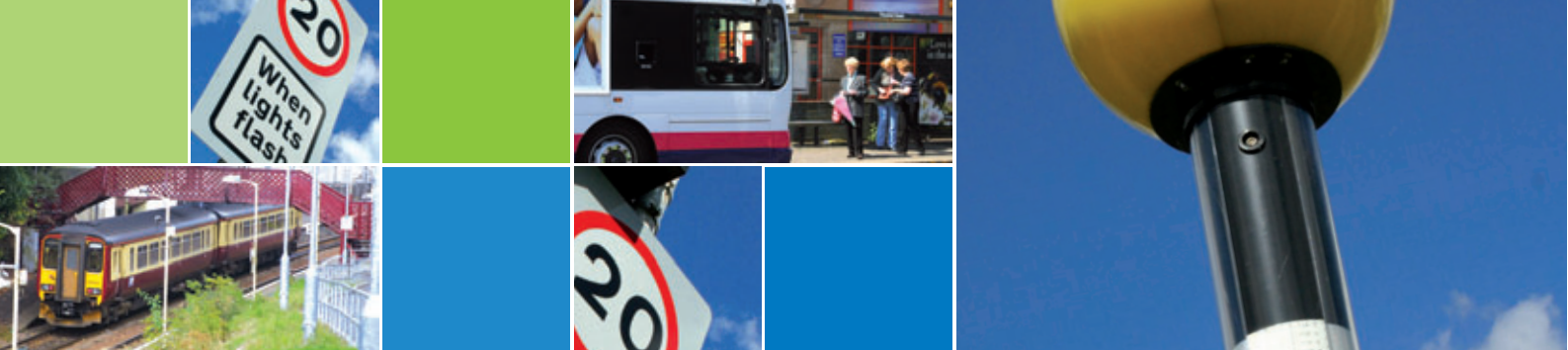




**Table 14.7: Potential Studies and STAG appraisals which the Council would encourage industry stakeholders to progress**

Study	Description	Link to Schemes	Partners
Auchenback Station	Investigation of the operational and technical feasibility of constructing a station at Auchenback on the Neilston line and providing it with a regular train service.	35, 37	SPT, Network Rail, First ScotRail, Transport Scotland
Rail Services & Infrastructure Improvements	Address capacity restraints on the rail network including Glasgow Central station, platform lengths at stations, single line south of Barrhead, single line south of Busby and integration between the rail networks on the south-west and north-east of Glasgow city centre. Improvements in train service frequencies and capacities as appropriate. Longer hours of operation for train services. Improved accessibility at stations.	33, 34, 37	SPT, Network Rail, First ScotRail, Transport Scotland
Public Transport Information	Improve information provision through a variety of media including mobile technology. Ensure information is up to date and readily available to all members of society. Facilitate greater use of travel planning facilities such as Traveline and Transport Direct.	46	SPT, Transport Scotland, Bus operators, First ScotRail
Parking Policy	Investigate and implement a regional parking policy that employs a holistic approach to parking provision in the west of Scotland taking into consideration the role that parking can play in demand management and that the influence of parking policy can extend beyond the boundaries of the local authority within which it is implemented.	15, 43	SPT
Road User Charging	Consider the appropriateness of a national road user charging scheme in comparison to ad hoc local schemes.	N/A	Scottish Government
Road Maintenance Funding	Investigate whether additional funding needs to be made available to address the backlog of road maintenance that has developed on the network across Scotland.	18	Scottish Government, SPT, Transport Scotland
Land-use & Transport Planning Integration	Consider ways in which land-use and transport planning can be more closely integrated in order to achieve the common goals of reducing environmental impacts of transport, reducing the need to travel, promoting a modal shift and maintaining the character and integrity of the existing environment.	49	Scottish Government, SPT, Glasgow & Clyde Valley Structure Plan





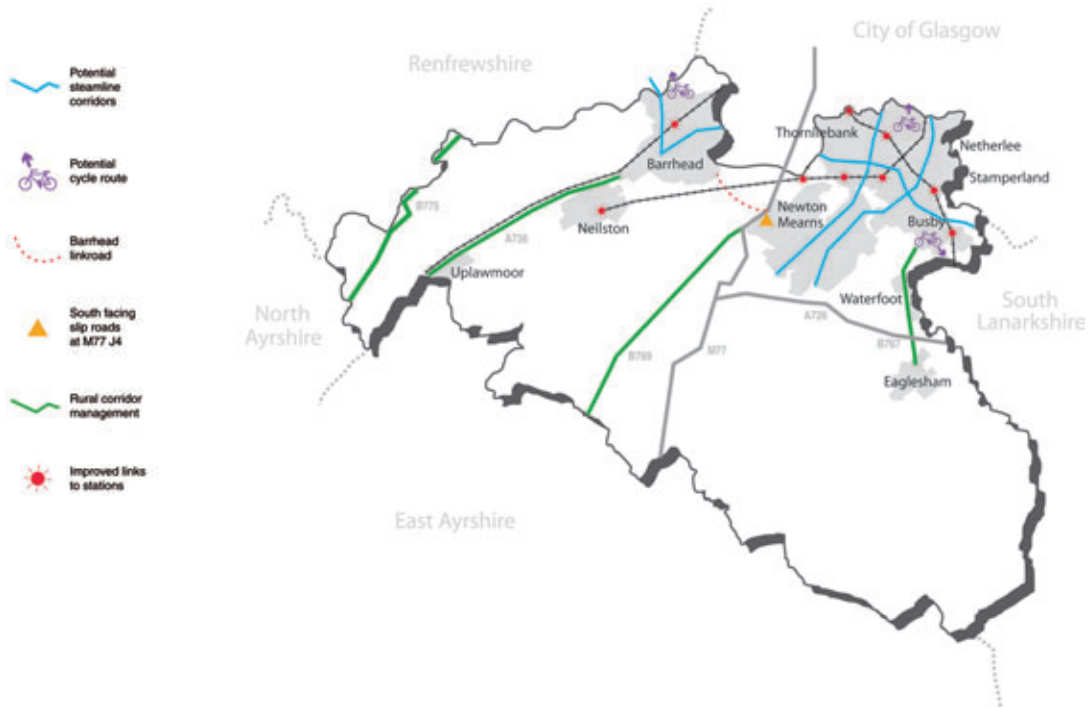
**Table 14.7: Potential Studies and STAG appraisals which the Council would encourage industry stakeholders to progress – CONTINUED**

Study	Description	Link to Schemes	Partners
Concessionary Travel	Review the extent of and eligibility for concessionary travel on all modes of transport to ascertain whether any amendments are required in order to facilitate enhanced accessibility and social inclusion.	25, 40	Transport Scotland, SPT, Scottish Government
Alternative Fuels	Examine how greater uptake of alternative fuels can be encouraged and how this can be implemented at a local level.	50	Scottish Government
Light Rail Conversion	Explore conversion of sections of the heavy rail network in the south of Glasgow and beyond to light rail operation. This should include consideration of conversion of existing links through Clarkston, Giffnock, Busby, Thornliebank and also to Newton Mearns, Neilston and Barrhead. Opportunities for extension of the existing network should also be considered with particular attention on links to Newton Mearns. Linked to Mass Transit.	38	Transport Scotland, Network Rail, SPT, Glasgow City Council
Mass Transit	Investigate a mass transit system (Tram, LRT, Metro, BRT, High Quality Bus, etc.) through the south side of Glasgow (Shawlands, Battlefield, etc.) to the outermost suburbs (Clarkston, Giffnock, Thornliebank, Busby, Newton Mearns). Linked to Light Rail Conversion.	38	SPT, Transport Scotland, Glasgow City Council
Park & Ride on the M77 Corridor	Examination of the most appropriate locations for new / enhanced park & ride facilities on the M77 corridor. Investigation of potential demand, commercial viability, capital and revenue costs and impact on local transport networks.	39	SPT, Bus operators, Transport Scotland
Sustainable Travel Demonstration Town/ Village	Investigate the implementation of a Sustainable Travel Demonstration Town or Village in East Renfrewshire and the measures commensurate with this.	45	Scottish Government
East Renfrewshire Bus Station	Explore whether construction of a bus station / layover facility in East Renfrewshire would offer enhancements in public transport provision and, if so, where the most appropriate location would be.	32	SPT, Bus operators
New station between Muirend and Williamwood Stations	Investigate the demand for and feasibility of constructing a new station on the Neilston line between Muirend and Williamwood Stations and providing it with a regular train service.	36, 37	SPT, Network Rail, First ScotRail, Transport Scotland

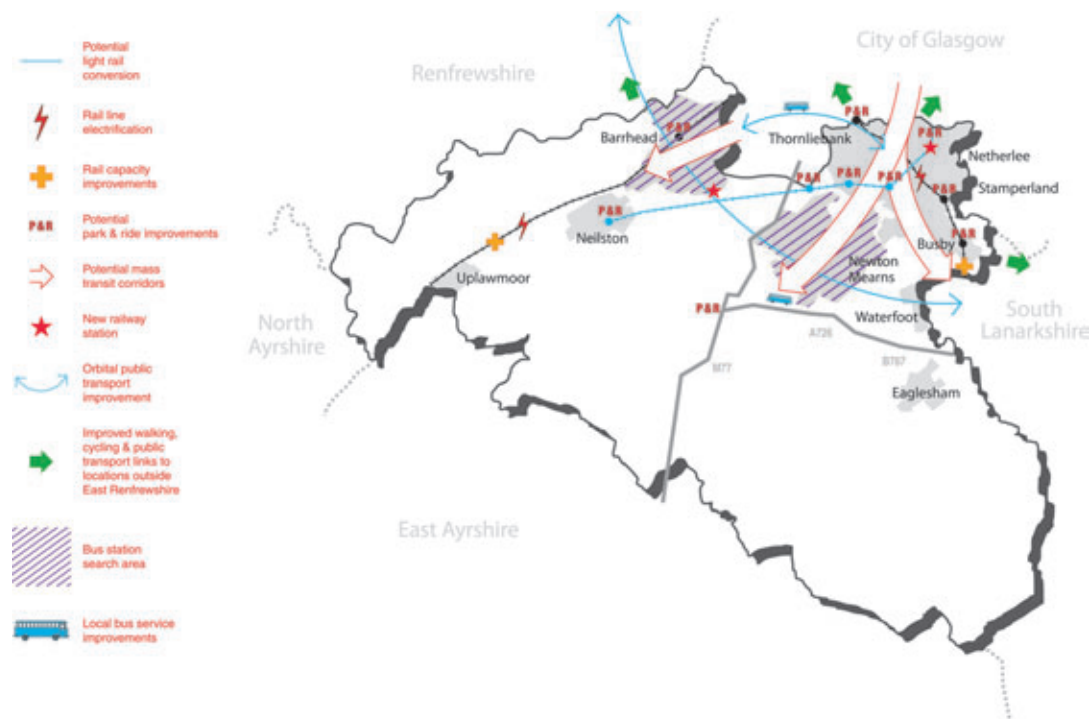




Key Diagram 1 – Council-led Plan



Key Diagram 2 – Stakeholder-led Plan





#### 14.4 Funding & Delivery

Implementation of the LTS is dependent upon a number of factors, particularly the availability of funding. The Council has limited funds and is therefore dependent upon securing funding from external sources. The Council has previously been successful in securing funding from external bodies including the Scottish Government, Sustrans, developers, as well as the former Strathclyde Passenger Transport and West of Scotland Transport Partnership which are now combined to constitute Strathclyde Partnership for Transport. The M77 extension and GSO were built under a Public Private Partnership where private investors provide the capital for construction and receive payments for a specified period following completion. These funding sources are not guaranteed and the Council often has to competitively bid for funding. All available opportunities to secure additional funding to implement the LTS will be pursued. The extent to which this succeeds will heavily influence how successful the LTS is in fulfilling its objectives.

Transport schemes often involve partnership working between different industry stakeholders to bring them to fruition. Where necessary, the Council will seek to work in partnership to implement the actions outlined in the LTS. The priorities and aspirations of other industry stakeholders do not necessarily always align with those of the Council which can subsequently influence the ability to implement particular actions identified by the Council. In some instances the Council has statutory powers to aid the implementation of particular actions but often a collaborative approach is required. Therefore, delivery of some actions may be dependent upon decisions taken by other industry stakeholders and not those of the Council.

Project lead-in times for transport schemes can be considerable as work is undertaken to assess the feasibility of the proposal, develop it in detail, secure the necessary funding for implementation, progress through the required statutory procedures and carry out the required works. This affects both infrastructure projects and schemes that do not require infrastructure development. There is often a requirement to carry out studies, such as STAG appraisals, prior to progressing a proposal any further. The LTS covers a brief period of time, 3 years, which means that full implementation of certain actions will be unlikely even if funding is available and agreements are struck between all relevant bodies. Therefore, timescales for implementation cannot be definitively identified with the exception of those schemes in the Capital Investment Plan.



SECTION 15

# Targets & Monitoring







### 15.1 Monitoring Arrangements

Monitoring of the LTS allows identification of where it is being successful and where policies and actions may need to be reconsidered. Targets and indicators have been developed, taking into account those in the NTS and RTS, to facilitate this. Targets were not set in the first LTS and thus there are no existing targets to review.

The Council has limited resources for monitoring and relies predominantly on published data for this purpose. Therefore, targets have been set which can be readily monitored. Attempts have also been made to ensure that targets are SMART (Specific Measurable Achievable Realistic & Time-bound). Monitoring will be undertaken annually along with a review of the Action Plan.

### 15.2 Targets & Indicators

The Council is required to monitor a number of statutory performance indicators and these have been included within the monitoring framework. In addition, the Council, along with bodies like the Scottish Government and SPT, collects other relevant data that has allowed a base scenario to be identified against which the success of the strategy can be measured. All targets apply to the life of the LTS, between 2008 and 2011, with progress reports published on an annual basis.

There are some areas of the LTS for which no targets have been established. This is predominantly due to difficulties in measuring certain elements of the LTS. In particular, no road traffic related targets have been set with further detail about the reasons for this outlined in the Road Traffic Reduction Act Report attached as Appendix A.

Performance Indicator	Base Scenario (Year)	Data Source	Target
<i>MODAL SHIFT</i>			
People walking as a mode of transport	44% never walk as a mode of transport (2003/04)	Scottish Household Survey	Increase percentage of people walking as a mode of transport
People walking for pleasure or fitness	58% never walk for pleasure or fitness (2003/04)	Scottish Household Survey	Increase percentage of people walking for pleasure or fitness
People cycling as a mode of transport	98% never cycle as a mode of transport (2003/04)	Scottish Household Survey	Increase percentage of people cycling as a mode of transport
People cycling for pleasure or fitness	97% never cycle for pleasure or fitness (2003/04)	Scottish Household Survey	Increase percentage of people cycling for pleasure or fitness
People using buses	65% never use buses (2003/04)	Scottish Household Survey	Increase percentage of people using buses
People using trains	72% never use trains (2003/04)	Scottish Household Survey	Increase percentage of people using trains



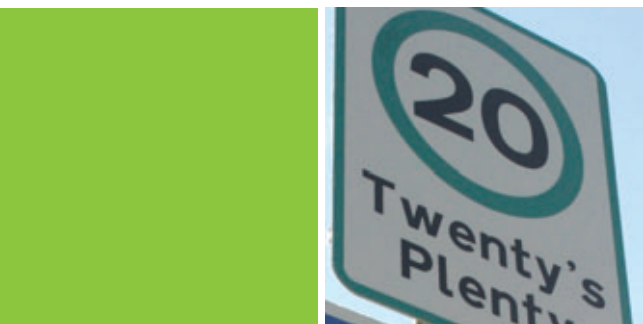
Performance Indicator	Base Scenario (Year)	Data Source	Target
Frequency of driving	54% drive every day (2003/04)	Scottish Household Survey	Decrease percentage driving every day
<i>NETWORK MANAGEMENT</i>			
Carriageway condition	62% of road network should be considered for maintenance (2006/07)	East Renfrewshire Council	Decrease percentage of road network that should be considered for maintenance
Traffic light repairs	94% of repairs completed within 48 hours (2006/07)	East Renfrewshire Council	Increase percentage of traffic lights repaired within 48 hours
Street light repairs	98% of repairs completed within 7 days (2006/07)	East Renfrewshire Council	Increase percentage of street light repairs completed within 7 days
Age of street lighting columns	70% of street lighting columns over 30 years old (2006/07)	East Renfrewshire Council	Decrease percentage of street lighting columns over 30 years old
Council bridges capable of carrying 40 tonne vehicles	2.5% of Council bridges unable to carry 40 tonne vehicles (2006/07)	East Renfrewshire Council	Decrease percentage of Council bridges unable to carry 40 tonne vehicles
Council bridges that have a weight or width restriction	2.5% of Council bridges have a weight or width restriction (2006/07)	East Renfrewshire Council	Decrease percentage of Council bridges that have a weight or width restriction
<i>SAFETY &amp; SECURITY</i>			
Killed and seriously injured road casualties	43% reduction in killed and seriously injured road casualty rate (2001-05 average compared to 1994-98 average)	East Renfrewshire Council	40% less killed and seriously injured road casualties by 2010 compared to the 1994-98 average
Children killed and seriously injured road casualties 55% reduction in children	killed and seriously injured road casualty rate (2001-05 average compared to 1994-98 average)	East Renfrewshire Council	50% less children killed and seriously injured road casualties by 2010 compared to the 1994-98 average
Slight road casualties	35% reduction in slight casualty rate per 100 million veh km (2001-05 average compared to 1994-98 average)	East Renfrewshire Council	10% reduction in slight casualty rate per 100 million veh km by 2010 compared to the 1994-98 average
Security of bus services	32% think bus services are unsafe (2003/04)	Scottish Household Survey	Decrease percentage of people that think bus services are unsafe
Security of train services	31% think train services are unsafe (2003/04)	Scottish Household Survey	Decrease percentage of people that think train services are unsafe





Performance Indicator	Base Scenario (Year)	Data Source	Target
<i>ENVIRONMENT</i>			
Transport related air pollution	No sites exceed NAQs thresholds (2006)	East Renfrewshire Council	No transport related exceedences of NAQs thresholds
<i>ACCESSIBILITY &amp; SOCIAL INCLUSION</i>			
Accessibility to supermarkets	68% of people within 15 mins of a supermarket by public transport during the daytime (2007)	East Renfrewshire Accession Model	Increase proportion
	65% of people within 15 mins of a supermarket by public transport in the evening (2007)	East Renfrewshire Accession Model	Increase proportion
Accessibility to Secondary Schools	84% of people within 15 mins of a Secondary School by public transport during the daytime (2007)	East Renfrewshire Accession Model	Increase proportion
Accessibility to Primary Schools	97% of people within 15 mins of a Primary School by public transport during the daytime (2007)	East Renfrewshire Accession Model	Maintain existing levels as a minimum and increase proportion if possible
Accessibility to Hospitals	83% of people within 30 mins of a Hospital by public transport during the daytime (2007)	East Renfrewshire Accession Model	Increase proportion
	68% of people within 30 mins of a Hospital by public transport in the evening (2007)	East Renfrewshire Accession Model	Increase proportion
Accessibility to Silverburn	36% of people within 30 mins of Silverburn by public transport during the daytime (2007)	East Renfrewshire Accession Model	Increase proportion
	26% of people within 30 mins of Silverburn by public transport in the evening (2007)	East Renfrewshire Accession Model	Increase proportion
Convenience of Public Transport	88% view public transport as either very convenient or fairly convenient (2003/04)	Scottish Household Survey	Increase percentage who view public transport as either very convenient or fairly convenient
Walking Time to the Nearest Bus Stop	78% have to walk less than 6 minutes to the nearest bus stop (2003/04)	Scottish Household Survey	Increase percentage who have to walk less than 6 minutes to the nearest bus stop

# APPENDICES





## Appendix A: Road Traffic Reduction Act Summary Report 2007

### 1. SETTING THE CONTEXT

#### Introduction

East Renfrewshire Council is required under the Road Traffic Reduction Act 1997, supplemented by the Road Traffic Reduction (National Targets) Act 1998, to:

- undertake an assessment of the levels of road traffic within the council area on roads other than motorways and trunk roads,
- prepare a forecast of the expected growth in those levels,
- specify targets for a reduction in the levels of local traffic in the area or a reduction in the rate of growth in the levels of such traffic if deemed appropriate, and
- establish indicators and monitoring mechanisms for the future assessment of target performance.

#### Response to the Evaluation of the RTRA Report 2000

This report is the second Road Traffic Reduction Act Report (RTRA) produced by the Council. The Scottish Government commissioned a review of the first set of RTRA Reports which concluded that East Renfrewshire Council did not make enough reference to regional congestion issues and did not consider the contribution that could be made to regional targets. Consideration of regional congestion has been included in this report although no reference is made to regional targets as SPT have not yet established any. It also expressed concerns that traffic monitoring has not been maintained on a consistent basis since publication of the initial RTRA Report. This is recognised and a programme of 6 monthly traffic counts at 25 core sites across the authority area has now been established. This will provide a consistent and comparable dataset to allow the analysis of traffic flows and trends. The Council is also continuing to develop their local traffic model although it was not available to assist in forecasting for the new RTRA Report. The new RTRA Report was also made available for public consultation although no specific comments were received about it.

#### Previous Road Traffic Reduction Act Targets

In 2000 the Council established targets for traffic reduction based upon modelled traffic flows obtained from the Central Scotland Transport Model. Unfortunately, these targets contained arithmetical errors and it is therefore not appropriate to measure the extent to which these have been achieved. Moreover, the monitoring of traffic flows in East Renfrewshire has not been consistent in the period since the production of the original RTRA Report which makes the assessment of traffic level trends problematic.



## Traffic Trends

Due to the lack of suitable data there are only 8 sites where direct comparisons can be made, as shown in the table below.

Road Section	AADT (2000)	AADT (2006)	Growth %
A77 between Malletsheugh and Floak	28,178	1,210	-95.7%
B764 between Eaglesham and the EAC boundary	8,494	1,019	-88%
B764 between Eaglesham and the SLC boundary	16,517	3,584	-78.3%
B767 between Waterfoot and the A726	9,171	5,874	-35.95%
Mearns Road between the GSO and the Broomhill shops	6,550	7,870	20.2%
A727 East Kilbride Road	21,354	14,291	-33.1%
A727 Eastwoodmains Road	20,502	20,505	0.001%
A727 Rouken Glen Road	23,713	19,646	-17.2%

The most significant impact on traffic flows has been the construction of the M77 extension from Fenwick to Malletsheugh and the Glasgow Southern Orbital (GSO) route. The M77 extension has significantly reduced traffic on the A77 south of Newton Mearns, dropping by 95.7% between Malletsheugh and Floak. The GSO effectively bypasses several communities along the A727 and B764 relieving them of significant volumes of through traffic. The B764 has seen a decrease in traffic as trips transfer to the GSO whilst the decline on the A727 and increase on Mearns Road highlights that the GSO is acting as a strategic route with mainly local traffic remaining on the A727.

## Travel To School

The RTRA Report 2000 established targets relating to school travel with a reduction in car trips of 122 per weekday targeted for Kirkhill Primary School. An initial travel survey identified that 69% of the 451 pupils travelled to school by car which equates to 311 trips.

The targeted reduction in car trips was 122 which means the number that should now be observed is  $311 - 122 = 189$  trips (42% of 451 pupils)

A follow up survey in 2006 found the number of trips to school by car = 276 trips (56% of 493 pupils)

It can be seen that this target has not been achieved, however comparison of modal splits suggests that a shift away from cars has been achieved as shown in the following table.





**Modal splits for pupils travelling to Kirkhill Primary School (%)**

	Walk	Car	Bus	Cycle	Other	Total
1999	19	69	11	0	1	100
2006	27	56	16	1	0	100

Targets for other schools were extrapolated from the results obtained from the Kirkhill Primary School survey. However, surveys were not undertaken for each of the schools and it is thus impossible to measure whether a reduction in car trips has been achieved at a given school.

### Problems

There are a number of current and projected problems that have implications for road traffic in East Renfrewshire. The current problems include:

- High car ownership and usage especially in the Newton Mearns and suburban northern part of the authority area.
- Lack of incentive to switch from car to alternative modes of transport.
- Lack of south facing ramps at M77 Junction 4 restricts traffic movements.
- M77/M8 junction has insufficient capacity causing congestion on the M77 and M8.
- Congestion on the A736 through Barrhead during the AM peak heading northbound especially at Allan's Corner roundabout.
- Congestion on the A727 in Giffnock and around the centre of Clarkston particularly during peak periods.
- Localised air and noise pollution from traffic, especially at Sheddens roundabout.
- Through traffic in Barrhead and on the A727 through Giffnock, Clarkston and Busby causing severance and localised pollution problems.
- Congestion and safety problems resulting from the school run.
- Slow journey times (especially public transport).
- Reduced safety for pedestrians and cyclists in congested areas.

It is expected that the following problems will continue to affect East Renfrewshire in the future:

- Higher levels of car ownership and car dependency.
- Increasing levels of congestion.
- Increasing levels of road traffic related pollution.
- Slower journey times.
- Decreasing levels of safety for pedestrians and cyclists.

## 2. EXISTING AND FORECAST TRAFFIC LEVELS

The appendix contains four tables that show East Renfrewshire's existing and forecast traffic levels. Table 1 collates the current and historic traffic flows in AADT format. Note that the 2003 counts are the oldest traffic counts that are available.



Table 2 shows the historic traffic growth against a base year of 2006.

Table 3 shows the “Do Minimum” Traffic forecasts. The traffic growth factors were calculated using TEMPRO and NRTF figures. A detailed explanation for deriving these growth factors can be found in section 7 of the report.

Table 4 compares 2006 and 2007 traffic levels at the 25 core monitoring sites.

### 3. STRATEGY APPRAISAL

There are two key issues that underpin the current transport problems in East Renfrewshire. These can be categorised as either modal or spatial.

Modal issues concern the modes of transport that can be used to undertake the everyday travel of people and goods, which include walking, cycling, public transport and motorised vehicles in the case of people movement, and rail, water and motorised vehicles for goods. The spatial issues relate to the relationship between transport and land-uses and the extent to which access to particular areas is given priority in the strategy.

The preferred strategy aims to improve accessibility and connectivity to services and employment opportunities within East Renfrewshire and the surrounding area in a sustainable manner. To achieve this, measures must be undertaken to encourage modal shift and to improve the accessibility of key locations. A co-ordinated approach to land use and transportation issues will contribute to this.

Consideration has also been given to a “Do Minimum” strategy option, which assumes the Council would maintain the expenditure in the Committed Investment Plan but without delivery of the Strategic Implementation Plan. As such, it assumes that existing trends in travel performance would continue. As a result we have provided a “Do Minimum” forecast for traffic levels (see Table 3 of Appendix) but are unable to provide a forecast scenario that reflects the preferred strategy due to limited modelling capabilities at this time. However, the Council is confident that the results of the “Do Minimum” scenario represent a worst-case scenario and that any steps taken to deliver the Strategic Implementation Plan will have a beneficial affect on traffic levels.

### 4. TARGET SETTING

The National Transport Strategy outlined the intention to maintain the aspirational target to stabilise road traffic levels at 2001 levels by 2021 and the Council will continue to monitor progress towards this target. However, the Council has decided to abandon the targets set in the RTRA Report 2000 because:

- they are arithmetically inaccurate
- there is a lack of data to monitor progress towards them
- the Council has insufficient powers to influence car ownership and usage
- some previous targets were simply too unrealistic







- the Council has limited resources to undertake monitoring
- surrounding areas, and the through traffic they generate, have a significant influence on traffic levels in East Renfrewshire which is outwith the Council's control
- the data is based predominately on modelled traffic flows rather than observed traffic flows

Given the limited resources available to forecast and monitor traffic levels, the lack of regional targets and the need to secure additional funding to fully implement the LTS, it is not felt appropriate to set new targets at this time. This will be kept under review on an annual basis along with the Action Plan and targets set out in Chapter 15.

## 5. CONSULTATION

The Road Traffic Reduction Act Report was subject to consultation along with the Local Transport Strategy consultative draft in August and September 2007. No comments were received on the new RTRA Report. Generally, people were supportive of the objectives and proposals outlined in the LTS.

## 6. MONITORING

As previously stated, traffic monitoring has not been maintained on a consistent basis. The Council have now established a regular traffic monitoring regime. In addition, targets have not been set although this will be kept under review.

The data collected from our 9 safety camera sites and the 25 ATC sites will be monitored to identify trends and problem areas. A list of these sites is provided in the appendix. In the future, the Council will have a vastly improved ability to monitor traffic conditions in the area and to consider the possibility of setting targets for traffic reduction.

## 7. FORECASTING DETAILS

### The Forecasting Methodology

Since there is very little historic data available, it would be impractical to use 2001 as the base year to forecast traffic levels. Therefore, 2006 has been used as the base year as it is the first year that comprehensive data is available. As such, the NRTF growth factors have been adjusted to incorporate 2006. The amended NRTF growth factors are shown in the appendix.



An example of how the 2006 figure for a Rural, Trunk & Principal Road was calculated is shown below with the same methodology being used to calculate the other factors.

$$2006 = 110 + (129-110) \times \left( \frac{2006 - 2001}{20011 - 2001} \right)$$

TEMPRO was used to adjust the national growth factors to local circumstances using 2006 as the base year and the most up to date demographic projections available from the GROS. Where more up to date data was not available, TEMPRO defaults were utilised. TEMPRO Origin / Destination data was used for this calculation. It was used to calculate the Trip End Growth for both East Renfrewshire and Great Britain which was utilised to develop the Adjusted Local Peak Period Growth Factors.

The assumptions used are as follows:

Year	Households	Jobs
2006	35,720	19,334
2011	36,960	19,340
2021	39,490	20,100

### Estimating Average Weekday Traffic Growth

The Adjusted Local Peak Period Growth Factor can be calculated using the following equation:

$$\text{Adjusted Local Peak Period Growth Factor} = \frac{\text{NRTF 97 Growth} \times \text{Trip End Growth (ER)}}{\text{Trip End Growth (GB)}}$$

### Example Calculation

The following is the calculation for the adjusted growth factor for 2011 on an A class road in an urban area within East Renfrewshire.

$$\text{NRTF 97 growth on urban trunk \& principal road} = 116 / 111 = 1.045$$

TEMPRO average weekday driver + passenger trip end growth for East Renfrewshire = 1.0455

TEMPRO average day driver + passenger end growth for Great Britain = 1.050

$$\begin{aligned} \text{Adjusted Local Peak Period Growth Factor} &= \frac{1.045 \times 1.0455}{1.050} \\ &= 1.041 \end{aligned}$$

This figure can now be multiplied with the base year AADT to calculate the estimated AADT on that particular road in 2011.





## RTRA Report Appendix

Adjusted NRTF (Great Britain) 1997 Table

List of Traffic Count Sites

Table 1: Annual Average Daily Flows at Counter Sites

Table 2: Historic Traffic Growth against Base Year

Table 3: Do Minimum Traffic Forecasts

Table 4: Comparison of 2006 and 2007 traffic levels

### Adjusted NRTF (Great Britain) 1997 Table

RURAL ROADS				
Trunk & Principal				
	Motorways	Dual	Other	Total
1996 traffic (bn veh kms)	57.5	49.3	149.1	255.9
1996 = 100	100	100	100	100
2001	116	110	107	110
2006	134	120	115	120
2011	152	129	122	130
2021	188	146	136	150
2031	217	159	146	165

URBAN ROADS				
Trunk & Principal				
	Motorways	Dual	Other	Total
1996 traffic (bn veh kms)	15.9	74.3	92.1	182.3
1996 = 100	100	100	100	100
2001	110	106	110	108
2006	120	111	121	117
2011	129	116	132	125
2021	142	125	153	141
2031	150	131	170	152



## List of Traffic Count Sites

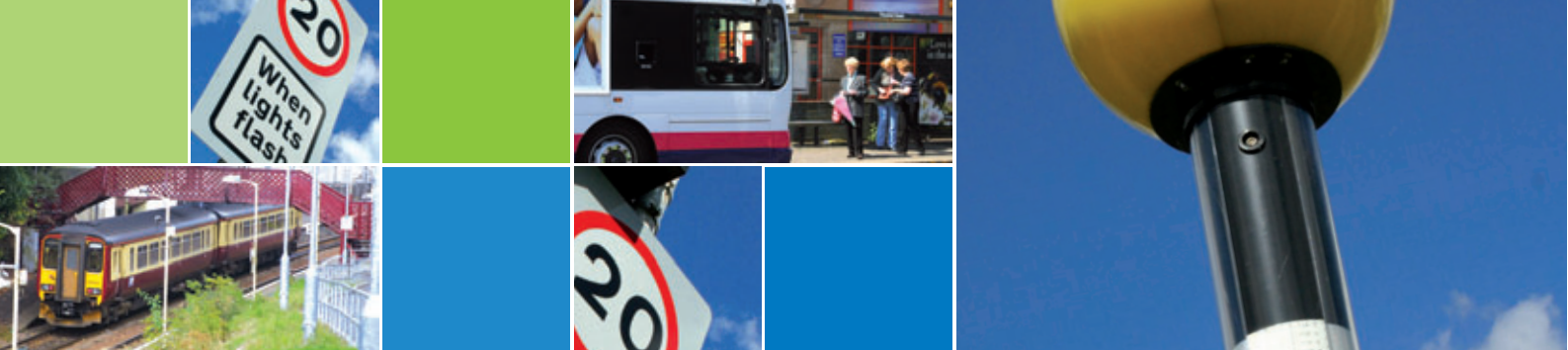
### *Safety Camera Sites*

1. A727 Rouken Glen Road, Giffnock
2. A736 Main Street, Barrhead
3. B769 Spiersbridge Road, Thornliebank
4. A77 Fenwick Road, Giffnock
5. A727 East Kilbride Road, Busby
6. Crookfur Road, Newton Mearns
7. Kingston Road, Neilston
8. Aurs Road, Barrhead
9. Mearns Road, Newton Mearns

### *ATC Sites*

1. B771 Paisley Road, Barrhead
2. A736 Glasgow Road, Barrhead
3. B773 Darnley Road, Barrhead
4. A727 Rouken Glen Road, Thornliebank
5. B769 Thornliebank Road, Thornliebank
6. A77 Fenwick Road, Merrylee
7. B767 Clarkston Road, Netherlee
8. A727 East Kilbride Road, Busby
9. B764 Cheapside Street, Eaglesham
10. B764 Eaglesham Moor
11. A77 Floak
12. B769 Black Hill
13. A736 Lochlibo Road, Uplawmoor
14. B775 Gleniffer Road
15. B776 Rigfoot Farm
16. B775 Gleniffer Road
17. A736 Kelburn Street, Barrhead
18. Neilston Road
19. B769 Aurs Road, Newton Mearns
20. A727 Eastwoodmains Road, Clarkston
21. B767 Glasgow Road, Waterfoot
22. A77 Ayr Road, Newton Mearns
23. B769 Thornliebank Road, Newton Mearns
24. Barrhead Road
25. Mearns Road, Newton Mearns





**Table 1: Average Annual Daily Flows at counter Sites (Two-way flow)**

Road Classification	Status	Description	2003	2004	2005	2006
Trunk Roads	PL	M77 - 1/2 mile South J3 Nitshill Road	44962	44678	50576	54405
	PL	M77 - 1/4 mile S J4 Crookfur Road	28284	27606	36404	42647
	PL	M77 - At J5 Ayr Road South Bound	28104	27126	31085	34545
Average			33783	33137	39355	43866
Principal Roads	SC	A727 Rouken Glen Road, Giffnock	20952	24849	23753	22114
	SC	A727 East Kilbride Road, Busby	19290	19105	17309	15277
	SC	A77 Fenwick Road, Giffnock	17395	16993	16980	14008
	SC	A736 Main Street, Barrhead	21124	21413	21326	20978
Average			19690	20590	19842	18094
B Class Roads	SC	B769 Spiersbridge Road, Thornliebank	11707	12034	12098	12006
Average			11707	12034	12098	12006
C Class Roads\	SC	Crookfur Road, Newton Mearns		11900	10865	9462
Unclassified						
Average				11900	10865	9462

SC - Safety Camera site

PL - Permanent Loops Sensor ATC site

**Table 2: Historic Traffic Growth against Base Year (2006 = 1.000)**

Road Classification	Status	Description	2003	2004	2005	2006
Trunk Roads	PL	M77 - 1/2 mile South J3 Nitshill Road	0.826	0.821	0.930	1.000
	PL	M77 - 1/4 mile S J4 Crookfur Road	0.663	0.647	0.854	1.000
	PL	M77 - At J5 Ayr Road South Bound	0.814	0.785	0.900	1.000
Average						
Principal Roads	SC	A727 Rouken Glen Road, Giffnock	0.947	1.124	1.074	1.000
	SC	A727 East Kilbride Road, Busby	1.263	1.251	1.133	1.000
	SC	A77 Fenwick Road, Giffnock	1.242	1.213	1.212	1.000
	SC	A736 Main Street, Barrhead	1.007	1.021	1.017	1.000
Average						
B Class Roads	SC	B769 Spiersbridge Road, Thornliebank	0.975	1.002	1.008	1.000
Average						
C Class Roads\	SC	Crookfur Road, Newton Mearns		1.258	1.148	1.000
Unclassified						
Average						

SC - Safety Camera site

PL - Permanent Loops Sensor ATC site



**Table 3: Do Minimum Traffic Forecasts**

Road Classification	Urban/Rural	Description	Do Minimum Traffic Growth			Forecast Do Minimum Traffic Levels		
			Base Year (2006)	2011	2021	Base Year (2006)	2011	2021
Trunk Roads	rural	M77 - 1/2 mile South J3 Nitshill Road	1.00	1.041	1.206	50576	52650	60995
	rural	M77 - 1/4 mile S J4 Crookfur Road	1.00	1.041	1.206	36404	37897	43903
	rural	M77 - At J5 Ayr Road South Bound	1.00	1.041	1.206	31085	32359	37489
Principal Roads	urban	A736 Glasgow Road, Barrhead	1.00	1.041	1.206	14265	14850	17204
	urban	A727 Rouken Glen Road, Thornliebank	1.00	1.041	1.206	19646	20451	23693
	urban	A77 Fenwick Road, Merrylee	1.00	1.041	1.206	12312	12817	14848
	urban	A727 East Kilbride Road, Busby	1.00	1.041	1.206	14291	14877	17235
	urban	A736 Kelburn Street, Barrhead	1.00	1.041	1.206	17439	18154	21031
	urban	A727 Eastwoodmains Road, Clarkston	1.00	1.041	1.206	20505	21346	24729
	urban	A77 Ayr Road, Newton Mearns	1.00	1.041	1.206	11449	11918	13807
	rural	A77 Floak	1.00	1.070	1.304	1210	1295	1578
	rural	A736 Lochlibo Road, Uplawmoor	1.00	1.070	1.304	5265	5634	6866
	rural	A736 Lochlibo Road, Barrhead	1.00	1.070	1.304	6243	6680	8141
B Class Roads	urban	B769 Spiersbridge Road, Thornliebank	1.00	1.086	1.354	12098	13138	16381
	urban	B771 Paisley Road, Barrhead	1.00	1.086	1.354	13503	14664	18283
	urban	B773 Darnley Road, Barrhead	1.00	1.086	1.354	9304	10104	12598
	urban	B769 Thornliebank Road, Thornliebank	1.00	1.086	1.354	13214	14350	17892
	urban	B769 Thornliebank Rd, Newton Mearns	1.00	1.086	1.354	3334	3621	4514
	urban	B767 Clarkston Road, Netherlee	1.00	1.086	1.354	18430	20015	24954
	urban	B769 Aurs Road, Newton Mearns	1.00	1.086	1.354	7200	7819	9749
	urban	B767 Glasgow Road, Waterfoot	1.00	1.086	1.354	5874	6379	7953
	urban	B759 Carmuncock Rd at Kittoch bridge	1.00	1.086	1.354	9439	10251	12780
	rural	B764 Cheapside Street, Eaglesham	1.00	1.056	1.267	3584	3785	4541
	rural	B764 Eaglesham Moor	1.00	1.056	1.267	1019	1076	1291
	rural	B769 Black Hill	1.00	1.056	1.267	889	939	1126
	rural	B775 Gleniffer Road	1.00	1.056	1.267	2582	2727	3271
	rural	B776 Rigfoot Farm	1.00	1.056	1.267	750	792	950
C Class Roads/ Unclassified	urban	Crookfur Road, Newton Mearns	1.00	1.086	1.354	9462	10276	12812
	urban	Neilston Road	1.00	1.086	1.354	8048	8740	10897
	urban	Barrhead Road, Newton Mearns	1.00	1.086	1.354	10550	11457	14285
	urban	Mearns Road, Newton Mearns	1.00	1.086	1.354	7870	8547	10656
	urban	Aurs Road, Barrhead	1.00	1.086	1.354	6800	7385	9207
	urban	Blackbyres Road, Barrhead	1.00	1.086	1.354	4278	4646	5792
	urban	Burnfield Road, Giffnock	1.00	1.086	1.354	4477	4862	6062
	urban	Braidholm Road, Giffnock	1.00	1.086	1.354	11495	12484	15564
	urban	Woodvale Avenue, Giffnock	1.00	1.086	1.354	2852	3097	3862
	rural	Springfield Road, east of Neilston	1.00	1.056	1.267	758	800	960
	rural	Waterfoot Road, Newton Mearns	1.00	1.056	1.267	3387	3577	4291
	rural	Humbie Road at Earn Water	1.00	1.056	1.267	1658	1751	2101
	rural	Malletsheugh Road	1.00	1.056	1.267	123	130	156





**Table 4: Comparison of 2006 and 2007 traffic levels**

Road Classification	Urban/Rural	Description	2006	2007	Difference	% Difference
Principal Roads	Urban	A727 East Kilbride Road, Busby	14,291	14,296	5	0.03%
	Urban	A727 Eastwoodmains Road, Clarkston	20,505	19,129	-1,376	-6.71%
	Urban	A727 Rouken Glen Road, Thornliebank	19,646	20,682	1,036	5.27%
	Urban	A736 Glasgow Road, Barrhead	14,265	14,222	-43	-0.30%
	Urban	A736 Kelburn Street, Barrhead	17,439	17,311	-128	-0.73%
	Rural	A736 Lochlibo Road, Uplawmoor	5,265	5,208	-57	-1.08%
	Urban	A77 Ayr Road, Newton Mearns	11,449	11,539	90	0.78%
	Urban	A77 Fenwick Road, Merrylee	12,312	12,377	65	0.53%
B Class Roads	Rural	A77 Floak	1,210	1,350	140	11.53%
	Rural	B764 Cheapside Street, Eaglesham	3,584	3,675	91	2.53%
	Rural	B764 Eaglesham Moor	1,019	1,193	174	17.03%
	Urban	B767 Clarkston Road, Netherlee	18,430	18,782	352	1.91%
	Urban	B767 Glasgow Road, Waterfoot	5,874	6,040	166	2.82%
	Urban	B769 Aurs Road, Newton Mearns	7,200	7,274	74	1.02%
	Rural	B769 Black Hill	889	876	-14	-1.52%
	Urban	B769 Thornliebank Road, Newton Mearns	3,334	3,468	134	4.02%
	Urban	B769 Thornliebank Road, Thornliebank	13,214	13,323	109	0.82%
	Urban	B771 Paisley Road, Barrhead	13,503	13,682	179	1.32%
	Urban	B773 Darnley Road, Barrhead	9,304	9,678	374	4.02%
	Rural	B775 Glenifer Road, at junction with B777	2,582	2,804	222	8.60%
	Rural	B775 Glenifer Road, Caplaw Farm	4,241	3,631	-611	-14.40%
Rural	B776 Rigfoot Farm	750	744	-7	-0.87%	
Unclassified Roads	Urban	Barrhead Road, Newton Mearns	10,550	10,905	355	3.36%
	Urban	Mearns Road, Newton Mearns	7,870	7,937	67	0.85%
	Urban	Neilston Road	8,048	8,092	44	0.55%
All Roads	N/A	Total	226,774	228,213	1,439	0.63%





## Appendix B: STAG Appraisal Summary Table

Proposal Details	
<b>Name and address of the authority or organisation promoting the proposal:</b> East Renfrewshire Council	
<b>Proposal Name:</b> Integrated Modal & Spatial Strategy	<b>Name of Planner:</b> Alec Knox
<b>Proposal Description:</b> A coordinated approach to modal and spatial issues. Access will be provided by a range of transport modes with emphasis on alternatives to motorised travel. Acknowledgement of the need to ensure efficient operation of the road network and that some journeys cannot be transferred to alternative modes. Appropriate roads interventions and maintenance will be undertaken along with any necessary demand management measures. Access to services and employment within East Renfrewshire and surrounding areas will be pursued. Enhanced accessibility for those in danger of social exclusion.	
<b>Estimated Total Public Sector Funding Requirement:</b>	
Council Capital: £0.9M	RTP Capital: £0.3M
Other Capital: £0.5M	Council Revenue: £3.5M
	Cost to Government: £5.2M
<b>Funding sought from:</b> Council, SPT, Scottish Executive, Other (e.g. developer contributions, Sustrans, etc.)	<b>Amount sought:</b> £0.8M
Background Information	
<b>Geographic Context:</b> East Renfrewshire has a population of 89,600 resident in 35,512 households. Situated to the south of Glasgow and with good transport links to the city it is an attractive location for commuters. The authority covers an area of approximately 174 square kilometres with suburban residential housing in the north and the town of Barrhead situated in the Levern Valley in the northwest. A significant rural hinterland in the south incorporates a number of small settlements including Neilston, Eaglesham, Waterfoot and Uplawmoor. The M77 is a important strategic route providing links between Ayrshire and Glasgow via East Renfrewshire. Other key routes include the A726 Glasgow Southern Orbital linking the M77 to East Kilbride, A727 through Clarkston and Busby, the A736 through Barrhead and A77 in Newton Mearns and Giffnock.	
<b>Social Context:</b> The social composition of East Renfrewshire varies considerably across the authority although generally speaking it is a relatively affluent area without any significant deprivation problems. The exception is within Barrhead which has been identified as an area in need of economic and urban regeneration. The Scottish Index of Multiple Deprivation 2004 has identified parts of Barrhead as being in the 5%, 10% and 15% most deprived areas of Scotland respectively. Social exclusion in these areas is a concern. This is also an issue in the rural parts of the authority where public transport is less readily available and those without access to a car are at risk of being marginalised from society. Newton Mearns is regarded as a particularly affluent part of the authority. As such, the dichotomy of the social profile in the area raises a number of differing issues which must be taken into consideration and addressed in the LTS.	
<b>Economic Context:</b> The employment rate is around 80% of the working age population which is regarded to be as close to "full employment" as practically possible. Unemployment rates are low but vary across the authority area with the Barrhead and Neilston areas showing higher levels than the rest of the authority. Residents of East Renfrewshire are heavily dependent upon employment opportunities in neighbouring authorities with 70% of the working population commuting out of the authority area. 64% of all out-commuters go to Glasgow, 13% to Renfrewshire and 11% to Lanarkshire. East Renfrewshire provides around 20,300 jobs predominantly in public services, retail & catering, financial & business services and construction. 36% growth in the number of financial & business services jobs is expected in the period to 2010. The area has suffered from the decline of traditional industries with Barrhead being particularly affected by this. There is a general lack of services and employment opportunities in East Renfrewshire.	







**Planning Objectives**

Objective:	Performance against objective:
Reduce the need to travel and stimulate sustainable economic development in the local area.	Improved access to local facilities likely to reduce the need to travel. Local economic development stimulated through enhanced accessibility to key locations and markets.
Reduce car dependency and stimulate modal shift to walking, cycling and public transport.	Modal shift stimulated by pursuing improvements to alternative modes and implementation of demand management measures if necessary. More local economic activity will reduce trip lengths and make them more conducive to being undertaken by walking and cycling.
Enhance access to jobs and services by a variety of modes of transport for all members of society.	Improved access to key economic locations by a range of modes pursued thus improvements in accessibility for all members of society.
Reduce the negative environmental impacts of transport.	Negative environmental impacts of transport reduced by improvements in alternative modes of transport and encouragement of modal shift. More efficient operation of transport networks will reduce the occurrence of localised environmental problems.
Reduce congestion on all transport modes and services.	Congestion reduced on roads by encouraging modal shift and any necessary demand management measures. Reduced congestion on public transport dependent upon cooperation from operators.
Improve safety and security on transport networks and services.	Safety improved on road network through careful management of its operation. Measures pursued to increase security when waiting for public transport and using other transport networks. Improvements on public transport services is the responsibility of operators.
Enhance integration and efficiency of transport networks, infrastructure and services.	Integration and efficiency enhanced by improvements in access to key economic locations and by implementation of facilities to encourage modal shift. Greater service integration is at the discretion of operators although partnership working can be employed to facilitate this.
Promote awareness of alternatives to the private car.	Improvements in alternative modes of transport to the car are likely to raise awareness of these facilities. Partnership working with key bodies will be undertaken to publicise the alternative modes available.
Maintain roads and other transport infrastructure in a condition that ensures it is fit for purpose.	Road maintenance is given due consideration but it is not guaranteed that sufficient resources will be available to ensure the existing backlog of maintenance is addressed. The need for maintenance of all transport infrastructure, not just roads, is taken into account.

**Implementability Appraisal**

<b>Technical:</b>	No significant technical problems are foreseen. Proposals are likely to involve implementation of tried and tested facilities. Thorough investigation of any innovative technologies or schemes will be undertaken prior to their implementation.
<b>Operational:</b>	Any improvements in public transport provision are at the discretion of operators and are thus outwith the control of the Council. Partnership working with operators will be required to realise improvements. Resolution of some capacity restrictions including rail network constraints, train and bus overcrowding will also require partnership working. Enhanced access to surrounding areas will necessitate close working with neighbouring authorities.
<b>Financial:</b>	Funding from external sources is likely to be available for the development of facilities for alternative modes to motorised transport. Match funding from neighbouring authorities may be available for schemes to improve linkages with surrounding areas. Options for funding will be investigated further as schemes are developed towards implementation. It is assumed that Central and Local Government funding allocations will be maintained at existing levels as a minimum. Expenditure on road maintenance will be continued at existing levels and increased to address the existing backlog if possible. Funding levels are, however, not guaranteed and this will affect the ability to implement the strategy to its full extent. "



**Public:** The public is likely to be supportive of improvements in access to key economic locations within and outwith the authority. There is also likely to be support for improvements in public transport provision although demand management, if necessary, would be a more contentious issue. Preliminary consultation did not identify an adverse reaction to the principles of the LTS and options have been prepared taking into consideration the issues raised by the public.

**Government Objectives for Transport**

Objective	Assessment Summary	Supporting Information
<b>Environment:</b>	Moderate Positive. The environmental impact of transport will be reduced by promotion of modal shift and reducing the need to travel.	Improvements in alternative modes of transport and demand management measures, if appropriate, will stimulate modal shift from motorised transport reducing the environmental impact of travel. Measures to reduce the need to travel through encouraging greater local economic activity will compound this trend. Shorter journeys are more likely to be undertaken by walking and cycling significantly reducing their environmental impact. Even if journeys are still undertaken by car their environmental impact will be lessened by the reduced journey time.
<b>Safety:</b>	Moderate Positive. Improvements in safety will be achieved by enhancement of transport facilities and networks.	Careful management of the road network will improve safety for all users of it. Any new infrastructure will have safety as a paramount consideration. Improvements in facilities will make walking, cycling and waiting for public transport more secure. Security on public transport services is outwith the control of the Council and will require action by operators.
<b>Economy:</b>	Major Positive. Access to employment opportunities and services will be improved for residents and economic activity will be promoted by improvements in accessibility.	Economic development will be encouraged by measures that ensure better access to key locations locally and in the surrounding area as well as the efficient operation of existing and new transport networks and services. Improvements in accessibility for those without access to a car along with greater integration between areas will reduce the occurrence of social exclusion and encourage participation in the labour market.
<b>Integration:</b>	Moderate Positive. Integration of infrastructure and policy improved. Service integration is at the discretion of public transport operators.	Enhanced linkages to employment and services will improve integration. Improved links within the authority will provide greater integration and interaction between areas. Improved interchange facilities and consideration of all modes will enhance integration of transport services and infrastructure although service integration is dependent upon working with operators to encourage a more coordinated approach to be taken. The promotion of modal shift and reducing the need to travel is consistent with policy objectives. Land-use and transport planning integration is improved.
<b>Accessibility &amp; Social Inclusion:</b>	Moderate Positive. Accessibility and social inclusion will be improved by targeted investment that takes into consideration areas and social groups with the greatest need.	Attempts will be made to provide access by a range of transport modes although improved public transport services will require cooperation from operators. Those without access to a car will be targeted to mitigate the occurrence of social exclusion. Overall accessibility to services and employment will be enhanced encouraging greater participation in the labour market and economic activity.

**Option acceptance or rejection:** Accept. Proposal contributes to all the objectives and reconciles the spatial and modal elements of the issues faced by East Renfrewshire addressing them in a coordinated manner.





## Appendix C: Technical Papers

The Local Transport Strategy is supported by a suite of Technical Papers which provide the detailed evidence base upon which the strategy has been based. For brevity these Technical Papers have not been included as appendices to the LTS but are available on request to anyone who may require them. Copies of the Technical Papers can be obtained through the contact details below or via the Council's website. The Technical Papers are as follows:

- TP 1: Appraisal of Objectives. This outlines the process undertaken to develop the objectives of the new LTS. It appraises the objectives of the 1st LTS against the SPT/Westrans Joint Transport Strategy and Scotland's transport future as well as some key transport issues then tests alternative objectives against the same criteria.
- TP 2: Travel to Work & Study. Analysis of the travel to work and study data collected as part of the Census in 2001 was undertaken to garner an understanding of the travel characteristics of the residents of East Renfrewshire. A summary of this analysis is presented in this Technical Paper to assist in identifying the prevailing transport trends and any issues or problems these may present.
- TP 3: Secondary Data Analysis. This paper compiles an analysis of secondary data that is of relevance to transport in East Renfrewshire. This has been undertaken to help establish a baseline for monitoring against future conditions following the implementation of the LTS and to ascertain the prevailing conditions in order to assist in the identification of problems, issues and constraints that need to be addressed.
- TP 4: Spatial Analysis. Utilising data available from the Census 2001 this paper examines the spatial distribution of transport related characteristics across East Renfrewshire to establish variations between different parts of the authority area. This has also been employed to help identify problems, issues and constraints to be considered in the strategy.
- TP 5: Option Generation & Sifting. This paper outlines a range of potential strategy options developed paying heed to the underpinning themes of modal and spatial issues which have identified as being fundamental to the transport problems being encountered in East Renfrewshire. Initial sifting of options is undertaken to rule out any that are deemed to be unfeasible or inappropriate with the remaining options taken forward to be subjected to STAG Part 1 appraisal.
- TP 6: STAG Part 1 – Option Appraisal. The strategy options that emerged from the initial sifting exercise were then subjected to a STAG Part 1 appraisal with the results detailed in this paper. Three options were considered and Appraisal Summary Tables prepared for each. The STAG Part 1 appraisal resulted in the selection of a preferred option to form the basis of the Local Transport Strategy. This option is subsequently refined in more detail by the utilisation of a modified STAG Part 2 appraisal process.





- TP 7: STAG Part 2 – Option Refinement. In this instance the STAG Part 2 appraisal was modified to reflect the fact that the standard process is more suited to the appraisal of projects rather than strategies. This paper details the process that was undertaken to refine the preferred strategy option and help to identify potential solutions which could help to implement it. These potential solutions form the basis for the LTS Action Plan.
- TP 8: Issues & Objectives Consultation Responses. This paper outlines in more detail the responses received to the preliminary Issues and Objectives consultation undertaken as well as touching upon other relevant public and stakeholder consultation findings as well.
- TP 9: Consultative Draft Responses. This summarises the responses that were received to the consultation of the Draft LTS and outlines the action that was taken in relation to these responses in the final LTS.
- TP 10: Road Traffic Reduction Act Report. This is the full version of the RTRA Report including count location maps and detailed traffic count data.

Copies of these Technical Papers or further information about them can be obtained by e-mailing [LTS@eastrenfrewshire.gov.uk](mailto:LTS@eastrenfrewshire.gov.uk) or through the Council's website at [www.eastrenfrewshire.gov.uk/lts](http://www.eastrenfrewshire.gov.uk/lts).





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