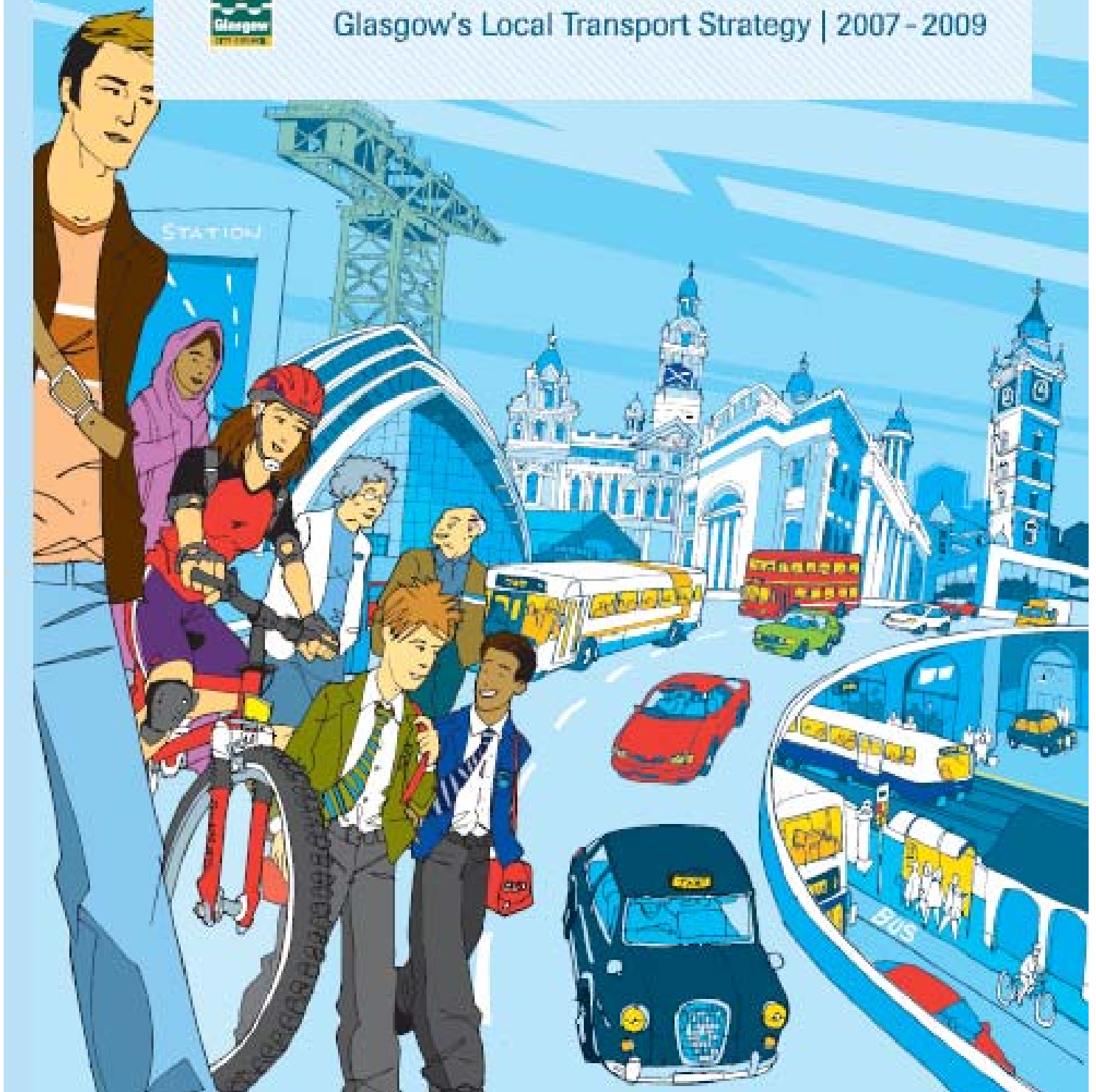




KEEPING GLASGOW MOVING

Glasgow's Local Transport Strategy | 2007 - 2009



FOREWORD



Transportation issues are interwoven into all aspects of society. The travel choices people make have a significant effect on the local and global environment as well as influencing the health and well being of the population.

The effects of global warming on the environment and the economy have been highlighted through the recent publication of the Stern Report. With transport related emissions currently accounting for around 25% of all greenhouse gas emissions in the UK, the importance of making the correct transport policy decisions has never been more important.

At a more local level an efficient and accessible transport system has a vital role in providing access for all to health care, employment, education and the many other opportunities the City has to offer. Providing for the efficient movement of customers and goods is also crucial for maintaining a vibrant economy.

The policies and actions contained within the Council's transport strategy will work towards making Glasgow a more pleasant, vibrant, safe and healthy city in which to live, work and visit, while also contributing to improving the environment and economy, at a local, regional and national level.



Councillor William O'Rourke
Executive Member for
Roads and Lighting



Robert Booth
Executive Director of Land and
Environmental Services

EXECUTIVE SUMMARY





This Local Transport Strategy sets out Glasgow City Council's aspirations for taking forward transport policy and infrastructure within Glasgow. As well as communicating the Council's transport strategy it also informs the development of the statutory Regional Transport Strategy and outlines the framework for delivering the objectives of the National Transport Strategy and Regional Transport Strategy at a local level.

It is a non-statutory document that sets out the Council's transport policies and associated actions. The document covers the period 2007–2009 and builds on the success of the previous strategy 'Keep Glasgow Moving'.

The strategy has been developed taking account of other relevant strategies at a national, regional and local level as well as the feedback from an extensive consultation exercise and an examination of local issues, problems and opportunities.

Five high level objectives have been set. These are:

LTS1 - Support the continuing physical, social, economic, cultural and environmental regeneration of the City by maintaining and promoting efficient and effective transportation services and infrastructure within Glasgow.

LTS2 - Promote social inclusion and tackle poverty by seeking to ensure that transport is accessible to all sections of the community and provides good links to employment, health care, education and leisure.

LTS3 - Promote healthy and environmentally sustainable methods of transport that minimise harmful emissions and energy consumption including those that involve physical activity.

LTS4 - Improve the safety and the actual and perceived security of travelling within the City by reducing accidents and enhancing the personal security of all users of the transport network.

LTS5 - Promote integration of the transport system and provision of travel information within Glasgow.

A balanced strategy has been adopted, which concentrates on promoting and enhancing sustainable transport modes such as walking, cycling and public transport. There is limited investment in roads infrastructure to tackle key congestion points, provide essential links to development areas and provide links to enable public transport to provide effective circumferential services.

VISION STATEMENT

'Glasgow's transport vision is to provide a world class transport system which is safe, reliable, integrated and accessible to all citizens and visitors: A transport system that continues to support the physical, social, economic, cultural, environmental and economic regeneration of the City while contributing to the overall well-being, health and fitness of present and future generations: A system where transport serves all sections of the community equally and there are no transport barriers in terms of accessing jobs, health care, education and leisure.'

A number of specific policies and associated actions have been developed to work towards achieving the above vision and to deliver the transport strategy. These cover all aspect of transportation and have been divided into the following topics:

- Improving Accessibility
- Improving Travel Choice
- Traffic and Demand Management
- Improving Travel Safety
- Improving the Economy
- Maintaining the Network
- Improving the Environment
- City Centre

In order to measure the success of the strategy in achieving the national and local objectives a number of performance indicators have been established. An annual monitoring report will be produced on performance against the strategy's policies and actions.

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1. INTRODUCTION



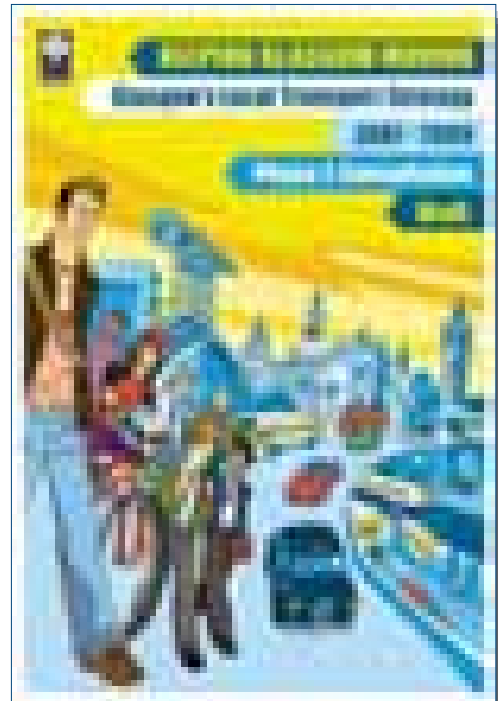


INTRODUCTION

In line with guidance issued by the Scottish Executive, the Council has produced an updated Local Transport Strategy. This strategy covers the three year period from 2007 to 2009, although some of the projects which make up the strategy extend beyond this period. The strategy has been developed taking account of the feedback from an extensive consultation exercise involving the distribution of a questionnaire, the holding of a series of workshops and the distribution for comment of a draft strategy document. As well as communicating the Council's transport strategy, it provides the policy basis for existing and new roads and transportation infrastructure within Glasgow. The strategy also supports the work of other agencies and transport providers in improving transport provision.

The strategy will inform, and has been informed by, the development of other statutory transport strategies and plans that will affect Glasgow and the surrounding metropolitan area, such as the City Plan and the Regional Transport Strategy. It also outlines the framework for delivering the objectives of the National and Regional Transport Strategies at a local level. Finally, the policies contained in the document will provide the policy background for funding bids for the delivery of transport related projects and initiatives.

The policies in this strategy document build on the success of those contained in the previous strategy document 'Keep Glasgow Moving'. However, changes have occurred since publication of that document in terms of transport policy delivery, including the formation of the Regional Transport Partnership (Strathclyde Partnership for Transport) and Transport Scotland, the national transport agency. Strathclyde Partnership for Transport is developing a Regional Transport Strategy while the Scottish Executive has published the National Transport Strategy. To account for the changing context in which the Local Transport Strategy will be delivered, a number of additional policy areas, which were not addressed either in whole or part in the previous document, are covered in the updated strategy. These include such matters as social inclusion, asset management, community planning, accessibility planning and community transport.



DEVELOPMENT OF THE DRAFT DOCUMENT

Local Transport Strategies are non statutory documents and the Scottish Executive Guidelines ('Scotland's Transport Future: Guidance On Local Transport Strategies February 2005') provide guidance on their development. It suggests five elements in the development of the strategy:

- 1) **Analysis** - an analysis of current and future local issues, travel patterns and planned developments taking into account relevant national, regional and local plans and strategies.
- 2) **Objective Setting** – developing a set of high level objectives taking account of the output from the above analysis.
- 3) **Choosing Options** – generating a set of options for achieving the above objectives and selecting a preferred option using the Scottish Transport Appraisal Guidance (STAG) methodology. This methodology provides a framework to assess alternative strategy options against the Scottish Executive's five objectives for transport.
- 4) **Implementation** – detail the actions that are to be undertaken in order to achieve the preferred strategy option.
- 5) **Monitoring and Evaluation** – describe the monitoring and evaluation that is to be undertaken to measure the performance of the strategy.

As well as requiring the development of the strategy to comply with STAG methodology, the guidance also highlights the requirement for strategies to be developed under the Strategic Environmental Assessment (SEA) Directive (EU Directive 2001/42/EC). The first stage of this process is normally to undergo a screening process to ascertain whether a full SEA is required. However, promoting a sustainable environment within the City is one of Glasgow City Council's key objectives and a full SEA of the Local Transport Strategy (LTS) has been undertaken.

Stakeholder involvement has been a key element in the development of the strategy and the feedback from the widespread distribution and subsequent analysis of a

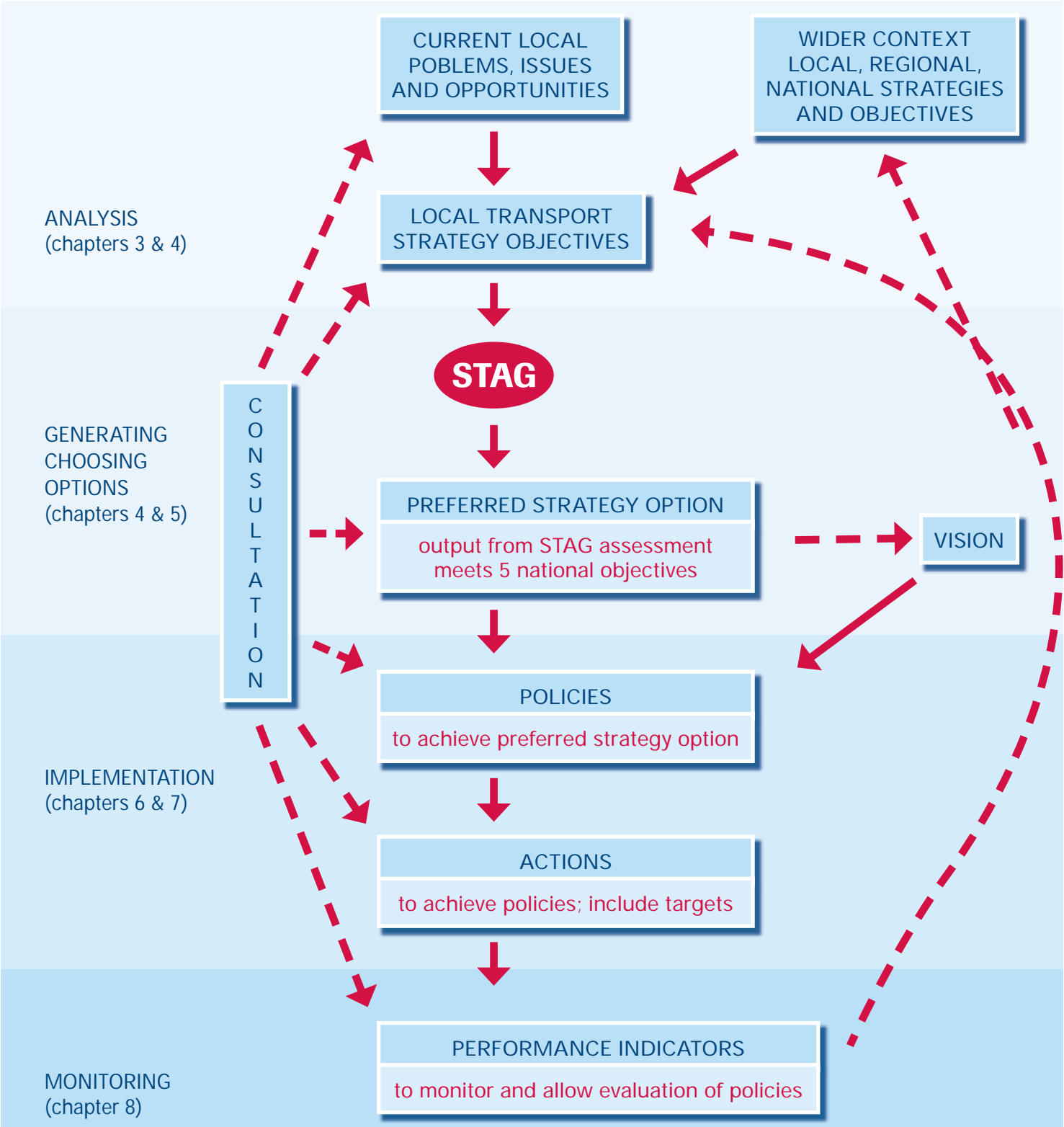
questionnaire, a series of workshops and comments on a draft strategy document have been utilised in developing the strategy. A consultation audit of the document has been undertaken to ensure the views expressed have been accounted for. Feedback from the Citizens Panel consultation has also been utilised. A full description of the consultation process undertaken along with a summary of the results is contained in Appendix 1.

The methodology used for the development of the strategies, policies and actions contained within this document closely follow the Scottish Executive Guidelines outlined above. The process is illustrated in Figure 1.1





FIGURE 1.1 - LTS - PROCESS



DOCUMENT STRUCTURE

Chapter 2 – contains a review and summary of the achievements of Glasgow’s previous local transport strategy ‘Keep Glasgow Moving’.

Chapter 3 - outlines the wider context within which the LTS sits in relation to other local, regional and national strategies.

Chapter 4 – gives a summary of the current problems, issues and opportunities facing Glasgow and, based on these, sets out the high level objectives of the LTS. It then describes the Scottish Transport Appraisal Guidance (STAG) process that has been undertaken on the overall strategy options considered and details the preferred strategy adopted.

Chapter 5 - contains the vision for transport within Glasgow building on the preferred strategy produced from the STAG process.

Chapter 6 – contains the more detailed policies that form the preferred strategy and the actions proposed to implement these policies, making reference to the relevant feedback from the consultation process.

Chapter 7 – contains more details on the actions in Chapter 6 providing details of funding sources and who is responsible for delivering each element of the strategy.

Chapter 8 – sets out the performance indicators that will allow the Council to measure the success of its policies and actions in meeting its high level transport objectives.

2. 'KEEP GLASGOW MOVING' - PROGRESS





BACKGROUND

In 1998, Glasgow City Council produced its initial Local Transport Strategy (LTS), 'Keep Glasgow Moving.' In the same year the Scottish Executive published the White Papers 'A New Deal for Transport' and 'Travel Choices for Scotland'. Through these, local authorities were encouraged to develop Local Transport Strategy documents. Following this guidance, Keep Glasgow Moving was reviewed and updated and submitted to the Scottish Executive as an interim strategy document. The current 'Keep Glasgow Moving 2001 – 2004' was developed from this interim document taking account of the results from a full public consultation exercise undertaken in April / May 2000.

Within 'Keep Glasgow Moving' the strategy objectives were split into three categories –

- **MANAGEMENT OF THE NETWORK**
- **DEVELOPMENT OF THE NETWORK**
- **MAINTENANCE OF THE NETWORK**

For each of these categories, the aims, policies, implementation plans and targets were described in detail.

This chapter outlines some of the major achievements under each of the above categories and then assesses the Council's success in undertaking the implementation plans and meeting the targets.

SUMMARY OF ACHIEVEMENTS

Glasgow City Council has had considerable success in implementing the policies and actions contained in the 2001 / 2004 LTS. A large number of schemes have been introduced covering areas such as public transport, cycling, accident reduction, parking and maintenance. These schemes have contributed towards meeting the overall vision and aims of the 2001 / 04 LTS. Examples include achieving a reduction in the level of traffic using Glasgow's local road network and a greater reduction in road casualties compared to the national average.

Some of the main actions undertaken are summarised below.

MANAGEMENT OF THE NETWORK

Streamline

- Eight Streamline Corridors have been introduced across Glasgow through a £30 million partnership providing a high quality bus priority network.
- A ground breaking 'quality partnership' has been implemented between Glasgow City Council and bus company 'First'.
- Bus priority measures have been implemented at key locations. High quality buses, improvements to bus stops and the use of the latest technology to provide additional priority for buses and improved information on bus arrival times have also been introduced.
- Measures to improve safety, the pedestrian environment and conditions for businesses have been introduced along the corridors.
- The project was awarded the prestigious UK National Traffic Management Award 2006, a UK National Bus Industry Award and a technology award at the Scottish Transport Awards 2006.



Road Safety / Accident Investigation & Prevention

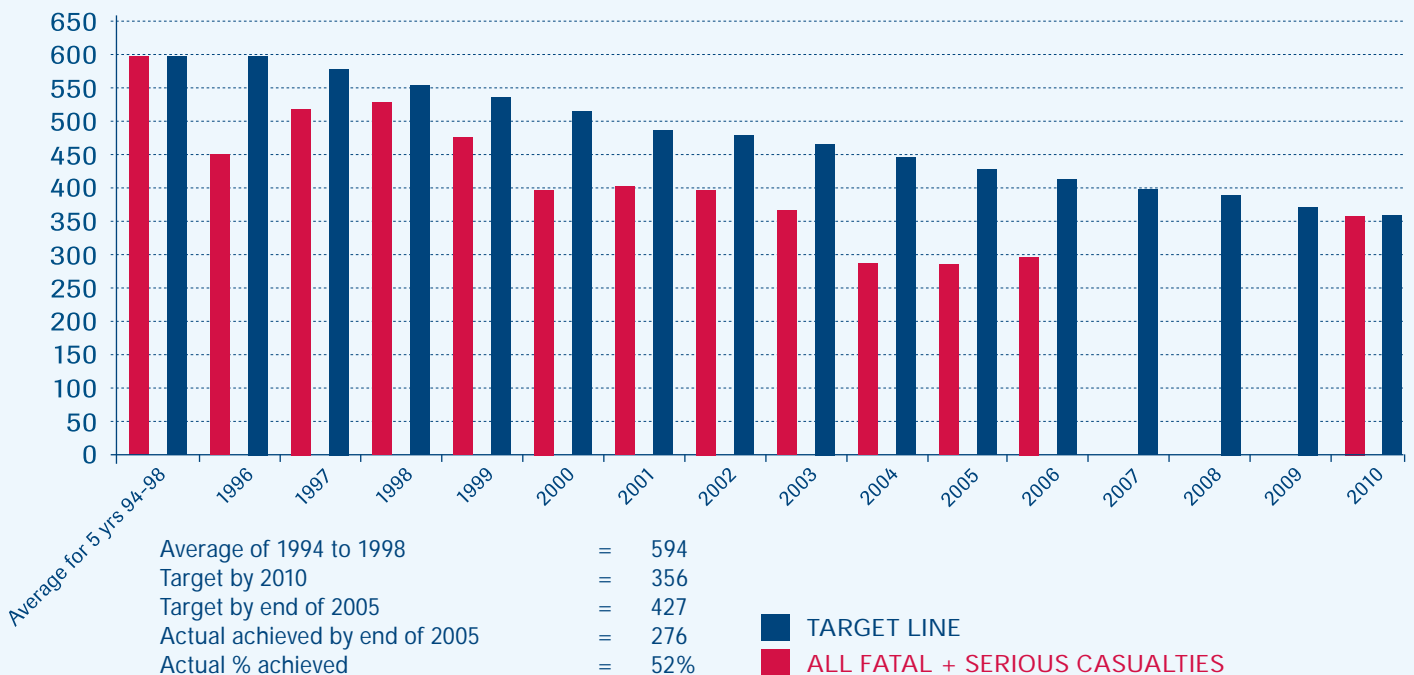
- TWenty mph Limits At Schools ('TWELAS') schemes have been introduced at all primary and secondary schools in Glasgow. These impose twenty mph speed limits outside schools during pupil arrival and departure times.
- 51 Twenty's Plenty schemes have been introduced in self contained residential areas to encourage safer driving.
- A 51% reduction has been achieved in people killed or seriously injured in road accidents in Glasgow compared to the 1994-1998 average. In view of this excellent progress made in reducing fatal and serious casualties, Glasgow City Council has decided to revise the targets. Instead of a 40% reduction in fatal and serious casualties and a 50% reduction in fatal and serious child casualties by the year 2010, Glasgow is now aiming for an extra 10% reduction in each category by the year 2008.

Parking

- In the public consultation exercise undertaken in 2000, 88% of respondents agreed that, where parking demand is high, residents should have priority over commuters. In response to this, in order to provide priority for residents, 8 restricted parking zones have been introduced to the west of the City Centre. These are being controlled using 'positive marking' where signs are erected at the entry points to the restricted zones stating that parking is only authorised in marked bays. Within the zones there are no yellow lines on the road and fewer signs thus reducing subsequent maintenance costs and visual intrusion.
- The capacity of Shields Road subway station park and ride has been increased from 545 spaces to over 800 and positive signing has been introduced to encourage use. In addition cycle lanes have been introduced in the vicinity of the car park.

GOVERNMENT TARGETS FOR 2010

40% REDUCTION IN ALL FATAL AND SERIOUS CASUALTIES



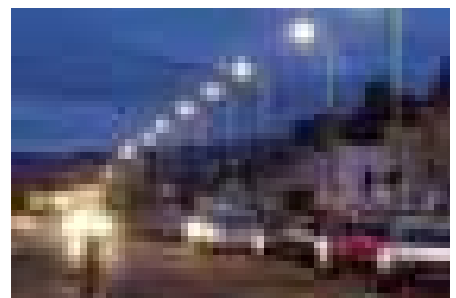
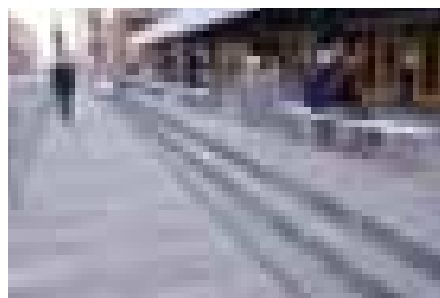
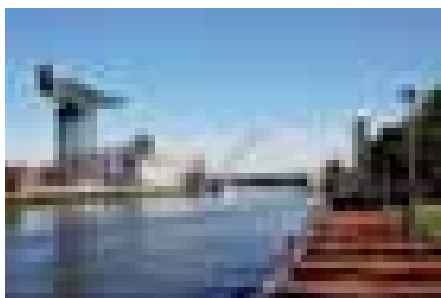


Sustainable Transport

- 212km of cycle routes have been created comprising traffic calmed streets, bus/cycle lanes, purpose built off-road tracks, designated routes in parks, signalised crossings at main roads, advanced stop lines at traffic junctions and cycle bypasses of road closures.
- Glasgow City Council achieved 'highly commended' status in the cycling category of the prestigious 2004 National Transport Awards and won the best UK participant for work carried out for European Mobility Week in 2004 and in 2006.
- The School Bike Loan Scheme has been introduced, which has seen nearly 100 bicycles loaned to four pilot schools and an increase from 0% to 7% of pupils cycling to St Mungo's Academy, the first school where the scheme was introduced.
- Over 500 cycle parking units have been installed throughout the city, many of which are located within the City Centre, main shopping areas and within schools.
- 38 schools have benefited from Safer Routes to School Schemes, to encourage more pupils to walk or cycle to school.

DEVELOPMENT OF THE NETWORK

- Clyde Arc, the first major transport crossing of the River Clyde since the Kingston Bridge has been constructed at Finnieston providing improved public transport connections and access to Pacific Quay where the BBC and SMG have relocated. As well as providing two lanes for general traffic, the bridge has two public transport/cycle lanes and pedestrian footways.
- Major public realm improvements have been introduced in the International Financial Services District of the City, improving the environment for pedestrians. This £5.7million project covering 11,500m² was completed in July 2006.
- Planning consent has been received for the East End Regeneration Route, which involves the construction of a 3.8km road with the aim of improving accessibility between the East End of Glasgow and the strategic road network to facilitate regeneration in the Clyde Gateway area.
- Proposals have been developed for Fastlink, a state of the art public transport service utilising tram like road vehicles, to provide better, safer and more reliable travel along the Clyde Corridor from Glasgow Central Station to Glasgow Harbour. Planning permission has been obtained for this section and studies undertaken into a wider network.
- In order to improve visibility and safety for drivers and pedestrians new white lighting has been or is being installed on 36 projects across the main arterial routes in the city. To date this has involved the installation of around 4,000 lanterns and 3,000 new street lighting columns.





- The M74 Completion was taken forward by the Scottish Executive in partnership with Glasgow City, South Lanarkshire and Renfrewshire Councils early in 2001. In August 2006, following a public local inquiry, the procurement process commenced, and the road is now programmed to open in 2011.

MAINTENANCE OF THE NETWORK

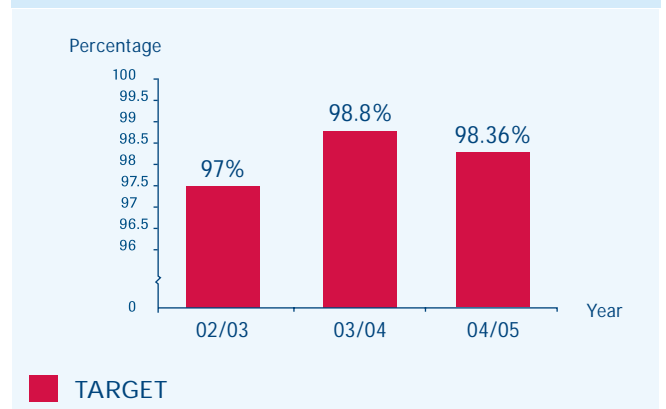
- A programme of carriageway and footway resurfacing works approved by the local Area Committees continues throughout the City. The footway programme covers over 80 streets every year with over 40 other streets receiving slurry seal treatment. The carriageway resurfacing programme includes work on over 100 streets annually.
- Over the last five years potholes on arterial routes have been dealt with within 24 hours by use of Jetpatching machines. The use of these machines has seen a reduction in Public Liability Claims and consequently a reduction in costs to the Service.
- A Roadworks Control Unit has been set up to help co-ordinate all works on the network to ensure safety, minimise inconvenience and disruption and protect the structure of the network. Through the Lay Assessor Scheme over 60 members of the public have been recruited and trained creating a direct link with the public, while assisting in the drive to improve the standard of work on the network.
- Safety Inspections of the network are carried out by trained staff to the frequency and standard set out in the Code of Practice for Highway Maintenance Management and the results recorded manually. Electronic Data Capture Devices have recently been purchased and will be used to allow information to be directly down loaded into the Computerised Management System. This will increase the efficiency of remedying defects.
- To meet the ever increasing challenge of winter maintenance a vehicle mounted GPS based computer system has been introduced to monitor

performance and improve efficiency of gritting vehicles. Alternative treatments and plant, which give a cleaner alternative to the more traditional materials, have also been trialled in pedestrian areas.

- Glasgow City Council continues to be part of a consortium of all Local Authorities who jointly procure annual road condition data by means of vehicle survey via the Scottish Road Maintenance Condition Survey. The results of this survey form the base information used to rank roads in terms of their priority for maintenance treatment.
- A programme of bridge assessments and strengthening works has been undertaken to ensure that bridges within Glasgow are capable of carrying the loads required. A total of 248 bridges have been assessed and 20 strengthened. Major bridge strengthening works carried out include Petershill Road, Titwood Road, George V and Finnieston Overpass.
- A programme of essential maintenance work is on-going on the Clyde Tunnel. The tunnel provides a vital link for the City with 25 million people travelling through it each year.
- Street lighting maintenance continues to be undertaken by the Service's own Roads Trading Organisation with satisfactory performance targets for repairs being continually met. (Table 2.1)

Table 2.1

STREET LIGHTING - REPAIRS MEETING TARGETS



ASSESSMENT

The transport strategy contained in Keep Glasgow Moving was set out in the form of:

- **Aims** - which provided broad indications of what the Council was seeking to achieve.
- **Policies** - which gave more details of the course of action.
- **Implementation Plans** - which comprised specific projects within the Council's Capital/Revenue budget or specific policy initiatives. They demonstrated how the Council could achieve its aims.
- **Targets**-which allowed for the monitoring of Implementation Plans.

There were a total of 20 aims, 69 policies, 138 implementation plans and 82 targets.

A 3 star rating system has been used to assess the Council's overall performance in undertaking the implementation plans and meeting the targets set out in 'Keep Glasgow Moving'. This system can be used to interpret the achievement of a wide range of goals and has also been used as the measurement standard in improved performance reports presented to the Corporate Management Team and in Land Services' Annual Performance Reports.

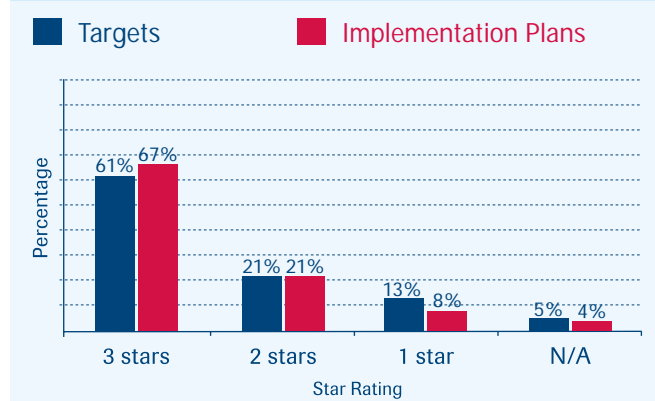
The following indices are used in the assessment:

- 3 stars** where performance or progress achieved has exceeded original targets, standards or intentions
- 2 stars** where performance or progress is in line with original targets, standards or intentions
- 1 star** where performance or progress has yet to meet original targets, standards or intentions

The results of the assessment are summarised in Table 2.2

Table 2.2

ASSESSMENT OF 'KEEP GLASGOW MOVING' USING THE 'STAR' RATING SYSTEM



The results show that the Council has been highly successful in progressing the implementation plans and meeting the targets set out in the 2001 – 2004 Local Transport Strategy with 88% of implementation plans completed as proposed or exceeded and 82% of specific targets met or exceeded.

The majority of plans and targets that were not completed or met are included as part of this updated strategy. Examples include developing a Council Travel Plan, investigating the possibility of establishing a city car club and supporting the development of a Freight Quality Partnership.

3. WIDER CONTEXT





Transportation issues are not bound by individual local authority areas and have a strong link with wider planning, health, economic and social inclusion issues. In developing the Local Transport Strategy 2007/2009 for Glasgow, it is therefore vital to take account of other relevant strategies and plans at a national, regional and local level. This section outlines those strategies and also provides a summary of the responsibilities of the main organisations involved in transportation policy and delivery within Scotland.

NATIONAL/REGIONAL/LOCAL TRANSPORT STRATEGIES

The organisations and planning processes which establish and deliver transport policies in Scotland at the national, regional and local level have recently changed with the introduction of a new National Transport Agency and a number of Regional Transport Partnerships.

The development of these new organisations has been a result of legislation introduced following publication of the Scottish Executive's White Paper, 'Scotland's Transport Future'. This document sets out the 5 high level national transport objectives, which are to:

N1 - Promote economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximise their efficiency.

N2 - Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network.

N3 - 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.

N4 - Improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, drivers, passengers and staff.

N5 - Improve integration by making journey planning and ticketing easier and working to ensure smooth

connection between different forms of transport.

The National Transport Agency - 'Transport Scotland' was established in January 2006 and is now responsible for a number of the Scottish Executive's transport functions including rail delivery, strategy and investment, trunk roads infrastructure, network management and administration of the National Free Concessionary scheme introduced in April 2006. The Transport Group within the Scottish Executive remains responsible for co-ordinating the National Transport Strategy, liaison with regional transport partnerships, aviation, bus, freight and taxi policy and ferries, ports and harbours. A National Transport Strategy has been produced, with a Strategic Transport Projects Review to follow to determine the future programme of strategic transport investment for Scotland.

The National Transport Strategy was issued in December 2006. This document shapes the formation of national transport policy over the next 20 years. It places 'growing Scotland's economy' as the Government's first priority and recognises that transport is an essential element in achieving this. 3 strategy outcomes are identified that will make a difference in delivering a world class transport system:

- Improved journey times and conditions
- Reduced emissions
- Improved quality, accessibility and affordability



The Regional Transport Partnerships (RTP's) facilitate the coordination of transport issues across council boundaries. The RTP for the West of Scotland is called the Strathclyde Partnership for Transport (SPT) and, as well as Glasgow, covers the council areas of North, South and East Ayrshire, North and South Lanarkshire, East and West Dunbartonshire, Renfrewshire, East Renfrewshire, Inverclyde and part of Argyll and Bute. It took on its powers on the 1 April 2006 and is one of seven Regional Transport Partnerships that have been established across the country under the terms of the Transport (Scotland) Act 2005. Under this Act, the Regional Transport Partnership has to produce a Regional Transport Strategy (RTS) by 31 March 2007. It is important that there is a strong relationship between the policies contained within the strategies at a local and regional level. The policies contained within the local strategy will therefore feed into the development of the RTS and future updates of the LTS will tie into the regional strategy. It is also important that there are linkages between Glasgow's Local Transport Strategy and those of neighbouring local authorities.

PLANNING STRATEGIES / LEGISLATION

The interaction between the planning process and transportation and in particular the integration between land use, transportation policy and development control is crucial to reducing the need to travel and in promoting sustainable methods of transport.

At a national level the aims and guidance in securing integration are set out in the following publications:

- National Planning Framework 2004
- Scottish Planning Policy, SPP1 (The Planning System)
- Scottish Planning Policy, SPP17 (Planning for Transport)
- Planning Advice Note, PAN75 (Planning for Transport) and
- Planning Advice Note, PAN51 (Planning, Environmental Protection and Regulation)

These documents provide policy guidance on the achievement of better integration between transport and land use planning at national, regional and local level.

They aim to create favourable conditions for using sustainable methods of transport and detail the requirements for transport assessment for major developments.

For Glasgow, at a regional/local level the planning framework is set by:

- The Glasgow and the Clyde Valley Structure Plan and
- The City Plan

The City and the Structure Plan strategies, policies and proposals seek to provide the context for delivering the Scottish Executive's broad planning objectives as they relate to Glasgow and the surrounding area. The Structure Plan provides the strategic planning framework for the eight local authorities in the wider Glasgow Metropolitan area. The City Plan has to conform to the Structure Plan and these two documents comprise the statutory development plan for Glasgow.

The Glasgow and Clyde Valley Structure Plan seeks to enhance the well-being and quality of life of the people who live in, work in or visit Glasgow and the Clyde Valley through balanced and sustainable development of its communities. It highlights the need for a greater emphasis to be placed on urban renewal and regeneration and the protection of the environmental heritage of the metropolitan area. The Structure Plan has four interrelated aims.



SP1 - Increase Economic Competitiveness- by identifying a framework of development opportunities which will meet the needs of new and expanding business, develop an inclusive economy and improve the attractiveness of the area for investment.

SP2 - Promote Greater Social Inclusion and Integration by improving the quality of life and identity of local communities in terms of jobs, housing, services and environmental conditions, particularly for the most disadvantaged in society.

SP3 - Sustain and Enhance the Natural and Built Environment particularly by the re-use of existing urban land and buildings and the sustainable use of natural resources.

SP4 - Integrate Land Uses and Transportation - by promoting improved access to and between work, home, leisure and shops, in particular by public transport, and an increase in the proportion of goods moved by rail.

The City Plan is a statutory document that guides development and land use decisions in Glasgow and, like the Local Transport Strategy, it reflects the corporate policy of Glasgow City Council. Ensuring integration between land use and transportation policy is vital and it is important that the Local Transport Strategy supports the aims and objectives of the City Plan.

The current City Plan for Glasgow was adopted in August 2003 and it contains transport related policy mechanisms for new developments such as maximum parking guidelines, public transport accessibility guidelines and requirements for transport assessments and travel plans. The City Plan is currently under review with City Plan II due to be adopted in 2009 and work is on-going to ensure that the planning and transport strategies work towards a common goal.

OTHER STRATEGIES / PLANS

THE GLASGOW CITY COUNCIL PLAN 2003 - 2007

The aim of the Council Plan is to give direction to those working within the City Council and to set out the administrative priorities for local citizens. The Plan contains five key objectives that express the Council's overall aims. Each key objective lists targeted actions that are reported on in an annual public performance report.

The five key objectives are:

GP1 - Provide accessible, accountable Council services that are effective and offer value for money.

GP2 - Create a cleaner, safer City and a sustainable environment.

GP3 - Promote social inclusion and tackle poverty and improve health and well being.

GP4 - Sustain the physical, social, economic, cultural and environmental regeneration of Glasgow City Council.

GP5 - Develop Glasgow's metropolitan role, quality of life, heritage and services.

These 5 key objectives have been taken into account in the development of the Local Transport Strategy.

VISION FOR GLASGOW, COMMUNITY PLAN 2005 - 2010

The Local Government in Scotland Act 2003 sets out guidance to aid local authorities in establishing Community Planning Partnerships in their area. Community Planning is a process that brings together the public sector, partner organisations and the community to agree priorities on the planning and provision of services. It goes beyond just the provision of information to the public by providing the mechanisms for consultation, co-operation, participation and empowerment.



10 local Community Planning Partnerships have been set up in Glasgow, organised around the proposed multi member wards developed for local government elections in 2007. At the same time, 5 Community Health and Care Partnerships have been set up. This community planning framework has been utilised to assist in involving the citizens of Glasgow in the development of the LTS.

Glasgow City Council and its Community Planning Partners have produced a community plan document entitled '**Our Vision for Glasgow, Community Plan 2005 – 2010**'

This aims to ensure an inclusive Glasgow where all citizens and visitors have an opportunity to participate fully in the life of the City.

Five key themes through which action to change the city for the better should be taken have been developed. These are:

- A Healthy Glasgow
- A Safe Glasgow
- A Working Glasgow
- A Learning Glasgow
- A Vibrant Glasgow

Glasgow City Council Local Biodiversity Action Plan

Biodiversity is the preservation of the variety of living things on earth. The UK Government published a biodiversity Action Plan in 1994 and Local Biodiversity Action Plans (LBAP) are seen as a crucial method for implementing the UK Action Plan at the local level. In Glasgow a local Steering Group, comprising some 18 partner organisations and Council services, has guided the development of the City's Action Plan.

Glasgow City Council Environment Strategy and Action Plan 2006 - 2010

This document gives an overview of the wide range of activities related to environmental protection and enhancements that are currently being carried out in Glasgow. It also serves as an introduction to a number of new policies intended to help address the many challenges facing both the local and global environment.

Glasgow Access and Walking Strategy - 'Connecting Glasgow'

This strategy aims at improving and increasing the walkways and cycle ways within Glasgow that make it possible to traverse the city without having to resort to travelling on busy streets. It develops four themes; Building Healthy Communities, A Safe and Attractive Glasgow, Accessible and Active Urban Locations and Regeneration and Development.

Metropolitan Glasgow - Our Vision for the Glasgow City Region

- is the strategic approach adopted by public and private sector agencies within the Glasgow City Region. Glasgow City Council has led the production of the Vision, which takes a consultative approach and will ensure a broad consensus on the development priorities that will have the greatest potential for regional impact, and which will engender a sense of ownership across local authority boundaries. The intention is that the Glasgow City Region will be one of the most dynamic, economically competitive and socially cohesive city regions in Europe.

'A step change for Glasgow' - Glasgow's Ten-Year Economic development Strategy (Glasgow Economic Forum, 2006)

This document provides the framework for actions to achieve the ten year economic vision for Glasgow to be 'a world class city achieving its potential to deliver sustainable wealth and well-being for all its citizens'. It identifies the importance of creating better business connections in terms of fast, efficient and cost competitive movement of people, information and goods as well as connections for commuters, while recognising the importance of reducing transport related pollutants.

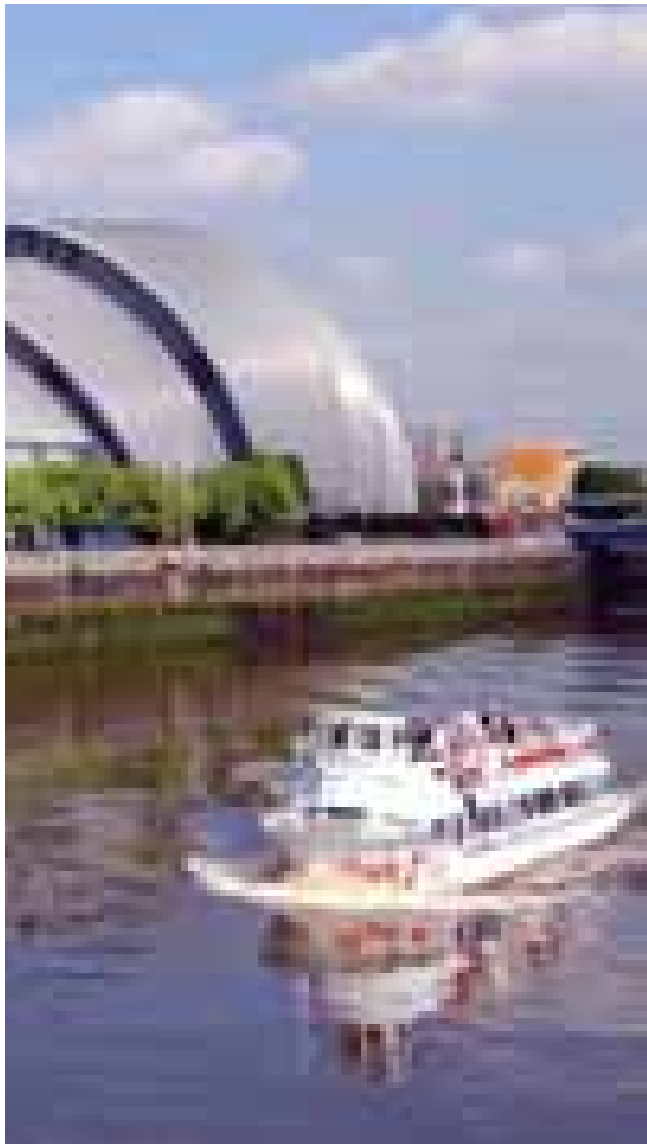
Glasgow City Council Corporate Race Equality Scheme 2005/2008

- is the Council's strategy and action plan that summarise the Council's approach to racial equality.

Developing the Sustainable City: Glasgow's Local Agenda 21 Framework - Local Agenda 21 (LA21) and sustainable development are critical to the future viability and competitiveness of Glasgow. This document introduces how the LA21 principles could be implemented at a local level.

People and Places – Regeneration Policy Statement (Scottish Executive Feb 2006) -

highlights the importance of economic growth to prosperity and as the means to tackle poverty and disadvantage. It describes the importance of partnership working between agencies - private, public and voluntary - and the role of the Community Planning Partnerships. Although a local based approach is deemed important the vital role of cities to regeneration is also highlighted. The current National Regeneration Priorities are the Clyde Corridor and Clyde Gateway.



OTHER LEGISLATION

Other legislation relevant to the production of the LTS includes:

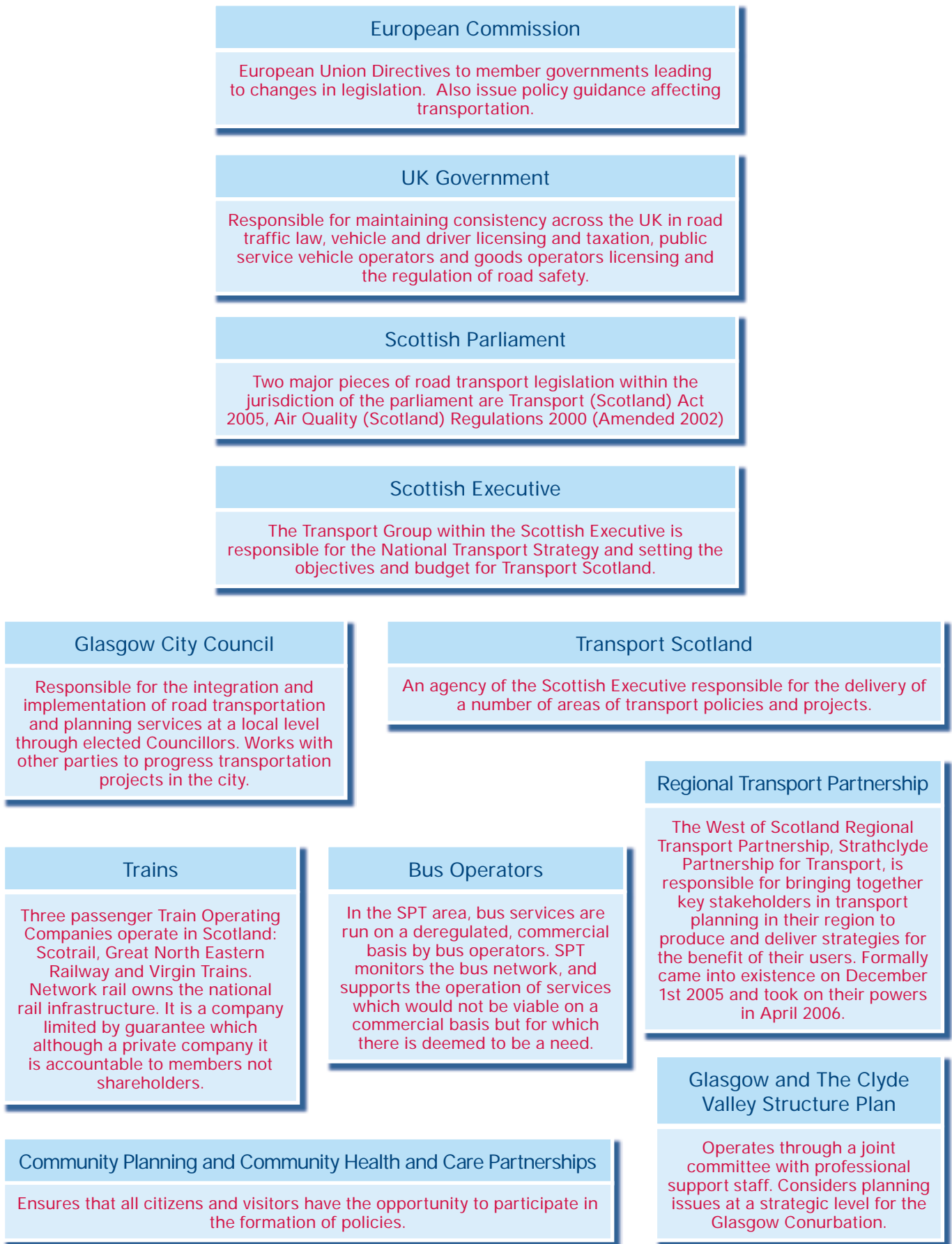
The Road Traffic Reduction Act 1997 which requires local authorities to monitor existing traffic flow levels within their area. It also requires authorities to either set a target for the reduction in the rate of growth of traffic levels, set a target for a reduction in traffic levels in real terms or give a valid reason for not setting a target. In 'Keep Glasgow Moving', Glasgow City Council set a target for a reduction in the rate of growth and this target has been reviewed as part of this strategy update. Guidance from the Scottish Executive stipulates that local transport strategies should be designed to meet the objective of reducing road traffic.

Part IV of The Environment Act 1995 which requires local authorities to undertake an assessment of air quality within their boundary and designate as Air Quality Management Areas (AQMA's) locations where the objectives for the 8 major pollutants detailed in the National Air Quality Strategy (1997) are not going to be met. For these AQMA's an Action Plan has to be developed to tackle the identified problems. Glasgow currently has one designated AQMA, covering the City Centre and is about to extend the area covered by this and designate a further two areas.

RESPONSIBILITY FOR TRANSPORT DELIVERY

There are a large number of organisations involved in the various levels of transportation delivery within Scotland. Figure 3.1 summarises the responsibilities of the main government and private organisations.

FIGURE 3.1 ROLES AND RESPONSIBILITY



4. STRATEGY DEVELOPMENT





This section gives an overview of the local issues, problems and opportunities facing Glasgow and then, taking account of these, the initial consultation feedback and the wider strategy context detailed in chapter 3, develops a set of overall objectives for the LTS. It then describes a number of strategy options that could be developed in order to meet these objectives and summarises the process undertaken to choose the preferred option.

GLASGOW'S TRANSPORT ISSUES

BACKGROUND

Glasgow is a city with a diverse range of functions and facilities that create a wide range of transport demands.

It is one of Europe's most visited cities, welcoming around 2.8 million overseas tourists and conference delegates each year. It thus has an important contribution to make in meeting the Scottish Executive national target of a 50% growth in revenue from tourism. Visitors and residents alike can enjoy a wealth of cultural and leisure attractions as well as a high quality shopping experience in the UK's largest retail centre outside of London.

Glasgow has expertise in hosting various events and festivals, for example, the Glasgow International Jazz Festival and the World Pipe Band Championships and has successfully accommodated all the transport and crowd control needs of the Champions League Final 2002 between Real Madrid and Bayer Leverkusen and will host the UEFA Cup Final in 2007. It was also host to the Special Olympics in 2005 and is currently bidding for the 2014 Commonwealth Games.

In recent years the city has been designated:

- Intelligent Community of the Year 2004, a global award, which recognised the benefits the city and its people are deriving from the use of technology
- European Capital of Sport 2003
- UK City of Architecture and Design 1999
- European City of Culture 1990

Although the City boasts a large historic and architectural heritage it is participating in the modern age and looks forward in its aspirations.

In excess of £2bn of capital investment is being targeted at the River Clyde Waterfront. This regeneration of the River Clyde involves the redevelopment of approximately 300 hectares of prime river front land and includes proposals for a new Museum of Transport and the introduction of Clyde Fastlink, a state of the art bus based public transport system. In addition, residential, commercial and entertainment developments have all brought life back to this area which now also hosts a highly successful annual River Festival.

The Clyde Gateway regeneration initiative is also underway, with the aim of securing substantial public and private investment in homes and jobs in the east end of Glasgow.

Around 66,000 students attend Glasgow's centres of learning. The level of scientific research carried out in the city's universities has helped Glasgow become the third science city in the UK in terms of funding invested in research. This success has made Glasgow a leading location for hi-tech industries and biotechnology.

There are currently 389,000 people employed in Glasgow and this generates a high demand for travel during the morning and evening peak periods. Furthermore following the introduction of the National Free Concessionary Scheme, a group now accounting for around a third of all bus based passenger journeys, has effectively levelled out the morning and evening peak

periods, particularly to the City Centre where demand for high frequency service remains all day.

Although projections are for the population of Glasgow to fall slightly over the next 10 years, it is predicted that the number of households will increase by around 7%.

Despite the extent of Glasgow's physical renewal, not all parts of Glasgow have benefited from the effects of economic growth. The Scottish Index of Multiple Deprivation (SIMD) 2006 indicates that, on measures relating to income, health and education, 52% of the most deprived areas (worst 5%) SIMD zones in Scotland are in Glasgow.

The health of the city's population is improving, but at a slower rate than the rest of Scotland. The current life expectancy rates are 69.9 for men and 76.7 for women compared with national figures of 74.2 and 79.2. The main health problems are cancer, heart disease and lung disease.

As with all major cities, some areas of Glasgow have issues with regard to poor air quality. In recognition of this, the City Centre was classified as an Air Quality Management Area (AQMA) for NO₂ and Particulates (PM₁₀) in 2002 and an action plan was formulated with the aim of reducing these two pollutants. There is currently a proposal to extend the City Centre AQMA and designate two additional areas as AQMA's.

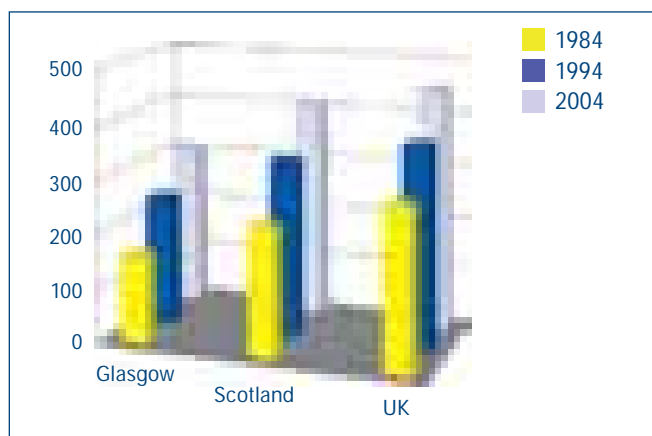


Figure 4.1 - Car ownership

CURRENT TRAVEL PATTERNS

Car ownership levels in Glasgow and the surrounding local authority areas are growing at a faster rate than the rest of Scotland. They have increased by 92% between 1984 and 2004 from a very low base level of 163 vehicles per 1,000 population to 313 vehicles per 1,000 population (Figure 4.1). However the proportion of Glasgow families who have access to a car at 44% is still lower than the Scottish (67%) and UK (80%) averages resulting in the majority of people in Glasgow still relying predominantly on public transport and walking for access to jobs and services.

Glasgow has a travel to work area covering around 1.8 million people with fifty percent of people who work in the city commuting daily from outwith its boundaries. Figures 4.2 and 4.3 show a comparison between Glasgow and Scotland of the proportion of residents using each method of transport for all trips and journeys to work.

CURRENT TRAFFIC GROWTH

Government projections in 1996 indicated traffic growth of up to 38% by the year 2016 unless there were significant changes to transport policy. Glasgow, recognising the unacceptable impact of traffic growth on the city, has been developing and implementing policies to shape traffic patterns in and around the city.

Traffic patterns in and around Glasgow are monitored by the Council, with the set of automatic traffic counters forming the mid - conurbation cordon (see Appendix 2) providing the best indication of traffic growth within the city as a whole. Data from this cordon indicates an overall decrease between 1996 and 2005 of 0.46% per annum with trunk routes increasing at 2.97% and other routes decreasing by 0.99% per annum (Figure 4.4).

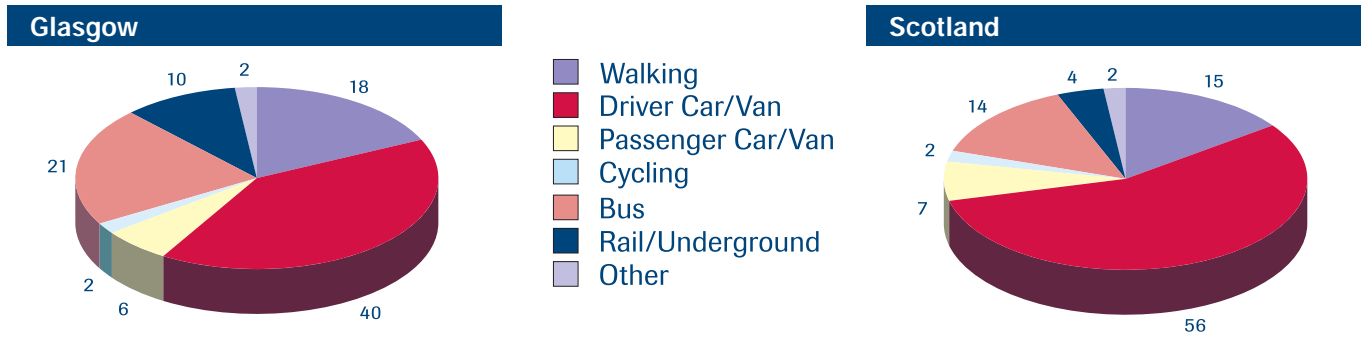
These figures would suggest that the policies introduced by Glasgow City Council over the past few years have had the desired effect of reducing the level of traffic on the local road network within Glasgow. However the traffic using the trunk road network, including the M8, is still increasing. This traffic will include a significant proportion of through trips that have neither their origin



Figure 4.2 - All trips %



Figure 4.3 - How adults normally travel to work or education %



nor destination within Glasgow. Although traffic on local roads has not increased, the current levels are causing congestion in certain locations at certain times.

In terms of public transport usage SPT has indicated an overall rise of 18% in patronage of local bus services since 1999/2000. The policies of Glasgow City Council and the development of enhanced infrastructure and information provision has played a significant role in this increased patronage.

More details on these and other issues and consultation feedback for specific policy areas are given in **Chapter 6**.

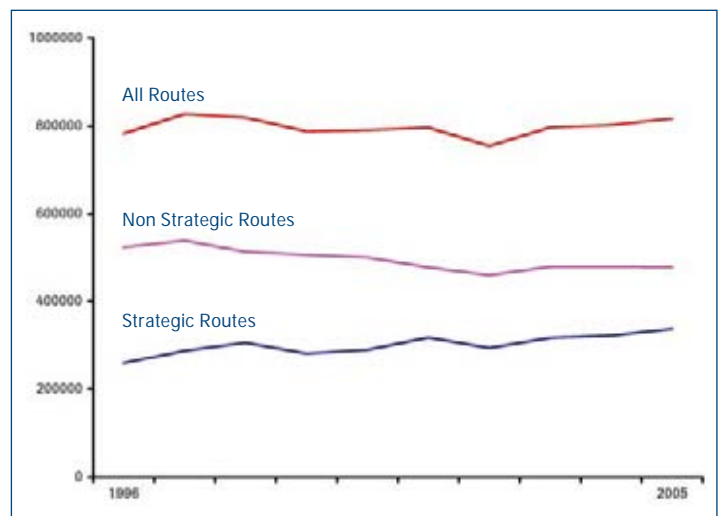


Figure 4.4 - Glasgow mid cordon average daily traffic flows

DEVELOPMENT OF LOCAL TRANSPORT STRATEGY OBJECTIVES

Taking account of the issues described above, the wider context of the national, regional and other relevant Glasgow City Council strategies and the output from the consultation exercise, a set of high level objectives has been formulated for the Local Transport Strategy.

The city is currently experiencing a high level of economic regeneration with a significant number of new developments being attracted to Glasgow. In order to serve these developments and ensure future investment in the city it is vital to provide and maintain good quality transportation services and infrastructure. The consultation feedback demonstrated support for ensuring that Glasgow's transport system provided good access to all the social, economic and cultural opportunities the city has to offer.

LTS1 - Support the continuing physical, social, economic, cultural and environmental regeneration of the City by maintaining and promoting efficient and effective transportation services and infrastructure within Glasgow

A transport system that is accessible to all has a vital role to play in tackling areas of deprivation and social exclusion. This is particularly the case in Glasgow due to the relatively low levels of car ownership and subsequent heavy reliance on public transport to gain access to health care, education, employment and leisure. The importance of providing a transport system accessible to all was one of the priority issues raised during the consultation exercise.

LTS2 - Promote social inclusion and tackle poverty by seeking to ensure that transport is accessible to all sections of the community and provides good links to employment, health care, education and leisure.

Although indications are that there has been little increase in road traffic on Glasgow's local road network over the past few years, as car ownership continues to increase at a rapid rate, the potential for future traffic growth is high. The current levels of traffic are already causing some problems with certain areas experiencing congestion during the morning and evening peak

periods. There are also areas of the City where traffic emissions are contributing to poor air quality.

The safeguarding of the environment was a major topic of concern from the consultation feedback as was the enhancement of provision for walking and cycling.

LTS3 - Promote healthy and environmentally sustainable methods of transport that minimise harmful emissions and energy consumption including those that involve physical activity.

Glasgow City Council has played a significant part in contributing to the fact that road casualty rates in Glasgow are below the national average and it recognises the importance of continuing to work towards a safe and secure transportation system. Road safety was a persistent theme throughout the consultation process, as was the perceived lack of personal security while using public transport.

LTS4 - Improve the safety and the actual and perceived security of travelling within the City by reducing accidents and enhancing the personal security of all users of the transport network.

If the transport system within Glasgow is to be easily accessible to residents and visitors, it is important that travel information is readily available and journeys using the various methods of transport available are easy to undertake. The importance of an integrated approach to transport information and services was rated as one of the highest priorities from the consultation feedback.

LTS5 - Promote integration of the transport system and provision of travel information within Glasgow.



Figure 4.5 below demonstrates the strong linkages between the above objectives, the Council's key objectives, the national transport objectives and the structure plan aims. Linkage to the regional transport strategy and updated City Plan objectives will be assessed once these strategies have been developed.

Figure 4.5

	Council's 5 key Objectives (see page 22)	National Transport 5 Objectives (see page 20)	Glasgow & the Clyde Valley Structure Plan 4 Aims (see page 22)
Local Transport Strategy LTS1	GP1 GP2 GP3 GP4 GP5	N1 N2 N3 N4	SP1 SP2 SP3 SP4
Local Transport Strategy LTS2	GP1 GP3 GP4 GP5	N2 N4 N5	SP1 SP2 SP3 SP4
Local Transport Strategy LTS3	GP1 GP2 GP3 GP4 GP5	N3 N4 N5	SP2 SP3 SP4
Local Transport Strategy LTS4	GP1 GP2 GP3 GP4 GP5	N2 N4 N5	SP1 SP2 SP3 SP4
Local Transport Strategy LTS5	GP1 GP3 GP4 GP5	N1 N2 N3 N4 N5	SP1 SP2 SP3 SP4

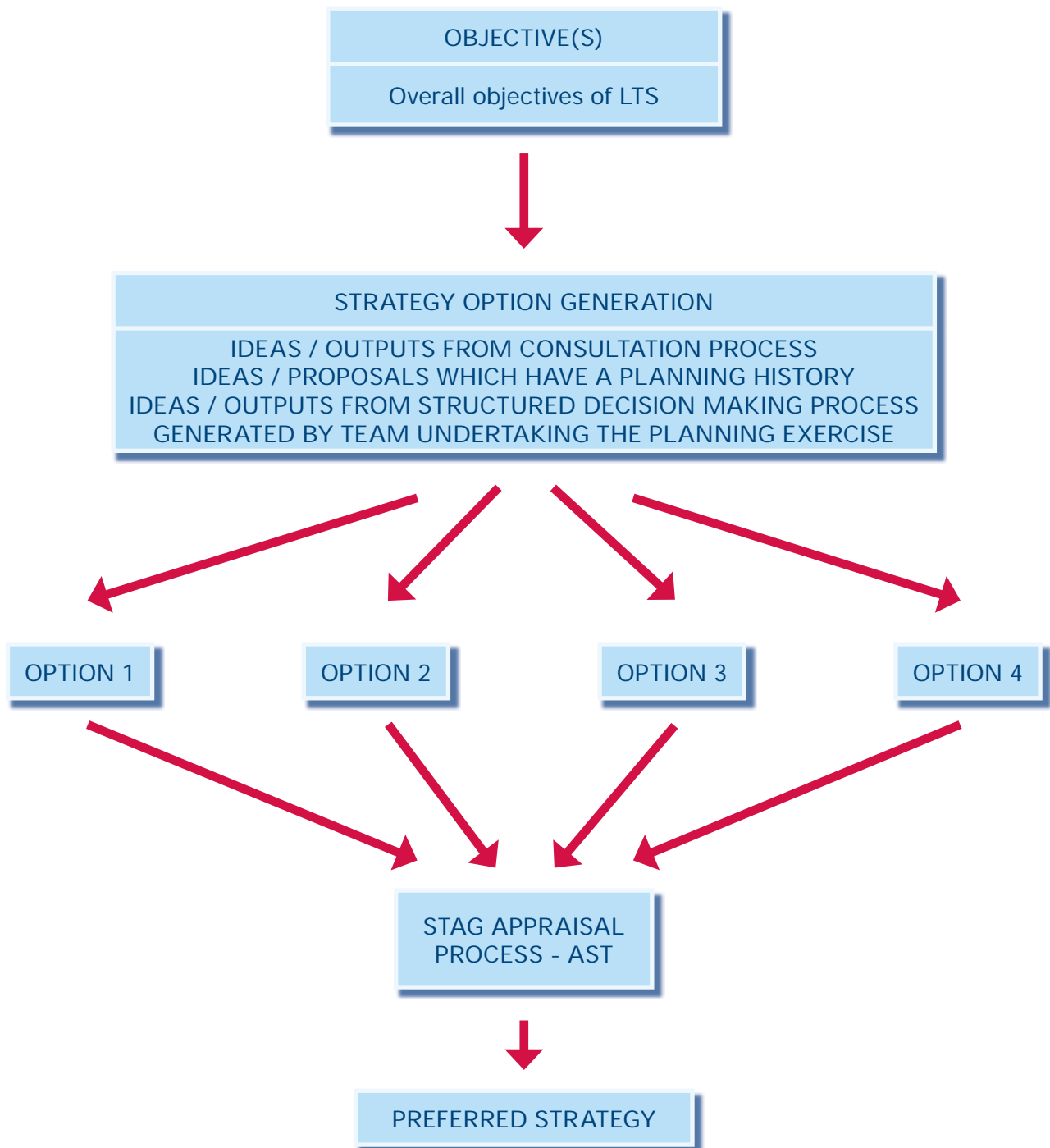
DEVELOPMENT OF PREFERRED STRATEGY OPTION

Introduction

In accordance with Scottish Executive Guidelines, Glasgow's updated LTS has been developed following the philosophy of the Scottish Transport Appraisal Guidance (STAG), the aim of which is to ensure that the LTS meets the aims of national and local transport objectives

The STAG process is outlined in Figure 4.6

FIGURE 4.6 - STAG PROCESS SUMMARY





STRATEGY OPTION GENERATION

Taking account of the output from the extensive initial consultation exercise and the need to meet the overall national and local transport objectives, four broad strategy options were developed:

- **Option 1 – Do Minimum**

This option is based upon maintaining the existing policies of 'Keep Glasgow Moving' and scope of work without increasing resources or funding.

- **Option 2 – Car Based Strategy**

This would involve an increase in road-space capacity for all vehicles through the construction of new roads and capacity increases on existing roads, with the aim of catering for the increase in car ownership and potential trips. There would be limited demand management with parking charges reduced or removed and additional parking capacity created to match demand. Investment in public transport, cycling or walking would be targeted to that required to meet the residual demand for these modes once all car based demand was met.

- **Option 3 – Public Transport / Sustainable Transport based strategy**

Investment would be concentrated on promoting and enhancing sustainable transport modes such as cycling, walking and public transport with no investment in new road construction. Measures such as higher parking charges and extensions to the restricted parking zones would be introduced. More of the carriageway would be restricted to use by public transport at certain times of the day and through partnerships with the bus companies the quality of information, vehicles and other infrastructure would be greatly improved. There would be more pedestrian priority areas throughout the city and the cycle network would be greatly extended.

- **Option 4 – Public Transport / Sustainable Transport with Targeted Road Investment**

This option would be similar to option 3 with the exception that there would be limited investment in roads infrastructure to tackle key congestion points in

the network and to provide essential linkages to key developments and regeneration areas. Particular emphasis would be given to links which enable public transport to provide effective circumferential services which would complement existing radial services.

APPRAISAL OF STRATEGY OPTIONS

BACKGROUND

The appraisal process consists of assessing the success that each of the above strategy options would have on achieving the 5 national transport objectives. To assist in this process, Appraisal Summary Tables (AST's) are completed. There are normally two parts to undertaking the STAG assessment with the initial part 1 appraisal assessing whether proposals are worth pursuing further and part 2 involving a more detailed assessment. For an overall strategy such as the LTS, Scottish Executive guidance recommends that a single assessment is undertaken at an 'appropriate' level.

In order to provide as robust an assessment as possible, Glasgow has completed the AST's associated with the more detailed part 2 assessment. However some elements covered by the part 2 assessment would only be relevant for specific schemes and are not applicable to a high level strategy. The items in the AST where it is felt that this is the case have been left blank. A full STAG appraisal will be carried out on any specific schemes that form part of the LTS, where appropriate.

In assessing a high level strategy such as the LTS, quantitative data is not always available or appropriate. Therefore, in assessing the strategies, logically developed value judgements have often been used. However to provide a more robust assessment, use has been made of the high level transport / planning model SITLUM to provide quantitative back up to these judgements where possible. Different criteria were entered into the model in relation to quality and cost of public transport, parking availability and charges (including park and ride) as a proxy for the different strategies. Outputs from the model included forecasts for air quality emissions, employment, population and the proportion of people using the different methods of transport.

COMMENTARY ON RESULTS

The results of the STAG assessment are contained in Appendix 3. A summary of the effects predicted by the STAG assessment that each of the strategies would have in terms of each of the national transport aims is given below:

Environment

With Option 2 an increase in car journeys is likely to have a negative impact on the environment in terms of increases in harmful emissions and noise pollution. With both options 3 and 4, the investments in public transport services and infrastructure will increase patronage and the subsequent reduction in journeys made by car is likely to have a positive effect on the environment. This effect may be slightly more positive with option 4 where investment in key strategic road schemes will assist in reducing any congestion.

Safety

In terms of reducing accidents again options 3 and 4 are likely to have a positive effect by reducing the number of vehicular trips made on the road network. In option 4, targeted road enhancements may increase traffic on some strategic routes but would also remove traffic from a number of local roads. Option 2, however would have no effect on the rapidly rising use of the private car and with more vehicles on the road, more accidents are likely.

Economy

In option 2 a reduction in demand management measures will mean there are no restraints on the current high growth in car usage. Although road capacity increases would initially improve the flow of traffic at some locations there would always be 'pinch' points where capacity increases are not feasible. This will have the result of congestion increasing and result in delays for essential commercial traffic and public transport. Option 3 by providing better quality public transport will encourage more people out of their cars to use public transport. This will release more road capacity for commercial and other essential traffic. However there are still likely to be key points on the network where congestion is likely to occur and the targeted

strategic capacity enhancements in option 4 would improve further the overall performance of the transport network, thus aiding the economy.

Accessibility and Social Inclusion

A large proportion of residents in Glasgow have limited access to a private car and are dependent on public transport to gain access to employment, health, leisure etc. The lack of investment in public transport in option 2 would not improve accessibility for this segment of the population. The high level of investment in public transport services in option 3 would assist in ensuring that transport is not a barrier to accessing the wide range of opportunities that the city offers. Again by tackling the key congested points in the network, option 4 may enhance accessibility by improving conditions for public transport and commercial vehicles.

PREFERRED STRATEGY OPTION

The STAG assessment summarised above, suggests that option 4, investing in public and sustainable transport with targeted road capacity and linkage enhancements, would be the most successful in meeting the local and national transport objectives. Investing in public transport assists the whole population of Glasgow in gaining access to jobs and services. Encouraging more people to use alternatives to the car and tackling key congestion points by investment in infrastructure improves the environment and the economic vitality of the City by freeing the road space for essential trips. It also improves the health of residents by encouraging cycling and walking as methods of transport for short trips. Any road investment would be targeted to improve public transport connections, contribute to an improvement in access to new development areas and tackle key congestion points. The completed AST for this option is contained in Appendix 3.

5. VISION



Building on the preferred strategy developed through the STAG assessment a future transport vision for Glasgow has been produced.

VISION STATEMENT

Glasgow's transport vision is to provide a world class transport system which is safe, reliable, integrated and accessible to all citizens and visitors: A transport system that continues to support the physical, social, economic, cultural, environmental and economic regeneration of the City while contributing to the overall well-being, health and fitness of present and future generations: A system where transport serves all sections of the community equally and there are no transport barriers in terms of accessing jobs, health care, education and leisure.

An important aspect in achieving the above vision will be to discourage people from making unnecessary journeys by private car while encouraging more sustainable methods of transport such as walking, cycling, bus and rail. To achieve this will require a balanced approach between demand management measures, investment in making the alternatives to the private car more attractive as well as information and awareness campaigns.

The main tool of demand management will continue to be controls on the provision and use of on and off road parking. This will require a charging regime that discourages long stay commuter parking in the city centre and its environs whilst catering for resident and short stay parking for commerce and customers accessing shops.

A balanced strategy solution is required that provides priority to walking, cycling and public transport through



road space allocation and traffic control measures whilst maintaining access for essential car and freight movements. To achieve this a hierarchy of road users has been developed for different types of road. This is illustrated in Figure 5.1. Advanced traffic control and related traveller information systems will be developed and utilised to allow the existing road network to be managed efficiently and provide relevant information permitting road users to make informed travel choices.

In order to contribute to the health and fitness aims of the Council, as well as encouraging sustainable methods of transport for commuters etc, it will be important to continue to encourage walking and cycling for leisure purposes.

The maintenance of the Council's infrastructure in terms of roads, footways, signs and lighting as well as the need to strengthen bridges to meet European standards are vital in contributing to a safe and reliable transport network within the City.

The next chapter contains details of the specific policies and actions that the council proposes to implement in order to make the above vision a reality.



FIGURE 5.1 - HIERARCHY OF ROAD USERS

CITY CENTRE/ARTERIAL ROUTE WITH RESIDENTIAL/SHOP FRONTAGE
1. Pedestrian
2. Public Transport
3. Cyclists/Freight
4. Car /Motorcycle

MOTORWAY/EXPRESSWAY
1. Freight
2. Public Transport
3. Car /Motorcycle

RESIDENTIAL ROADS
1. Pedestrian
2. Cyclists
3. Services/Public Transport
4. Car /Motorcycle

INDUSTRIAL ROADS
1. Freight
2. Pedestrian
3. Cyclists/Public Transport
4. Car /Motorcycle

ARTERIAL ROUTE (NO/LIMITED RESIDENTIAL/SHOP FRONTAGE)
1. Public Transport
2. Freight
3. Pedestrian /Cyclists
4. Car /Motorcycle

Note: The above hierarchy of road users is a general guide only and access will be maintained in all cases for commercial and other essential traffic.