



Regional Transport Strategy 2008 - 2023



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Foreword

The Tayside and Central Scotland Transport Partnership (TACTRAN) was established on 1 December 2005 as one of seven statutory Regional Transport Partnerships across Scotland. TACTRAN includes the local authority areas of Angus, Dundee City, Perth and Kinross and Stirling which together make up nearly 12% of Scotland's land mass and just under 10% of the nation's population. More information on the Partnership can be found at our website www.tactran.gov.uk.

In accordance with the Transport (Scotland) Act 2005, our Regional Transport Strategy sets out a vision and strategy for improving the region's transport infrastructure, services and other facilities, over the 15 years to 2023. The Strategy has been prepared in partnership with our four constituent Councils and with input from a wide range of key stakeholders. TACTRAN's Vision is to deliver:

“a transport system, shaped by engagement with its citizens, which helps deliver prosperity and connects communities across the region and beyond, which is socially inclusive and environmentally sustainable and which promotes the health and well-being of all.”

Our Strategy seeks to fulfil this Vision through a balanced and integrated approach which supports our key themes of:

- **delivering economic prosperity;**
- **connecting communities and being socially inclusive; and**
- **delivering environmental sustainability, health and well-being.**

Although TACTRAN is a relatively new Partnership we have a heritage of existing good practice in the provision of transport services and infrastructure, upon which this Strategy seeks to build. Our priorities include securing improvements to our key strategic road and rail networks; enhancing public transport through partnership working with transport providers; encouraging a shift towards more sustainable forms of transport, in particular walking and cycling; working with road haulage, rail freight and port operators to develop more efficient and sustainable movement of goods; and improving integration within transport and between transport and other policy areas including land use and health.

Improving quality of life and opportunity in our cities, towns and deepest rural areas, with particular emphasis on improving access to employment, health, education, and our key leisure and tourism areas, lies at the heart of this Strategy. Over the next 15 years we will face many challenges in ensuring that our transport system supports a vibrant economy whilst at the same time protecting our environment. We believe this Strategy offers an integrated and balanced approach to meeting these challenges and addressing the future transport needs of our region by managing and developing our transport system for the benefit of today's users and future generations.

Councillor Fraser Macpherson
Chair
TACTRAN



1 Introduction

1.1 Regional Transport Strategies

The Transport (Scotland) Act 2005 places a duty on Regional Transport Partnerships to develop a Regional Transport Strategy (RTS), which sets out a Vision and Objectives over a 10-15 year horizon for meeting the transport needs of people and businesses throughout their region. TACTRAN has developed this first RTS for the region, covering the Angus, Dundee City, Perth and Kinross and Stirling Council areas, in compliance with statutory requirements and following extensive consultation with our key stakeholders, communities and the general public.

1.2 Statutory Requirements

The RTS must consider “the respects in which transport in the region needs to be provided, developed or improved and operated”, in particular:

- enhancing social and economic well-being and public health
- promoting public safety, including road safety and the safety of users on public transport
- being consistent with the principles of sustainable development and conserving and enhancing the environment
- promoting social inclusion
- encouraging equal opportunities and, in particular, the observance of statutory Equal Opportunities requirements
- facilitating access to hospitals, clinics, surgeries and other places where a health service is provided
- integrating with transport elsewhere.

Statutory Guidance requires strategies to:

- provide a Vision and a set of Objectives for transport over a 10-15 year time-horizon
- support the National Transport Strategy
- generate a list of key regional schemes for Transport Scotland's Strategic Transport Projects Review, which will set out and prioritise investment in Scotland's future 'strategic' transport projects
- provide a key steer for Local Transport Strategies
- set a strategic framework for the development of a programme of activities, projects and interventions by the RTP, its constituent Councils and other stakeholders which will contribute to the achievement of the agreed Regional Transport Strategy.

Consultation

Extensive consultation was undertaken with a wide range of key stakeholders, including constituent Councils, Community Planning Partnerships, Health Boards, Community Councils, neighbouring Regional Transport Partnerships, passenger and freight transport providers and user and other interest groups during the preparation of this RTS. The consultation process followed and how this has helped shape and influence the development of the RTS is described in a separate RTS Consultation Report.

Strategic Environmental Assessment

In accordance with legislative requirements a full Strategic Environmental Assessment (SEA) of the RTS has been undertaken and is addressed in a separate SEA Report.

Delivery and Monitoring

Proposals associated with the Delivery and Monitoring of the Strategy are covered in a separate Delivery Plan. Progress on delivery of the RTS will be reported on annually and the Strategy will be the subject of substantive review, in consultation with stakeholders, every four years.

A description of the process undertaken in developing this Regional Transport Strategy, in accordance with the Statutory Guidance, is set out in **Appendix A**.



2 The Tactran Region

2.1 At the Heart of Scotland

Our region lies at the heart of Scotland, connected to and connecting other parts of the Country and beyond by a number of strategically important road and rail transport corridors. With three thriving and increasingly prosperous cities and a range of smaller towns, villages and rural areas, our transport links provide the vital lines of communication for the movement of people and goods that the region's economy and social well-being depends on.

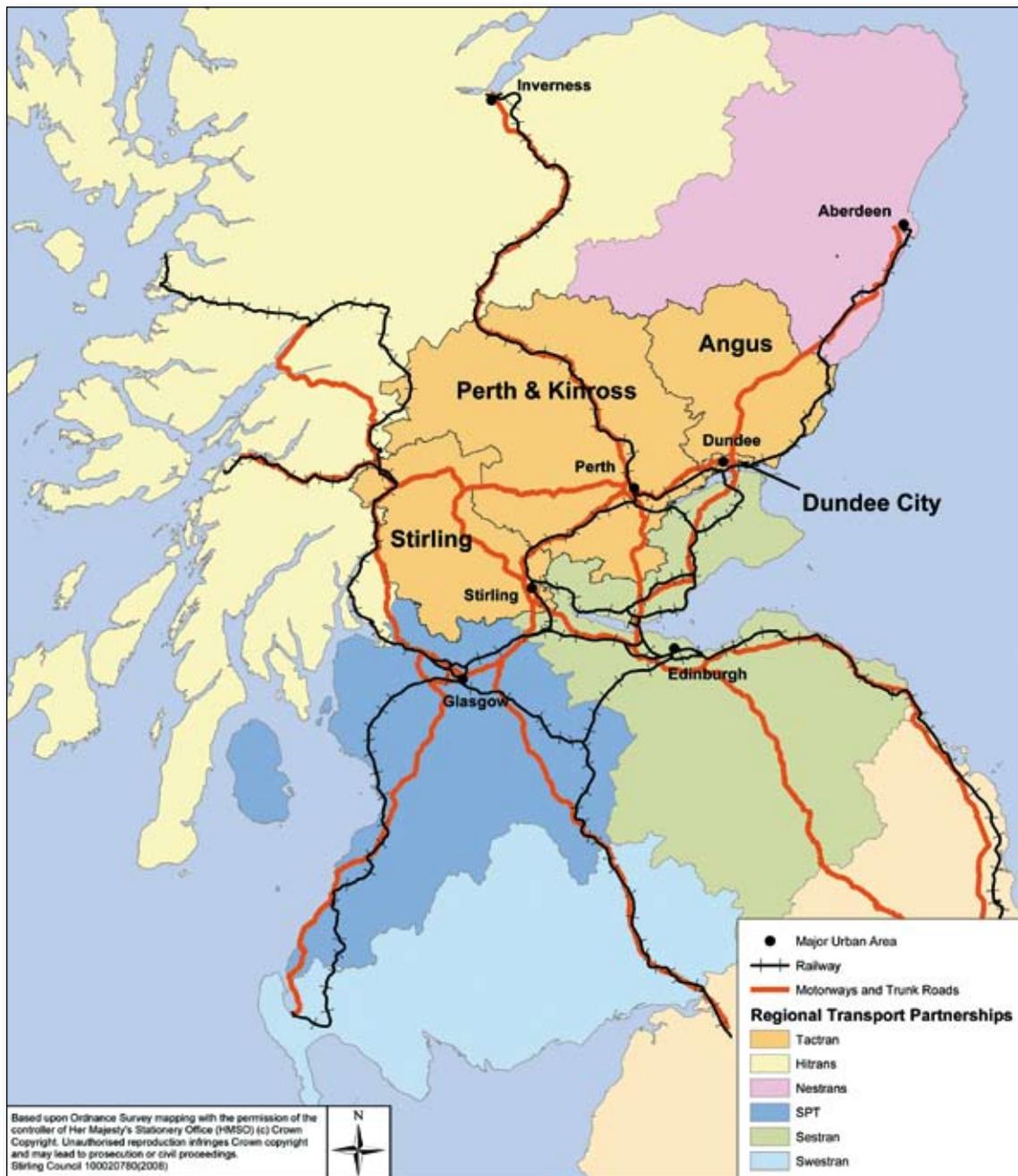


Figure 2.1 Tactran in the Scottish Context

The region includes parts of the Loch Lomond and Trossachs and Cairngorms National Parks, with some of the most scenic rural areas of Scotland. A number of other major attractions are located across the region, making tourism an important and growing contributor to the local economy.

We benefit from being close to Scotland's Central Belt yet avoid some of the problems associated with the larger conurbations. Our levels of traffic congestion are generally less severe and less prolonged but we suffer relative peripherality as a result of poorer transport links with the Central Belt and the remainder of the UK. We have been able to improve internal transport links by focusing significant investment in our public transport systems, bringing the benefits of acknowledged best practice in accessible buses and passenger information systems to many of our residents. However, further improvements are needed to our internal and external transport connections if we are to maintain and improve economic, social and environmental wellbeing.

Where We Live

The total population of the region is currently around 475,000 (Census 2001) and this is forecast to increase slightly during the lifetime of this strategy.

Almost two thirds of the region's population live in our largest cities and towns of Dundee (145,600), Perth (43,500), Stirling (41,000), Arbroath (22,800), Forfar (13,200) and Montrose (10,800). Approximately 10% live in small towns with a population between 3,000 and 10,000 and a quarter of our people live in rural communities with populations of less than 3,000.

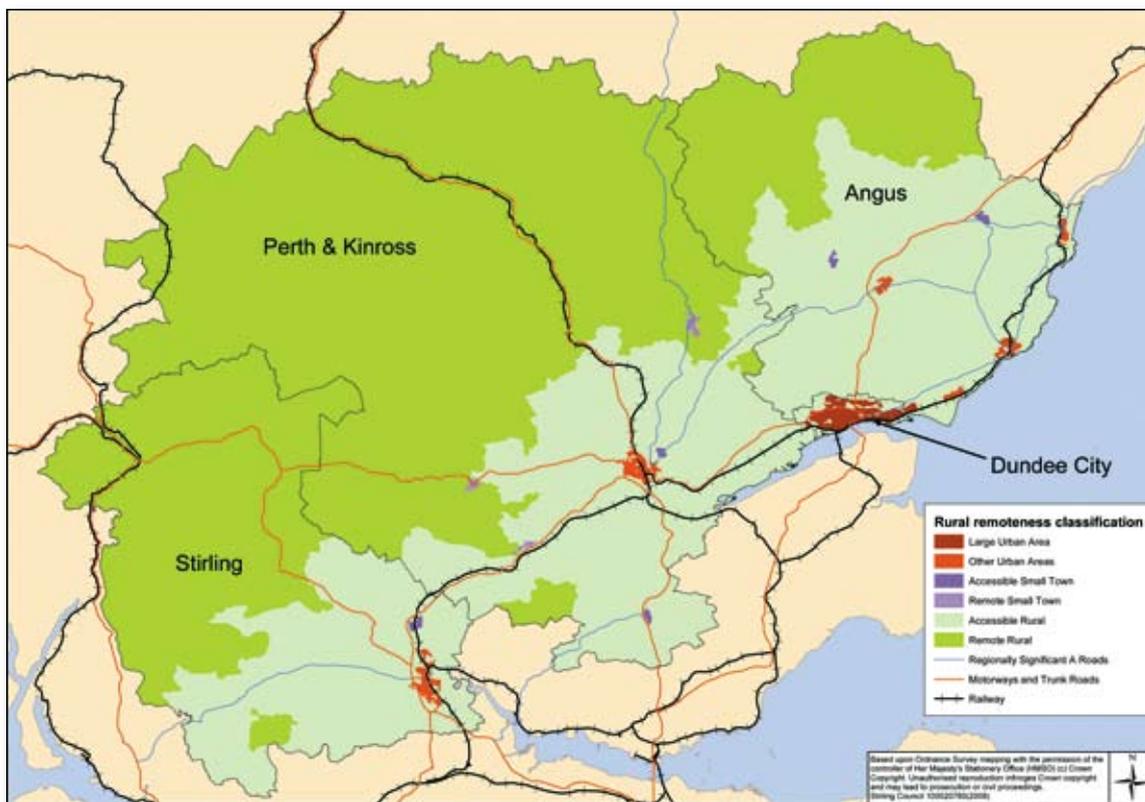


Figure 2.2 Urban and Rural Areas of the Tactran Region

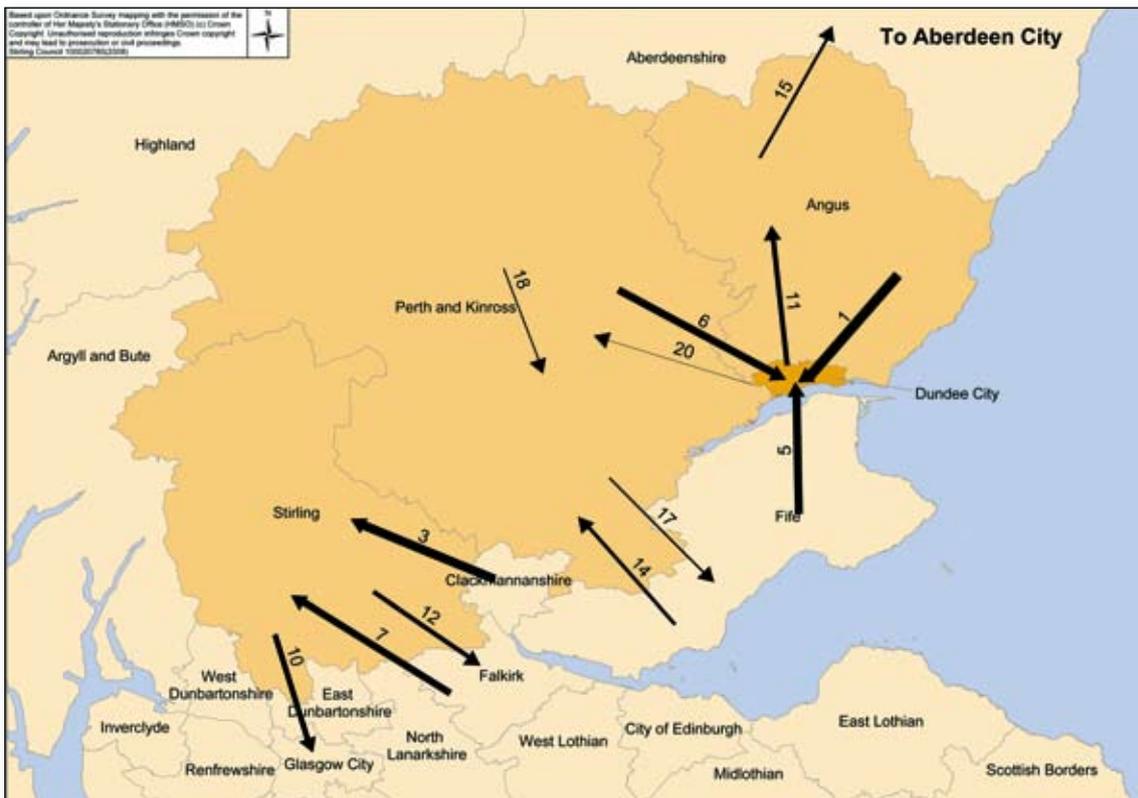
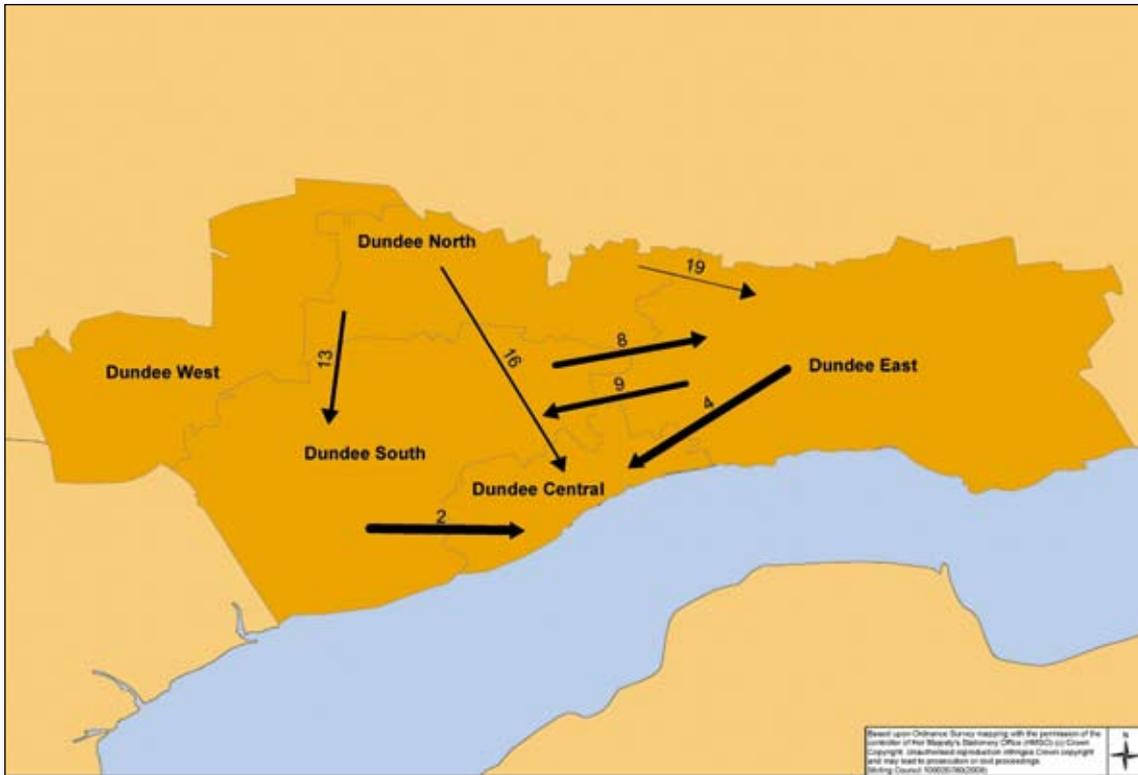
Figure 2.4 and Table 2.1 show the Top 20 commuter movements (Census 2001 Travel to Work data), within the TACTRAN region and between TACTRAN and neighbouring areas. The Table shows daily commuting movements and includes a number of large internal and cross-regional boundary movements including Clackmannanshire-Stirling, Fife-Dundee, Falkirk-Stirling, Angus-Aberdeen, and Stirling-Glasgow. It is important that the RTS considers these key cross-boundary links, as well as the internal transport network.

Table 2.1 Top 20 Commuter Movements (Census, 2001)

No	From	To	Car	PT	Other	TOTAL
1	Angus	Dundee City	8779	1357	375	10511
2	Dundee South	Dundee Central	2162	1153	1252	4567
3	Clackmannanshire	Stirling	3660	559	99	4318
4	Dundee East	Dundee Central	2688	1218	231	4137
5	Fife	Dundee City	3421	400	132	3953
6	Perth and Kinross	Dundee City	3419	273	156	3848
7	Falkirk	Stirling	2939	456	75	3470
8	Dundee South	Dundee East	1990	560	659	3209
9	Dundee East	Dundee South	2413	537	135	3085
10	Stirling	City of Glasgow	1991	616	21	2628
11	Dundee City	Angus	2031	267	147	2445
12	Stirling	Falkirk	2161	201	48	2410
13	Dundee North	Dundee South	1615	372	190	2177
14	Fife	Perth and Kinross	1888	150	21	2059
15	Angus	City of Aberdeen	1259	395	338	1992
16	Dundee North	Dundee Central	1205	683	81	1969
17	Perth and Kinross	Fife	1702	18	30	1750
18	Perth and Kinross (Highland)	Perth and Kinross (Central)	1471	174	42	1687
19	Dundee North	Dundee East	1175	345	108	1628
20	Dundee City	Perth and Kinross	1222	249	96	1567



Figure 2.4 Top 20 Commuter Movements



Roads

The Tactran region has a total of 452 km of Trunk Roads (including motorways) and 5716 km of local roads (including A, B, C and unclassified roads). Trunk Roads are the responsibility of Transport Scotland, whilst responsibility for local roads lies with individual local authorities.

The strategic Trunk Road network in the region includes:

- the M9/A9 connecting Stirling and Perth to Inverness and beyond (dual carriageway between Stirling and Perth, predominantly single carriageway beyond)
- the A90/M90 connecting Perth - Dundee - Angus to Fife and Edinburgh and to Aberdeen and the North (dual carriageway)
- the A80/M80 Stirling/Glasgow corridor through North Lanarkshire (dual carriageway)
- the A82/A85/A84 linking Fort William and Argyll to Stirling and the Central Belt via Tyndrum and Crianlarich (single carriageway)
- the A85 providing a key east-west route across Scotland from Oban to Perth via Lochearnhead and Crieff (single carriageway)
- the A91 connecting Stirling to Fife (single carriageway)
- the A92 linking Dundee and Fife via the Tay Road Bridge.

Other regionally significant A-roads in the area include:

- the A92 beyond Dundee along the east coast to Arbroath (dual carriageway) and on to Montrose and north (single carriageway) to join the A90 south of Stonehaven
- the A94 linking Perth and Forfar via Coupar Angus (single carriageway)
- the A93 connecting Perth to Braemar and Aberdeen via Deeside (single carriageway)
- the A811 Stirling to Drymen, Balloch and the A82 at the south end of Loch Lomond (single carriageway)
- the A932/A933/A935 linking Arbroath, Forfar, Brechin and Montrose within Angus (single carriageway)
- the A977 Kinross to M9/Falkirk via Kincardine Bridge (single carriageway).



Good Practice – A92 Upgrade in Angus

The A92 between Dundee and Arbroath was a high speed single carriageway road with a relatively poor accident record. The 17km of road had numerous minor road junctions and property accesses, with limited overtaking opportunities. As a local road the responsibility for this significant A class road rested with the local authorities.

In 2002 Angus Council awarded a design, build, finance and operate contract under the Private Finance Initiative. The scheme dualled the section of road between Arbroath and Claypotts junction in Dundee, providing grade separated junctions in the rural sections combined with roundabouts for all other road junctions.

As the most significant roads infrastructure project in the area, the new road, completed in 2005 has provided a major boost to the local economy creating a much improved and safer route for commercial as well as local commuter traffic. Utilising the opportunities offered by Private Finance Initiative enabled the scheme to progress representing a major investment by Angus Council, working in partnership with Dundee City Council, constructing a transport link for the 21st century.

Although congestion and delay is not widespread across the region, a number of key junctions in and around the three main cities are currently overloaded in peak periods, and are becoming more congested, including the Kingsway in Dundee, A9/M90/A93 Broxden Roundabout, Bridgend and A85 Crieff Road in Perth, Craig's and Customs Roundabouts and A9 Causewayhead Road corridor in Stirling. Delays to movement on the strategic roads occur mainly on the single carriageway sections of the Trunk and other Principal roads, including the A9 between Perth and Pitlochry, the A92 east of Dundee to Arbroath and on the A92 Tay Bridge crossing to Dundee. The proposed concentration of further housing and employment across the south of the TACTRAN region will exacerbate these problems over time.

Road Safety

Over recent years, the region's local authorities have succeeded in significantly reducing the number of casualties from road accidents, in line with national targets. However, a number of casualty 'hot spots' remain, with particular concerns along the A9 from Stirling to Drumochter, the A84/A85 between Callander and Crianlarich, the A90 north of Dundee, the A92 in Angus, the A811 from Stirling to Loch Lomond and the A977 from Kinross to the Kincardine Bridge.

Rail

The TACTRAN region is at the heart of the Scottish rail network. There are 22 rail stations within the region, with nine of the top 10 passenger flows between urban centres running through the area. The First ScotRail Express network services from Glasgow - Aberdeen; Glasgow - Inverness; Edinburgh - Aberdeen; and Edinburgh - Inverness all serve the region. Stirling and Dunblane are also served by the Glasgow and Edinburgh suburban rail networks. The West Highland lines serve four stations in the region at Crianlarich, Upper and Lower Tyndrum and Rannoch. Long distance passenger services are provided by National Express East Coast to/from London via the East Coast Main Line, to Leeds, Birmingham and the West Country by CrossCountry, and to London on the Caledonian Sleeper service. The rail network also provides for movement of freight.



Figure 2.5 The Tactran Rail Network and Station Passenger Numbers

Dundee and Stirling are two of the busiest stations in Scotland, with 1.4 million and 1.7 million passengers entering, exiting and interchanging these stations annually (Office of Rail Regulation 2004-05 figures). Dundee, Stirling and Perth are all amongst the top six urban passenger arrival centres.

The stations at Dunblane, Arbroath, Montrose, Bridge of Allan and Pitlochry are also well used. Annual numbers of passengers using these stations ranges from 84,000 (Pitlochry) and 320,000 passengers (Montrose) to nearly 400,000 passengers in Dunblane. The remaining stations across the region are less well used. This is in large part due to the very infrequent nature of services stopping, which limits the opportunity for encouraging increased use of rail at these locations.

The level of facilities available to passengers varies significantly, with the small rural stations often unmanned and having only basic facilities. There is a need for improvements to disabled access at a number of stations in the TACTRAN area. There is also a need to address existing bottlenecks, such as the single track section at Usan near Montrose, which is a constraint on developing improved passenger and freight services.

Good Practice – Station Improvements Angus Rail Interchange Project

Following the award of Scottish Executive Public Transport Funding, Angus Council worked in partnership with First ScotRail and Network Rail to deliver a range of improvements at Carnoustie, Montrose and Arbroath stations aimed at improving station access and interchange between modes. Improvements included:

- enhanced passenger waiting facilities and CCTV installation at Carnoustie
- a passenger lift at Arbroath
- additional car parking facilities at Montrose and Carnoustie
- improved passenger interchange from bus and taxi at Montrose
- cycle shelter provision at Arbroath, Montrose and Carnoustie.



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Responsibility for maintenance and enhancement of the rail network lies with Network Rail and Transport Scotland. During the preparation of this RTS, Network Rail published its Scotland Route Utilisation Strategy (RUS), which sets out proposals and options for improving the efficiency and effectiveness of the rail network over the period to 2016. Rail is a key part of this RTS and TACTRAN supports RUS proposals for improvements at Dundee and Perth stations; introduction of a new Park and Ride station at Bannockburn; capacity improvements between Stirling and Glasgow and at Glasgow Queen Street Station; capacity and journey time improvements between Aberdeen - Dundee - Edinburgh and capacity improvements at Edinburgh Waverley; and frequency improvements between Inverness - Perth - Edinburgh. TACTRAN also supports proposals in the RUS for introduction of new hourly services between Edinburgh - Perth and Edinburgh - Dundee (possibly extended to Arbroath); review of station car parking policy to provide increased opportunities for rail-based Park and Ride and encourage modal shift in favour of rail for commuter and other demands.

TACTRAN has also proposed that account is taken of the Tay Estuary Rail Study (TERS) in developing proposals for improving rail passenger services and capacity between Dundee and Edinburgh and between Stirling/Dunblane - Glasgow, and that specific consideration is given to developing the TERS proposals to enable an additional hourly service between Arbroath - Dundee - Perth - Stirling - Glasgow, with the potential for additional stations at locations such as Dundee West, Blackford, Greenloaning, if the need for station re-opening can be demonstrated.

Scotland's National Transport Strategy and associated Scotland's Railways document indicate proposals to generally improve journey times and connections; to maximise the role of Dundee and Perth as key interchange stations and introduce higher standards at these stations; to reduce journey times between Aberdeen - Edinburgh/Glasgow by 2006 - 2009; introduce an hourly service between Perth - Inverness and hourly commuter service between Perth and Edinburgh by 2009 - 2014; and to evaluate the electrification of routes, including from Edinburgh and Glasgow to Aberdeen and Inverness and also the feasibility of a High Speed Rail link between Edinburgh and Glasgow and London, by 2014 - 2020. TACTRAN supports these proposals subject to further consultation on the actual implications and benefits within the TACTRAN area and inclusion of consideration of the above local and regional improvements within development of these proposals.

Bus

Buses are the most widely available form of public transport across the region. There are four main operators - Stagecoach (over 450 buses in the TACTRAN area, including the former Strathtay Scottish Omnibus), Travel Dundee (118 buses) Citylink (80 coaches) and First (70 buses). Together these account for over three-quarters of the bus fleet in the region.

These main operators are supplemented by 31 smaller scale operators, who are licensed to operate less than 10 buses each. They include mainly coach operators who run school services and a few registered Council subsidised services.

There are around 45 rural commercial bus services operating in the TACTRAN region. 60% of these services operate on an hourly basis during weekdays and the rest operate less frequently. The main bus companies operating in the TACTRAN area and the number of buses they operate is provided in **Appendix B**.

Angus

The coastal area from Montrose, Arbroath and Carnoustie to Monifieth is the most densely populated and here bus services are provided largely on a commercial basis. The Strathmore area, incorporating the towns of Forfar, Kirriemuir and Brechin, is less densely populated and here most of the bus services are provided on a subsidised basis except for the commercial operation on the main inter-urban corridors. Beyond the Strathmore area lies the sparsely populated Angus Glens, where all services are provided on a subsidised basis.

There are 13 operators providing registered local bus services in the area, with Stagecoach Strathtay, providing approximately 90% of the local bus service network. Much has been achieved in partnership with operators to provide enhanced service provision in terms of improved frequency, network coverage and vehicle standards. Public transport infrastructure has also been improved significantly with an extensive shelter renewal programme, improved passenger interchanges, and on key corridors and at major stops, the provision of real time information, solar lighting and bus boarders. The diverse journey demands of rural Angus remain a challenge and new and innovative means of meeting passenger demand are actively pursued.



Good Practice – Angus Council Public Transport Information Strategy

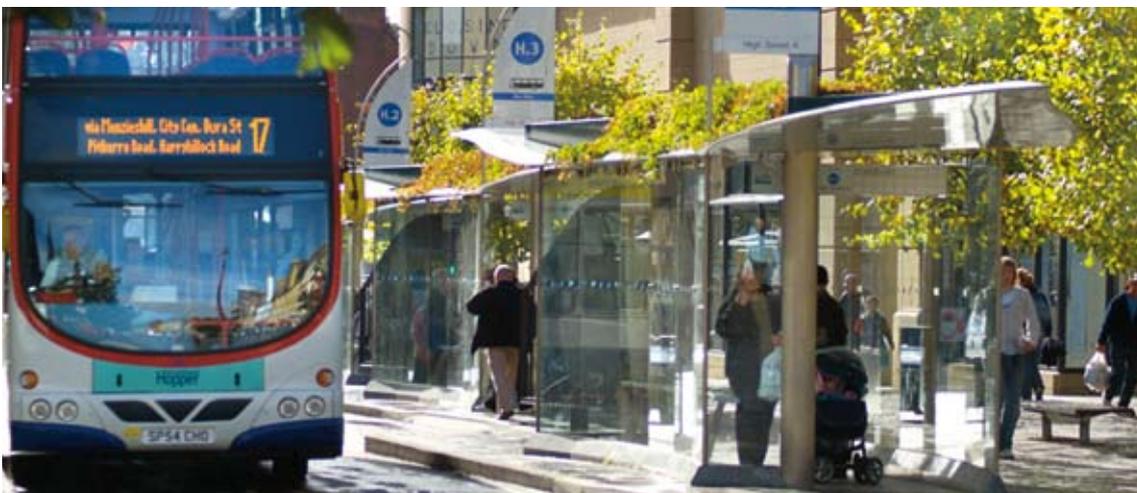
In line with the requirements of the Transport (Scotland) Act 2001, Angus Council has produced a Public Transport Information Strategy determining the provision of local bus information to the public. The strategy covers all information including; paper timetables, roadside displays, real time information, web based information, fares information, concessionary travel information, information for mobility impaired passengers, maps and information in respect of the delivery of the National Transport Timetable.

The production of the strategy followed extensive consultation including customer satisfaction surveys, a Young People's Forum, workshops with key stakeholders and bus operators in addition to benchmarking with other Scottish local authorities. The resulting strategy sets out partnership working between operators and the local authority to deliver short, medium and long term measures for improved public transport information provision.

Dundee

In Dundee significant investment in partnerships with local bus operators, Travel Dundee and Stagecoach, NHS Tayside, Scottish Enterprise Tayside and the Scottish Executive has delivered one of the most modern bus systems in the UK. More than 95% of bus services are operated commercially providing a high frequency / high quality city-wide network with Travel Dundee operating a 100% low-floor bus fleet since October 2004.

The City Council has delivered a step change in waiting facilities and information systems that includes Real Time Passenger Information, Intelligent Traffic Signal Bus Priority, CCTV on all buses, timetable information at all stops, integrated journey planning on line and through interactive kiosks, high quality interchanges in the city centre and at Ninewells Hospital and all bus shelters and bus stop poles replaced. These improvements combined with Travel Behaviour Change marketing are yielding continual passenger increases and positive feedback through market research.



Good Practice - Dundee Smartbus

Recognising the importance of public transport Dundee City Council has improved the network and overall experience for existing users and to attract and encourage car users to use the bus more frequently.

The city-wide Smartbus project included:

- 350 bespoke high quality bus shelters with real time information displays, good quality paper information and CCTV capability
- 550 new bus stop poles each incorporating solar power to light good quality paper information
- all buses fitted with CCTV
- bus priority at all traffic signal junctions within the city
- fleet management facility for bus operators.

Through a Quality Bus Partnership Concordat, the bus operators have invested in new bus stock to match the City Council's bus initiatives.

Perth and Kinross

Perth and Kinross embraces a large and diverse public transport catchment. Many of the urban city services, offering good commercial frequencies, are operated by Stagecoach. Partnership working between Stagecoach and the Council resulted in the initial "Kickstart" pilot service 7, which generated 70% passenger growth over 3 years. Many of the rural services are tendered by the Council.

In 2006 the Council re-tendered the majority of supported local bus services, resulting in a number of positive changes being made, including: timetable improvements, the introduction of wheelchair accessible vehicles on certain corridors, and adjustments to some journeys to allow more reliable operation.

Stirling

The Stirling area comprises diverse urban and rural elements. In the urban area, consisting of Stirling city, the towns of Bridge of Allan and Dunblane and villages close by, First operate a comprehensive network of commercial services, with competition from local operators on the most popular routes. Stirling Council subsidises some early morning, evening and Sunday journeys as well as daytime services to areas that would otherwise remain unserved.

In the rural area, First provides direct commercial links to Stirling and Glasgow along main routes, but all other services are specified and subsidised by the Council. A fully demand-responsive service operates in the Balquhider area. Designation of Loch Lomond and The Trossachs National Park has increased public expectations of public transport in the rural area. Stirling Council is progressively upgrading waiting and information facilities throughout the urban and rural areas to meet the needs of residents and visitors alike.

Good Practice - Bus Route Development

Significant enhancements have taken place across the region using Bus Route Development Grant. The Grant provided financial support for up to three years to support the development of new and existing local bus services which have the potential for growth. Improvements to services have included:

- increased service frequencies
- enhanced bus stop infrastructure
- the introduction of low floor buses
- improved customer safety through installation of CCTV on buses
- increasing the number of drivers holding an SVQ in Passenger Transport and ensuring all drivers serving the route have been on customer care training.

New and improved services included:

- a new service in Forfar providing a link for workers to an existing industrial estate, not previously served by public transport, and a new business park
- enhanced Services 5/6 and 9/10 in Perth linking the residential areas of Moncrieffe, Craigie, Letham, North Muirton and Muirton with the city centre.
- A new frequent express bus service directly connecting major housing areas in Monifieth / Broughty Ferry in the east of the city with Ninewells Hospital and Dundee Technology Park in the west.

The services have been successful, with decline in patronage being reversed on Services 5/6 and 9/10 in Perth, and in Dundee, where the Cross City Direct service began operating in October 2005, passenger numbers have increased by over 100% since the first three months of operation and by early 2007 the service was carrying approximately 1,200 passengers per day.



Community Transport and Demand Responsive Transport

Scheduled bus services cannot cater for all transport needs across the region. Community Transport services provide an essential lifeline for many of the region's residents, particularly those in remote rural areas, those with mobility impairments who are unable to use conventional registered bus services, and those who wish to travel at times when registered bus services do not operate. Community Transport (CT) and Demand Responsive Transport (DRT) services, together with Taxicard services in Angus, Dundee and Stirling, provide an equally important and essential supplement for those groups of users in both rural and urban areas.

Many existing CT and DRT schemes are run on a purely voluntary basis. The existing level of CT/DRT usage in the TACTRAN region is around 170,000 journeys per annum. A large number of these journeys are provided by Dundee Taxicard (120,000); Order of Malta Dial-a-Journey (27,000 +) and the WRVS (Womens Royal Voluntary Service), together with a significant number of small fleet services with patronage between 150 and 3,000 per annum. These are all essential services, on which many people depend. There is considerable scope for expanding the role of CT and DRT services in maintaining and enhancing access by public transport in both rural and urban areas.

Over recent years the Scottish Executive's Rural Community Transport Initiative (RCTI) has supported the development of a number of rural community transport operations. A range of voluntary and community transport providers, including WRVS and Strathcare have received up to 75% grant funding towards their costs of providing community and demand responsive services in rural Scotland. From 1 April 2008 funding for these schemes has been incorporated into the overall funding local authorities receive from Scottish Government.

Good Practice – Community Transport

Community Transport varies from single car voluntary schemes to fleet taxi / minibus rentals. Some examples of good practice in the TACTRAN area include:

- Dundee Community Transport offers group hire of a 16-seater minibus to constituted voluntary and charitable organisations within Dundee
- Order of Malta, Dial a Journey provides mobility impaired people with taxi style services giving access to leisure, recreation and healthcare in the Stirling, Clackmannanshire and Falkirk Councils.
- Strathcare provides a small volunteer driver scheme for disabled people in Strathearn
- Balquhidder area subsidised taxi service offers a taxi ride for the same cost as a bus fare.

Park and Ride / Park and Choose

The rail and bus networks in the region provide opportunities for the development of Park and Ride or Park and Choose schemes. Currently there are four bus-based Park and Ride sites operating:

- Perth (Broxden) Park and Ride - located on the A9 approach to Perth, adjacent to the Broxden roundabout. This site, with 400 free car parking spaces and services running Monday - Saturday, has proved extremely successful
- Scone Park and Ride - located on the A94 approach to Scone with 50 car parking spaces and operating 7 days a week
- Springkerse Park and Ride - situated south east of the city of Stirling. This site is operational Monday - Saturday and has a capacity of 250 car spaces
- Kinross Park and Ride - opened in May 2007 and located adjacent to Junction 6 of the M90, provides connections into the express coach network as well as some local bus services. The site has spaces for 126 cars and 12 cycle lockers.



Good Practice – Park & Ride

Successful Park and Ride sites have been established at Broxden in Perth and Springkerse in Stirling.

The service at Broxden has enjoyed considerable success since opening. The strategic location of the site and the frequent service provision has encouraged a switch for many trips that would have previously driven into the city centre. With the current issues of congestion in the city centre and the designation of the Air Quality Management Area for the whole of the city, the continued operation and development of the Park and Ride service is crucial to the city's longer term transport strategy. The decision to allow the highly successful Megabus service to use Broxden as an interchange has opened up travel opportunities for many.

Patronage levels have risen steadily since the Broxden site opened and the original 250 space car park was frequently full. An extension providing an additional 150 parking spaces, funded jointly by TACTRAN and Perth and Kinross Council, was opened in June 2008.

Springkerse Park and Ride offers a good model for a town or small city that is not large enough to justify a service dedicated only to park and ride. Key features of success include:

- a service open to all not just Park and Ride customers
- two sections of dedicated busway ensure that the Park and Ride customers travel in and out of Stirling city centre quicker than if they had driven
- routing of the service through Morrison's superstore via a section of bus-only route ensures that retail customers get right up to the store entrance if travelling by bus
- presence of a retail park, business centre, industrial estate and major sports facility at the car park end of the route ensures balanced directional flows and a good spread of customers throughout the day.

Many of the region's rail stations also provide opportunities to Park and Ride. Well-used locations include Dunblane where parking has overflowed into adjacent streets, Montrose, Perth and Stirling.

Ports and Harbours

The region has three active ports, the Port of Dundee (operated by Forth Ports), Montrose and Perth Harbour. These ports currently handle a wide range of general and bulk goods including timber, pulp, grain, paper, oil-related cargoes and agricultural-related goods.



Table 2.2 Inward and Outward Foreign and Domestic Traffic in 2004

Port	Inward Traffic	Outward Traffic	Total Traffic
Dundee	905,000 tonnes	317,000 tonnes	1,222,000 tonnes
Montrose	466,000 tonnes	232,000 tonnes	698,000 tonnes
Perth	133,000 tonnes	7,000 tonnes	140,000 tonnes

Source: Scottish Transport Statistics 2006

The Port of Dundee is a 'Forest Product Specialist' and an Offshore Oil and Gas Support Facility and also serves a growing 'Cruise Ship' market. Montrose is well equipped to deal with the full range of commercial and oil-related cargoes and for general storage, warehousing, fabrication and repair work. Perth can handle cargo ships up to 90 metres in length and currently handles agricultural-related cargoes, timber, chemicals and mineral ore.

Each of these ports has infrastructure/access problems by road and whilst none currently has a rail-freight handling capability, opportunities exist to enhance the role of Montrose and Dundee Ports and Perth Harbour, by improving their road and rail connectivity.

Airports

There are two airports located within the TACTRAN region - Dundee Airport and Perth Airport. Since December 2007 Dundee Airport has been operated by Highlands and Islands Airports Ltd (HIAL). Cityjet provides a service to London City Airport and Flybe operates to Belfast and Birmingham. Perth Airport is operated by Perth Airport 2000 Ltd. Currently there are no scheduled passenger services provided, the airport facilities being mainly used for flying training. No air cargo services operate from either Dundee or Perth Airport.

UK and Scottish national policy recognise that air travel is important for regional economic prosperity and the social and other benefits it can bring. However the economic and social benefits of air travel need to be balanced against the wider impacts which air travel has on the environment. The UK Government's White paper, the Future of Air Transport, and Scotland's National Transport Strategy, have identified the need to develop terminal and other facilities at Dundee to support growth at Scotland's airports and encourage the development of new routes which reduce the need for connecting through congested airports in south east England.



The airports at Aberdeen, Edinburgh and Glasgow outwith the TACTRAN region, also provide important services for the region's residents and businesses. Access to both Edinburgh and Glasgow Airports will be improved through the Gyle railway station interchange with the proposed Edinburgh Airport tram service and GARL airport rail link scheme. It is important that the implications of these proposals for developing Dundee Airport as a regional facility are recognised.

Walking and Cycling

All TACTRAN Councils, together with Sustrans and other stakeholders, have been promoting walking and cycling schemes across the area. Initiatives are in place to extend, improve and develop non-motorised commuter routes, create a core network of paths, and link the existing cycling routes to the National Cycle Network.

The region is served by a number of National Cycle Network routes with further routes proposed to extend coverage or provide more direct connections than currently.



Figure 2.6 National Cycling Network in the TACTRAN region

As noted in the 'Cycling Scotland Audits of Performance', all TACTRAN Councils have a good representation of cycling. However, there is a need to better promote the extensive road networks as an integral part of the cycling network and to further develop cycling links to and parking at railway and bus stations and other transport interchanges. The report highlights good cycling networks particularly in Perth and Kinross, and comments upon examples of good practice also in Stirling (Cycle to Station initiative), the Green Circular recreational route in Dundee; and the school surveys undertaken in Angus for Safer Routes to School.

Good Practice – Walking & Cycling

Dundee Green Circular - Dundee City Council has worked in partnership to develop an outdoor access strategy that aims to provide a cohesive network of path and cycle routes that cater for recreational and commuter walking and cycling. A continuous cycle and walk route has been developed around the city.

Cycling and Station Access Project - Dunblane, Bridge of Allan & Stirling - The Cycling and Station Access Project was funded from a Public Transport Fund award from the Scottish Executive. The aim of the project was to improve access for all users to Dunblane, Bridge of Allan and Stirling Railway Stations. The project included:

- platform extensions, CCTV coverage, cycle and motorcycle parking and improved passenger information at Bridge of Allan and Dunblane Stations
- a car park extension at Bridge of Allan
- pedestrian and cycle links connecting residential areas, schools and employment centres with the stations
- a new pedestrian/cycle bridge connecting the Forthside development with Stirling Station
- cycle parking stands and cycle lockers at Stirling Station.



Conclusions

The TACTRAN region is centrally located within Scotland and straddles the main road and rail routes connecting Aberdeen and Inverness with Glasgow, Edinburgh and the south. External connectivity is enhanced through the presence of three ports and two airports. However, each of the ports has issues of road access and none is rail connected. Neither of the two airports handles cargo and while Dundee Airport has services to London, Belfast and Birmingham, it is necessary to travel to Aberdeen, Edinburgh or Glasgow Airports to access a wider range of destinations.

The population is largely urban and concentrated in the Tay and Forth valleys and Strathmore. While traffic congestion is not generally a problem in the region, it does occur, particularly in the peak periods, around the three main cities of Dundee, Perth and Stirling. Road safety has improved in recent years, however there are a number of locations on the main inter-urban routes where the frequency and severity of accidents are of concern.

Much of the north and west of the region, in the Angus glens, highland Perth and Kinross and Stirling, is sparsely populated. This gives rise to difficulties in the provision of public transport for those without access to a car.

In terms of public transport provision, the rail network is in need of improvements to infrastructure, particularly to stations and single line sections, though there are proposals to reduce journey times and enhance frequencies on the inter-city routes that pass through the region.

Bus services provide the most widely available form of public transport. In the urban areas and on the main inter-urban routes these are largely operated commercially by the larger national operators. Rural services tend to be specified and subsidised by partner Councils with many operated by smaller locally based operators. Buses are complemented by CT and DRT services operating in remote rural areas, providing for the needs of people with mobility impairments or at times when local bus services do not operate. Park and Ride and Park and Choose provide opportunities for motorists to combine the convenience of the private car in rural areas with the higher frequency of public transport services in urban areas and avoiding the need to find a parking place in larger town centres. Four Park and Ride sites are currently in operation, together with parking opportunities at many railway stations.

The most environmentally sustainable forms of transport, walking and cycling, have been the subject of promotion by the partner Councils, together with Sustrans. There are a number of National Cycle Network routes in the region, which include some gaps where routes have yet to be completed.



3 Our Vision and Objectives

3.1 Tactran Vision

Our Vision statement sets out the strategic direction and outcomes we want this RTS to achieve over the next 15 years and beyond, which is to deliver:

'a transport system, shaped by engagement with its citizens, which helps deliver prosperity and connects communities across the region and beyond, which is socially inclusive and environmentally sustainable and which promotes the health and well-being of all.'

3.2 RTS Objectives

In support of this Vision, we have defined a series of Objectives for our Transport Strategy. These have been developed from a detailed assessment of the regional problems, trends and issues, as identified through analysis and consultation with key stakeholders and detailed in section 4. Our Objectives also reflect the guiding principles outlined in the statutory RTS Guidance and Scotland's National Transport Strategy, as well as the Strategic Objectives and National Outcomes outlined in the Scottish Government's National Performance Framework. These have been developed under six broad themes: **Economy; Accessibility, Equity and Social Inclusion; Environment; Health and Well-being; Safety and Security; and Integration**. The overarching Objective for each theme and related supporting sub-Objectives are set out below:

Economy: To ensure transport helps to deliver regional prosperity.

- 1 Ensuring that transport infrastructure and services in the region help deliver economic growth, particularly in key business and employment sectors
- 2 Improving the efficiency, reliability and integration of the movement of goods and people
- 3 Addressing issues of peripherality associated with the TACTRAN area.

Accessibility, Equity and Social Inclusion: To improve accessibility for all, particularly for those suffering from social exclusion.

- 4 Improving access to employment
- 5 Improving access to public services, including health and education
- 6 Improving access to retail, recreation and leisure facilities
- 7 Reducing severance and social and economic isolation caused by transport, or by a lack of it
- 8 Improving the accessibility and inclusivity of the transport system.

The Environment: To ensure that the transport system contributes to safeguarding the environment and promotes opportunities for improvement.

- 9 Contributing to the achievement of the Scottish national targets and obligations on greenhouse gas emissions
- 10 Promoting a transport system that respects both the natural and the built environment
- 11 Promoting a shift towards more sustainable modes.

Health and Well-Being: To promote the health and well-being of communities.

- 12 Helping to meet or better all statutory air quality requirements in the TACTRAN area
- 13 Promoting a culture of active and healthy travel.

Safety & Security: To improve the real and perceived safety and security of the transport network.

- 14 Improving transport-related safety
- 15 Improving real or perceived levels of personal security on the transport network.

Integration: To improve integration, both within transport and between transport and other policy areas.

- 16 Improving integration of all transport modes
- 17 Ensuring integration with land-use planning
- 18 Ensuring a fit with other relevant national, regional and local strategies and policies.

These Objectives have guided the identification of options and packages of measures which have been considered and assessed in the development of our Strategy.

3.3 Links between RTS Objectives and Scottish Government's Strategic Objectives

The RTS Objectives support all five of the Scottish Government's Strategic Objectives, which are as follows:

- **Objective 1 - Wealthier and Fairer**
Enable businesses and people to increase their wealth and more people to share in that wealth
- **Objective 2 - Healthier**
Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care
- **Objective 3 - Safer and stronger**
Help local communities to flourish, becoming stronger, safer places to live, offering improved opportunities and a better quality of life
- **Objective 4 - Smarter**
Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements
- **Objective 5 - Greener**
Improve Scotland's natural and built environment and the sustainable use and enjoyment of it.

Our Objectives also contribute to the achievement of thirteen of the fifteen National Outcomes. The connections between the RTS Objectives and the Government's National Objectives and Outcomes are shown in detail in **Appendix C**.

4 Trends and Issues

In developing the Strategy we have identified and examined the main transport problems, constraints and opportunities within the region. This chapter outlines the key trends and issues affecting transport in the TACTRAN region under the six broad themes discussed in Chapter 3. A more detailed assessment of the key problems, issues, trends and opportunities for transport is provided in the RTS Issues and Objectives report.

4.1 Economy

Cost of Travel

In the last 25 years the real cost of motoring has **fallen by 10%** while average bus and rail fares have **risen by 40%**. Over this same period disposable incomes have **risen by 95%** so travel is, in general, much more affordable for those in work, and the volume of travel has risen substantially.

The combined impact of these two trends has been an **increase of 81% in car kilometres** over this 25 year period, with a decline in total use of public transport (bus person kilometres reduced by 8% and rail travel has remained broadly static - Scotland wide figures).

It is expected that the combination of increased efforts to reduce carbon emissions and the effects of 'Peak Oil' is likely to lead to significant increases in future fuel prices. The Department for Transport regularly update their estimates of future fuel prices.



Traffic Growth and Congestion

As a result of increasing mobility and a growing local economy, traffic on the road network has been **increasing on average by around 1.6% per annum** over the last 10 years. Some illustrative statistics from 2001 Census and the Scottish Household Survey (SHS) of both the nature and the diversity of the impacts of this growth include:

- the majority of car journeys are now 'driver only' - 61% of all trips and 84% of commuter car journeys in the TACTRAN region
- 10% of drivers in the TACTRAN region currently report being delayed by congestion, compared to a corresponding Scottish-wide figure of 12% (SHS 2003/04)
- this proportion of delayed car journeys made by residents of the region rises to nearly 20% of trips made during the morning and evening peak periods, with commuting and travel to education the two journey purposes most affected
- the growth in retail and tourist trips has resulted in congested traffic conditions during weekends and the high seasons for tourism.

Councils have been using demand management measures in line with their Road Traffic Reduction targets to minimise the trend of traffic growth. These measures, supplemented by future actions in support of this Strategy, will contribute to the Scottish Government's target of stabilising traffic at 2001 levels by 2021, as reaffirmed in Scotland's National Transport Strategy.

Future traffic growth will also be affected by any significant increases in fuel prices, either as a result of supply/demand effects or increased fuel taxation or both. Increasing emphasis on reducing carbon emissions may also result in behavioural changes which may have a dampening effect on future traffic growth and make a positive contribution towards meeting the Scottish Government's Traffic Stabilisation target.



Commuting Patterns

The general background trend of greater mobility has been reinforced in places where the economy is growing. Across the TACTRAN region as a whole there has been an increase in jobs (9,000 since 1998). Over half of these are in Dundee, a quarter in Stirling and the remainder in Perth and Kinross.

This overall picture includes some specific changes of note:

- the growth in jobs in Dundee City coupled with the decline in Dundee's working-age population has increased the amount of in-commuting from neighbouring areas
- Stirling and Perth's good accessibility to employment in the Central Belt has increased their popularity as residential locations, with consequent increases in 'out commuting'.

The combination of work commuting and the 'school run' are key drivers of congestion and crowding on the transport network. Understanding the trip patterns and choices people make when commuting can, therefore, assist in identifying objectives and appraising solutions. Within the region:

- commuting accounts for 22% of all journeys, matched by shopping which creates a similar proportion of the overall daily total number of trips made by TACTRAN residents
- 78% of residents' travel to work journeys are within local authority areas - Dundee City has the highest proportion (88%) of internal trips, followed by Perth and Kinross (82%), Angus (69%) and Stirling (68%)
- approximately 69% of all journeys to work in TACTRAN are currently made by car, walking accounts for 17%, bus 10% and rail and cycle cover about 2% each
- Dundee's car commuter mode-share is around 62%, with its public transport share around 19%
- within Angus, Perth and Kinross and Stirling, the car share is around 85%, with the share of public transport being correspondingly lower, at around 9%
- The car share of commuting trips increased from 63% to 70% between 1991 and 2001, while the bus share of these trips went down from 16% to 10% - the impact on commuter traffic was further magnified by a significant reduction in car sharing over this period and so the 7% increase in the proportion of people using cars represented an even larger number of additional cars.

Initiatives such as the adoption of corporate car sharing schemes in Dundee have sought to address the problem of increased car use. The local authorities across the region have also implemented a range of successful initiatives, including Smartbus and Bringing Confidence to Public Transport (BCPT) in Dundee, together with the use of Bus Route Development Grant funding in most Council areas. However, with a growing economy and without further interventions, the trend would be for an increasing number of trips by car, compounding the underlying increase in traffic nationally, contrary to supporting the Scottish Government's Traffic Stabilisation target.

Freight

Currently there are no rail freight terminals in the TACTRAN region. This, combined with the limited freight capability of the rail network, results in the majority of freight within and through the region being transported by road. The National Transport Strategy Freight Action Plan contains proposals to develop regional freight terminals.

Scottish Transport Statistics 2006 show that on average some 28.5 million tonnes per annum of freight are moved by road in the former Tayside & Central Regions. Of this, 13.3 million tonnes (47%) started and ended its journey within this area. The main external movements are to Strathclyde, Lothian and the rest of the UK.

The cargoes handled by the region's three main ports of Montrose, Dundee and Perth are described in Chapter 2. The ports together serve both the immediate hinterland and the wider east coast of Scotland. Principal access to/from the ports is currently via the road network. There are potential opportunities to integrate rail freight facilities into the ports to reduce dependence on road transport.

There are currently no air cargo services from Dundee airport. Edinburgh airport currently handles the majority of air cargo and mail in Scotland, with 80% of its cargo throughput being in the express mail sector. Consequently there is a strong reliance in the region on access to Edinburgh airport to serve the growing technology, manufacturing and processing industries which have established in the region. There is a potential opportunity to expand facilities and services at Dundee airport, which is well located to serve the region's needs.

The most relevant freight-related context and trends are:

- dispersed economic activity and ongoing dispersion of population out of traditional centres is increasing the demand for local freight transport for distribution
- there are no operating rail freight terminals in the TACTRAN region and increasing traffic congestion in the Glasgow area is restricting access to the increasingly-important rail freight terminals at Coatbridge and Mossend; facilities at Grangemouth and Rosyth are closer to the region and throughput here is growing
- significant recent and continuing expansion in the volume of timber extraction within the region that currently relies on the road network as its principal means of distribution
- increasing delays and reliability problems are affecting strategic transport links (i.e. Trunk Roads and other key freight links, including links to ports)
- many of the worst bottlenecks experienced by local freight operators are on the key links outwith the TACTRAN region, notably the A80, the Forth Road Bridge and in the Glasgow area.

Land Use and Development Pressures

The development of sustainable communities is at the heart of national planning policy. The National Planning Framework for Scotland, currently under review, states that “the planning system can promote more environmentally sustainable forms of transport and settlement by focusing new development in places which are well located in relation to existing public transport infrastructure”.

This is simplified in ‘Planning for Transport’ SPP17 – “The planning system is a key mechanism for integration through supporting a pattern of development that...takes account of identified population and land use changes in improving accessibility to public services, including health services jointly planned with Health Boards, and....reduces the need to travel”.

All of the current Plans for the Region - Structure Local and Community - suggest that the trends for growth in employment and increasing demand for housing due to reductions in household size will continue. Whilst both continued growth in employment and increased demand for housing reflect a vibrant economy, effective land-use/transport planning and supporting measures are required to ensure that economic growth does not undermine the efficiency and reliability of the transport network by leading to growing problems of congestion.

Accordingly, each of the three Structure Plans that comprise the TACTRAN region also seeks to address the implications for transport arising from development. In Dundee and Angus *“the promotion of a pattern of development and land use which encourages sustainable methods of transport and reduces the need to travel remains a major challenge in Dundee and Angus where accessibility rather than congestion is the key problem”*.



This issue is addressed in the Plan's Settlement Strategy in the following terms: *"the existing pattern of land use and development is a key determinant in guiding additional development to the most sustainable locations. This is reinforced by the relatively modest scale of development anticipated, arising from population change through to 2016, which can most efficiently and effectively be focused on existing settlements"*.

The Perth and Kinross Structure Plan *"recognises that Perth is the dominant centre and the prime source of the area's economic growth. Therefore the Plan focuses growth on Perth and other growth points.... in order to reinforce this role". The Plan continues "an integrated approach to land use allocations and policies is required in order to meet the objectives of sustainable development"*.

The Clackmannanshire and Stirling Structure Plan states – *"in identifying sites for development in Local Plans and in the assessment of other development proposals, the Councils will consider the contribution of the development to the Plan's strategy of "Working Towards Sustainable Development". The Structure Plan's locational strategy "seeks to guide development to sustainable locations where overall it reduces the need to travel"*.

Key future socio-economic trends which are likely to have transport-related impacts for the region include:

- General Register Office for Scotland (GROS) projections suggest an increase in the total population within the TACTRAN region between 2006 and 2031, with a decrease in Dundee's population offset by growth in the rest of the region
- Over this 25 year period the region is forecast to have a 7% increase in the number of households, driven largely by a trend towards smaller average household size – this may lead to a more dispersed population which would be harder to serve efficiently by public transport
- Structure Plan policies are in place in all Council areas to promote sustainable development and minimise the impact of these trends on the transport network
- employment levels in the region are forecast to increase, leading to increased prosperity and increased demand for commuter travel
- changing work patterns as a result of modern technology and flexible working may also result in significant impacts on the transport network
- car ownership and use in the region has been growing steadily and is likely to continue to do so
- the relevant corridors where significant increases in peak period congestion are forecast include the A90 (Kingsway), south and east Stirling, the A9 between Stirling and Perth, the M90 and Forth Road Bridge, the A80/M80 Corridor and the A977 through Kincardine.

To cater for a trend increase in the number of households during the next 20-25 years, major land allocations have been identified in the three Structure Plans that make up the area. If taken up, and subject to Structure Plan reviews, these would continue the trend of concentrating the majority of the TACTRAN population in urban areas.

The Structure Plans and related land use planning policies all seek to promote sustainable development and minimise the impact from development on the transport network. Within Dundee, the trend for a decline in population has been arrested through regeneration initiatives.

The rural hinterland has been identified within Structure Plans as being suitable for “appropriate rural development” with a requirement for affordable housing and supporting economic development centred on the agriculture, forestry and tourism industries.

City Regions

The TACTRAN region contains one of Scotland's four city regions, centred on Dundee. The recognition that there is strong interdependence between the future of Scotland and its cities led to an initial review of their role by the Scottish Executive and the identification of two policy conclusions:

- the cities are at the centre of Scotland's economic growth and dynamism
- whilst each city is unique and individual, each is at the centre of the region which surrounds it and has a key strategic role to play in the growth and dynamism of that region.

Following the Executive's review, each city region was invited to prepare a City Vision. At an early stage two city regions were identified in the region, based on Dundee and Stirling. Both Dundee and Stirling Councils, and their neighbouring authorities, prepared City Vision statements for their respective areas that embraced the principles of sustainable communities.

Subsequently, the Scottish Parliament passed the Planning, etc. (Scotland) Act 2006 which will introduce a modernised planning system. All Scottish Councils will be required to prepare a local development plan for their area, while in each of the four biggest city regions, including Dundee, a Strategic Development Planning Authority (SDPA) is being created that will be responsible for the production of a city region-wide Strategic Development Plan (SDP).

The RTS needs to recognise the pivotal role played by the Dundee city region in driving growth in this part of the TACTRAN region. At the same time the SDPA will need to ensure its SDP is produced in such a way as to take explicit account of the RTS and its encouragement of more sustainable forms of transport.



Economy Issues Facing the Region

The existing economic conditions and the trends for the future have been considered. Against this context, the key issues that have been identified, with the assistance of stakeholders, are:

Issue No	Issue	Importance
E1	Need to maintain and improve strategic transport links within the region, to the rest of Scotland and beyond	Very Important
E2	Connectivity problems between existing and new location of housing, employment and key services in certain parts of the region	Very Important
E3	Dispersed economic activity, and ongoing dispersion of population out of traditional centres is increasing the need to travel	Important
E4	Timing, speed, frequency and cost of public transport options to major centres not perceived to be optimal and may compound image of peripherality	Important
E5	Parking in city and town centres and in tourist areas - scope for improved management of car, coach and HGV	Important
E6	Need for increased promotion of the overall Tactran region as a tourist destination	Important
E7	Lack of regional air connections to UK and European destinations (particularly for business travel)	Important
E8	Seasonal congestion caused by high levels of traffic in tourist areas	Important
E9	Bottlenecks and network constraints (including some outwith Tactran) may be limiting economic growth	Important
E10	Freight traffic (notably timber and extractive industries) on rural roads in affected areas	Important
E11	General congestion within city and town centres at peak times and its impact on bus reliability and links to external markets	Important
E12	Road infrastructure and traffic management restrictions sub-optimal for freight	Important
E13	Real and perceived peripherality	Important
E14	Road maintenance backlog	Very Important
E15	Significant growth in 'white van' goods delivery	Important
E16	Need to improve streetscape in towns and cities to maintain/boost economic vitality and quality of life-	Important

4.2 Accessibility, Equity and Social Inclusion

Car Availability

Approximately **31% of TACTRAN households do not currently have access to a car**. The proportion of non car availability rises to over 48% for lone parent family households and to 69% for single pensioner households. 44% of TACTRAN adults who are not in good health have no access to a car, which is more than double the value for adults in good health (21%) (Source: 2001 Census).

The pattern of 'non car' availability varies across the region. In 2001:

- 45% of households in Dundee did not have access to a car, compared to 26% in Angus and around 24% in both Stirling and Perth and Kinross
- Perth and Stirling cities have approximately 34% of households with no car available
- in Rural and Remote Rural areas much lower proportions of around 14% - 15% of households have no access to a car.

The key trends in car ownership are:

- ownership is rising, reducing the numbers excluded due to lack of access to a car, but potentially increasing the move to a 'car-based culture' which would increase the accessibility problems for those who remain non-car-available
- the ageing population will tend to increase the numbers unable or unwilling to use a car.



Access to Health Care

The RTP in partnership with Health Boards is required to consider how to provide adequate access to health care, particularly for residents who do not have access to a car. Around 4% of households in TACTRAN (approximately 8,650 households) have no car available and live more than one hour by public transport from their nearest main hospital. The corresponding figures by Local Authority are 9% of households in Angus, 0% in Dundee (since all Dundee households live within one hour of Ninewells hospital), 5% in Perth and Kinross (rising to 7% in the off peak) and about 1% of Stirling households. These figures will be different for access to localised specialist care, which may not be available at the nearest hospital.

Accessibility Analysis for hospitals is particularly time sensitive - most people need access at a specific time. This has implications for both road access (peak period congestion) and public transport (availability of service in the off peak).

Key future trends which will further impact on this issue include:

- proportions outside acceptable journey times to hospital by public transport will increase with proposed further centralisation and/or relocation of health services
- provision of ambulance-based transport to hospitals for non-emergency patients is likely to decrease in the near future
- ageing population will increase the need for improved non-car-based access to health care.

Additional issues include the availability and cost of parking at hospitals and the general movement of health staff and health-related goods to and between hospitals in the region.

Access to Employment

Accessibility Analysis has mapped relative accessibility to employment by public transport. As might be expected, in regional terms, the urban areas of Dundee, Perth and Stirling show relatively high public transport accessibility to employment opportunities, as do areas around Carnoustie and Arbroath.

However, there remain a number of areas within each of these cities and towns that are not well served by public transport and from which employment is hard to access. Past trends for employers to locate in edge-of-town business parks which are distant from public transport routes has also given rise to problems of access to employment opportunities.

In general terms, rural areas have lower access to employment by public transport. In many cases employed adults in rural areas will have access to a private car, but, for those on low incomes, either the cost of owning and running this car represents a significant proportion of their disposable income or a car cannot be afforded. There is a need to provide a reasonable level of accessibility for those with no car and who are not yet in employment in these areas.

Public Transport Fares and Availability

Fares are a significant component of the total cost of a journey by public transport, and are significantly higher than the direct costs of using a car. However when parking and other fixed charges, plus the environmental costs of motoring are taken into account, public transport is a much more efficient mode of travel. Public transport fares are generally considered to be related to distance, but this relationship is now weak. Fares vary significantly by operator, locality and by time of day. In addition the complexity of many fares systems, particularly in relation to rail travel, can act as a disincentive to using public transport.

This variation in fares creates significant differences in the cost of public transport access to employment and services, in some cases compounding the access problems created by rurality and remoteness.

By contrast, a significant and increasing proportion of all bus users do not pay a fare, as a result of the National Concessionary Travel scheme, offering free travel for older and disabled people. However, people using CT and Taxicard services do not have the benefit of concessionary fares. This benefit is also not shared by those who do not have access to a 'useful' bus service, particularly those in rural and remote areas.

Accessibility Issues Facing the Region

The key issues which have been identified, with the assistance of stakeholders are:

Issue No	Issue	Importance
A1	Access to healthcare facilities, notably following centralisation of health care, including parking at major hospitals, PT access, emergency and non emergency transport	Very Important
A2	Increasing elderly population presents challenges of maintaining accessibility for these people	Very Important
A3	Difficulty in providing desired levels of evening public transport services	Important
A4	Variable daytime public transport provision in certain areas	Important
A5	Access to Universities and Colleges within Tactran area and beyond	Important
A6	Provision of accessible public transport for mobility and visually impaired travellers is variable across the region	Important
A7	Differences in public transport fare levels across Tactran area, with high PT fares creating a barrier for some low-income travellers	Important
A8	Insufficient/patchy Taxicard and/or DRT Services	Important
A9	High levels of car ownership (despite relatively low incomes), low level of public transport and proximity to services in rural and suburban areas	Important
A10	Community severance caused by certain major roads (notably the Kingsway in Dundee)	Quite Important
A11	Pockets of severe deprivation in certain areas which might benefit from improved transport links	Important

4.3 Environment

Climate Change

Climate change is becoming widely recognised as the most serious environmental threat facing the planet. Emissions of greenhouse gases from the burning of fossil fuels are already making an impact on the world's climate. Transport makes a significant and growing contribution to Scotland's global environmental impact, accounting for 28% of Scotland's energy use and 27% of Scotland's greenhouse gas emissions, although the relative environmental efficiency of modes such as walking, cycling and public transport must also be recognised.

"Choosing our Future - Scotland's Sustainable Development Strategy" (2006) committed Government to making an equitable reduction in emissions to contribute directly to the UK domestic goal of reducing emissions of carbon dioxide to 20% below 1990 levels by 2010.

Scotland's Climate Change Programme *"Changing our Ways"* (2006) for the first time quantified this equitable reduction or "Scottish Share" in carbon terms and also set a key goal of bettering this contribution by defining the Scottish Target. The Scottish Target is to exceed the Scottish Share by one million tonnes of carbon in 2010. Subsequently, the Government has consulted on the Scottish Climate Change Bill that proposes an ambitious target of reducing carbon dioxide emissions in Scotland by 80% by 2050.

Sustainability

Moving towards sustainable transport means less energy use, higher percentage of renewable energy used, less detrimental impacts on communities and the environment, reduced economic impacts of congestion/delays, appropriate transport for particular trips, high occupancy vehicles in all modes - in essence living within our resource limits.

The least 'sustainable' way of travelling is as the driver in an otherwise-empty car. The following statistics illustrate the scale of this challenge in the TACTRAN area:

- car occupancy has fallen in the TACTRAN region since 1999 - the proportion of all journeys made as a driver of a car in which the person was unaccompanied has increased from 58% in 1999 to 69% in 2004
- car accounts for over 80% of all trips made by TACTRAN adults living in rural or remote rural areas, with walking/cycling making up most of the remainder
- this car share falls to around 57% of trips made by residents in Dundee City and about 64% of trips made by residents in the other urban areas
- even in larger urban areas the public transport share is only around 16% of all trips made.

Environmental Issues facing the Region

Against the context set out above the following Issues have been identified with the assistance of stakeholders:

Issue No	Issue	Importance
Env1	Need to contribute to reducing climate change/global warming	Very Important
Env2	Need to plan for climate change/global warming/rising sea levels	Important
Env3	Need to minimise the impact of transport and transport infrastructure on the environment	Important
Env4	Improvement to transport infrastructure and vehicles, to make transport quieter	Important
Env5	Need for promotion of sustainable transport options	Very Important

Strategic Environmental Assessment

Development of this Regional Transport Strategy included a Strategic Environmental Assessment (SEA) being undertaken. The full SEA report includes a wider and more detailed consideration of environmental issues and defines specific objectives to address these. In summary the SEA concluded that:

- the effects on carbon emissions, air quality and health are dependent on the reduction in car dependency and promoting more sustainable modes (cycling and walking)
- there is potential to reduce traffic growth
- there may be some significant effects on the natural and cultural heritage from new infrastructure projects at some locations.

4.4 Health and Well-Being

Local Air Quality Issues

Poor air quality can have a serious impact on health. Road traffic emissions are a key source of air pollutants impacting on air quality in the TACTRAN area, particularly from nitrogen dioxide (NO₂) and particulate matter (PM₁₀). Dundee and Perth have declared Air Quality Management Areas and Stirling has areas of the city that are giving concern over air quality. In each case traffic is the main contributor to the local air quality problem.

There are currently no other Air Quality Management Areas across the region, but the Councils are undertaking statutory monitoring to ensure they remain within increasingly-stringent national air quality limits.

Active Travel Modes

Obesity and lack of exercise are major contributors to poor health in Scotland and these accumulating health-related problems are increasing rapidly over time. Promoting changes in travel habits can have a beneficial impact on health. Relevant statistics are:

- walking currently accounts for 19% of all trips in the region, while cycling is only around 1%
- while 55% of trips less than 1km are by walk or cycle, this falls to around 31% for trips between 1km and 2km and to 14% for trips between 2km and 3km
- 40% of trips less than 1km are made by car and 26% of all car trips are less than 2km in length
- 37% of households had one or more bicycles which can be used by adults but only around 6% of residents had cycled more than a quarter of a mile in the most recent seven day period
- the proportion of residents walking to work decreased from 18% to 15% between 1991 and 2001, while the proportion cycling to work has remained broadly constant, at around 2%
- walking/cycling mode share for all trip purposes ranges from 24% down to 11% in urban and rural areas respectively.

Outdoor Activities, Recreation and Greenspace

The TACTRAN region is fortunate in the quality of its outdoor environment, its recreational facilities and its functional Greenspace. This is being strengthened by the development of its Core Path networks and the Outdoor Access Strategies of the various local authorities and is facilitated by the involvement of the two National Park Authorities.

However, a number of issues remain:

- many of our best outdoor opportunities are not easily accessed by those without a car
- lack of cycle facilities on public transport, creating potential barriers to cyclists wishing to “bike and ride”.



Health and Well-being Issues facing the Region

Against the context set out above the following issues have been identified, with the assistance of stakeholders:

Issue No	Issue	Importance
H1	Pollution hot spots particularly within city and town centres	Important
H2	Poor health caused by lack of exercise, over-use of the car for short trips	Important
H3	Where/when traffic levels become excessive, this can cause transport noise and environmental degradation	Important
H4	Large school catchment areas, particularly within rural areas, which reduce opportunities for walking and cycling	Important
H5	Provision of sustainable transport infrastructure, paths, cycle lockers, gaps in cycling and walking network, etc	Important
H6	Need to maintain and provide access to outdoor activities, recreation and green spaces	Quite Important

4.5 Safety and Security

Recent trends in casualty reduction, where Scottish Government targets in all four Council areas have been exceeded, are encouraging. The number of casualties occurring on non-built up roads (i.e. rural roads) has remained more or less constant over this period and the casualty rate for the TACTRAN area is currently below the Scottish average.

However, there still remain a significant and concerning number of fatal and serious accidents occurring on roads in the TACTRAN area. Several routes have been identified as having serious accident records including the A9, the A84/A85, the A90, the A92, the A811, the A977 and others. Vulnerable groups - pedestrians, particularly children, and cyclists remain a particular concern, as are young motorists (17-24 year-olds) and motorcyclists. There are also a number of accident cluster sites across the region, many at the intersections between the Trunk and local road networks.

Stakeholder consultation has also highlighted a perceived concern over personal security when walking, cycling and using public transport systems. Much has been done by local Councils to improve this, for example, coverage of street lighting and CCTV, but more remains to be done to address this issue.

Safety and Security Issues facing the Region

Against the context set out above the following issues have been identified, with assistance from stakeholders:

Issue No	Issue	Importance
S1	Road safety in urban and rural areas, particularly for pedestrians and cyclists, and where freight delivery, car and public transport access are required	Important
S2	Road safety and road collisions/casualties occurred to motorcyclists, drivers and passengers	Important
S3	Road accidents at intersections of local and trunk roads	Quite Important
S4	Need for ongoing work providing Safer Routes to School	Very Important
S5	Training for cycling & motorcycling	Quite Important
S6	Perceived levels of insecurity preventing people from using public transport	Important

4.6 Integration

Many of the issues that occur with the use of transport, particularly public transport, arise as a result of a fragmented approach to its organisation and supply. Responsibility for the road system is shared between different levels of Government. Different organisations provide rail, bus and air transport. Community and health services are provided by a diverse range of organisations. Differing fare structures and ticketing regimes apply between different operators. It is not possible to carry bicycles on many public transport vehicles. All of these factors can provide barriers to 'seamless' and easy journeys for people.

Therefore, improving integration between all transport modes and services, between land use and transport and with the strategic objectives of the National Transport Strategy are key objectives of this RTS. There is a need to significantly improve the efficiency and effectiveness of the transport network through multi-modal approaches, creating the opportunity to provide and encourage more sustainable travel choices and behaviour, in support of environmental objectives. The problem has been increasingly recognised over recent years and whilst much has been achieved through increased partnership working more remains to be done.

The key issues which have been identified, with assistance from stakeholders are:

Issue No	Issue	Importance
I1	Integration between transport and land-use, including across LA boundaries to reduce the need to travel and the distance travelled	Very Important
I2	Integrated ticketing options	Important
I3	Facilities for interchange between all modes at main rail stations, Park & Ride sites and other transport hubs/local bus interchanges are in need of further improvement	Important
I4	Joint working of Health and Transport providers	Important

4.7 Strengths and Opportunities

In addition to identifying current and future problems and issues, the RTS identifies the transport-related strengths and opportunities of the region and relates these to RTS Objectives. A 'strength' is a quality of the region's transport system which contributes positively to RTS Objectives. An 'opportunity' is a combination of circumstances which exist now or in the foreseeable future which might make a particular intervention easier to achieve than would be the case if the 'opportunity' did not exist.

The key **strengths** of the transport system in the TACTRAN region are:

- the area contains three thriving and increasingly prosperous cities and a wide range of towns, villages and rural areas
- overall there is forecast to be a modest increase in the region's population over time, thereby largely avoiding the problems associated with wide scale population growth or decline
- the region includes parts of two National Parks, some of the most scenic rural areas of Scotland and a number of other major tourist attractions
- traffic congestion is generally currently less severe and less prolonged than in many parts of the Central Belt
- the region is served and connected to the rest of Scotland by a number of strategically-important transport corridors
- many parts of the region have benefited from significant investment in passenger infrastructure, information systems and the accessibility of the bus fleet
- the number of accessible taxis in the region has been increased significantly.

The main **opportunities**, partitioned by the six main themes which run through this document, are listed below.

Economy

- the three Structure Plans have identified significant economic development opportunities across the region
- the ongoing programme of Trunk Road investment (notably A80/M80) will help improve the connections between the region and its neighbours
- the Strategic Transport Projects Review offers the potential for delivering further nationally significant improvements to the strategic road and rail networks
- there is spare rail capacity on most of the rail network within the region
- additional cross-Forth rail paths following the transfer of freight to the Stirling-Alloa-Kincardine railway line and likely signalling enhancements on the Forth Rail Bridge will facilitate the provision of increased rail frequency to the south and also to the north
- there is spare runway and terminal capacity at Dundee Airport potentially providing opportunities for additional direct air links to/from the region
- introduction of a new interchange at Gyle railway station interchange with the proposed Edinburgh Airport tram service will provide much-improved links from the region to Edinburgh airport for tourist and other travel
- freight gauge enhancement on the rail network between Mossend and Aberdeen allows larger freight containers to use the rail network throughout the region
- there is potential for establishing rail freight terminals in Montrose, Dundee and Perth
- there are increasing opportunities for sea-borne freight via the three main ports, all of which have spare freight-handling capacity
- there are potential opportunities to increase the number of sea-borne passenger services to/from Dundee (cruise ships and possibly also ferry services)
- the Forth Replacement Crossing Project offers opportunities to consider and contribute to long-term cross-Forth capacity requirements.



Accessibility, Equity and Social Inclusion

- the region includes three major bus operators and a range of smaller operators, offering the potential for further partnership working to improve public transport availability and quality
- there is a range of well established Community Transport and other voluntary transport providers in many parts of the region, offering scope for developing Demand Responsive Transport services across the region
- extension of the Scottish Government's Concessionary Travel Scheme to young people will help reduce the cost of public transport use where it is available for this key group and may delay the adoption of a car-dependent lifestyle
- review of patient transport services and hospital provision in various parts of the region offers the opportunity for joint working with Health Boards on cross-sector integration of passenger transport service provision
- abolition of tolls on the Tay Road Bridge offers opportunities to consider improvements to access across the River Tay.

Environment

- significant investment in public transport in the area, consolidation of the public transport providers and the formation of the TACTRAN RTP will help to increase the quality and profile of public transport in the region, with the potential to increase the use of this more-sustainable mode
- funding to support development of Travel Plans and promotion of behavioural change can contribute to modal shift and reducing transport's impact on the environment
- the SEA process provides an opportunity to identify how better to provide sustainable solutions and minimise adverse impacts of transport through improved understanding
- increasing awareness of climate change is making it more acceptable to develop measures which tackle this problem.



Health and Well-Being

- increasingly stringent air quality standards and the associated Air Quality Management Areas and Action Plans give added impetus to improving local air quality and provides a strong publicly-acceptable reason for restricting city centre car use
- introduction and promotion of the North Sea Cycle Route and associated cycle route infrastructure has the potential to increase the profile and attractiveness of cycling in the area
- potential exists to improve the joint working between transport and health providers in the region
- Health Improvement Plans now recognise the importance of walking/exercise
- developing Core Path Plans will aid integrated planning of on and off-road access networks.

Safety and Security

- enhanced infrastructure provision and other measures to protect vulnerable road users (notably cyclists and motorcyclists)
- a framework for sharing good practice and promoting consistency in the approaches to safety and security
- potential to enhance passenger safety and security across the region by working in partnership with transport providers.

Integration

- network-wide availability of smart-card ticket machines on all buses as a result of the National Concessionary Travel Scheme will facilitate integrated ticketing initiatives
- Scottish Government and Transport Scotland have indicated a desire to pilot integrated ticketing schemes at a regional level
- there are opportunities for improved multi-modal interchanges at various key transport nodes across the region
- recent consolidation of public transport providers in the area could also facilitate service and fare integration
- to promote and facilitate increased transport integration across the region and increased consistency in a number of policy areas, including parking, travel planning and land-use development
- the evolving City Regions offer opportunities for closer regional integration and cooperation between land-use and transport planning.

5 The Strategy

Review of the region's transport systems and infrastructure, informed by analysis and input from a wide range of stakeholders, has identified many examples of good practice which are already supporting the RTS Vision and Objectives set out in Chapter 3. This strategy seeks to build on and develop existing good practice across the region and also, through developing new measures, ensure that our Vision and Objectives are achieved.

Several key issues have been identified:

- the region is peripheral to Scotland's and the UK's main economic centres and we need to maintain and improve our strategic transport links to support existing businesses and attract future investment, including reducing journey times for movement of people and goods
- where we live, where we work and where our key services are located, have become increasingly distant from each other. The need to travel greater distances to reach many of our basic services places increasing burdens on our transport systems and our people, particularly those in the more remote rural areas
- specialist healthcare services, in particular, have become increasingly centralised and this trend is likely to continue. An increasingly elderly population will place greater demands on healthcare services, yet find them harder to access
- the need to improve integration between transport modes and between transport and land use planning
- the standard of our public transport services, whilst good in many areas, is not the same for all; service levels, fares and vehicle standards vary across the region
- safety in using our transport system is a major concern for many people. Much has been achieved to improve road safety but pedestrians, cyclists and motorcyclists in particular remain vulnerable when using the roads. More of our schools need to benefit from the 'Safer Routes to Schools' initiative. Personal security concerns still affect some groups in our society when using public transport
- the need to address climate change and the wider environmental impacts of transport locally and globally through changes in the way we develop and use our transport system.



5.1 Defining the Strategy

Drawing on the Objectives set out in Chapter 3 we have developed a Strategy that is designed to address the diverse needs of the TACTRAN region. By relating the key issues addressed by each individual Objective, a balanced strategy has been defined. The methodology which was employed in defining the Strategy is detailed in **Appendix A**.

Our Strategy has at its heart three key strategic themes:

- delivering economic prosperity
- connecting communities and being socially inclusive
- environmental sustainability and promoting health and well-being.

To achieve these aims we will build on the good foundations which exist and have been put in place to date, through targeted investment focused on the key issues that have been highlighted as important to the future economic, social and environmental well-being of the TACTRAN region.

The main policies and proposals are outlined under each of the strategic themes below. Interventions that will put the Strategy into effect are detailed in a separate RTS Delivery Plan.

Delivering Economic Prosperity

The Trunk Road network and other Principal roads, along with the rail system, bus network, transport interchanges, ports and airports form the strategic transport network that is vital to the region's economy, providing access for business, employment, and tourism. We will maintain and enhance the economic prosperity of the region by:

- securing improvements to and improving road safety on the Regional Trunk Road network as priorities within the Strategic Transport Projects Review, in particular removing delays and bottlenecks which hinder the efficient movement of people and goods and undermine the economic performance of the region
- enhancing the role of buses in providing access to employment, tourism and enhancing the region's economy. This will include the development of a Regional Bus Strategy that will provide a policy and delivery framework for specific interventions and promotion of Quality Bus Partnerships
- securing improvements to the rail network within the Strategic Transport Projects Review, to enable increased provision and opportunities for the movement of passengers and freight by rail. Improvements are likely to include faster hourly services between Aberdeen/Inverness and Edinburgh/Glasgow as well as an additional hourly service between Arbroath, Dundee, Perth, Stirling and Glasgow
- ensuring that the role of ports and airports in supporting the economy of the region is supported by appropriate transport infrastructure including improved road and rail connections. We will work with relevant airport authorities to promote flights from Dundee and improved facilities at Dundee Airport

- managing growing demands on our road system in a more sustainable way, including reducing the need to travel, increased emphasis on demand management techniques and managing how road space is allocated between transport modes to ensure that the most efficient use is made of the resources we have available
- establishing a Strategic Regional Parking Policy that will address areas where parking demand currently or in the future will exceed supply. This will also consider parking standards for the provision of parking in new developments.

Connecting Communities and Being Socially Inclusive

The ability to access key services and facilities within a reasonable time and at reasonable cost is an essential aspect of an inclusive society. Appropriate public transport options should be available for those who do not have access to a car or who cannot make use of conventional scheduled bus services. We will improve community connectivity and accessibility by:

- ensuring that the local road network provides the links between individual communities, which enable people to access goods and services, whether by private or public transport
- developing a public transport network that is accessible to all and enables people to access the region's main centres of employment, retail and education
- ensuring that health and transport provision are considered and planned in a coordinated manner
- improving the quality and integration of our public transport services across the region, including development of improved/new multi-modal interchanges at key locations including Dundee, Perth and Stirling, integrated ticketing and improved travel information
- developing a Regional Park and Ride Strategy which will outline a programme for Park and Ride/ Park and Choose networks serving the region's main towns and enhancement to railway station car parks
- developing a Regional Travel Information Strategy that will identify the detailed measures and policies to improve access to travel information
- maximising the role and contribution of Community and Demand Responsive Transport in improving general accessibility and social inclusion
- developing a Walking and Cycling Strategy to ensure that the two modes form part of an integrated transport system.



Environmental Sustainability and Promoting Health and Well-being

Addressing the causes and effects of climate change is an increasing challenge facing all sectors. The National Transport Strategy states that “the key challenge for transport is to break the link between economic growth, increased traffic and increased emissions”. Whilst many of the initiatives that will require to be undertaken in support of this aim are the responsibility of the UK and Scottish Governments, Regional Transport Strategies have a key part to play in contributing to achieving reductions in local and global transport emissions and improving local air quality and health.

Investment in new development brings many benefits but places additional demands on the transport system. Planning for Transport, Scottish Planning Policy 17 sets out a clear framework to be applied to the allocation and development of land. Individual planning applications are required to demonstrate means of mitigating impacts on the transport system, particularly through the use of sustainable Travel Plans.

Transport safety and active travel also have an important role to play in improving the health and well-being of TACTRAN's population.

We will promote environmental sustainability and improved health and well-being by:

- ensuring that improvements in the movement of passengers and goods are sustainable, including maximising the use of public transport and rail and water-borne freight
- ensuring that development proposals include Travel Plans that maximise the potential for walking, cycling, public transport and other sustainable travel choices, including through continued use of planning agreements
- liaising closely with the appropriate Planning Authorities to ensure that the RTS is fully integrated within land use planning processes across the region
- taking a lead in the promotion and development of active Travel Plans at major centres of employment, hospitals and other main health establishments, in partnership with Councils, Health Boards and the private sector
- promoting a range of SMART measures, including Travel Plans, travel awareness campaigns, high quality travel information, region-wide car-sharing schemes, cycling and walking infrastructure and initiatives, development of tele-working etc.
- ensuring that, where network infrastructure improvements are undertaken, measures adopt high standards of mitigation to minimise impacts on landscape and communities
- promoting and enhancing transport safety, reducing road casualties and removing barriers caused by real and perceived safety issues. This will include developing a Regional Road Safety Plan.

5.2 Implementing the Strategy

Implementation of the RTS is detailed in a separate Delivery Plan that sets out a proposed programme for the first three years of the Strategy from 2008/09 to 2010/11 and indicative programme of priorities in the medium (years 4 - 9) and longer (years 10 - 15) terms.

The Delivery Plan will be developed through continuing consultation with partner Councils and other stakeholders, and will take account of and inform Councils' evolving Single Outcome Agreements. It will also address resources and funding, and identify delivery responsibilities.

6 Strategy Appraisal and Monitoring

An overarching appraisal of the Regional Transport Strategy has been undertaken. This has been based on assumed interventions that have been defined and developed through the RTS Indicative Delivery Plan. The strategy Interventions are listed in full in the Delivery Plan. Many of these will require individual full Scottish Transport Appraisal Guidance (STAG) appraisal as part of the development of the detailed business case for implementation.

Three separate appraisals have been undertaken based on RTS Guidance:

- a STAG compliant appraisal
- a Strategic Environmental Assessment
- an Equality Impact Assessment.

More detail will be added to the assessment as schemes are developed through to implementation.

6.1 STAG Appraisal

The STAG process requires that the strategy is tested against:

- the Planning Objectives
- the implementability of the Strategy
- the Government's five objectives - environment, safety, economy, integration and accessibility.

The strategy has been developed in accordance with STAG principles. From the outset the RTS development process has been strongly objective-led, in line with RTS Guidance. This involved a comprehensive analysis of trends and issues in the Tactran area and has been subject to extensive consultation. A key consideration was that the RTS Objectives should closely reflect the Government's five NTS objectives.

The SEA fulfils the Environment Appraisal requirements for a STAG Part 1 appraisal of the RTS. The detailed methodology and results of the STAG process are included in the RTS Delivery Plan.

6.2 Strategic Environmental Assessment

The Environmental Assessment (Scotland) Act 2005 requires transport plans and programmes developed by public bodies to be subject to Strategic Environmental Assessment (SEA). The Scottish Executive's March 2006 Guidance on Regional Transport Strategies also states that SEA is required for a RTS.

SEA has made an input at all stages of the RTS development process, starting from the early stages of identifying RTS Issues and Objectives, through to the finalised Strategy itself. The SEA has been undertaken in similar stages which integrate with those used for the RTS process and has been carried out in parallel with development of the RTS.

In summary the SEA concluded that:

- the effects on carbon emissions, air quality and health are dependent on the reduction in car dependency and promoting more sustainable modes (cycling and walking)
- there is potential to reduce traffic growth
- there may be some significant effects on the natural and cultural heritage from new infrastructure projects at some locations.

The separate SEA Environmental Report provides full details of the environmental assessment undertaken as part of the development of the RTS

6.3 Equality Impact Assessment

The Transport (Scotland) Act 2005 requires that Regional Transport Partnerships include a description about how transport will be provided, developed, improved and operated so as to, amongst other things, encourage equal opportunities and in particular, the observance of statutory Equal Opportunities requirements.

The preparation and consultation phases for the RTS were designed so that the resulting Strategy took into account the views of a wide range of stakeholders who have interests covered by this general heading. The Scottish Executive Equality Unit provided contact details for representatives of equality groups and these were positively engaged through an invitation to comment on the Strategy at draft stage and to contribute towards focus group and stakeholder workshops convened to consider various aspects of the emerging Strategy.

The Objectives of the Strategy were formulated to address Key Issues identified in consultation with stakeholders, particularly those associated with social inclusion. There is a strong emphasis within the Strategy on accessibility to key destinations using all forms of public transport.

As part of the public consultation on the draft Strategy, respondents were asked whether they considered the RTS would have a negative impact on equality groups. 54% responded that it would not; 36% were unable to assess the issue ('don't know') and 10% did consider that aspects of the strategy would have an impact.

As specific measures within the RTS are implemented they will be subject to an Equality Impact Assessment, where appropriate.

An Equalities Scheme has been developed and an early action arising from this has been the establishment of an Equalities Forum.

6.4 Appraisal Conclusions

Our appraisal of the Strategy demonstrates that:

- there is good resonance with the core Vision of the Regional Transport Strategy, which is sustainable economic growth, to redress the current inequalities which in part are due to the peripheral location of key settlements
- there is a strong fit with the stated Objectives of the Regional Transport Strategy, with particular emphasis on environment and health
- there is a positive Strategic Environmental Assessment, which shows potential benefits across a wide range of environmental indicators
- the Regional Transport Strategy contains measures to reduce inequality and address concerns of specific groups in society - for example older people (accessible buses), women (better security on public transport) etc.

6.5 Monitoring and Targets

Monitoring will play a key role in ensuring that:

- the assumptions behind our Objectives remain relevant.
- the Delivery Plan Interventions are meeting the Strategy Objectives
- the Delivery Plan Interventions are achieving their intended outcomes

A series of initial Output and Outcome Measures have been defined and are included in the Delivery Plan. These relate the Delivery Plan Interventions and RTS Objectives. TACTRAN will continually develop and refine these to ensure effective monitoring of progress towards achieving the defined RTS Objectives and planned outcomes of the Strategy.

Monitoring of outputs and outcomes will be used to assist in developing future policies and determining new or amended Interventions in the Delivery Plan. As the Strategy develops and is implemented, we will develop a series of Specific, Measurable, Achievable, Realistic and Time bound (SMART) Targets, against which delivery progress will be measured and reported annually.

In defining SMART Targets we will have regard to comments received during public consultation on the Draft RTS. However, many of our proposed Interventions and Actions contained within the Delivery Plan are currently at an early stage of development. Further detailed appraisal will assist in defining measurable outcomes, for which Targets can then be set.

Targets should also be determined in the context of available delivery resources, both financial and human. The targets contained within the Delivery Plan will be the subject of further detailed consultation with constituent Councils and other potential delivery partners, to determine delivery priorities and responsibilities. This will include discussion and agreement on appropriate delivery targets.

Reflecting linkages with the National Transport Strategy, the establishment of Targets for the RTS will also be influenced by, and will have regard to, relevant Targets established through the Delivery Plan for the NTS.



Appendix A - The RTS Process

Overview of Tactran RTS Development Process

The development of the Tactran RTS has followed a series of well defined steps. These are briefly described below.

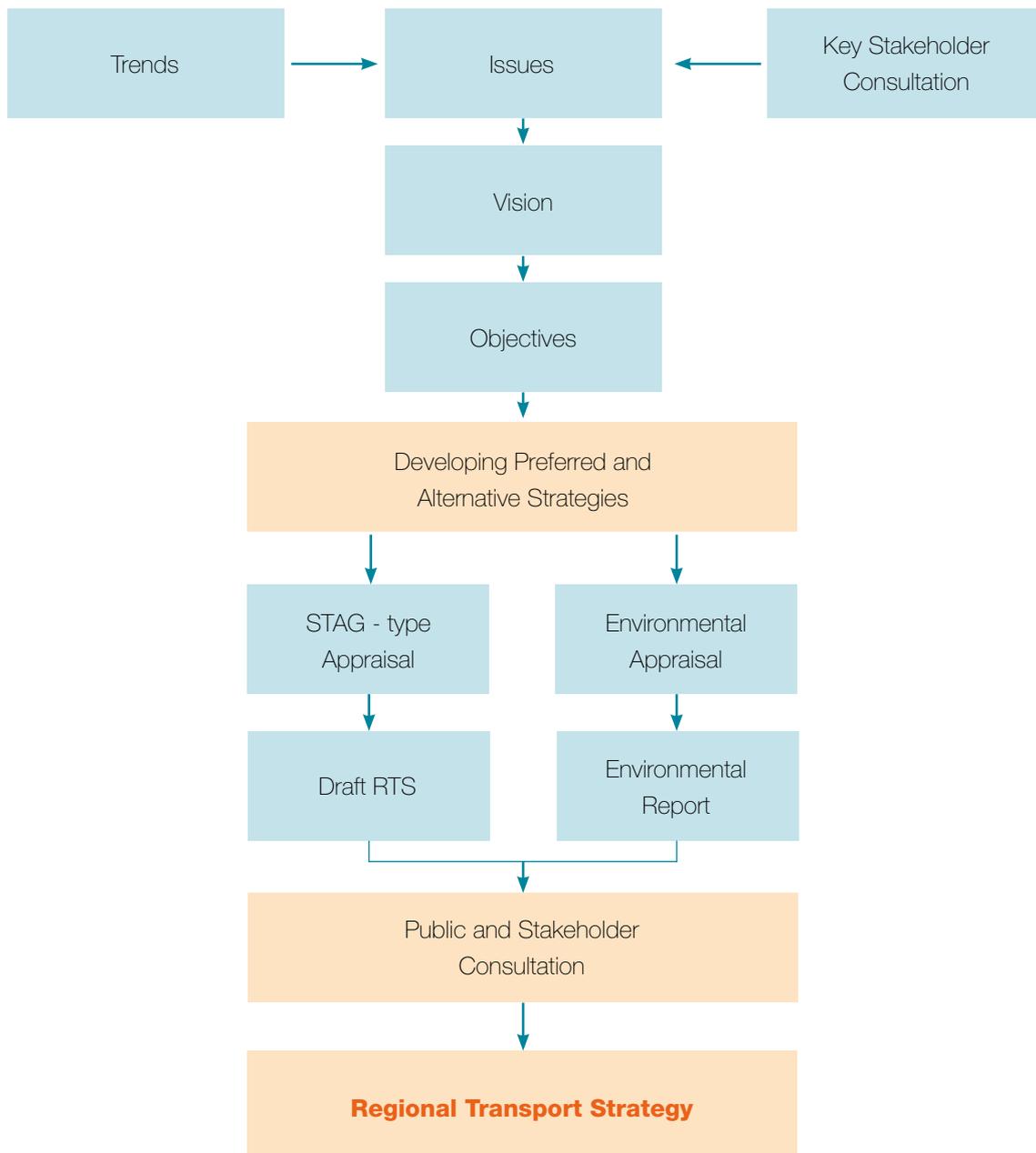


Figure 1 Overview of the Tactran RTS Development Process

Identification of Key Trends and Issues

A first step included a clear identification of all the relevant current and likely future problems and issues which need to be addressed by the RTS. A number of sources have been used to identify, analyse and synthesise the issues and opportunities in the Tactran area. These included:

- consultations with a broad range of officers from each of the four local authorities within Tactran
- a review of key documents supplied by Tactran authorities
- wider stakeholder and expert consultations, including Health Boards
- a collation and analysis of existing data
- a development and analysis of future forecasts.

Development of Vision Statement and Objectives

Feeding directly out of the key trends and issues identification work, an overarching Vision statement and a comprehensive set of 18 Objectives was developed. The Objectives were aligned, as well as the Issues, with the key themes in the Scottish Executive's RTS Guidance and the Scottish Transport Appraisal Guidance (STAG) and grouped into 6 categories - Economy; Accessibility; Equity and Social Inclusion; Environment; Health and Well-being; Safety and Security and Integration.

Following the development of Objectives, a public and stakeholder consultation exercise was undertaken. The consultation provided general feedback that the public and stakeholders viewed the Objectives as meaningful and relevant.

Defining the Preferred Strategy

The next step was to ensure the Strategy itself was prioritised towards the needs of the Tactran area. The means of doing this was to identify an appropriate weighting for each of the individual Objectives and a priority for each overarching Objective by examining the context and trends, various plans and documents in the Tactran area, stakeholder input and issues identified. The Objective Weighting Section below provides the detailed methodology used to weight the objectives.

The output from this process was a set of individual weighted Objectives and a Preferred Strategy that gives a preference to delivering regional prosperity with other themes of connecting communities and environmental protection & health improvement also seen as key to delivering a transport strategy tailored to the needs of the Tactran region. All of these key themes are supported by the Objective to integrate transport modes and relevant policy areas.

Appraisal - Option Generation and Prioritisation

Appraisal of Potential Interventions was undertaken based on initial options and priorities. The method adopted is reported in the Indicative Delivery Plan.

Objectives Weighting

Having approved a set of Objectives for the strategy it was important to ensure that the strategy itself is prioritised towards the needs of the Tactran area. The means of doing this was to identify an appropriate weighting for each of the individual Objectives and a priority for each overarching Objective by examining the Context and Trends, various plans and documents in the Tactran area, stakeholder input and issues identified.

Methodology

Stage 1 - Determination of Issues

Utilising the Context and Trends, background documents and stakeholder inputs a series of issues were identified. These are listed in the Summary of Issues and Objectives Report. There were 49 issues identified in total, broken down into categories as follows:

- Economy - 17 issues (E1 - E17)
- Accessibility - 11 issues (A1 - A11)
- Environment - 5 issues (Env1 - Env5)
- Health and Well Being - 6 issues (H1 - H6)
- Safety & Security - 6 issues (S1 - S6)
- Integration - 4 issues (I1 - I4)

Stage 2 - Importance of Issues

Each of the above issues was then given a degree of importance in three categories: very important, important and quite important. The degree of importance was determined by a mixture of the voting given by each of the stakeholders at the Stakeholder Consultation event and knowledge gained from context, trends and appropriate Tactran area documentation.

Stage 3 - Issues/Objectives Correlation

The 18 Objectives subsequently agreed by the Partnership each address a number of the 49 issues identified. The Issues and Objectives Report identifies which issues are addressed by each of the Objectives. For example:

Objective 1 - To ensure that transport infrastructure and services in the region help deliver economic growth, particularly in key business and employment sectors.

Issues Addressed: E1, E2, E3, E5, E7, E9, E13, E16, E17, Env2, H5, H6

Stage 4 - Attaching Weights to Issues

From Stage 2 above, each issue was categorised as very important, important, or quite important, with a weighting is attached as follows:

- Very Important - 3
- Important - 2
- Quite Important - 1

Stage 5 - Weighting of Objectives

By combining the number of issues and the weighting given for each issue, each Objective achieves an overall score, as tabulated overleaf. The final column contains the defined Weightings for each individual Objective, and the final row contains the priority for each overarching Objective.



Specific Objectives	Overarching Objectives						Objective
	Economy	Environment	Health & Well-being	Safety & Security	Accessibility	Integration	Weighting
1 To ensure that transport infrastructure and services in the region help deliver economic growth, particularly in key business and employment sectors	20	2	1				23
2 To improve the efficiency, reliability and integration of the movement of goods and people	23	3	3	4	13	9	55
3 To address issues of peripherality associated with the Tactran area	18				4	5	27
4 To improve access to employment	12		2		6	7	27
5 To improve access to public services, including health and education	10		4	3	16	7	40
6 To improve access to retail, recreation and leisure facilities	16		2		11	5	34
7 To reduce severance and social and economic isolation caused by transport, or by a lack of it	10	3	2		11	5	31
8 To improve the accessibility and inclusivity of the transport system	2		2		9	5	18
9 To contribute to the achievement of the Scottish national targets and obligations on greenhouse gas emissions		5	3			2	10
10 To promote a transport system that respects both the natural and the built environment		4	5			5	14
11 To promote a shift towards more sustainable modes	11	8	9		7	2	37
12 To help meet or better all statutory air quality requirements in the Tactran area	2	5	6		2	2	17
13 To promote a culture of active and healthy travel	4	8	5	3		2	22
14 To improve transport-related safety	5			9			14
15 To improve real or perceived levels of personal security on the transport network				10			10
16 To improve integration of the transport modes	5	3			11	9	28
17 To ensure integration with land-use planning	5	5	2			5	17
18 To ensure a fit with other relevant national, regional and local strategies and policies		5				9	14
Overall Strategy Weighting	143	51	46	29	90	79	

Appendix B - Tactran Bus Operators

Company	Approximate Number of Vehicles
Stagecoach Fife / East + Strathclyde Scottish Omnibus Ltd	320 + 150
Travel Dundee (and G & N Wishart Ltd)	118
Scottish Citylink Coaches Ltd	80
First Edinburgh	70
Rennies of Dunfermline	52
Moffat & Williamson Ltd	39
M W Nicoll Hirers Ltd	18
JP Minicoaches Ltd	15
Mackie's Coaches of Alloa	15
Order of Malta, Dial a Journey Ltd	10
Smith & Sons Coaches	10
Fisher Tours	9
Earnside Coaches	9
Meffan's Coaches Ltd	8
Glenesk Travel Company Ltd	7
Goosecroft Coaches Ltd	7
Harlequin Coaches	7
Morrison's Travel	6
Caber Coaches	5
Elizabeth Yule	5
Dochertys Midland Coaches	5
Ferguson's Mini Bus Hire	5
Kingshouse Travel	5
Town and Country Taxis	4
Broons Buses & Taxis	4
Mitchell's Coaches	3
Crieff Travel	3
Gordon's Coaches	3
A1 Minibus and Coach Services	3
Jamie's Transport Services	2
Morrison Coaches	2
Hamilton Coaches	2
WAVE (Wheelchair Accessible Vehicle Enterprises)	2
Aberfeldy Motor Services	2
Sweeneys Garage	2
Addison of Callander	2
James Donald	1
Rowan Travel	1
Strathmore Travel	1
Bumbræ Garage	1
Pegasus Travel	1
National Express	unknown



Appendix C - Links between RTS Objectives and Scottish Government's Strategic Objectives and National Outcomes

	RTS Objectives	ECONOMY	To ensure that transport infrastructure and services in the region help deliver economic growth, particularly in key business and employment sectors	To improve the efficiency, reliability and integration of the movement of goods and people	To address issues of peripherality associated with the TACTRAN area	ACCESSIBILITY, EQUITY & SOCIAL INCLUSION	To improve access to employment	To improve access to public services, including health and education	To improve access to retail, recreation and leisure facilities	To reduce severance and social and economic isolation caused by transport, or by a lack of it	To improve the accessibility and inclusivity of the transport system	ENVIRONMENT	To contribute to the achievement of the Scottish national targets and obligations on greenhouse gas emissions	To promote a transport system that respects both the natural and the built environment
Scottish Government's Strategic Objectives		1	2	3		4	5	6	7	8		9	10	
1 - Wealthier and Fairer – Enable businesses and people to increase their wealth and more people to share in that wealth, and put into effect		1	1	1		1	1	1	1	1				
2 – Healthier - Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care								1	1				1	
3 – Safer and stronger - Help local communities to flourish, becoming stronger, safer places to live, offering improved opportunities and a better quality of life										1	1		1	
4 – Smarter - Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements						1	1				1			
5 – Greener - Improve Scotland's natural and built environment and the sustainable use and enjoyment of it		1	1	1					1				1	1
Scottish Government's National Outcomes														
1 – We live in a Scotland that is the most attractive place for doing business in Europe		1	1	1		1							1	1
2 – We realise our full potential with more and better employment opportunities for our people		1				1				1				
3 - We are better educated, more skilled and more successful, renowned for our research and innovation								1						
4 - Our young people are successful learners, confident individuals, effective contributors and responsible citizens								1						
5 - Our children have the best start in life and are ready to succeed								1						
6 - We live longer, healthier lives								1	1	1			1	
7 – We have tackled the significant inequalities in Scottish society					1	1	1	1	1	1				
8 - We have improved the life chances for children, young people and families at risk								1		1	1		1	
9 - We live our lives safe from crime, disorder and danger														
10 – We live in well-designed, sustainable places where we are able to access the amenities and services we need		1	1	1				1	1	1	1		1	1
11 - We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others								1	1	1	1			
12 – We value and enjoy our built and natural environment and protect it and enhance it for future generations		1	1						1				1	1
13 - We take pride in a strong, fair and inclusive national identity														
14 – We reduce the local and global environmental impact of our consumption and production			1			1	1						1	1
15 - Our public services are high quality, continually improving, efficient and responsive to local people's needs		1	1	1		1	1	1	1	1				1

To promote a shift towards more sustainable modes	HEALTH & WELL-BEING	To help meet or better all statutory air quality requirements in the TACTRAN area	To promote a culture of active and healthy travel	SAFETY & SECURITY	To improve transport-related safety	To improve real or perceived levels of personal security on the transport network	INTEGRATION	To improve integration of the transport modes	To ensure integration with land-use planning	To ensure a fit with other relevant national, regional and local strategies and policies
11	12	13	14	15	16	17	18	19	20	21
1	1	1	1	1	1	1	1	1	1	1
					1	1				1
1	1	1					1	1	1	1
1										
							1	1	1	1
								1		
									1	
1	1	1	1	1	1	1		1	1	1
1								1	1	1
1	1	1						1	1	1
1			1		1	1		1	1	1



Appendix D - Glossary

The following definitions have been used in producing the Tactran RTS.

The Vision: is Tactran's over-arching aspiration

Issues: are the identified difficulties in the region that are in some way related to transport. For example, lower than desired economic development may be related to a perception of peripherality that itself is seen to be caused by under-developed transport links

Objectives: are what are desired in the wider terms to achieve the vision and address the issues. For example, to reduce social exclusion

Strategy: is the overall way in which objectives will be achieved

Intervention: a term used to encompass measures which can be taken to change a transport system

Policy: a declared, statement of principle to change the transport system in a particular way or to retain and maintain a particular aspect of the system.

Scheme: a specific, defined action to change some aspect of the transport system. Some examples might be dualling a road, introducing a new train service, mounting a regional road safety campaign, or implementing a Work Place Travel Plan

Thus the **Regional Transport Strategy** contains **policies** and **schemes** which together act in an integrated manner to develop an area's transport system to support and shape present and future travel needs in order to achieve a set of defined **objectives**, to ameliorate **problems and issues**, and to realise the strategy's overall **vision**.

Other definitions and abbreviations are:

Accessibility Accessibility can be either (a) the ease of reaching a destination (in a given time or at a given cost); or (b) the physical ability of people to board or alight from a vehicle or enter/leave premises such as a railway station

Bus Priority Measures used to improve bus service reliability or reduce bus journey times

CCTV Closed Circuit Television

Community severance The separation of residents from facilities and services within their community caused by heavy traffic or transport infrastructure

Community Transport (CT) Community transport – transport provided by voluntary and community groups

Concessionary travel Provision of reduced fare or free travel for specific groups, usually young, older or disabled people

Connectivity Transport connections between places, facilities and services

Core Paths	Under the Land Reform (Scotland) Act 2003, each local authority is required to draw up a 'Core Paths Plan'. This will designate a system of paths sufficient for giving the public reasonable access throughout the area
Demand Responsive Transport (DRT)	A form of transport where the day to day service provision is influenced by the demands of users
Freight Quality Partnership (FQP)	A partnership between transport authorities and the freight industry to address freight issues and encourage more sustainable carriage of goods
GARL	Glasgow Airport Rail Link
HGV	Heavy Goods Vehicle, or lorry
LA	Local authority
National Cycle Network (NCN)	A network of cycle routes throughout the UK, created by the charity Sustrans
National Transport Strategy (NTS)	The Scottish Government's vision, policy and context for transport over the next 20 years, published in December 2006
Peak Oil	When global oil production reaches its peak and starts to decline
PM₁₀	Particles smaller than 10 microns (a hundredth of a millimetre) in diameter
PT	Public Transport
Quality Bus Partnership (QBP)	A partnership between roads and transport authorities and bus companies covering infrastructure, services and quality standards
RTP	Regional Transport Partnership
RTS	Regional Transport Strategy
RUS	Network Rail Route Utilisation Strategy
SEA	Strategic Environmental Assessment
SHS	Scottish Household Survey
SMART	Smart, Measurable, Achievable, Realistic and Timebound when related to targets
SOA	Single Outcome Agreement (between local authorities and Scottish Government)
Social Inclusion	Reducing inequalities between the least advantaged groups and communities (due to unemployment, low skills, low incomes, poor housing, high crime rates, poor health and family breakdown) and the rest of society

SPP	Scottish Planning Policy – statement of Scottish Government policy on planning issues
STAG	Scottish Transport Appraisal Guidance
Stakeholder	An individual or organisation that has a direct interest in a service being provided
Sustainable	The principle of meeting present needs without compromising the ability of future generations to meet their own needs
SVQ	Scottish Vocational Qualification
Taxicard	Reduced fare taxi travel usually for people who cannot use conventional bus services because of a severe disability or infirmity
Tele-working	Working at home for some or all of the time, usually via a computer link
TERS	Tay Estuary Rail Study
Travel Planning	A package of measures that aim to promote more sustainable travel behaviour within an organisation or for an individual
Trunk Roads	Roads of national strategic importance that are managed by Transport Scotland
WRVS	Women's Royal Voluntary Service

Appendix E - Tactran Board

The TACTRAN Board includes 10 Councillor Members from the four constituent Councils, together with five Non-Councillor Members:

Board before May 2007	Current Board (August 2008)
TACTRAN Councillor Members	
Angus Council	
Councillor Kitty Ritchie (Deputy Chair)	Councillor Iain Gaul
Councillor David Selfridge	Councillor John Whyte
Dundee City Council	
Councillor Fiona Grant (Deputy Chair)	Councillor Brian Gordon
Councillor Kevin Keenan	Councillor Fraser Macpherson (Chair)
Councillor Roderick Wallace	Bailie Roderick Wallace
Perth & Kinross Council	
Councillor John Hulbert	Councillor Ann Gaunt
Councillor Alan Livingstone (Chair)	Councillor Alan Jack (Deputy Chair)
Councillor John Mair	Councillor John Kellas
Stirling Council	
Councillor John Paterson	Councillor Andrew Simpson
Councillor Gillie Thomson	Councillor Jim Thomson
TACTRAN Non-Councillor Members	
Robert Andrew	Robert Andrew
Professor Malcolm Horner	Professor Malcolm Horner
Gavin Roser	Gavin Roser
Bill Wright	Bill Wright
Margaret Duffy	Professor Tony Wells

