

## ***6. Moving about the North East***

### **6.1 Introduction**

In 1998, the Government published the Transport White Paper *'Travel Choices for Scotland'* and in the UK, *'A New Deal for Transport: Better for Everyone'*. The White Papers recognise the contribution that transport policy can make in achieving the integration of land use and transport as well as delivering environmental policy and objectives of the national air quality strategy. An important concern for the Government is "to reduce the need to travel, especially by car". The White Papers set out how this can be achieved by outlining policy measures to reduce the length and number of car trips while maintaining accessibility and sustainability. These are principal aims of the structure plan and are integrated throughout the written statement.

Aberdeen City and Aberdeenshire Councils have developed a joint co-operative approach to transport, which is reflected in many policy documents that each has adopted. Transport policies in the structure plan are no exception. There has been extensive co-operation and joint working between the two Councils. This is reflected through transport based partnerships such as the Quality Partnership with Bus Operators, the North East Scotland Rail Freight Development Group (NESRFDG), the North East of Scotland Economic Development Partnership (NESEDP) and the Campaign for Rail Enhancement Aberdeen to Edinburgh (CREATE). Both Councils also have policy documents whose main focus is not primarily about transport but are in some way connected or influenced by transport. These include the Air Quality Strategy, Waste Management Policy, Economic Strategy and Educational Policies. All of these policy documents can help to achieve the transport outcomes of the development plan and Local Transport Strategy.

The structure plan recognises that there must be seamless integration between different administrative areas and within the transport policy documents of both Councils. In this context, the close inter-relationships and inter-dependencies that exist in the North East have influenced the Councils to embrace the Government's ideas of a Regional Transport Partnership. The Scottish Executive has been encouraged by the voluntary partnership in the North East and has indicated its willingness to encourage continued voluntary joint working here.

### **6.2 Strategic Transport Framework in the North East**

#### **European Context**

The plan recognises the growing importance of transport and communications links with Europe and the role that partnerships can play at the European scale. There are already strong links with other North European countries, built up as a result of the oil and gas industry. These links have spawned air and shipping services between the countries, helping to promote Aberdeen Airport and Harbour as key elements of a European Transport Hub.

There are several initiatives stemming from the European Union, which seek to develop pan-European links and regional development of transport links in an effort to reduce the effects of peripherality. In this context, European Union programmes such as INTERREG IIIB and IIC, allocate funds to initiatives through the European Regional Development Fund.

The European Union (EU) recognises the importance of Trans-European social and economic cohesion. Indeed, in the last ten years it has made significant progress towards the free movement of people and goods through policies such as the single market. The EU believes that in order to break down the regional imbalances of wealth, population and infrastructure that exist within the member states, an integrated European transport system must be developed. Trans-European Networks or TENs are an attempt to improve the efficiency and

competitiveness of the European economy and to improve the conditions in which people and goods can move around Europe. The main aspirations of authorities in the North East in terms of the Trans-European Network are for recognition of:

- The strategic Trunk road network including the A90 (Aberdeen to the south) and the A96 (Aberdeen to Inverness route);
- The need for traffic to be able to bypass Aberdeen, for example by the construction of a Western Peripheral Route;
- Trans-European Rail Network comprising improvements to the East Coast Mainline and links to the Channel Tunnel, including freight transfer facilities;
- The North East's sea ports including improvements to existing harbours and the development of new routes and services;
- Aberdeen Airport and the importance of air routes; and
- Trans-shipment facilities between rail, road and sea transport.

### **Local Transport Strategies**

The local transport strategies identify crucial implications for land use decisions in the North East. Equally, the emerging development plan and the consideration of individual planning applications can have a similar impact upon the local transport strategies. It is essential therefore, that the transport strategies and land use frameworks are integrated and consistent with one another. This is reflected in National Planning Policy Guidance 17 'Transport and Planning', which states development plans and local transport strategies should complement and reinforce each other. Being material considerations in deciding whether or not to grant planning permission further reinforces the importance of transport strategies.

### **Transport and the Economy**

An efficient and integrated transport system is essential to the development of a strong and vibrant economy. Congestion in many of our towns and cities can reduce the efficient movement of goods and restrict the free flow of employees. It is estimated that congestion costs the Aberdeen area economy £100 million a year.

A good transport system is an important consideration for North east business. Any perceived congestion in Aberdeen and on the main arterial routes from the south, in addition to limited freight transport facilities by rail and air, may all limit the expansion ambitions of local firms as well as the establishment of new firms. The significance of transport to the economy does not just affect the local and national picture. Justification for the Trans-European Network is based in part upon its contribution to the economic growth of the European Union.

The Structure Plan Forecasts suggest we are entering a period when existing industries will decline. The structure plan provides a policy framework for countering this decline and promotes sustainable development and economic growth. In planning for this change, recognition that a better transport system can improve business accessibility to markets and the labour force is key. However, it is also important to consider the two-way effect of improved transport infrastructure, as investment can just as easily leak out as be attracted to an area. We must be prepared to deal with increased competition from business outwith the North East.

## **Sustainable Transport**

A major study into sustainable transport in and around Aberdeen, funded by Aberdeen City Council, Aberdeenshire Council and the Scottish Executive, was completed in August 1998. It considered alternative and combinations of transport policy scenarios and modelled their likely impacts in economic, social and environmental terms. The emerging local transport strategies build on the findings of these tests and focuses their targets on the modelled results, particularly the key findings that individually, policies have little impact, but collectively they can contribute to significant traffic reduction.

## **Community Involvement & Participation**

Community Planning exercises in both Aberdeen City and Aberdeenshire Council areas have shown that transport issues are high on the public agenda. The local transport strategy provides an opportunity to consult the public on local transport issues. The development plan framework provides another valuable opportunity to consult on the land use aspects of proposals.

## **6.3 Connecting Communities within the North East**

### **Introduction**

Land use and transport must be considered in an integrated way if the vision of connecting communities is to be realised. Bringing jobs and services closer to the home in order to lessen the reliance on the car means that the vision of sustainable development, economic growth and accessibility for all can be achieved. Achieving these elements means that attractive alternatives to the car must be provided if the community, economy or the environment is not to become marginalised. The consequences of not doing so will undermine the North East position environmentally, economically and strategically.

### **Traffic Growth**

Between 1986 and 1998 the number of cars in the UK increased from 17 million to 23.3 million. The distance travelled in them also increased significantly and is projected to grow further. Government projections published in 1997 indicated traffic growth of up to 38% by the year 2016, under previous policies. Table 40 highlights the degree of car use that North East's residents have for their journey to work. While this is not as high as the national figure, there is a realisation amongst politicians and the public that this is simply unacceptable. Therefore there is an urgent need to both resolve the problems caused by the recent growth in traffic levels and to plan future land use in a way which minimises the need for car use.

Table 40: Mode of Transport used for Journey to Work in the North East

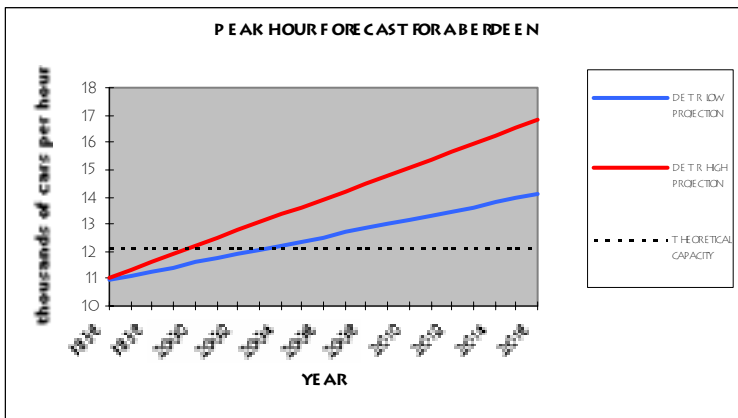
North East Journey to Work Mode of Transport

Mode of Travel	Aberdeenshire		Aberdeen City		National Travel Survey
	Number	% of Total	Number	% of Total	% of Total
<b>Total Residents Travelling to Work</b>	101,440	100.0	100,370	100	100
<b>Car Drivers</b>	52,180	51.6	47,570	47.4	70
<b>Car Passengers</b>	8,700	8.6	7,310	7.3	?
<b>Bus</b>	6,130	6.0	21,010	21.0	8
<b>Train</b>	560	0.6	250	<1.0	5
<b>Motor Cycle</b>	810	0.8	780	0.8	-
<b>Pedal Cycle</b>	1,670	1.6	1,730	2.0	4
<b>Walk</b>	14,080	13.9	13,940	14.0	12
<b>Other</b>	7,120	7.0	3,050	3.0	1
<b>Work from Home</b>	10,190	10.0	5,500	6.0	1

Source: 1991 Census of Population

Some corridors in Aberdeen have experienced dramatic growth in traffic, significantly higher than the Government’s forecast. Before the introduction of recent policies in the Transport White Papers, demand for peak hour traffic to enter the city was projected to exceed capacity before 2006 (see figure 10).

Figure 10: Peak Hour Forecast for Aberdeen



Source: Aberdeen City Council, DETR

**The Growth in Car Use**

440,000 people live in the North East of whom 226,000 live in Aberdeenshire and 214,000 live in the City. Aberdeen is the focal point in the North East and main service centre providing high value shopping, leisure and recreational facilities. Of the 100,000 Aberdeenshire residents in employment, nearly 30% work in Aberdeen (see Table 41) and many more rely on Aberdeen for shopping and leisure opportunities. Similarly, 16,000 or 11% of Aberdeen residents in employment work in Aberdeenshire and many more take advantage of the area for outdoor leisure and recreation.

*Table 41: Destination of Aberdeenshire Residents for Work*

Work Destination of Aberdeenshire Residents		
	Number	% of Total
<b>Total Residents in Work</b>	101,440	100.0
<b>Travelling to:</b>		
<b>Aberdeenshire</b>	66,930	66.0
<b>Aberdeen City</b>	29,060	28.6
<b>Moray</b>	380	0.4
<b>Highland</b>	110	0.1
<b>Tayside</b>	770	0.8
<b>Offshore</b>	3,360	3.3
<b>Other</b>	830	0.8

Source: 1991 Census of Population

A significant contributor to congestion in the North East is the number of people who choose to use cars to travel to work or to convey children to school. This creates congestion particularly at peak times and results in environmental and economic disbenefits.

There are significant numbers of people who travel long distances to work. There are 4,000 workers from outwith the Structure Plan Area who commute into Aberdeen. 2,150 (5%) of Aberdeen city centre workers live in Highland, Tayside and other areas outwith the structure plan area. 69% of these workers drive to work and just 4% travel by train. There are also around 8,000 people living elsewhere in the UK who work at oil and gas platforms in the North Sea. Many of these travel through the North East to be transported offshore from Aberdeen Airport. The most significant movement of people is those who move within settlements themselves such as Aberdeen, Peterhead and Fraserburgh (*see Table 42*). Other settlements, such as Ellon and Stonehaven, have less internal trips but a higher percentage of commuter trips to Aberdeen.

Tables 42 and 43 illustrates some of the Aberdeenshire movements in more detail and particularly highlight the contribution that Ellon and Stonehaven make in generating trips to the City. The tables reinforce the lack of employment land opportunities in Ellon and Stonehaven and indicate their status as commuter settlements.

Table 42: Workplace Destination of Economically Active Residents by Settlement

Destination	Settlement				
	Aberdeen	Fraserburgh	Peterhead	Ellon	Stonehaven
Local Area	85%	65%	54%	23%	37%
District	3%	9%	22%	8%	5%
Aberdeen City	N/a	6%	9%	50%	45%
At Home	3%	-	-	4%	-
Elsewhere in Scotland/ Offshore	4%	6%	4%	14%	8%
No fixed workplace	6%	13%	9%	3%	4%
Not Stated	6%	2%	2%	-	1%

Source: 1991 Census of Population

Table 43: Typical Modal Splits for Journey to Work Trips

Modal Split for Journey to Work Trips			
From	To	Example Mode	Percentage
Aberdeen City	Aberdeen City	Car	56%
		Bus	22%
		Walk	14%
Peterhead	Peterhead	Car	48%
		Walk	37%
		Bus	9%
		Cycle	4%
Peterhead	Aberdeen City	Car	74%
		Bus	14%
Ellon	Aberdeen City	Car	85%
		Bus	15%
Ellon	Ellon	Car	60%
		Bus	6%
		Walk	26%
		Cycle	9%
Fraserburgh	Aberdeen City	Car	84%
		Bus	16%

Source: 1991 Census of Population

## Accessibility for all

Over the 20 year period 1971-1991 the total number of cars owned increased by 83% in the City and by 470% in Aberdeenshire. In contrast, the number of households without a car in Aberdeen fell by just 12%. The low fall in the number without a car has occurred through a combination of factors such as an increase in the number of households, a large increase in families with two or more cars and a decline in the availability of public transport. Although the North East has relatively high car ownership levels, in 1991 there remained 32% of households without access to a car (*see Table 44*). It is unlikely that this has fallen dramatically since 1991, so significant numbers remain without access to a car, even in rural areas. Improved accessibility must benefit all to improve social inclusion, particularly in rural areas, and cannot therefore be exclusively for the benefit of car owners. There is scope throughout Aberdeenshire for development opportunities that will help to balance trip generating and trip attracting land uses. These will help redress the need to commute by making local communities more self sufficient, particularly in terms of employment land, retail and leisure opportunities.

Table 44: Car ownership in the North east

Area	0 Cars		1 Car		2+ Cars	
	1981	1991	1981	1991	1981	1991
Aberdeen	47%	40%	36%	37%	17%	23%
Aberdeenshire	-	23%	-	48%	-	29%

Source: Sustainable Transport Study (1998)

Walking, cycling and encouraging a mix of appropriate development will be the main ways to reduce the length and number of trips by car in settlements. Some places will be expanded to a size that could support viable Town Bus Services. However, it is not regarded as appropriate to provide any new roads or improvements to roads that will increase commuting by car. The Western Peripheral Route is distinct from this as it will reduce congestion within Aberdeen and improve accessibility in the North east generally.

*Table 45: Percentage of Grampian Commuters to Aberdeen*

<b>Town</b>	<b>Percent</b>	<b>Location</b>	<b>Main Roads</b>
Inverurie	13%	North West	A96
Ellon	16%	North	A90
Stonehaven	15%	South	A90
Banchory	14%	West	A93

Source: Grampian Satellite Initiative – Commuting Patterns to Aberdeen (1996)

## **Teleworking**

Teleworking presents an opportunity to reduce the number of office based workers commuting into Aberdeen. The Grampian Satellite Initiative's 1996 study highlighted that commuting patterns to Aberdeen from the rest of Grampian and the surrounding area. 58% of these commuters travelled from Inverurie, Ellon, Stonehaven and Banchory (*see Table 45*). If these commuters could work either from home or from satellite offices then a significant reduction in road traffic would result. Homeworking can provide a flexible working environment while reducing the need for commuting, although long-term home working can lead to a lack of social interaction. The Aberdeenshire Satellite Office Initiative advocates a pilot office with integrated computing and telecommunications facilities, as the proving ground and forerunner of a network of similar high quality facilities distributed throughout Aberdeenshire.

Within Aberdeen and in the market towns, there are major employment areas with few opportunities for access other than by car. The City Council has been working with groups of employers to develop Green Travel Plans to aid commuting options. For example, Shell has introduced dedicated buses to meet staff's needs, car share databases have been piloted in Kirkhill industrial estate and BP is investigating the opportunity for car pools and a car club. Robert Gordon University has developed a travel plan for students with the aim of minimising car dependency at its new Faculty of Management at Garthdee.

## **Environmental and Economic disbenefits**

The difficulty with the current level of car use is the congestion and environmental disbenefits that it causes. Past solutions to the growth in transport and car use have been to plan land uses and provide transport infrastructure to accommodate it. In the last ten years national policy has evolved and now recognises this approach is unacceptable. Efforts to bring origins and destinations together and the establishment of effective public transport are the key to sustainable growth of our communities.

Rural transport policy recognises the high level of car use outwith large settlements and aims to increase the availability of options, including working from home, cycling and journeys on foot especially in rural settlements. This is because public transport is often infrequent and policies to restrict car use could well erode the economy of these areas. On the other hand, in Aberdeen the opportunity to use public transport is often much greater, especially for journeys to the City Centre. Coincidentally journeys by car can often be so numerous as to disbenefit the economy through congestion, and the environment through poorer air quality. Table 46 illustrates the scope of the problem. The number of miles travelled per person for shopping trips in 1985/86 was almost double what it was in 1995/97. Other significant increases in miles travelled can be attributed to visiting friends at home, holidays, other personal business trips and commuting to work. This is while the number of miles walked has almost halved.

Projected levels of brownfield development in Aberdeen will help to progress towards sustainable development. Brownfield development and the opportunity for mixed-use developments will lend support to policies for public transport, cycling and walking.

*Table 46: Average distance travelled per person per year by purpose in Scotland*

Purpose	Number of Miles Travelled per Person			
	1985/86	1989/91	1992/94	1995/97
Commuting	980	1,084	1,061	1,299
Business	527	691	680	669
Education	162	163	144	171
Escort education	23	36	34	72
Shopping	541	712	746	919
Other personal business or other escort	532	847	791	946
Visiting friends at home	765	1,287	940	1,154
Visiting friends elsewhere	158	176	174	187
Sport/entertainment	324	415	403	430
Holiday/day trip	554	854	809	822
Other (including "just walk")	85	68	40	49
All purposes	4,652	6,333	5,823	6,719

Source: Scottish Transport Statistics, 1999

## 6.4 Connecting Communities to Places Further Afield

### Introduction

Much of the North East's wealth and success has been derived from oil and gas over the last 30 years. However, traditional industries such as fishing, farming and forestry have long contributed to the North East's economy. Maintaining a successful and prosperous economy relies very much on effective transport infrastructure, which link the North East to markets outwith the North East such as the harbours, roads, rail links, and the airport in Aberdeen.

Aberdeen is seen as a significant service centre for many people in remote areas of North East Scotland in particular, from neighbouring areas such as Highland, Moray, and the Islands. Effective and efficient links between the North East and other parts of Scotland and Europe are seen as vital to attract further economic activity and tourism to the area. New technology and e-commerce will have an important future role in linking businesses together in a worldwide market place and help to reduce the need for travel.

*Table 47: Summary of Goods Movements by Mode To, From and Within the North East*

Mode	Movement of Goods To, From and within the North East	
	'000s of Tonnes	% of Total
Road (1993)	26,620	82.4
Sea – Aberdeen & Peterhead (1993)	5,267	16.3
Rail	400	1.2
Air (1992)	5	0.02
<b>Total</b>	<b>32,292</b>	<b>100</b>

Source: Grampian Enterprise, "Distribution of Goods to and From Grampian" (1995)

## Air links

Aberdeen Airport provides an important connection between the North East and national and international destinations. Its role in providing social and economic links to the Northern Isles and far North of Scotland, in particular, should not be underestimated. However, passenger numbers and freight carriage have declined in recent years in contrast to other Scottish airports (*see Table 48*) and the airport has become very dependent on providing services for the oil and gas industry. A study in 1995 by Grampian Enterprise Ltd found that less than 1% of freight into and out of Grampian was carried by air.

Surface access by car is good between the airport and the North East but routes leading to the airport can be congested at peak times. Access to the airport by public transport can, however, be problematic. Discussions are ongoing with the airport, bus companies and ScotRail to identify opportunities for improvements and the Western Peripheral Route will help to alleviate congestion problems and speed up connections to the airport, particularly from the south of the City.

*Table 48: Summary of Airport Statistics*

Airport	Terminal passengers (000's)	% Change on 1997/8	Air Transport Movements	% Change on 1997/8	Cargo (tonnes)	% Change on 1997/8
Aberdeen	2,530.3	-4.1	85,181	-4.8	4,647	-19.4
Glasgow	6,728.6	5.4	85,822	2.5	8,531	-15.8
Edinburgh	4,957.0	11.2	81,619	9.6	16,815	33.8
<b>Total</b>	<b>14,215.9</b>	<b>5.4</b>	<b>252,622</b>	<b>2.0</b>	<b>29,993</b>	<b>5.4</b>

NB: There are 82 scheduled flights to 25 destinations in 8 countries from Aberdeen Airport  
Source: BAA Traffic Statistics, 1999

## Sea Links

Aberdeen and Peterhead harbours are two of the most significant harbours in the North East and Scotland in terms of fish landings and freight handling, carrying over a third of imports and exports to or from the area. Peterhead alone handles 1.3 million tonnes of freight of which 10% is fish, 6% general cargo and the rest related to oil. In 1997, Aberdeen Harbour handled about 4 million tonnes of which 80% was related to the oil industry and the rest to general cargo. The 1995 Study found over 16% of all freight into and out of Grampian passed through Aberdeen and Peterhead harbours and 80% of general cargoes are carried between Aberdeen and Peterhead to other British Ports. Considerable investment is continuing to be made at both harbours.

With improvements to the A90 south of Aberdeen in the last 20 years, there is now the potential to attract road freight, which would otherwise be transported through the central belt ports or ports in England. Both Councils would like to increase freight through Aberdeen harbour and will look to allocate enough land for appropriate, modern facilities.

Regular roll-on roll-off freight ferries operate to Holland and Scandinavia, as well as combined freight and passenger ferries to Orkney and Shetland. Passenger ferries and liners leaving from and arriving at harbours in the North East provide opportunities for tourism, as they increasingly become known as gateways to seaborne tourism.

Other important harbours are at Fraserburgh and Macduff. These harbours provide significant employment opportunities for the local communities of the North East and account for 20% of the total value of fish landings in the North East.

## **Road Links**

The structure plan supports the recognition given by the European Commission of the importance of strategic long distance transport links throughout Europe. The A90 from central Scotland to Aberdeen and the A96 Aberdeen to Inverness are designated as Trans European Network road links. However, these routes are recognised as falling short of the standards that roads of such strategic significance should meet. One of the priorities for the Trans European Network road links is the provision of bypasses around major urban centres that lie on the route to other locations on the network. This highlights the requirement for a high standard route such as the Western Peripheral Route to link the A90 south and the A96.

The structure plan is not anti-car but it is committed to reducing car use where a choice of alternatives can be provided. The plan recognises that new road building is no longer an acceptable solution to resolve increasing car use and to reduce congestion. Where freight cannot be carried by any other method than by road, the Western Peripheral Route will assist economic development in the North East by improving transport access and links for businesses, particularly to key areas such as harbours, the airport and the city centre.

The Western Peripheral Route should not be seen as a stand-alone scheme. Not only will it help longer distance trips it will also link park and ride sites proposed to serve the city, and free road space into the city to enable bus priority on radials. It will also result in traffic transfer from congested inner city streets to more appropriate distributor routes for more effective traffic management and safety. In Aberdeenshire, it will enable more efficient movement around the City removing traffic from unsuitable roads and speed up journey times. It will provide better links between Northern businesses and markets to the South. In doing these things the Western Peripheral Route is contributing to safer routes and an improved environment.

The justification for the route is based on an integrated transport strategy and the case for it has been shown in several independent studies including the Sustainable Transport Study, which was part funded by the Scottish Executive.

A study in 1997 for Grampian Enterprise gave the following attributes:

- The route is not designed to accommodate commuting but to assist movement around and past Aberdeen;
- The route is part of an integrated transport strategy;
- The route has virtually unanimous support from business and is capable of removing adverse influences on business activity;
- The route will further assist economic development and business growth by providing options to help overcome potential property and land availability constraints;
- The route will facilitate inter-modal transport solutions by improving access to ports and airports and, in the longer term, through connection to a modern road-rail interchange;
- The project has considerable potential to attract private contributions and may be suitable for private finance;
- The route will produce significant environmental benefits in the city centre and in the inner suburbs; and
- If the route is not built, Aberdeen faces growing congestion, worsening environmental effects and constraints on its future business development and economic growth.

The Sustainable Transport Study examined alternative transport measures in terms of their contribution to key indicators. It found that a package of measures, which included the Western Peripheral Route, resulted in the best results against a series of environmental, social and economic indicators, compared to alternative scenarios tested. The package produced greater benefits in terms of reduced travel, modal shift towards greater public transport use and improved access. In addition, more bus trips were completed in a quicker time and access by bus to areas such as the city centre and Altens from the areas of highest exclusion, such as the Great Northern Partnership areas, is improved. Vehicular flows in the indicator streets were reduced. This resulted in benefits for road safety, severance, amenity and environmental quality within the city. The option also reduced greenhouse gases to a level below present day readings.

North East roads account for around 10% of the Scottish road network and carry around 26 million tonnes of freight generated in the North East of Scotland each year. Aberdeen's road network can be congested, but is at the hub of most freight movement. Despite this, over 80% of all North East freight is carried by road, partly because over three-quarters is remaining wholly within the region (see Table 49). Encouraging freight operators to increase their use of rail transport for imports and exports will help to reduce the amount carried by road outwith the North East, but road movement of freight is likely to remain predominant within the Structure plan area throughout the plan period.

*Table 49: Average Freight lifted by HGVs per year (1994-1998) - Journeys with UK origins and destinations, which either started or ended in Scotland.*

Journey Started In	Journey ended In					Total
	Central	Grampian	Highlands	Tayside	Elsewhere	
Central	5,521	443	144	492	1,509	14,089
Grampian	494	15,422	548	585	1,081	19,266
Highlands	239	593	5,598	141	306	7,330
Tayside	514	974	185	6,566	875	11,390
Elsewhere (UK)	1,434	994	268	1,022	N/a	N/a
Total	12,304	20,105	7,497	10,820	N/a	N/a

Source: Scottish Transport Statistics, 1999

## Rail links

Included within the Trans European Network are the Aberdeen to Edinburgh/Glasgow and Inverness railway lines. The European Commission feels this route is up to standard for 'conventional lines'. However, it does recognise the inadequacy of the West Coast Main Line from Glasgow/Edinburgh to London. Aberdeen and Aberdeenshire Councils are keen to pursue improvements to the European Network outwith the NEST area, especially to encourage freight onto railways.

Only about 1% of all freight movements is presently carried by rail. However, this is projected to increase as the industry is looking to double in size in the lifetime of the structure plan. Given the distances involved in reaching many markets, rail freight is particularly viable to carry bulky but low value materials such as timber and products for the paper industry. Many current problems relate to the lack of track capacity and the limitations on the track south of Aberdeen for freight carriage. Land for viable, attractive, modern trans-shipment depots to serve the North East needs to be reserved.

Both Councils are trying to encourage rail companies to improve passenger service (including infrastructure) particularly to Glasgow, Edinburgh and Inverness. If journey times and costs can be made comparable or better than road journeys, in particular to the Central Belt, then more people are likely to use rail. Through CREATE, the importance of longer distance strategic links to destinations south of the border, including London and connections to Europe are also identified.

## 6.5 Sharing Responsibility for Transport and Limiting its Impact

### Introduction

New developments likely to create vehicular movements, particularly at peak times and by car, must demonstrate how their impact can be minimised. Car parking standards, Transport Assessments, and Green Transport Plans are all methods of reducing the reliance on the car or ensuring adequate mitigation when planning for new developments.

The problems caused by increasing traffic levels fall generally into three categories, although these aspects are inter-related:

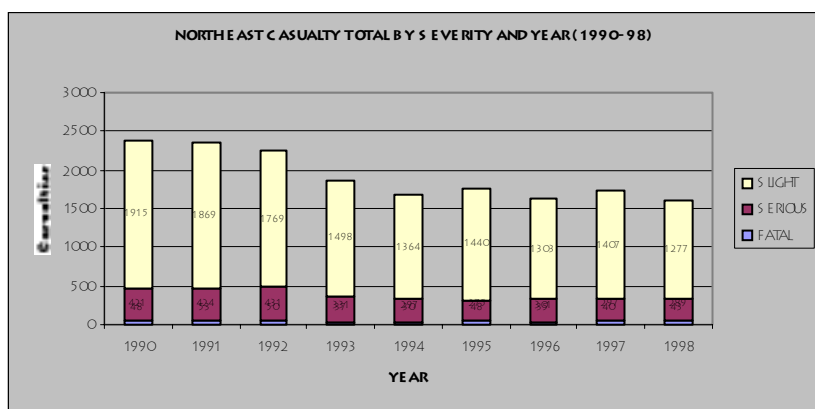
- Safety and accessibility concerns;
- Congestion generated by new developments; and
- General environmental considerations, including concerns over deteriorating air quality.

### Safety & Accessibility

If people are to be encouraged to leave their cars at home and either walk or make more use of public transport or bicycles, they must be assured that these modes are safe. Infrastructure must be in place to ensure that they are not unnecessarily inconvenienced.

In 1998, 332 people were killed or seriously injured in traffic accidents in the North East and a further 1,277 suffered minor injuries. Whilst this represents a reduction from 469 deaths and serious injuries and 1,915 minor injuries in 1991 it still represents too high a figure. The Government has recently set more stringent targets in an effort to curb the rate of fatal and serious injuries in traffic accidents.

Figure 11: North East Road Casualty Rates 1990-98



Source: Aberdeenshire Road Safety Plan Statistical update (1998) & Injuries on Aberdeen Roads (1999)

## Congestion

Congestion affects businesses, individuals and the area's image as well as impinging on residents' health and the environment. Although the North East, including Aberdeen, may be relatively congestion-free compared to larger conurbation's, delays caused by congestion nonetheless have been estimated as costing the local economy in the order of £100 million per year. It is, however, a problem that currently affects a few routes, a few junctions and for fairly short periods of time.

It would not be appropriate, efficient or effective to attempt to solve the problems of congestion by building more roads to accommodate the peak demands of car drivers, particularly as evidence from sources close to the Government suggest that more trips may be generated to take up latent demand. The Western Peripheral Route is not proposed in order to accommodate peak demands. Its purpose is very different as is explained above. The authorities are convinced that the reduction of congestion is best addressed by increasing awareness of the problems, through the provision of suitable alternatives and direct action to lessen such impacts.

## Environmental concerns

In the past the solution to growing traffic was to build more roads to accommodate them. The policy of 'predict and provide' is no longer accepted as a way forward, as the pollution generated from traffic, both in terms of noise and air quality, the land taken by roads and the general safety concerns are simply unsustainable.

Air Quality is one of the most important policy areas in which transport can have major detrimental impacts. The Air Quality Strategy for Scotland was published in January 2000. It provides a revised framework for reducing air pollution at national and local levels from a wide range of sources. Transport has a direct impact on the air quality including contributing 75% of carbon monoxide emissions and 65% of lead (*see Table 50*). Air pollution is a major source of ill health thought to contribute to 20-30,000 deaths annually in Britain. It can particularly affect children who suffer from asthma.

*Table 50: Contribution from Road Transport to Emissions*

Pollutant	Contribution from Road Transport	
	% of National UK Emissions	
Benzene		66
1,3-Butadiene		68
CO		75
Lead		65
Nitrogen Oxides		47
Particulates - PM		26
Particulates - Black smoke		58
SO		2
VOC		32

Source: Scottish Executive Local Air Quality Management, Guidance Notes, 2000

Both Councils are undertaking the assessments required by the UK National Air Quality Strategy but neither currently anticipates having to declare any Air Quality Management Areas by 2005.