

Summary Problems and Issues Report
South Coast Corridor Multi-Modal Study

Prepared for
**Department of Transport, Local
Government and the Regions**
December 2001

Halcrow

In association with:

Accent

Chris Blandford Associates

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1 Introduction

1.1 *Background to the Report*

1.1.1 The Halcrow Group led consortium has been appointed by the Government Office for the South East (GOSE) to undertake the South Coast Corridor Multi-Modal Study (SoCoMMS). This study forms one of the second tranche of multi-modal studies proposed by the transport White Paper, '*A New Deal for Trunk Roads in England*' (DETR, July 1998) and builds on the work already undertaken within the:

- M27 Integrated Transport Study;
- A27, Worthing – Lancing Integrated Transport Study; and
- the Access to Hastings Multi-Modal Study.

1.1.2 The Problems and Issues Report seeks to provide an understanding of the current situation in the study area. The document reviews current transport policies and other related policy areas, provides a summary of existing travel conditions (supply and demand) and summarises the range of transport issues and problems that have been identified through a range of sources. As such, this report provides the basis with which to understand how these problems may change in the future.

1.2 *Study Area*

1.2.1 The SoCoMMS study is investigating the congestion, safety and environmental problems related to transport along the south coast between Southampton (Hampshire) and Thanet (Kent). As such, the south coast transport corridor is well defined between Southampton and Brighton being hemmed in to the north and south by the South Downs and the sea respectively. To the east of Brighton, the transport corridor passes through the South Downs and crosses the Pevensey Levels to Hastings. To the east of Hastings, the rail based transport system passes inland to Ashford and then on to Ramsgate and Margate via both Dover and Canterbury. Similarly, the road network in this area splits at Brenzett, with the A259, A20 and A256 route following the coast through Folkestone and Dover while the A2070, A28 route passes through Ashford and Canterbury.

1.2.2 In addition, the study has defined an area of influence which reflects that:

- the alternative travel routes for longer distance movements are via London for rail and via the M25 for road based trips;
- there are major land use influences (current and proposed), particularly to the west at Dibden Bay and to the north at Winchester, Gatwick, Bluewater and Tunbridge Wells;

- the main access route to areas such as Bournemouth and the Isle of Wight is through the study area; and
- there are other locations for which transport measures might influence travel on the south coast (for example rail improvements at Gatwick airport).

1.3

Data Sources

1.3.1

A wide range of information sources have been used to develop a comprehensive understanding of the transport related problems and issues which exist within the SoCoMMS Study Area. The main sources are listed below.

- Previous studies
- Regional and local transport and development plans
- Existing travel data
- Participation workshops
- Freight related interviews
- Public consultation
- Meetings of expert topic groups
- Local authority responses
- Responses from other organisations
- The SoCoMMS strategic model.

1.3.2

No single source of information or data collected for the study purports to show the whole picture. Taken together, however, they provide a good understanding of the strategic transport related problems and issues within the study area.

1.4

Consultation

1.4.1

In order to further understand the transport problems and issues in the corridor, a range of participation / consultation initiatives have been undertaken. This first phase of consultation was held in June / July 2001 and included:

- direct discussions between the consultant, GOSE, and the steering group;
- direct presentations and discussion with MPs and MEPs;
- correspondence and discussion with local authorities;
- a regional workshop designed to discuss the corridor wide needs of particular groups within the corridor, including the business community, the transport operators, local authorities, statutory agencies and regionally based Non Government Organisations (NGOs);

- sub-regional workshops designed to discuss the transport issues at an intermediate level, again involving the business community, the transport operators, local authorities and sub-regionally based NGOs;
- locally based workshops designed to discuss specific transport related issues and proposals within the more local areas along the corridor; involving local chambers of commerce, parish and District Councils, local transport operators and locally based NGOs;
- topic based workshops designed to explore corridor wide issues relating specifically to topic areas such as the environment, planning, regeneration, freight, public transport, and transport modelling issues;
- selective interview-based discussions with port operators, freight hauliers, shipping companies and local distribution companies;
- a newsletter issued at key locations along the corridor, which contained a questionnaire on transport related problems and issues;
- an internet website providing instant access to all newsletters, reports and steering group minutes, together with providing an opportunity for stakeholders to provide inputs into the study process; and
- a questionnaire on transport issues was also placed on the website.

1.4.2

Four sub-regional workshops were held in Canterbury, Eastbourne, Brighton and Fareham. They sought to gain attendees' views on current significant trends and issues. Individuals were asked to prioritise the key themes before working in small groups to carry out a more detailed analysis of a particular problem or issue. The groups were asked to address the following four questions:

- What is currently working well?
- What are the current problems?
- What problems are likely to emerge in the future?
- What opportunities are likely to emerge in the future?

1.4.3

Five local workshops were held in Chichester, Worthing, Polegate, Folkestone and Thanet. These had a similar structure to the sub-regional workshops but examined issues at a more local level. From initial discussions undertaken with the steering group, it was evident that the level of previous participation / consultation varied significantly along the corridor. In areas such as Hastings, Portsmouth and Southampton, where there had already been local multi-modal studies, it was generally felt that SoCoMMS should build on what had gone before, utilising the findings of the Access to Hastings study and the M27 Integrated Transport Study. It was additionally felt there was little to be gained, at this early stage in the south coast study, by reopening issues that have already been addressed within these previous studies. However, these areas would be

consulted at later stages of the project, when considering to the identification of solutions and the emerging strategy.

1.4.4 The cross-corridor workshop was held in Crawley and brought together a range of stakeholders with strategic interests. The workshop followed a similar format to the local and sub-regional workshops by identifying significant issues, trends and drivers within the corridor. The final stage of the corridor workshop was, however, used to obtain participants' aspirations for the future of the corridor.

1.5 ***SoCoMMS Strategic Model***

1.5.1 A strategic transport model has been developed for the SoCoMMS study with the aim of testing a range of schemes, policy measures, and strategies within the study area. The model is multi-modal in nature in that it has representations of the highway, rail and interurban bus/coach networks. The model operates within the EMME/2 software.

1.5.2 The SoCoMMS model has been developed from a range of existing sources. The highway model has been developed from SERTM (South East Regional Traffic Model), ORBIT (a multi-modal study investigating orbital movements around London) and local models developed for other multi-modal studies (e.g. the Access to Hastings study and M27 Integrated Transport Study). The rail element of the model has been developed from data obtained from the DTLR (Department of Transport, Local Government and the Regions). The network databases have been developed in a Geographic Information System (GIS). The model covers an area from the south coast to London and the river Thames (northern boundary) and Wiltshire / Dorset (western boundary).

2 Background to the Study Area

2.1 *The Policy Context*

2.1.1 A review has been undertaken of transport policy from the national to local levels. These provide the framework within which the SoCoMMS strategy has to be assembled. In 1998 the Government published a transport White Paper 'A New Deal for Transport: Better for Everyone'. This established the framework for an Integrated Transport Policy and set out five main criteria for transport including

- environmental impact;
- safety;
- economy;
- accessibility; and
- integration.

2.1.2 These criteria have formed the key objectives for the multi modal studies to assess the impact of their proposals. Within each of the key objectives a series of sub-objectives have been identified. These objectives provide a useful benchmark with which to assess existing transport issues and problems.

2.1.3 Against the backdrop of these objectives, the Government has announced a 10-Year Transport Plan (to 2010). The vision is that ' by 2010 the UK will have a transport system that provides:

- modern, high quality public transport, both locally and nationally. People will have more choice about how they travel, and more will use public transport;
- more light rail systems and attractive bus services that are fully accessible and integrated with other types of transport;
- high quality park and ride schemes so that people do not have to drive into congested town centres;
- easier access to jobs and services through improved transport links to regeneration areas and better land use planning;
- a modern train fleet, with reliable and more frequent services, and faster trains cutting inter-city journey times;
- a well-maintained road network with real-time driver information for strategic routes and reduced congestion;

- fully integrated public transport information, booking and ticketing systems, with a single ticket or card covering the whole journey;
- safer and more secure transport accessible to all; and
- a transport system that makes less impact on the environment.’

2.1.4

The Regional Planning Guidance for the South East (RPG9) covers the period up to 2016 and sets the framework for the longer term future. The primary purpose of this guidance is to provide a regional framework for the preparation of local authority development plans. Its other purpose is to provide the spatial framework for other strategies and programmes which include the preparation of local transport plans.

2.1.5

The main principles that should govern the continuing development of the region as stated in the guidance include those given below.

- Urban areas should become the main focus for development through making them more attractive, accessible, and better able to attract investment.
- Green development (namely, on previously undeveloped land) should normally take place only after other alternatives have been considered, and should have regard to the full social, environmental and transport costs of location.
- There should be continued protection and enhancement of the region’s biodiversity, internationally and nationally important nature conservation areas, and enhancement of its landscape, and built and historic heritage.
- Access to jobs, services, leisure and cultural facilities should be less dependent on longer distance movement and there should be increased ability to meet normal travel needs through safe walking, cycling and public transport with reduced reliance on the car.
- Transport investment should support the spatial strategy, maintaining the existing network, enhancing access as part of more concentrated forms of development, overcoming bottlenecks and supporting higher capacity and less polluting modes of transport.

2.1.6

A key feature of the strategy is the concentration of development in urban areas. Town centres should be the normal focus of retailing and services requiring accessibility by large numbers of people, transport investment should be directed to support an urban renaissance. RPG9 contains eight policy statements related to the regional transport strategy:

- Policies should be developed which minimise the distance which people need to travel whilst enhancing choice and ease of access to activities,

taking into account the needs of all users including disabled people and others with reduced mobility.

- Local authorities should work in partnership with other groups to develop travel awareness strategies designed to encourage change in travel habits which complement and are consistent with the proposed land use strategy.
- Local authorities should, in consultation with adjoining authorities, adopt maximum parking standards for all new development proposals.
- Walking and cycling should be vigorously promoted especially for shorter distances, as the healthiest and most environmentally-friendly ways to travel.
- Public transport (bus, train and water-borne) should be improved to enable it to compete more effectively with the private car and to increase its share of total travel.
- A fully integrated freight distribution system should be promoted which makes the most efficient and effective use of road, rail, inland waterways and coastal shipping.
- The sustainable development of seaports and port facilities (including road and rail access to them) should be supported for international deep sea, short sea and coastal shipping.
- Any surface access measures necessary to cater for airport growth either within existing planned limits or for further expansion, should be sustainable. Any further development associated with such airport growth should also be sustainable in nature.

2.1.7

A series of Priority Areas for Economic Regeneration (PAERs) are identified within RPG9. They are located in South Hampshire, Southampton, Portsmouth, the Sussex coastal towns (from Shoreham Harbour to Hastings) and the former coalfields and coastal towns of East Kent. Each PAER has its own distinctive set of problems and will need individually tailored strategies.

2.2

Planning Context

2.2.1

A planning review has been undertaken to assess current social and demographic characteristics of the study area and to provide a basis for developing forecasts for 2016. The review of existing conditions has shown the following:

- The highest population densities along the corridor are in the Brighton-Worthing and South East Hampshire areas where settlements are located between the sea and the South Downs.
- Many of the south coast towns have the highest proportions of elderly people in the south east. The areas with the higher proportions of elderly

people include the Manhood Peninsula, Bognor Regis, Worthing, towns east of Brighton (e.g. Rottingdean, Peacehaven, Newhaven, Seaford), Eastbourne, Bexhill, New Romney and Birchington.

- The highest employment densities are in Brighton, Portsmouth and Southampton.
- The highest unemployment locations along the south coast are in Brighton, Hastings, Dover, Folkestone and Thanet.
- Those wards with the highest proportion of households owning no cars are in the coastal towns. These include wards within the central areas of Southampton, Portsmouth, Worthing, Brighton and Hove, Eastbourne, Hastings, Folkestone, Dover and Ramsgate.

2.3

Social Inclusion

2.3.1

The Indices of Multiple Deprivation (IMD) for 2000 have been downloaded from the Office for National Statistics (ONS) website. These data have been compiled by Oxford University at ward level to provide an indicator of social inclusion and is an aggregation of a number of characteristics.

2.3.2

The IMD provides a score for each ward and a ranking according to the score. A ward with a high ranking value is one with lower levels of deprivation and thus higher levels of social inclusion. The data show that, generally, the coastal corridor has wards with higher levels of deprivation than the national average. In particular, areas such as Brighton, Thanet and Hastings have wards that are in the most deprived 10% of wards in the country.

2.4

Environmental Constraints

2.4.1

In order to assess how transport solutions may be developed in the future, it is necessary to map the existing environmental constraints. These have been undertaken under a number of headings as suggested by GOMMMS (Guidance on the Methodology for Multi Modal Studies). A review has been completed of these constraints.

2.4.2

The mapping of biodiversity, landscape, townscape and heritage constraints highlights the sensitive nature of the area. Within the study area and the area of influence are a number of areas of outstanding natural beauty (AONBs) including the South Downs, High Weald and New Forest. Several local authority districts within the study area have large areas within the AONBs. These AONBs reflect the distinctive landscapes and habitats of the area. There are a number of Heritage Coast areas such as around Beachy Head, which have been designated for their geology, vegetation and wildfowl importance. The townscape of many of the seaside urban areas reflect the towns' development during Regency and Victorian times as recreational centres.

3 Existing Transport Conditions-

3.1 *The Road Network*

3.1.1 An extensive database of travel information has been collated from a range of sources including national sources, local authorities and transport operators. These data have been used to assess existing travel patterns in the corridor.

3.1.2 The data demonstrate that the car is the dominant mode of transport. For example, travel to work data shows that for the study area, typically around two-thirds of journeys to work are made by car (see Table 3.1). Walking is the second most important mode for the journey to work with 13% of movements.

Mode	Percentage of trips
Car driver	65%
Car passenger	8%
Walk	13%
Bicycle	4%
Bus	6%
Rail	2%
Motor cycle	2%

Table 3.1: Mode used for Journey to Work for trips starting in the study area (source DTLR)

3.1.3 The largest use of bus to travel to work is in Brighton & Hove with 15% of movements. Overall, cycling comprises 4% of journeys made to work. However there is a considerable range in cycle use from Gosport where 16% of journeys are made by bicycle to Hastings where only 1% are made. Typically there are three times as many foot journeys to work than bicycle journeys.

3.1.4 The standard of the road network along the south coast is diverse with the following range of conditions:

- The high quality of the M27 linking Southampton and Portsmouth.
- The A27 (continuing from the M27), which provides a mixed quality dual carriageway route between Portsmouth and Lewes, with discontinuities at Arundel, Lancing and Worthing.
- The A27 and A259 between Lewes and Brenzett which provides a poorer quality single carriageway route.

3.1.5

At the eastern end of the corridor, there are also choices presented between different routes:

- The routes along the coast include the poor quality A259 between Brenzett and Folkestone, the A20 dual carriageway between Folkestone and Dover, the upgraded A256 which is dual carriageway between Dover and Eastry and the single carriageway section from Eastry to Ramsgate.
- The alternative to the coast routes is provided by the A2070 and A28 inland route through Ashford and Canterbury.

3.1.6

The main alternative routes for longer distance traffic to the coastal trunk road include

- the M3, M25, M20 route between Southampton and Folkestone;
- the A259 between Emsworth and Pevensey which runs through the coastal towns such as Bognor Regis, Littlehampton, Worthing, Brighton & Hove and Eastbourne; and
- the A272 / A265 / A268 / A28 route between Winchester and Ashford which runs to the north of the South Downs through a number of towns such as Midhurst, Billingshurst, Haywards Heath and Tenterden.

3.1.7

Journey times for longer distance movements along the corridor are high, particularly in the eastern part of the corridor. This makes the use of the M25 in combination with the M2, M20, M23 / A23, A3 / A3(M) and M3 an attractive alternative for longer distance movement along the coast. For example the off-peak journey time from Folkestone to Southampton via the M25 is 2 hours 33 minutes, and via the coastal route (i.e. A259, A27 and M27) is 3 hours 14 minutes. (Journey times are taken from the SoCoMMS model).

3.2

Highway Travel Demands

3.2.1

The highest flows in the corridor are found on sections of the M27 with AADT (Annual Average Daily Traffic Flow) values in excess of 100,000 vehicles per day between junctions 3 and 4, and between junctions 5 to 8 (see Table 3.2). The section of the A27 between the M27 and the A3(M) carries over 120,000 vehicles per day. At the other end of the spectrum, flows on the rural sections of the A259 are less than 10,000 vehicles per day for sections in East Sussex and Kent. Typically traffic flows in August can be 15% higher than the AADT.

Table 3.2: Annual Average Daily Traffic 2000 (two-way flows) (Sources – Highways Agency, Kent County Council)

Location	2000 Traffic Flow
M27 Junction 1 – 2	64,870
M27 Junction 2 – 3	89,160
M27 Junction 3 – 4	100,140
M27 Junction 4 - 4a	49,440
M27 Junction 5 – 7	107,000
M27 Junction 7 - 8	100,800
M27 Junction 8 - 9	91,700
M27 Junction 9 - 10	82,600
M27 Junction 10 - 11	90,600
M27 Junction 11 - 12	102,500
M271 – South of M27 Junction 3	48,190
M271- North of M27 Junction 3	12,940
M275 South of M27	78,000
A27 Between A2030 - A3	107,490
A27 Between A3(M) - A2030	121,700
A27 Brockhampton	77,790
A27 Chichester, W of A286	37,500
A27 New Westhampnett Bypass	39,900
A27 Walberton, (A29 - A284)	25,860
A27 Poling	27,200
A27 Clapham, West of A280	25,940
A27 Brighton Bypass, Hangleton Link	48,300
A27 Brighton Bypass Dyke Rd - Patcham	67,600
A27 Brighton Bypass Coldean-Old Boat	44,100
A27 Lewes Road, Falmer	63,290
A27 Newmarket, Lewes	48,900
A27 Beddingham Level Crossing	29,520
A26 Beddingham, S of A27	10,000
A27 Polegate, West of A22	28,860
A27 Dittons	17,980
Middlebridge, Pevensey A259-A27	17,920
A259 Glyne Gap	30,860
A259 Batchelors Bump	9,720
A259 West of Icklesham	7,960
A259 West of Rye	9,500
A259 South Undercliff Rye	10,340
A259 East of Rye	8,760
A259 Brookland	5,130

Table 3.2: Annual Average Daily Traffic 2000 (two-way flows) (Sources – Highways Agency, Kent County Council)

Location	2000 Traffic Flow
A259 Palmarsh	10,560
M20- J11 - 11a	47,610
M20- J11a- 12	35,960
M20- J12-13	35,220
A2- Bridge	23,940
A2 between A258 - A20	17,320
A2- Canterbury Bypass	19,940
A2- Harbledown	32,240
A20 between M20 - A260	32,030
A20 between A260- B2011	24,320
A28- Tenterden	12600
A28 Bethersden	8400
A28 Canterbury Road, Wye	9100
A28 Wincheap, Canterbury	21900
A28 Sturry	20800
A28 Upstreet	9800
A28 Brooksend	15600
A28 Garlinge	20500
A2070 Hamstreet Bypass	10500
A256 Whitfield Bypass	10800
A256 North of Whitfield	9300
A256 Sandwich Bypass	14500
A256 Richborough	21600
A256 Haine Road, Manston	18400

3.2.2

Travel demand data have been assembled to assess the range of movements being made. The data indicate that during a weekday there are at least 3 million journeys made in the study area between 0700 and 1900. Commuting trips by car comprise nearly 30% of 12-hour movements while car based business trips comprise 17% of daily journeys. Goods vehicle movements (including vans) comprise 17% of daily movements.

3.2.3

We have segmented traffic demands by trip purpose and orientation of movement. Table 3.3 provides a summary of this analysis splitting trips down into spatial and composition pattern. Within the highway matrices for the area, short distance trips are the largest group. Two thirds of trips within the corridor

are made entirely within a single county area (e.g. car journeys within the West Sussex part of the study area). Twenty per cent of journeys are from the study area to the area of influence while relatively few are to London. The average distance travelled on a car journey is less than 25 kilometres.

Movement	Car - Commuting	Car - Employers Business trips	Car- other trips	Light Goods	Other Goods	Total
Core area – local movements within county	20%	10%	25%	7%	4%	67%
Core area – movements between adjacent counties	2%	1%	3%	1%	1%	6%
Core area – longer distance	0%	0%	0%	0%	0%	0%
Core area to area of influence	6%	4%	7%	2%	2%	20%
Core area to London	1%	1%	1%	0%	0%	3%
Core area to other	0%	1%	1%	0%	1%	4%
Totals	28%	17%	37%	10%	7%	100%

Table 3.3: Trip breakdown in the corridor by purpose and spatial distribution – journeys by car
(*source SoCoMMS model*)

3.2.4

Examination of roadside interview data collected in 1999 along the corridor demonstrates the high proportion of short distance traffic. For example, data collected by East Sussex County Council at Icklesham, Glyne Gap (between Bexhill and Hastings), and east of Lewes, show that on an average day, there are 100 vehicles travelling from Kent to the corridor west of Brighton in each direction. By contrast, examination of the regional trip matrices show an additional 500 vehicles making that movement along the motorway network in each direction. In addition, there are a further 70 vehicles travelling from Kent to the Brighton and Hove area along the corridor in each direction while 100 vehicle make the same trip but via the motorway network. These data emphasise the current lack of long distance traffic currently making journeys on the south coast route. The interview data show that most journeys are between adjacent towns.

3.3

Existing Public Transport Conditions- Rail

3.3.1

The rail network within the study area consists primarily of two types of route. These are the coastal line and its branches, linking Southampton through to Margate, and the radial routes connecting the south coast to London. The coastal route is characterised by its disjointed structure, both in terms of services and infrastructure. In infrastructure terms, Portsmouth, Bognor, Littlehampton,

Brighton, Newhaven / Seaford and Eastbourne are all termini. Where these stations are served by through services, these have to enter and leave the stations from the same direction.

3.3.2 In terms of services the primary coastal service can be summarised into four parts as follows:

- Southampton – Fareham – Havant – Worthing – Hove (– Brighton);
- Brighton – Eastbourne – Hastings;
- Hastings – Ashford (this section is not electrified and is single track in parts); and
- Ashford – Dover – Ramsgate, or Ashford – Canterbury – Ramsgate – Margate.

3.3.3 In addition, there are secondary services linking:

- Southampton to Portsmouth;
- Portsmouth to Brighton;
- Bognor Regis to Littlehampton; and
- Littlehampton to Newhaven / Seaford.

3.3.4 Current rail services are designed primarily to cater for local and medium distance travel along the corridor, rather than long distance travel along the south coast. Those long distance movements which are made tend to be towards London. A journey from Southampton to Margate, via the south coast route would typically involve changing trains at Brighton, Hastings and Ashford and take around 5 hours to complete.

3.3.5 The radial services, which provide direct connections between London and Southampton, Portsmouth, Bognor Regis/ Littlehampton, Brighton, Eastbourne, Hastings, Ashford, the Channel Tunnel, Dover, Ramsgate and Margate additionally complement parts of the south coast route.

3.3.6 A journey from Southampton to Margate, via London, which would typically involve changing between London termini would take around 3 hr 30 minutes, some 1 hr 30 minutes faster than using the south coast route (source National Rail Timetable).

3.3.7 Station entry counts have been collected from a range of sources. These provide an estimate of typical weekday boarders at stations along the south coast. There are 102 stations within the SoCoMMS area. The data show that Brighton station is by far the busiest station in the study area with nearly 7000 passengers boarding per day. This is twice as many passengers as the next busiest station, which is Southampton Central. There are 24 stations that have less than 100 passengers boarding trains per day.

3.3.8 Rail travel demand data have been obtained from the DTLR for use in the multi-modal studies. These data show that of the county areas within the study area, the largest number of trips are generated in East Sussex. Much of this movement originates in the Brighton and Hove area. There are 25 million annual rail trips originating in the study area.

3.3.9 The trip purpose of rail journeys originating in the study area shows that commuting journeys to work comprise 45% of trips made. Business trips form 10% of rail journeys while 45% of journeys are for other purposes (e.g. visiting friends). The data indicates that nearly 50% of trips are made by passengers who have a car available for their journey.

3.3.10 Table 3.4 performs a similar analysis for rail trips as undertaken for the highway matrices on trip characteristics. The table shows that trips to London from the corridor form 40% of the total rail trips. Of these London bound trips nearly half are related to commuting to work. This demonstrates the importance of the London commuter market to the train operators as this is the largest individual segment (some 20% of all journeys). 'Other' journeys (such as leisure trips) to London are the second largest market segment. Local commuting journeys to work within the study area form 12% of trips.

Movement	Work	Business	School	Other	Total
Core areas – local movements within county	12%	3%	2%	11%	28%
Core area – movements between adjacent counties	4%	1%	1%	3%	9%
Core area – longer distance	0%	0%	0%	0%	0%
Core area to area of influence	8%	2%	1%	7%	18%
Core area to London	20%	4%	3%	14%	40%
Core area to other	1%	1%	0%	3%	3%
Total	45%	10%	6%	38%	100%

Table 3.4: Trip breakdown in the corridor by purpose and spatial distribution – journeys by rail
(*source SoCoMMS model*)

3.4 *Existing Public Transport Conditions- Bus*

3.4.1 Bus timetable data have been assembled from local bus guides published by the operators and local authorities, and from the Great Britain Bus Timetable. A bus service footprint map for the corridor has been derived. A number of operators provide services between the towns on the south coast. Inter-urban service providers include:

- Hampshire Bus;
- Provincial;
- Coastline;
- South Coast Buses; and
- East Kent.

3.4.2 In addition, there are a number of urban service providers including:

- Southampton City Transport;
- Brighton and Hove Bus Company
- Eastbourne Transport.

3.4.3 Table 3.5 shows the key inter-urban bus routes along the south coast. Those areas covered by the largest number of services are in the Brighton and South East Hampshire area. In addition there is National Express coast service 315 which operates from Eastbourne/ Brighton along the coast to Southampton and Cornwall (2 per day).

Bus Route	Operator	Weekday Frequency
26- Southampton –Botley- Fareham	Provincial	Hourly
69 Winchester- Bishops Waltham- Fareham – Portsmouth	Hampshire Bus	Hourly
72 –Southampton – Gosport	Provincial	Hourly
70/80/80A Southampton – Fareham	Provincial	2 /hour
X27, X47 Southampton – Portsmouth – Southsea (LIMITED STOP)	Southampton Bus	Hourly
5 Fareham- Portsmouth	Provincial	2 /hour
57 Warsash- Fareham – Portsmouth	Provincial	2 /hour
702 Brighton – Worthing –Arundel	Coastline	2 /hour
700 Brighton – Portsmouth	Coastline	2 /hour
60 Midhurst- Chichester – Bognor Regis	Coastline	2 /hour
9 Worthing – Littlehampton	Coastline	Hourly
28 Brighton –Lewes	South Coast Buses / Brighton & Hove	4 /hour
14 Brighton – Newhaven	Brighton & Hove	2 /hour
20 Brighton- Eastbourne	South Coast Buses	Hourly
712 Hove- Eastbourne	South Coast Buses / Brighton & Hove	2/hour
711 Eastbourne- Dover	South Coast Buses	Hourly
710 Hove – Camber	South Coast Buses	Hourly
111 /211 Dover- Canterbury	East Kent	Hourly
100/101/200/201 Dover –Canterbury- Margate- Ramsgate	East Kent	2/ Hour
94 Ramsgate – Sandwich – Dover	East Kent	Hourly
12 Folkestone – Lydd	East Kent	Hourly

Table 3.5 : Key Bus Services along South Coast Corridor (Source- 2001 National Bus Timetable and Local Authority/Operator timetables)

3.4.4

Table 3.6 sets out the approximate number of peak buses per hour terminating at a sample of town centres within the corridor, and the number of buses terminating on Sundays. This only provides an approximation of level of service, since in some urban areas there may be more than one terminal – in these cases the principal terminal is considered. In addition, the larger towns of Portsmouth, Southampton and Brighton and Hove have a number of suburban services, which cross the town centre, as well as inter-urban services providing links to neighbouring towns.

3.4.5

The table shows that for Kent bus services, Dover, Canterbury and Ashford have reasonably frequent peak hour services terminating in the town centre. All towns have Sunday services, but of variable frequency. Canterbury, which has a lower peak hour bus frequency than Ashford, but has a better Sunday frequency, probably due to the number of tourists visiting the city.

- 3.4.6* Of the current services in East Sussex, Eastbourne has the highest number of peak and Sunday terminating services. All three towns – Eastbourne, Hastings and Brighton have limited Sunday services but a greater number than West Sussex towns. Worthing, for example appears to have no terminating Sunday services, although there are several Sunday services passing through Worthing. Chichester, similarly, has few terminating Sunday services but has Sunday services passing through.
- 3.4.7* Also in the table the level of integration between buses and rail services is indicated. This looks at whether bus services just pass the station, and where there would be a suitable stop, or whether there is a reasonably close terminal for interchange with rail services.
- 3.4.8* This latter observation does not imply how well buses and trains are integrated – but rather that they are in reasonably close proximity. To be actually integrated may require more buses to serve the station, very short walking distances between bus and platform, co-ordinated rail and bus timings and real time passenger information. However, it should be borne in mind that for many small towns, integration means being able to find a taxi nearby or a convenient pick up point for kiss and ride.
- 3.4.9* Table 3.6 shows that all the principal towns have bus services that run close to the stations, if they do not terminate there. There is therefore potential to improve interchange particularly if rail and bus timetables (and fares) could be co-ordinated. However, care would need to be taken not to dis-benefit existing bus users by re-routing all bus services to local stations.

Table 3.6: Approximate Bus Service Frequency in the Principal Towns

<i>Town</i>	<i>Peak Buses per Hour Terminating at Town Centre</i>	<i>Sunday Buses per Hour Terminating at Town Centre</i>	<i>Integration with Rail Services</i>
Ramsgate	6	1	Passing services
Deal	8	2.5	Yes
Dover	20.5	3.5	Passing services
Folkestone	7.5	7	Passing services
Canterbury	28	6.5	Passing services
Ashford	36.5	1.5	Reasonably close, being improved
Hastings	29	9	Yes
Eastbourne	37	11	Within 200 metres
Worthing	5	0	Passing services
Chichester	13	2	Reasonable

3.4.10

Journey to work statistics show that over the area as a whole, some 6% of commuting journeys are made by bus. The highest numbers of trips are in Brighton & Hove and Southampton where over 10% of commuting journeys are made by bus (Table 3.7).

District	Daily trips to work	% of overall commuting trips
Adur	503	3.5%
Arun	860	2.8%
Ashford	1,252	4.3%
Brighton & Hove	13,502	15.0%
Canterbury	2,034	4.7%
Chichester	994	2.8%
Dover	2,831	6.3%
Eastbourne	3,533	9.2%
Fareham	1,889	5.5%
Gosport	1,543	7.2%
Hastings	1,536	6.3%
Havant	1,266	3.5%
Lewes	1,000	3.9%
Portsmouth	8,642	8.7%
Rother	498	2.6%
Shepway	1,591	5.8%
Southampton	13,390	12.7%
Thanet	1,831	5.5%
Wealden	706	2.3%
Worthing	1,080	3.2%

Table 3.7: Bus Journeys to Work (Source DTLR Journey to Work data)

3.5

Existing Transport Conditions- Cycling

3.5.1

The National Cycle Network is being developed by Sustrans to provide a safe, attractive, high-quality network for cyclists and a major new amenity for walkers

and people with disabilities. This was officially opened in June 2000. Work is continuing throughout the year with the aim of providing 5,000 miles of continuous routes, including traffic-free and traffic-calmed sections, and stretches on minor roads.

3.5.2 About a third of the National Cycle Network will be entirely traffic-free, built along old railway lines, canal towpaths, forestry tracks, riversides and urban spaces, and in many cases, these sections will be ideal for pushchairs as well as for cyclists and pedestrians. The rest of the network will follow existing roads; town roads may be traffic-calmed or incorporate cycle lanes, quiet minor roads will be used for country sections and there will be special crossings over busy roads where needed. The second phase of the National Cycle Network from 2000 to 2005 will complete the remaining sections of route.

3.5.3 Within the study area a number of routes are being developed such as “Route 2” which runs along the coast between Ramsgate and Southampton. In addition there are a number of routes linking the coast to London, such as from Ramsgate, Eastbourne, Brighton, Portsmouth and Southampton.

3.5.4 Journey to work data shows that 4% of commuting journeys are made by bicycle. Areas with higher cycling proportions for commuting journeys include:

- Arun 10%;
- Chichester 7%;
- Gosport- 16%;
- Fareham 6%;
- Havant 6%;
- Portsmouth 8%;
- Thanet 6%; and
- Worthing 8%.

3.6 *Ports and Airports*

3.6.1 Within the study area there are 7 ports with substantial capacity geared to handling overseas freight. These include Ramsgate, Dover, Folkestone, Newhaven, Shoreham, Portsmouth and Southampton. In addition, the Channel Tunnel also provides a key link with mainland Europe. In the last decade these ports have experienced a wide difference in their respective traffic growths. There was a steady growth in passengers crossing the Channel by sea through the 1990's until 1997 (see Table 3.8). The opening of the Channel Tunnel, and the recent abolition of duty free status for goods has reduced the number of passenger movements by sea. The data shows that in 1999 Dover handled nearly

80% of international sea passenger movements from the south coast ports. By contrast, Folkestone port has now closed to cross-channel shipping and Ramsgate only operates freight services.

Port	Number of Passengers (000s)									
	1991	1992	1993	1994	1995	1996	1997 ¹	1998 ¹	1999 ²	2000
Ramsgate	1,736	1,838	1,881	3,521	2,807	2,655	1,836	161	50	0
Dover	15,990	17,940	18,524	19,122	17,864	18,835	21,236	19,330	18,463	16,375
Folkestone	1,313	526	773	867	725	856	776	905	653	410
Newhaven	796	716	1,239	1,175	979	841	750	621	337	313
Portsmouth	2,827	2,806	3,035	3,173	3,331	3,005	3,391	3,509	3,487	3,306
Southampton	416	597	674	745	741	614	30	23	237	331
All South Coast Sea Ports	23,078	24,423	26,126	28,603	26,447	26,806	28,019	24,549	23,227	20,375
Eurostar (000 passengers)	-	-	-	Na	Na	6,004	6,308	6,593	7,130	6,004
Le Shuttle (000 passengers)	-	-	-	Na	na	6,795	8,305	11,903	10,294	na
Total Channel Tunnel	-	-	-	315	7,081	12,799	14,613	18,496	17,424	Na

¹ Excluding cruise passengers

Table 3.8 UK international sea passenger movements, by port and port area: 1991 – 2000 (Source *Maritime Statistics*)

3.6.2 In freight terms, Southampton and Dover are clearly dominant over the other ports. The south coast ports handle over 62 million tonnes of goods per year with Southampton handling 53% of south coast freight and Dover handling 31% of freight.

3.6.3 The cross-channel movement of cars is now dominated by Dover and the Channel Tunnel, with Portsmouth also having a significant market share. Dover and the Channel Tunnel handled 2.5 million and 2.9 million cars in 2000. As with the car market, Dover and the Channel Tunnel handle the largest number of HGVs with 1.6 million and 1.1 million goods vehicles in 2000 respectively.

3.6.4 Within the study area there are airports at Southampton, Lydd, Shoreham and Manston. Southampton airport positions itself as the leading business airport for central southern England. Its passenger profile has a high business traveller focus. In 2000 there were 855,000 passengers using the airport, of which 219,000 were on European flights. Shoreham and Lydd airports cater for light aircraft and helicopters. Manston airport (Kent International airport) is owned by the Wiggins Group on the site of a former RAF air base located close to Ramsgate. This airport is principally used for freight, with an anticipated demand of 6,000 tonnes per month in 2001.

3.6.5

Gatwick airport lies some 25 miles north of the study area and is London's second busiest airport providing a mix of domestic, international, charter, freight and business services. Whilst not being in the corridor itself, it provides a major transport and employment hub in close proximity to the south coast. The airport is served by rail directly from a number of south coast towns.

4 Problems and Issues

4.1 *Road Based Private Transport – The Problems and Issues*

4.1.1 As outlined in section 3, the car is the most dominant method of transport in the area. In many locations throughout the corridor the strategic traffic routes adjoin or pass through urban areas. In each of these locations they play a dual role, carrying both longer distance strategic traffic and local traffic that is accessing, or travelling around the urban area.

4.1.2 Given the typically short trip lengths within the corridor, the majority of the traffic on the corridor's strategic road network actually falls into this 'local' category, rather than the 'strategic' category. Addressing the needs of local urban movements could therefore provide a significant key in resolving the problems experienced by those seeking to make more strategic movements.

4.1.3 The review of problems and issues, from the various sources, has highlighted a number of areas where the road system is working well, including those listed below:

- The M27 strategic road network generally works well, particularly outside peak periods.
- The A27 dual-carriageway sections east and west of Chichester, particularly outside peak periods.
- The A27 Brighton bypass and Southwick tunnel generally work well.
- The construction of A27 Brighton & Hove bypass, between Falmer and Hangleton, has reduced east-west traffic movements within the Brighton & Hove urban area by 25% and traffic into Brighton town centre by 10%.
- The A256 road link between Dover and Thanet generally works well outside the peak periods.
- The dual carriageway sections of the A299, between the M2 and Margate generally work well.
- The new road access the to Port of Ramsgate works well.

4.1.4 From examination of the Local Transport Plans, comments made at study workshops and information from other sources, it is apparent that major urban congestion problems are experienced in Southampton, Fareham, Gosport, Portsmouth, Chichester, Worthing, Brighton, Eastbourne, Canterbury, Bexhill and Hastings. In addition, a number of the smaller coastal towns within the study corridor also suffer from excessive road based congestion. Working along the corridor from west to east, a number of problem locations have been

identified along the corridor including those given below:

- Flows on the M27 are approaching capacity in peaks, particularly on the sections between Junctions 3 to 7 and 9 to 12. The congestion on these sections is compounded by the local topography.
- The M27 motorway intersections are heavily congested in the peak periods.
- The section of the A27 between the A2030 and A3(M) is 4 lanes in each direction with heavy traffic flows but suffers from a large amount of weaving between traffic lanes and the presence of slow vehicles.
- There is extensive peak period congestion on the A27 Chichester Bypass. These problems are centred on the at-grade roundabouts and affect both east-west and north-south traffic. In the case of the latter, the problems are severe as the A27 effectively acts as a barrier between the Manhood Peninsula and Chichester.
- The railway level crossings at a number of locations along the corridor (e.g. to the west of Worthing and at Beddingham) give rise to delays for all road users and restrict train speeds.
- There are major congestion problems on the A27 at Arundel.
- The A27 through Worthing and Lancing carries high traffic flows. During peak periods a number of drivers rat-run onto residential roads. 25% of traffic within Worthing / Lancing has been identified as being through traffic (i.e. both ends of the journey are outside of Worthing/Lancing).
- Congestion occurs on the slip roads at the intersection of the A23 and A27 trunk roads.
- The roundabouts on the Lewes bypass cause traffic delays, particularly those at the eastern end.
- The A27 between Lewes and Polegate has a poorer standard than other parts of the corridor and doesn't work well because of the high number of side road junctions.
- The existing traffic signals at the A22 / A27 intersection in Polegate give rise to significant traffic delays, particularly for traffic approaching from the west.
- The A259, between Newhaven, Seaford and Eastbourne carries heavy volumes of traffic. This road is narrow, passes through an Area of Outstanding Natural Beauty (AONB) and suffers from a high accident rate.
- Journey times in the Bexhill and Hastings area are unreliable due to traffic congestion. The A259 between Bexhill and Hastings is of

insufficient standard to cater adequately for demand, which results in congestion problems. In addition, the Hastings and Bexhill areas suffer from seasonal traffic problems.

- The A259 east of Hastings, particularly at Rye and Winchelsea does not have a standard typically associated with a trunk road. While the flows are low there are issues associated with the hill at Winchelsea and the route at Rye.
- The capacity problems at junction 10 of the M20 affect its ability to accommodate any traffic diverted from the A259 as a result of the trunking of the A2070 and the resultant changes in signing, and the prospects for funding improvements to the interchange.
- There are problems on the M20 caused by 'Operation Stack' when there are difficulties at the ports and Channel Tunnel.
- The intersection of the A256 / A253 at Manston is congested at peak times.
- The single carriageway sections of the A28 at Birchington and the A253, south of Manston airport, give rise to congestion.

4.1.5

These problems have principally arisen through a combination of different influences, all of which can be summarised within the term, 'we live in an increasingly car dependent society'. These influences include those given below:

- The decentralisation of employment, residential and recreational facilities to suburban, rather than town centre sites.
- The demise of the corner shop and its replacement by specialist supermarkets and hyperstores.
- The introduction of parental choice within education policy and the greater use of the car to escort children to school (the 'school run' was frequently mentioned in consultation).
- A media induced concern regarding personal safety, particularly during the evening and at night.
- Increased personal wealth, leading to higher car ownership and a quest for a better 'material' quality of life.
- A consequent decline in the standards of public transport, to the point where, in many areas, it is considered to be a necessary evil for those who are less fortunate, rather than a real alternative that people might choose to use.

4.1.6

In the rural areas of the study corridor the problems associated with congestion, car based air pollution and noise are generally much lower. Nonetheless, the key influences that have led to problems within the corridor's towns and cities are not only still in place, but are often becoming stronger. The general absence of

any form of convenient rural transport, combined with the demise of local rural services has resulted in the car being a necessity for those who live in rural areas.

4.1.7 This in turn has led to a growth in the demand for car based rural travel, placing increased strains on both the corridor's strategic road network and its secondary road system. This results in congestion problems arising on the approaches to the major towns and cities, as well as disturbing the previously tranquil nature of country life.

4.1.8 For the stereotypical wealthy rural or village community within the study corridor such car dependency is generally seen as a way of life, rather than a problem. Car ownership levels are typically much higher than in urban areas with a greater proportion of 2 or 3 car owning households. There are, however, many rural communities where there are considerable problems of deprivation, brought about, in part at least, from the lack of easy access to the facilities of the neighbouring towns and cities. These include areas such as the Manhood Peninsula (south of Chichester), Romney Marsh and many parts of East Kent. Reversing the current trend towards a 'predict and provide' car dominated society would not only reduce the need to provide future road based infrastructure, it could also transform the quality of life for those living in such rural communities.

4.1.9 Throughout the study area there is public concern about the impact that increasing car use is having on the environment. These impacts are at a variety of levels and include increased noise, air pollution, reduced air quality and associated health problems. Rising traffic levels and associated congestion, pollution and severance increasingly threaten the quality and special character of the area's towns, villages and countryside.

4.1.10 Particular areas of concern include the following:

- The urban areas, where the most significant source of air pollution is road traffic.
- High traffic levels in the Worthing and Lancing areas bring adverse impacts in terms of noise and air pollution, safety and severance.
- The A259 at Winchelsea, Rye, Dymchurch and New Romney is too narrow in places and the presence of traffic affects these towns.
- Congestion on the strategic road network at Arundel gives rise to very heavy traffic in local villages and other areas.
- The Bexhill and Hastings area has a poor urban environment in certain locations due to heavy traffic flows.

4.1.11 Throughout the study corridor road safety has been identified as a key issue, transcending the type of location, whether it be city or town, urban or rural. All

local authorities have recognised the issue within their Local Transport Plans and all have ongoing strategies in place to address the issue. Despite these initiatives however, the problem continues to dominate road based transport concerns

4.1.12

A key common feature identified through the study area is that traffic speed lies at the core of the issue. In putting forward any proposals within this study, the issue of improving road safety should be given a high priority, along with the other key objectives of improving efficiency, improving the environment, creating greater accessibility and maximising integration. Key locations with safety problems include the following:

- The A27 Chichester bypass – There are serious problems, in terms of the number of injury accidents occurring at various junctions along the Chichester Bypass.
- The Arundel section of the A27 – The accident rate is twice the national average rate for the type of road and four times the national average for dual carriageways. Pedestrians face problems in crossing the A27 where it passes through Arundel, and it causes severance between different parts of the town.
- The A27 between Lewes and Polegate – This section has a poor safety record. It acts as a barrier for pedestrians and cyclists, causing severance with the both the villages and towns.
- Urban areas of Bexhill and Hastings – Child road safety is a major concern. There are significant problems with pedestrian / vehicle conflicts along Hastings seafront.

4.1.13

As already discussed, private vehicle travel demand between Hastings and the Kent boundary is very small at present, except perhaps during the peak of the holiday season. For this reason there are no significant capacity problems on the A259 route between Hastings and Brenzett. This part of the route does, nonetheless, have a number of its own problems, which relate primarily to the road's alignment, both horizontally and vertically. These combine to provide slow travel times, together with safety and environmental problems within the towns of Winchelsea and Rye.

4.1.14

The previous sections have concentrated on the east-west corridors through the study area. Most of the towns and cities along the south coast also look towards the north for employment opportunities, recreation and business activity. The important centres that interact with the south coast include Winchester, Horsham, Crawley, Gatwick, Tonbridge and London. Good communications with these centres is therefore also important.

4.1.15

In terms of road travel there are six major corridors that generally function well. These being the M3, A3, A23, M20, A2/M2 and A299/M2 corridors. For those south coast towns that lie at the end of these corridors (i.e. Southampton,

Portsmouth, Brighton, Ashford, Folkestone, Dover and Thanet) direct road based communication with London is therefore generally good. Elsewhere along the coast, communications to the north are generally poor. Such journeys either require use of unimproved roads such as the A286 (Chichester), A29 (Arundel), A24 (Worthing), A275 (Lewes), A22 (Eastbourne) and A21 (Hastings) or use of the A27 / A259 corridor to access the six primary radials.

4.2

Rail Based Public Transport – Problems and Issues

4.2.1

The current rail system within the corridor is seen to have a number of positive features which can form building blocks for the future. In particular, the frequency of trains along the Coastway, between Havant and Eastbourne is viewed by some as being adequate, as is the general density of station provision throughout the corridor. Similarly the introduction of new rolling stock in East Kent is viewed as positive.

4.2.2

It is also interesting to note that the services that currently run along the south coast have adequate capacity to accommodate more passengers. Capacity problems are therefore limited to the range of services that can be provided, rather than the capacity of the individual trains.

4.2.3

In addition, the four key rail routes between the south coast and London (at Southampton, Portsmouth, Brighton and Ashford (after CTRL) are seen to provide a reasonably adequate basic service.

4.2.4

These positive features are, however, vastly overshadowed by an array of real and perceived shortcomings. These will have to be addressed if the corridor's rail system is to become a first choice travel mode, rather than simply a necessary second best alternative for those who do not have access to a car.

4.2.5

It should be noted however, that the problems illustrated here are only part of the story. If rail is to function as a first choice travel mode, then 'whole journey issues' rather than just rail based journey issues will need to be addressed. Subsequent sections examine these other elements, particularly the quality of the primary station access modes (i.e. walking, cycling and public transport) and the extent to which there is seamless transfer between these modes and the train.

4.2.6

In overall terms there is a consensus of opinion that most of the existing rail network is operating close to its potential capacity in terms of train paths. This is particularly the case at peak times and this sometimes leads to delays and unreliability, giving rise to frustration amongst existing passengers. The key problems on many sections revolve around the number of stations on the route and the twin track railway system. These two elements combine to restrict both the overall capacity of the line and the mix of services that can be operated. The high number of level crossings, particularly in the section between Havant and Worthing, must also limit potential for increasing both line speeds and overall

network capacity.

- 4.2.7* In addition to the above, the physical layout of the network also imposes limitations on service operation. The key limitations revolve around the fact that Portsmouth, Bognor and Littlehampton are all station termini. Thus, none of these stations lie on the route of the semi fast services, calling at Southampton, Fareham, Havant, Worthing, Hove and Brighton. Furthermore, because of the absence of a west-facing chord at Barnham, there are no direct rail services between Bognor Regis and Chichester.
- 4.2.8* Similarly, on the eastern sections, a significant reason for the slow overall journey times is the fact that Eastbourne station is a terminus, rather than a through running station. As at Brighton, trains have to enter and leave the station by reversing their operating direction.
- 4.2.9* Between Hastings and Ashford there is a discontinuity in the Coastway facility. This part of the route has not been electrified and is currently a single track facility between Ore and Appledore. GoVia, as part of their new franchise have agreed to undertake electrification of the line. Twin tracking is not, however, currently programmed.
- 4.2.10* Many have expressed the view that there has been a lack of investment in the infrastructure. The image of poor quality is reflected through all aspects of the system, from the condition and cleanliness of existing rolling stock, the perceptions of the appropriateness of future rolling stock, the image in terms of journey speed, travel costs, service availability, ticketing systems and passenger information.
- 4.2.11* Directly related to the issue of service quality, conditions at stations were also raised as a matter of considerable concern. The main concerns relate to passenger comfort, personal safety and car parking facilities.
- 4.2.12* Issues related to rail accessibility have been raised both in the context of initial access to the rail system and secondly in terms of the level of accessibility that the rail network offers, once it has been accessed. These two issues, although different, are interlinked as willingness to initially access the system is, to some extent, dependent of its usefulness.
- 4.2.13* On the first issue, many of the county based Local Transport Plans make play of the fact that rail is unable to reach many of the inhabitants of their administrative areas. While this is perhaps true for the county as whole, the proximity of rail to the majority of the population within the study area is generally good, particularly given the close spacing of railway stations along the coastal rail route. It may well be true however, that either:

- the linkages between the journey origin and the station are poor, as are linkages between the destination station and the final destination; or
- the current stations are not ideally sited.

4.2.14 Once within the network there are a number of major issues with regard to ease of travel between stations. These stem from both the physical layout of the network and the service patterns operated thereon. As has already been mentioned, the coastal railway comprises of a series of separate main line sections and branch lines. In all there are some six / seven termini (i.e. Portsmouth, Bognor, Littlehampton, Brighton, Newhaven / Seaford, Eastbourne and Ashford), with Brighton and Eastbourne (and to some extent Portsmouth) each forming a major discontinuity in the system.

4.2.15 These discontinuities have a significant impact on the attractiveness of rail for a number of journeys, particularly as it is only possible to travel between a significant number of coastal destinations by changing trains.

4.3 ***Road Based Public Transport – Problems and Issues***

4.3.1 In overall terms there is a general consensus that during the working day the bus services within the major south coast towns (e.g. Brighton, Southampton and Ashford) and on a limited number of inter-urban routes provide an adequate, if very basic, service. In addition, there is a perception that, where provided, specialist bus services such as park and ride, community buses and shopper buses are successful.

4.3.2 The major failings have been identified as the lack of service availability in the evenings and at weekends. The limited extent to which the bus service penetrates into the community, particularly in more rural areas has also been raised. In addition, issues related to the high cost of travel and the inflexibility of the current deregulated operational regime and finally the general lack of facilities, in terms of passenger comfort, passenger information and bus prioritisation have also been identified.

4.3.3 Not surprisingly, buses operating in the urban areas along the south coast suffer from similar congestion problems to those that exist for general traffic. Although there are some bus priority schemes operating within the major cities, the overall extent of such measures is limited.

4.3.4 In common with the rest of England, excluding London, the bus services along the south coast operate within a deregulated environment. This effectively means that bus operators generally only provide services in locations, and at times, when they are financially viable. This results in the provision of a skeleton service, if any, within rural areas and the provision of very limited evening and Sunday services in urban areas.

4.3.5 Directly linked to the above is the issue of service quality. As with rail, there is a general perception that bus based public transport is a second grade form of transport. The perception is that vehicles are old, dirty and unreliable, passenger facilities leave much to be desired and information is difficult to obtain. Also personal safety is an issue of concern.

4.3.6 Other issues that have been raised in connection with bus services relate to staff recruitment problems for bus companies and the lack of north-south services, through the South Downs.

4.4 ***Walking***

4.4.1 The following aspects of pedestrian life were reported as being good:

- Provision for walking on the South Downs is good.
- The pedestrianisation schemes in Ashford, Canterbury and Ramsgate all work well.
- It is healthier to walk.

4.4.2 Despite the above, there are a wide variety of perceived problems for pedestrians within the study area. The following comments, reported at study workshops or extracted from Local Transport Plans, illustrate these and demonstrate the issues that need to be addressed if walking is to be promoted as a key part of any overall journey:

- Real and perceived traffic danger remains a problem in seeking to encourage more walking.
- Concerns have been expressed by pedestrians and mobility impaired people about pavement parking.
- Poor pavement conditions in urban areas do little to encourage walking.
- In rural areas pedestrians are often forced to walk on the carriageway of country lanes with fast moving vehicles passing very close to them with no verge to take refuge.
- Encouragement of walking to school is currently difficult due to the levels of traffic, the distances involved, perceived personal safety problems and issues surrounding parental choice of school.

4.4.3 It should be remembered that walking maybe be a key element of a public transport journey and should be included in the considerations of this study.

4.5 ***Cycling***

4.5.1 The issues faced by cyclists have received much prominence within both the study workshops and Local Transport Plans. Additionally, local authorities, together with Sustrans are doing much to develop the local and national cycle

networks within the corridor. The generally flat terrain within the coastal towns, together with their compact size offer ideal conditions for cycling. Cycling is healthy, cheap and environmentally friendly, and particularly suited to short journeys (such as the journey to work, the shops and school).

4.5.2 There are, nonetheless, still a significant range of problems that need to be addressed if cycling is to become a pleasurable experience for all. In terms of general comments most concerns revolve around general road safety issues and the non-availability of secure parking.

4.5.3 Potential cyclists are deterred by the unpleasant environment of the existing road network. There are currently real and perceived road safety problems associated with cycling due to a general lack of dedicated facilities and infrastructure. Cycling is considered dangerous on rural roads due to driver behaviour and associated traffic speeds. Workplace facilities for cyclists (secure parking, showers, and changing and storage facilities) are generally limited. There is still generally a lack of good quality, covered parking facilities within town centres and in the vicinity of local facilities. In many areas, whilst a national network is being developed, there are few, inconsistent or incomplete purpose built local links for cyclists.

4.6 ***Transport Integration***

4.6.1 In the preceding sections it has been seen that there are severe congestion problems on the roads within the study area, brought about through high dependency on the car. In addition, public transport services are inadequate to provide a viable alternative to the car. In the case of the latter, however, many of the identified deficiencies might be addressed if there was sufficient funding, political will and a desire from the general populace to change behaviour.

4.6.2 A key theme that has underlined many of the problems has been the inability of public transport to compete with the car, both in terms of its ability to penetrate into rural areas and its inability to provide a seamless travel alternative between origin and destination.

4.6.3 For this to be overcome, a much more integrated transport strategy is needed, recognising that all modes of transport will have their place within any future solution and the key to success lies in providing a fully integrated system, making best use of the private car, the taxi, community transport, the bus, the train, cycling and walking and linking each to the other through fully developed facilities that allow for good interchange. To promote the use of railways, for example, it is important for the passenger to have a seamless journey. This requires trains that connect with other trains, buses, taxis and cars at interchange

points that are comfortable, welcoming and informative. Transport integration issues have featured strongly in all the workshop sessions that have been held.

4.6.4 At the current time, the car plays a significant role in many people's day to day travel patterns and, apart from interchange between the car and walking, there is very little opportunity (or indeed desire) to interchange between the car and public transport. Established facilities that do exist are limited to the park and ride scheme in Canterbury and car parks at railway stations.

4.6.5 A preferred solution, wherever possible, is to encourage travellers to access public transport services through use of non-car-based modes. This approach has significant advantages in that it reduces the need for costly and environmentally intrusive car parking and it can strengthen the overall viability of local bus services. For such an approach to be attractive, however, good interchange facilities have got to be provided at all points where passengers change mode, i.e. at the bus stop near to the origin, at the origin and destination railway stations and near to the final destination.

4.6.6 The overall problems of interchange, through the majority of the south coast corridor are summed up as follows:

- Poor physical interface – Excessive distances between rail stations and closest bus stops or cycle parking being sited an inappropriately long distance from a rail station platform.
- Difficult access – Many station accesses are situated on congested parts of the county's road network. In many cases mobility by car has been put before convenient, attractive and safe access for other modes such as walking, cycling and buses.
- Lack of parking spaces.
- Poor connectivity – Onward journeys are often disadvantaged by a lack of co-ordinated timetabling between and often within modes.

4.6.7 Other comments in relation to integration found in Local Transport Plans and made at workshops re-echo these themes:

- There is a general lack of integrated policy and incentives.
- Integration between public transport services has generally deteriorated since de-regulation.
- The lack of integration between different modes makes using local public transport difficult.
- There is poor co-ordination of bus and rail services and little incentive for operators to encourage this.
- Some of the major urban areas in the corridor lack a central bus station.

4.6.8 Integration between the cycle and train is poor, with a general lack of cycle facilities, both on the approaches to the station, and at the station, and a negative attitude amongst transport operators in respect to the carriage of cycles. The latter is a particular issue with the introduction of newer rolling stock.

4.6.9 All of the above problems affect all current and potential public transport users. In addition, those in society who are often most dependent on public transport (i.e. the young, the old, mothers with young children and the disabled) are faced with a number of additional problems that reduce both their ability to access the system and their ability to interchange within the system.

4.7 ***The Seaports and the Channel Tunnel – The Operator’s Perspective***

4.7.1 To understand the needs of the port operators a series of interviews have been undertaken specifically for this study. These took place with the operators of each of the seven seaports and the Channel Tunnel.

4.7.2 The volume of traffic handled annually through the eight ports, (excluding short journey domestic ferry traffic at Portsmouth and Southampton) represent 14% of the UK’s cargo tonnage, 57% of HGV movements, 77% of passengers and 15% of containers. Thus the region’s ports have a disproportionate importance in the national context. The combined populations of Kent, East and West Sussex, Hampshire and Surrey total 5.2 million which is less than 9% of the national total. Therefore all but two of the eight ports in the region look to a wider UK area for a significant proportion of their traffic.

4.7.3 The key issues raised by the port operators can be summarised as follows:

The Port Related Case for a Strategic East-West Route

- The roads linking the ports with the M25, and for Portsmouth and Southampton the M27 and M3 / A34, are the most important arteries.
- Port related traffic is thought to make little use of other roads within the south coast corridor, although limited data is available.
- It is not a requirement of ports that they should be well connected to each other for the transfer of cargo between them. Neither has it been suggested that improved roads within the south coast corridor will significantly enhance the opportunities for the ports to win additional cargo or passengers.
- Notwithstanding the above, each port does have a degree of dependence on the corridor’s road infrastructure, but more for workers’ access over short distances than for the longer distance movement of passengers and cargo.

- Port managements are broadly satisfied with the road infrastructure to and from their dock gates. With some local exceptions, generally, there is little pressure for further investment to enhance the ability of ports to win business.

The Case for Rail

- Rail services are important for both the Channel Tunnel and Southampton. In the case of the former, rail caters for Eurostar passengers and through rail freight, while at Southampton rail is important for the carriage of containers and trade cars. (It should be noted however that the rail routes serving these ports do not fall within the corridor.)
- Two major rail expansion schemes are currently under construction or being actively planned. These are the Channel Tunnel Rail Link and the Portsmouth freight facility.
- Rail facilities along sections of the corridor are not used by the ports and there was no suggestion that future port traffic could be moved by rail parallel to the coast.

4.7.4

In terms of their immediate impact on the south coast transport corridor, the most significant factor is that the ports are very substantial providers of direct and indirect jobs. The ports therefore generate significant work based travel demand. At both Southampton and Dover the ports and maritime sectors are seen as the largest single source of local employment. The continued prosperity of the ports is of fundamental importance at each town or city. Where the prospect of a port failing has emerged, as in Ramsgate, Newhaven and Folkestone, this is a cause of great concern to local authorities.

4.7.5

In terms of problems, the port operators considered that these divide into two categories, these being land transport related and other issues. The key considerations are given under each heading below:

Land Transport Related Issues

- There are problems of access between the port gates and nearby dual carriageway links that form part of the national road system, e.g. Dover, Folkestone and Shoreham.
- There are problems related to insufficient marshalling area facilities, e.g. Dover and Portsmouth.
- There are problems associated with disrupted service parking for HGVs, e.g. Dover and the Channel Tunnel.

Other Issues

- There are problems associated with the close proximity of ports to residential areas and urban centres, e.g. Dover, Folkestone, Shoreham and Southampton.
- There are problems associated with competition from adjacent and much larger port neighbouring facilities, e.g. Ramsgate and Folkestone competing with Dover and the Channel Tunnel.
- There are problems associated with the operational and financial viability of smaller ports, e.g. Ramsgate, Folkestone and Newhaven.
- There is difficulty in obtaining planning permissions for new developments, allowing future port expansion to take place, e.g. Southampton and possibly Dover.

4.8

The Airports – The Operator’s Perspective

4.8.1

From discussions with the management team at Southampton airport and examination of the Southampton Airport Access Strategy, the key landside transport problems and barriers to increasing current levels of public transport usage by passengers are as follows:

- The ‘time sensitive / cost insensitive’ nature of business passengers.
- The current lack of public transport to meet early morning and late evening flight times.
- The scattered residential locations of passengers, often in country areas with little public transport access.
- The need to negotiate the bridge over the rail tracks at Southampton Airport Parkway rail station.
- There is also a concern over the lack of regular trains arriving at Southampton Airport Parkway rail station early enough in the day to allow business passengers to take early morning flights from the airport.

4.8.2

The main obstacles to implementing a staff related company travel policy for those working at BAA Southampton and its business partners are given below:

- The work shift patterns of staff – particularly those who start very early and those who finish very late – which makes public transport usage an unrealistic option due to lack of available services and concerns over personal security.
- The diverse range of residential locations of staff, many of whom live in areas not well served by public transport.
- The requirement of airline crews to reside within 45 minutes of the terminal.

4.9

Domestic Freight

4.9.1

This section examines the domestic freight related problems and issues within the corridor. The perceived problems divide broadly into two types. From the manufacturer and distribution viewpoint the problems centre primarily around

- the reliability of delivery;
- the cost associated with delivery; and
- the potential for future growth in each of the relevant transport sectors.

4.9.2

By contrast, the viewpoint of the local authorities and residents is more mixed. Overall, there is a general acceptance of the importance of facilitating freight movement, particularly from those local authorities whose economy currently depends on freight movement and those who are seeking to encourage inward investment and regeneration. There is also, however, an underlying concern with regard to the impacts of goods traffic, particularly in terms of traffic generation, noise and air pollution. These latter concerns are greatest amongst those represented at the study workshops.

4.9.3

The specific conclusions that can be drawn from the freight interviews are given below:

- There is only a limited desire line for freight based movement along the entire length of the corridor; the strongest attractors at either end are the Port of Dover and the Channel Tunnel at one end and Southampton at the other;
- Freight traffic generated in the Southampton and Portsmouth area can generally reach these attractors by using the existing motorway routes via the M25. Although shippers do complain about congestion on these routes, it is reliability (predictability of arrival time) that is recognised as a more important influence on business planning and costs, than absolute travel time. Recent improvements in communications and information technology (enabling immediate, real time searching for material sources) are helping to offset the costs of road congestion.
- Nonetheless, those freight based firms that are located within the central part of the south coast corridor are currently doubly disadvantaged in transport terms, having not only to experience delays on the coastal A roads but also on north-south connections to the M25 and M20. Additionally, such journeys must divert relatively longer distances, than firms located at either end of the corridor, to utilise the existing east-west motorways.
- The steady increase in urban congestion and its associated traffic management and pedestrianisation schemes are posing a growing

problem for freight firms dependent on urban and residential distribution.

4.9.4

In general, there seems little potential for transfer of freight movements along the corridor from road to rail. The reasons for this are as follows:

- Lack of infrastructure for through freight (limited loading gauge, need to reverse at a number of locations, e.g. Brighton).
- Lack of demand in sectors where rail freight is strong. On shorter distance bulk freight there is competition from coastal shipping, e.g. for aggregates movements along the coast.
- Break-bulk / inter-modal rail freight is usually viable over 200km. In the south east the supply lines are usually shorter than this. Where longer distance flows are possible, e.g. distribution of deep-sea containers from Southampton to near Europe, feeder shipping is the preferred option.
- The nature of business along the south coast is high-tech or pharmaceutical which is not good for rail freight.
- Rail freight is not viable for day sensitive produce.
- There is no flexibility with times, the client has to fit in with the EWS timetable.

4.9.5

The pressure from shippers is towards fewer, larger depots. Suitable locations, with room for expansion and access to appropriately skilled labour, are in short supply. The planning constraints may also restrict development of some sites for environmental reasons. The impact on business, which has the option of sourcing or locating elsewhere, together with the traffic consequences of this process, need full investigation. From the viewpoint of logistic planning it is unlikely that future distribution depots will be located in south coast towns as these are restricted to a 180 degree catchment.

4.10

Deprivation and Accessibility

4.10.1

Two key issues throughout the study area are those of economic deprivation and an overall lack of accessibility. The issues relating to both are brought out in many of the Local Transport Plans and have been discussed within the study workshops. These two issues also featured highly in the Access to Hastings Study.

4.10.2

One of the key questions for this study to determine will be the extent to which these two issues might be linked and, by implication, the extent to which overall improvements in accessibility might lead to economic regeneration. Deprivation is a fairly wide spread problem within the corridor. The Index of Multiple Deprivation shows that a number of wards along the coast are among the most deprived in the country.

- 4.10.3* The south east Hampshire and central Sussex towns have an over-heated economy and employers are finding it difficult to recruit staff. Conversely there are high levels of unemployment along the coastal strip, but these unemployed residents experience difficulties in accessing the areas of employment.
- 4.10.4* The structure of some of the local economies has a prevalence of low value-added service industries, relatively high unemployment levels and low average wages. East Sussex has a relatively narrow economic base with nearly 80% of all employment in the service sector.
- 4.10.5* The economic problems of the Bexhill and Hastings area also related to other factors, such as an oversupply of unskilled labour, shortage of available industrial premises and low rental levels which act as a constraint on business expansion. High unemployment, benefit dependency and a low wage economy also contribute to social exclusion and deprivation
- 4.10.6* The rural economy also has a relatively narrow base and offers few employment choices for those who live nearby.
- 4.10.7* The theme of poor accessibility has been raised on a number of occasions during the problems and issues identification process and has been attributed to variety of different factors, including
- poor levels of public transport provision;
 - an underdeveloped highway network;
 - high levels of congestion; and
 - the remoteness of parts of the study area from large centres of population.
- 4.10.8* This combination of factors, coupled with the reduced 180 degree catchment of all coastal towns has given rise to poor accessibility. In addition, many of the rural areas are cited as having poor accessibility, particularly in the eastern part of the study area.
- 4.10.9* The following series of comments demonstrate the extent to which there is a perceived link between poor accessibility and deprivation:
- Worsening congestion has led to concerns about the ability of the area to attract business, shopping and tourism in the future.
 - There has already been migration to out of town business parks and shopping centres.
 - Regeneration could be helped if there was less congestion.

4.11

Tourism

4.11.1

The links between transport and tourism were discussed in depth at the Polegate local workshop and it was concluded that the following factors would be important if we are to encourage tourism without generating excessive increases in traffic. This was considered to be a particularly relevant issue given the past dependence of the area on tourism. The main points from this discussion are given below:

- In the short to medium term there is a need for education both within the tourist industry and for visitors.
- The tourist industry needs to disseminate information about bus, train and taxi services to major attractions.
- In the short term there needs to be a partnership between public transport operators, local authorities and tourist attractions in order to reduce the impact of car use and pollution.
- There is also a need to introduce flexible bus routes and incentives to encourage use of rail, including introduction of lower fares for family groups and facilities to carry cycles.
- Proper provision needs to be made to enable wheelchair users to gain easy access to trains.
- Safer infrastructure and routes need to be introduced to encourage cycling and walking.
- Local councils need to demonstrate political will.

4.11.2

In the future the proposal to create a National Park encompassing the South Downs will have a significant impact on the study area. Depending on the adopted management approach, it could lead to significant increase in traffic activity within the corridor. In addition, however, it will impose much more stringent planning controls, making it increasingly important that any transport solutions are designed to minimise environmental impact.

4.12

Development Pressures

4.12.1

There will be significant development pressures within the study corridor in the future. These will come through both the Government's housing allocation targets and through the desires of local authorities to regenerate the economy within their own areas. Housing trends are already putting strains on the transport system, through new development, mismatches between housing location and labour need, higher development densities and a general move towards smaller family units.

4.12.2

Future development on brownfield sites will go some way to reducing the rate at which these pressures increase, but currently established land use patterns, with out of town shopping complexes and diversified employment sites will not be reversed overnight.

5 Summary

5.1 *The Car*

5.1.1 The private car is the dominant mode of travel in the corridor - two thirds of commuting journeys are made by car. The car provides flexibility but this has resulted in the dispersal of employment, leisure and residential activity away from the inner areas of towns and cities to the suburbs and rural areas. It has reduced the viability of public transport and made life much more difficult for those without access to a car

5.1.2 There is little demand for longer distance movement from one end of the study area to the other. Any such movements that do occur are made via the M3, M25 and M20/M2. This lack of demand reflects the fact that towns along the corridor relate primarily to their neighbours, the easily accessible towns in the Weald to the north and to London. There is very little commercial or social interaction between Coastal towns that are over 50 kilometres apart. This is illustrated by the fact that the average car journey is less than 25 kilometres.

5.1.3 Most congestion problems are currently confined to the peak periods and occur at a number of locations along the M27/A27/A259 corridor, as well as within the principal towns.

5.1.4 On the motorways and trunk roads, congestion tends to be at its worst where east-west movements meet north-south movements. Problems occur throughout the corridor, but particularly on the M27 near to the M3 and A3(M), on the A27 at Chichester, Arundel, Worthing and Polegate, on the A259 between Bexhill and Hastings and in East Kent at Ashford and Canterbury. With increasing demand to travel by car, fuelled by further new development, increasing affluence and increased leisure time, such congestion will increasingly occur outside these times.

5.1.5 Within the urban areas the worst problems occur on the main approaches to the cities of Brighton and Hove, Portsmouth and Southampton. In addition, there are also significant congestion problems at peak times on the approaches to many of the smaller towns (such as Canterbury, Chichester, Bognor Regis, and Worthing).

5.1.6 Such problems also affect the reliability of road based public transport. They also make it difficult for freight operators and businesses to accurately predict the times of freight deliveries. Congestion also detracts from the general accessibility of the Coastal towns.

5.1.7 Increasing car use has other affects also. It creates environmental nuisance in the form of air pollution, traffic noise and visual intrusion and makes alternative travel modes such as cycling and walking less attractive.

5.1.8 In rural areas, the demise of public transport has created problems of social exclusion for those without access to a car. This impacts particularly on the young, the old, the unemployed and those looking after young children.

5.1.9 Increasing car use also affects safety. Particular problems exist along the A27 at Chichester, Arundel, Worthing and between Lewes and Polegate and on the A259 between Hastings and Folkestone. In addition, there are general road safety problems associated with excessive travel speed. These occur in both rural and urban areas.

5.2 ***Public Transport***

5.2.1 Less than 12% of all motorised journeys are made by public transport. In the case of rail, east- west journeys are generally short. Rail does however play a significant role in catering for movements between the South Coast and London. Over 40% of rail journeys are to London and half of these are made by commuters. These facts reflect the dependency of the South Coast towns on London, together with the generally better standard of rail services on the north-south axis. In the east-west direction, travel patterns are similar to those by car, reflecting again the absence of any commercial or social interaction between Coastal towns more that 50 kilometres apart.

5.2.2 Bus generally plays a much more significant local role than rail, particularly within the major conurbations of Southampton, Portsmouth and Brighton & Hove. At present bus travel accounts for 13%, 9% and 15% of commuting journeys within Southampton, Portsmouth and Brighton & Hove respectively. Across the whole corridor however, bus journeys make up some 6% of all motorised trips.

5.2.3 In general, the quality of public transport is perceived as being poor. This is due to a lack of investment in vehicles, slow journey times and limited through services. There is also concern regarding the frequency of public transport services, their lack of availability in the evenings, at weekends, and public holidays, the safety of using them (particularly during the evenings) and the cost of travelling by public transport.

5.2.4 Another key factor is that such services generally form only part of the whole journey. To compete with the car the public transport system needs to provide seamless travel. By contrast the system is currently perceived as suffering from:

- Poor interchange between different modes, both in terms of physical proximity and timetabling;

- Inadequate information; particularly for those journeys that use many modes;
- Lack of availability of through ticketing, for inter-modal journeys.

5.2.5

All of the above apply equally to both rail and bus and consequently public transport is not currently seen as an attractive alternative to the car. The issue of poor integration between modes was highlighted as a key reason for the poor use of public transport. In addition, there were issues raised in relation to the integration of transport policy with other policies such as land use, education and health.

5.3

Other Modes

5.3.1

Walking -For short distance trips, walking play a major role. As important however, in the context of this study, walking also forms a key part of any public transport trip, providing a means of gaining access to the bus stop or rail station. Walking accounts for 13% of journeys to work. A number of issues were identified in relation to walking which demonstrate the issues that need to be addressed if walking is to be promoted as a key part of any overall journey:

- Real and perceived traffic danger remains a problem in seeking to encourage more walking.
- Concerns have been expressed by pedestrians and mobility impaired people about pavement parking.
- Poor pavement conditions in urban areas do little to encourage walking.
- In rural areas pedestrians are often forced to walk on the carriageway of country lanes with fast moving vehicles passing very close to them with no verge to take refuge.

5.3.2

Cycling –Cycling accounts for 4% of journeys to work. As with walking, cycling can form an important element of a rail journey by providing access to the station. Most cycling takes place on the road network due to a lack of dedicated cycle facilities. Potential cyclists are deterred by the unpleasant environment of the existing road network. There are currently real and perceived road safety problems associated with cycling due to a general lack of dedicated facilities and infrastructure. Cycling is considered dangerous on rural roads due to driver behaviour and associated traffic speeds. Workplace facilities for cyclists (secure parking, showers, and changing and storage facilities) are generally limited. There is still generally a lack of good quality, covered parking facilities within town centres and in the vicinity of local facilities. In many areas, whilst a national network is being developed, there are few, inconsistent or incomplete purpose built local links for cyclists.

5.4 *The Economy-*

5.4.1 With notable exceptions, particularly Southampton Port, most freight movement is made by road. Freight movements are however generally between the South Coast and the rest of the UK, rather than along the corridor. The Corridor acts as an important gateway to a number of ports and airports. Whilst most freight travels north-south, the corridor nonetheless still provides the final road and rail links to these facilities. Most employees at the ports of Southampton, Portsmouth, Shoreham, Newhaven, Folkestone, Dover and Ramsgate have to use the corridor's transport facilities to get to work. Similarly, many employees and passengers using the airports at Southampton, Gatwick and Manston have to use the corridor's transport network.

5.4.2 Lack of rail access to the port of Dover and Manston Airport is seen as a key issue that inhibits development. There are concerns about maintaining and enhancing public transport access from the South Coast towns to Southampton and Gatwick Airports. This is seen as inhibiting the ability of operators to actively encourage use of non car modes, as well as restricting the potential employment catchments of both facilities.

5.4.3 In the wider arena, businesses along the South Coast are concerned about poor local transport communications, particularly in the east-west direction. The inner areas of many South Coast towns suffer from high levels of unemployment and deprivation . A key issue raised by many in consultation was the perceived link between poor transport facilities, deprivation and the need to improve transport links so as to stimulate economic development.