

4. An Overview of Problems and Opportunities

The review of the transport system serving the urban area (and the neighbouring areas) raises a number of key issues which need to be addressed in the context of an integrated transport strategy for Southend, and indeed the servicing of future developments within the town centre and at Shoeburyness.

It is recognised that transportation and accessibility are crucial to attracting new investment to the Borough, and that any related problems are viewed as major barriers to the regeneration of Southend.

A number of problems and issues have been identified within the context of each of the Government's Shared Priorities. The transport strategy needs to address these to ensure the objectives are met in terms of managing effectively future growth in travel demands and hence achieving the aspirations for Southend. Further details of the findings can be found in the supporting document, the Review of Baseline Transport Conditions.

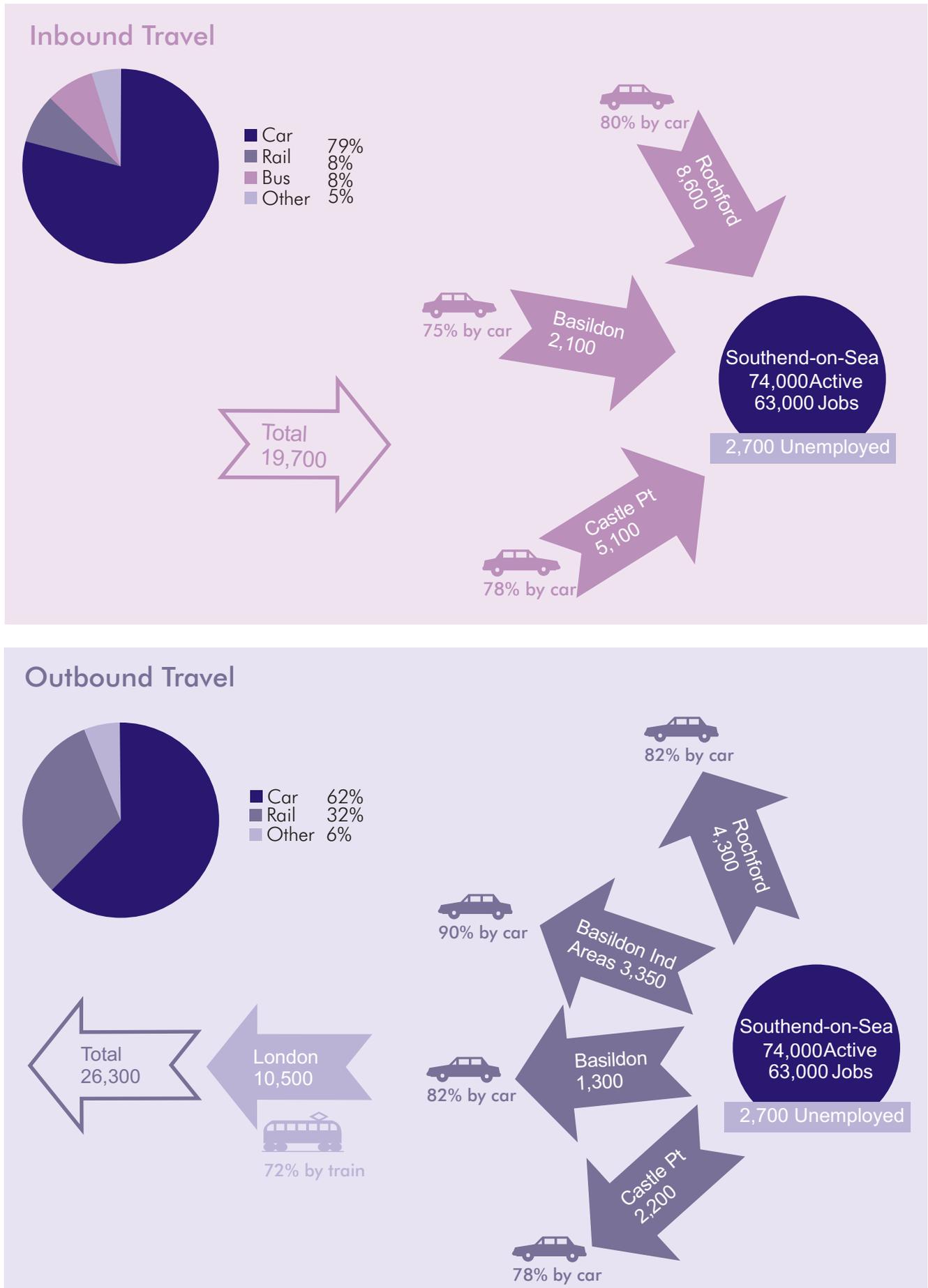
Tackling Congestion

Southend is the largest urban area in South Essex and supports local and strategic needs for employment, goods and services. Traffic levels in Southend have increased over recent years, albeit below the level of growth set as a target in LTP1. This has led to an increase in journey time for road users particularly along strategic routes.

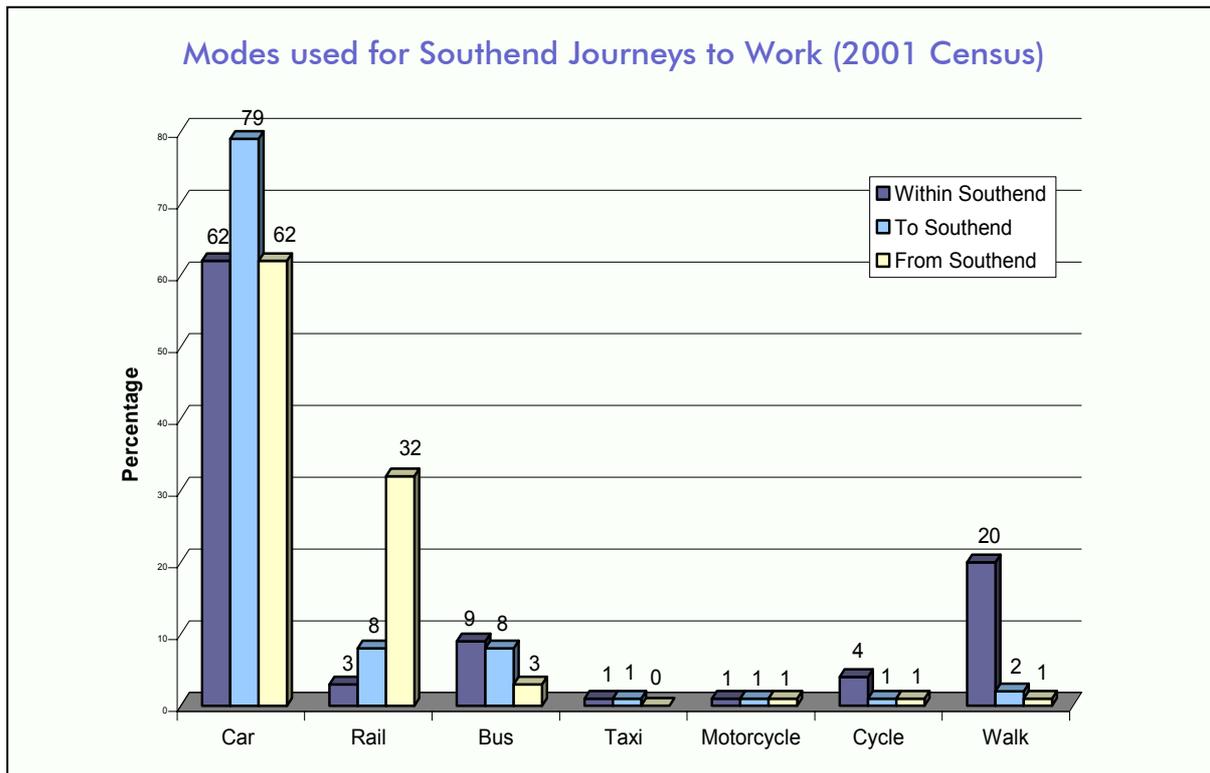
The movement of people and goods is extremely important to ensure the vitality of the town centre and the viability of the local economy continues. However, over the last couple of decades the private car has proved to be the preferred mode for many leading to lower levels of public transport patronage in some areas. This has led to increasing levels of car ownership and usage and consequently the problem of congestion has increased for both private and public transport users, with particular disbenefits to those without access to a car. At the same time a reduction in public transport for commercial reasons has led to less frequently available services.

Daily Mode of Travel to Work 2001 Inbound and Outbound

Fig 4.1



Source: Office of National Statistics



The Performance of the Highway Network

In recent years vehicle flows on key routes serving Southend have increased as the demand and propensity to travel by car increases. As a result a principle issue is the regular occurrence of traffic congestion on several routes serving the urban area, mainly the A127.

In an urban environment the capacity of the highway network is often governed by the capacity of the junctions within it, and not necessarily that of the links. This appears to be the case for Southend where delays are experienced at a number of key junctions (in particular, those connecting the primary route network within the urban area). The UTC systems and SCOOT at the predominantly traffic signal controlled junctions reduce the queueing, but must make allowances for cross traffic pedestrian movements. This is developed further in the Intelligent Transport Systems (ITS) section.

The two main arterial routes serving the Southend urban area experience significant congestion problems at a number of locations particularly in the peak travel times. In the AM peak hour (8:00-9:00) 2,300 vehicles travel eastbound along the A127 together with 2,500 vehicles westbound.

Similarly along the A13, where in the morning around 1,000 vehicles travel eastbound towards the town centre with just over 800 westbound. Under these circumstances 43% of the journey time in the eastbound direction is delay and 32% in the westbound direction.

The A1159 is also prone to long journey times and high levels of delay, especially in the westbound direction in the AM time period, where it accounts for 74% of the journey time. LTP1 major scheme seeks to address this by improving the Cuckoo Corner junction and dualling the single carriageway section.

Greater use of public transport would clearly be one solution to alleviate congestion; however reliability and frequency of the bus service, which is predominantly caused by buses being delayed

on the congested road network, is a problem that can act as a deterrent to using the service which then affects Bus operator efficiency. To a degree this perception has been alleviated with improved bus operations along the A13 passenger transport corridor, along with the introduction of bus telematics and a real time passenger information (RTPI) system at key bus stops. The new Travel Centre is also due for completion in March 2006.

Bus Usage

One of the main problems facing the bus operators in Southend is the relatively low level of passenger demand at present (that is beyond the A13 public transport corridor which has seen recent increases in passenger numbers) does not provide sufficient incentives to the operators for significant new investment. However, without a noticeable improvement in frequencies and service quality, the local bus operators may be faced with managing a declining market. The introduction of the voluntary umbrella Quality Bus Partnership (QBP) has helped to some extent redress bus related issues. Further co-operation from the bus operators will be required if the voluntary QBP is to work fully. The Council will also consider either Statutory QBP's or even Quality Bus Contracts if the voluntary ones fail to deliver its objectives.

There are just under 3,000 car based journey to work trips undertaken wholly within the central areas of the town (i.e. both origin and destination within Southend), together with nearly 12,500 trips to the town centre from the rest of the Borough. It is these trips which are most likely to be attracted to use public transport services, providing services can match the passengers' requirements in terms of frequency, reliability and journey time, as well as fare.

The bus network in Southend is principally run by two major operators, Arriva and First Group, and with services operating across the Borough boundary they should be attractive for more strategic trips as well as meeting local demands. The FAS identifies problems of accessibility relating to bus services, principally north-south links and hours of operation. The main artery of the bus network is the A13 passenger transport corridor, and with the completion of the first two phases of the LTP1 scheme, bus patronage numbers along this corridor have increased by 10% between 2000 and 2004.

In areas beyond the A13, it appears unlikely that a noticeable increase from the current low-level of use will be experienced without a step-change in the level of public transport provision. Therefore, in progressing this aspect it will be important to the public transport operators to work in partnership with and to review where funding for the additional resources can be obtained and best used. The Council regularly meets to discuss issues and concerns with bus operators. Changes to the Concessionary Fares structure in April 2006, will permit free travel within the Essex area for people aged 60 or over or disabled. It is expected that this will lead to an increase of up to 5% in patronage.

More recently, agreement with local developers has led to the provision of site specific bus services funded through planning obligations. This will be encouraged further through the LDF and Local Development Plan Documents.

Although the Council at present does not support bus services through bus subsidy due to financial restrictions placed upon it by Central Government, the Council is committed to assist in maintaining and developing the many commercial routes across the Borough through improvement of Public Transport infrastructure and information.

To assist in achieving the maximum affordable modal shift towards public transport an integrated approach to the whole transport policy is required, including parking policies, network and priority strategies as well as improvements to the services themselves. Additionally investigating the potential for an improved linkage between community transport and bus services will help improve

the attractiveness and efficiency of the overall public transport network. The “bus map” shows a network of core and secondary bus services, which are discussed further in this Plan. The Accessibility Strategy sets out the key role for public transport in improving access to employment, education and health and describes a number of problems and potential solutions in the form of an action plan.

Rail

The Borough is served by two railway lines; the Southend Victoria to London Liverpool Street line operated by One, and the Shoeburyness to London Fenchurch Street line operated by c2c. Within the Borough these lines are served by 9 stations, which together lie within one mile of a large proportion of the town’s population.

At present the quality of links to and from each of the railway stations vary with their location particularly between the two main town centre stations and the Travel Centre. LTP2 aims to improve pedestrian links within and through the town centre, and between the two central railway stations creating a first class interchange between rail and bus, (i.e. Southend Central and Southend Victoria and the Travel Centre).

Delivering Accessibility

It is important that the transport system satisfies the needs of all, including those without access to a private car and those with mobility impairments, and in particular embraces social inclusion and all modes of travel. To this end it should be providing safe and convenient access for everyone to all services and amenities across the town including employment, education, health and leisure facilities as well as shopping and entertainment.

In terms of car ownership, around a third of households in Southend do not have access to a car, leading to problems of social exclusion, and hence may feel socially excluded. However, the levels of car ownership vary considerably across different wards within the Borough. The wards of Victoria, Kursaal and Milton not only show the highest levels of unemployment but also the highest proportions of household with no access to a car.

In terms of public transport provision across the Borough the extent of existing services (assuming a 1 mile catchment from railway stations and a 400m catchment from routes with 3 or more buses an hour) covers the majority of the urban area. Whilst there is a good coverage of conventional public transport this does not necessarily reflect all travel needs and the transport strategy needs to pay attention to ensuring effective integration and co-ordination of services, particularly for cross town movements.

It is important that there is a good level of public transport provision in the relatively deprived areas of Southend, where unemployment is high and car ownership is low (i.e. Victoria, Kursaal and Milton). In addition to maintaining and enhancing these services it is equally important that the transport strategy aims to reduce related safety and fear of crime issues to alleviate the perceived and real barriers to encouraging greater use in the near future as well as sustaining these modes and ensuring accessibility for all.

Other forms of transport other than the private car and public transport, including taxis, dial a ride services and cycling and walking can contribute to delivering accessibility. There is however, currently a number of barriers, which if alleviated could encourage greater use of these modes. Safety and fear of crime is a significant factor for many, and could be redressed with improved facilities, lighting, CCTV, cycle parking, training and safety awareness.

Heavily trafficked roads through built up areas often create severance between communities and key amenities affecting the social behaviour of the community. In particular such severance can influence the way people make certain trips, especially where a busy road is seen as a barrier to cycling and walking, and the car as the more convenient and safer mode. The A127, together with the A1159 and Queensway are all busy roads that are constraining opportunities for greater accessibility in Southend, especially Queensway with its close proximity to the town centre and its location to Milton, Victoria and Kursaal wards which all have very low car ownership and hence greater reliance on non-car modes.

Better Air Quality

With rising levels in traffic and congestion there will be corresponding increases in vehicle emissions, with implications on the local environment and affecting the quality of life of residents and businesses. It also acts as a strong deterrent for many people to cycle or walk on their journey as it creates an unhealthy travelling environment. This actively deters them away from more sustainable modes of transport towards increased car use. Problems of air quality are often cited near schools and pedestrian routes. Whilst the Borough does not have any designated air quality management areas (AQMA) sensitive locations particularly in environmental rooms must be protected to improve the quality of life.

Safer Roads

In the three year period to December 2004, over 1800 personal injury accidents (PIAs) were recorded on the highway network within the Southend urban area involving 604 pedestrian and pedal cycle casualties. This is also seen as a major contributing factor in deterring people from cycling and walking. There has been a significant improvement in road safety across Southend during 2003 and 2004 where **the numbers of reported accidents have reduced significantly to levels 7% and 13% below that recorded for 2003 and 2002 respectively**. Similar reductions have been achieved for casualty numbers. Despite this a large number of the PIAs continue to occur with particular problems observed on:

- Hamlet Court Road (north of A13);
- Belton Way East; and
- Southchurch Avenue.

Pedestrian and Cyclists

Over the same three year period there were 215 cycle injury accidents within the Southend area, 12% of all PIAs. Similarly, across the Borough there were 382 accidents involving pedestrians (21% of all PIAs) over the same three year period.

Nearly a third of all pedestrian accidents involved children under the age of 16 years old. Encouragingly, accident records in 2004 do show a significant reduction in both pedestrian accidents as a whole (-24%) and those involving children under 16 years (-39%) since 2002.

Other Quality of Life Issues

Crime and fear of crime is an issue that affects people's quality of life and their choice of transportation mode. Being a strong deterrent in discouraging people from using public transport, it encourages people to use the car more as it is seen as a safer and seemingly more secure alternative transport mode.

Reducing crime whilst travelling was highlighted as a top priority by 54% of people in the Travel Diary 2001. One problem that is prevalent in Southend is the number of reported crimes on public transport, crimes at railway stations and bus related crimes have increased since 2001 from 234 to 263 in 2004 and 22 to 57 respectively.

Awareness of travel policies and solutions is encouraging however Southend's Travel Diary for 2001 found that 40% of people were aware of the "walking bus" scheme, over 30% were aware of safe journey's to school campaign and nearly 20% of the Local Transport Plan, which is considered to be quite high when compared to other policies and plans regularly publicised by the Council.

There is growing recognition of the role that transport planning can play in improving health. This goes beyond the obvious measurable impacts, i.e. road accidents and air pollution, to recognition of wider determinants of health, e.g. the health protection value of physical activity, and the importance of streets for their positive social functions in local communities. This links transport planning with a positive personal and public health contribution, rather than focusing only on addressing more immediate problems. A number of schools use the 'walking bus' as accreditation for the 'healthy schools' programme.

Health is always an issue which emerges from local public consultation. The House of Commons Health Committee carried out a detailed enquiry into obesity (2003/04). Active lifestyles are seen as being key to the reduction of the problems of obesity; higher levels of walking and cycling could contribute to this. The report also recommended a fundamental cultural change in urban planning to facilitate active travel and active workplaces. In terms of recommended levels of exercise, the Chief Medical Officer produced a report in 2004 which recommends 30 minutes a day of at least moderate physical activity on five or more days per week.

Highway Condition and Maintenance

The Borough maintains 430 kilometres of highway which is almost exclusively urban in nature (i.e. is lit, generally has footways both sides, has many traffic management features, and urban traffic volume/movement).

It is recognised that there has been under-funding in highways maintenance for many years and this has resulted in a backlog of maintenance. This maintenance backlog for the Borough was estimated, in outline, at £35M in 2001, using condition information, inventory data and unit costs of replacement. This was reported in a Best Value Review of Highway Maintenance for the Borough. The Best Value Inspectorate in 2002 viewed the Highway Maintenance service as "good" with "uncertain prospects" (due to uncertainty over resource levels to achieve adequate highway condition standards in the future) although the Inspectors did, in their view, consider condition of the network to be better than indicated by the Best Value Performance Indicators (BVPI) course visual inspection (CVI) measures.

Carriageway condition is assessed annually using the United Kingdom Pavement Management System (UKPMS) Inspection and Analysis Criteria as required in reporting the relevant BVPIs. Condition is output in map form in 20 metre sections of road either as in poor condition (red category); deteriorating towards poor condition (amber category); or satisfactory condition (green category).

The collection and analysis of CVI data has proved changeable over recent years and indeed data collection is moving towards mechanical (SCANNER) means, which commenced on principal roads in 2004/5. Some value in observing trends and understanding conditions has been possible using the data, coupled with engineering judgement. This data has been used in planned resurfacing and surface treatments to target programmes of work. Carriageway condition over the last four years appears to have maintained roughly the same overall level of condition.

The situation in respect of footway condition is less clear. The BVPI of footway condition shows in the region of 50% of those footways surveyed are in need of repair. However, these surveys have been undertaken on principal and classified roads rather than the category 1 and 2 footways (i.e.

the highest pedestrian traffic). The survey coverage will be changed in 2005/6 to accord with categories 1 and 2 to allow improved measuring and monitoring. Notwithstanding this there is a real concern over the condition of footways in many areas of the Borough.

Other pressures on the maintenance process are:

- increasing traffic levels and demands for vehicle movement, parking and servicing
- a greater number of traffic management, control and monitoring features and equipment in the highway which are necessary to facilitate the safe and efficient use of network and get best value of existing highway space
- an apparent increase in the incidence of extreme weather conditions which can bring disruption and deterioration to the highway structure, drainage systems and levels of service.

Bridge Maintenance and Strengthening

The Council is responsible for 110 highway structures comprising a mixture of road bridges, footbridges and retaining walls. In addition the Council inspects 38 structures, owned by others, under a duty of care to public safety. Within the first LTP period, to March 2006, 12 sites on distributor routes out of 17 identified in 2000 and 15 sites in environmental rooms out of 34 will have been strengthened or reassessed to their target strengths. These figures include 3 interim schemes on Network Rail bridges.

There has been significant under investment in the bridge stock over a number of years. This is evidenced by the CSS Bridge Condition Indicator (BCI), a measure of the physical condition of the highway structure stock. The current Bridge Stock Condition Indicator (BSCI) is 79, classified as 'Poor'. To improve the condition of the bridge stock to 'Good' under the BCI system, equivalent to a Bridge Stock Condition Index (BSCI) score of 90, it is estimated that Routine Maintenance (revenue) and Rehabilitation & Refurbishment (capital) funding in the region of £95k per annum will be required.

All highway structures owned by the Council or Environment Agency have been assessed for strength and incorporated, where appropriate, in the strengthening programme. Because of the extended approvals system employed by Network Rail, reports of their stock are at varying stages of adoption, although all first stage assessments have been completed and submitted.

The original strengthening programme established in the LTP of July 2000 has been modified by the conclusion of the assessment programme and by the implementation of strengthening works in the intervening period. It has been necessary to delay some proposals in the original plan and to advance others to compensate for those changes. Strengthening schemes have been prioritised and programmed on the basis of a risk ranking taking into account the probability of failure and the consequences of failure.

Future management of the Highway Structures stock will follow the recommendations of Management of Highway Structures – a Code of Practice by the UK Bridges Board and Roads Liaison Group. The Code emphasises the need for a holistic approach to highway structures management giving due consideration to the wider highway network and local environment. Ultimately the maintenance, strengthening and rehabilitation programme will be developed using Asset Management techniques. This is dependent upon the development of a new Bridge Management System, scheduled for procurement in 2006/7.

Future Traffic Conditions

In Southend, unconstrained highway travel demand in the morning peak is expected to increase by around 25% in 2011 relative to 2003 levels, and 40% by 2016¹³. Clearly much of the existing highway network is operating at or close to capacity at peak hours and therefore unable to cater for such demands, particularly in the same time period. In response to increasing travel demands and subsequent journey times many motorists will review their travel choices; they may choose to retime their journey to an adjacent time period; choose an alternative mode or car share; choose a different destination, or maybe not make the trip at all. On this basis actual travel demands are expected to be lower than that shown above, that is over 20% during morning peak travel times in 2011 and 35% in 2016, resulting in flows increasing on the A127 and A13 by up to 10% and 15% respectively. Under these conditions motorists will experience significant increases in delay on the A127 and hence journey times will increase by 50% to 75% by 2011, and double by 2016. The proportion of total time spent in queues will also increase to around 65% of the total journey time on the A127 by 2011 (and to 70% to 75% by 2016). Average speeds will drop to just over 10 miles per hour at peak times, half of that currently observed.

On the A13 peak journey times will increase by between 25% and 60% by 2011 as delays increase to up to 55% of the total journey time. Average speeds on the A13 will reduce by as much as 40% to around 10 miles per hour. Similar increases are expected under conditions forecast for 2016.

Increasing demands to travel on the local highway network will also have implications on safety and environmental conditions in Southend.

In terms of safety, whilst the total number of accidents may be expected to increase with increase traffic levels on the highway network serving Southend, this increase would be countered by improved vehicle technology and highway safety standards. On this basis, despite increases in traffic flow the overall numbers of accidents is forecast to reduce. In line with this, accident rates per million vehicle kilometres are also expected to reduce, the STAT forecasts a 65% reduction in fatal accident rates, 68% in serious accidents and 58% in slights. Further improvements can be achieved through further site specific accident mitigation measures and interventions and policies to manage the growth of traffic in the future and encourage greater use of alternative modes of transport.

Future levels of air quality and noise will also be affected by forecast traffic growth and travel speeds though vehicle technology is aimed at alleviating these impacts. On this basis levels of NOx forecast by the STAT reduce by around 40% across all road types with PM10 emissions falling by 60%. Levels of CO2 however will remain static over base levels. Traffic growth is expected to significantly increase noise levels with 93km of road experiencing a 3 decibels or greater increase in noise levels by 2011 in the Do Minimum scenario according to predictions from STAT. The greatest increase shall be experienced on secondary roads with 41km experiencing increasing noise levels, however noise levels on strategic routes will only increase on 1km of road.

Funding Challenges

Recent research has highlighted that if the Government's objectives for regeneration and growth are to be achieved in TGSE in a sustainable way, a 'step change' in transportation provision will be required.

¹³ Future year traffic conditions have been forecast using a Strategic Transport Analysis Tool, a bespoke analytical framework developed for the purposes providing supporting evidence for the Plan (Appendix C).

Studies such as those conducted by Roger Tym and Partners (2005) for the East of England and Hyder Consulting (LOTS Study) for TGSE partners, have emphasised the need for improved investment in transport infrastructure to ensure that a healthy balance is created between housing, jobs and infrastructure to provide for the delivery of sustainable development. Without such investment the Government's objectives for regeneration and growth, as set out in their Communities Plan, will not be achieved.

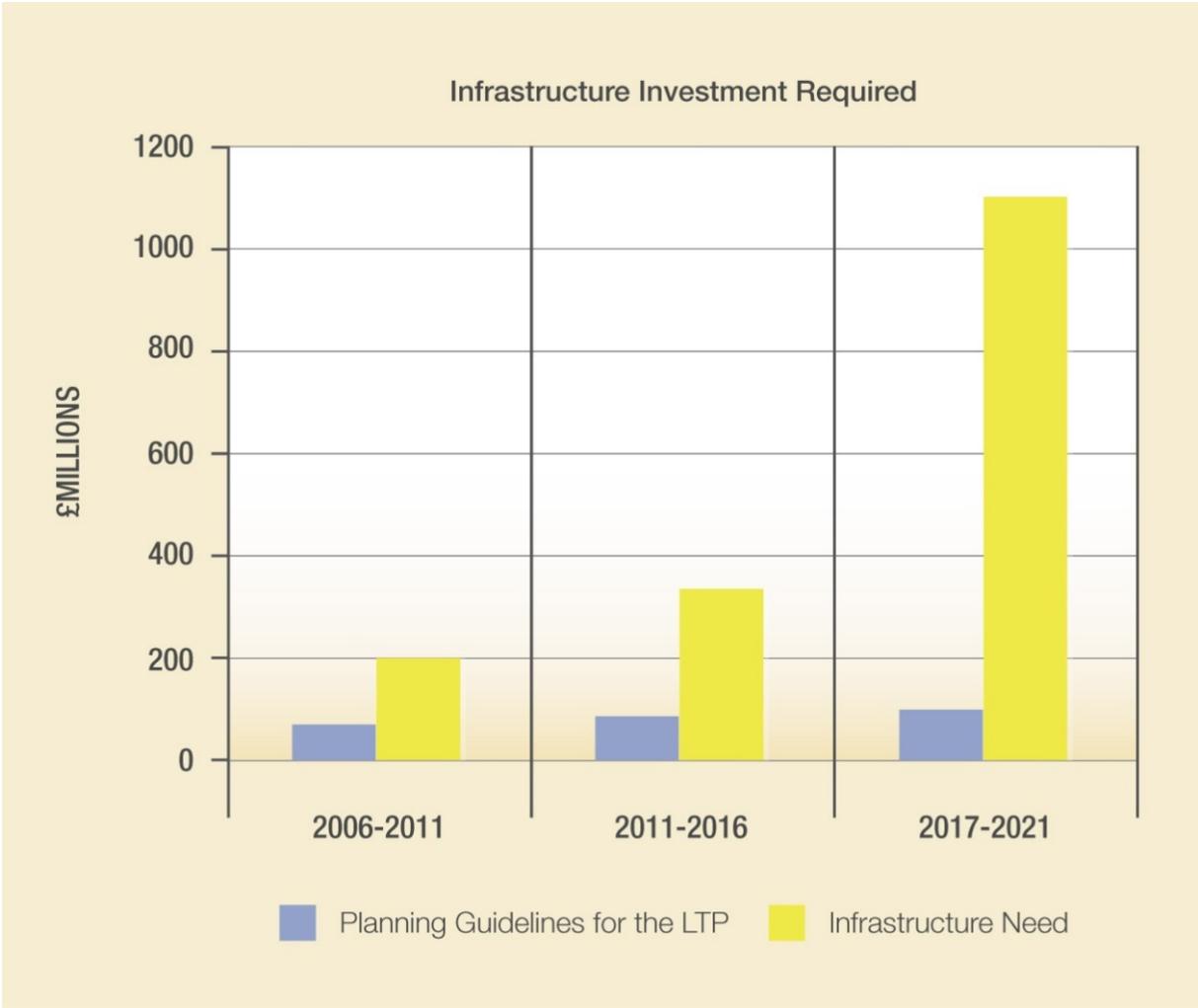
These findings have been reinforced in the TGSE Business Plan for Transport that clearly highlights the funding challenges presented. The Regional allocations announced by Government to 2008 and planning assumptions to 2016 will result in a shortfall in funding necessary to provide the infrastructure required to provide for sustainable regeneration and growth (see **Figure 4.2**).

One of the major challenges facing the TGSE Delivery Board therefore is to investigate and lobby for financial resources in addition to LTP funding. This will be crucial as improvements in transport infrastructure and accessibility will be a precondition for additional development.

Opportunities for Transport in Southend

An overview of the key characteristics of transport movement in Southend demonstrates that there are significant opportunities for improvement. Coupled with the experience gained in delivering LTP1 the following suggests areas where progress could be most effectively delivered in terms of the shared priorities and local issues.

- Better provision for the predominant movement of people and goods on a east-west axis, both in terms of local movements and more strategic travel (e.g. Southend – London);
- A relatively balanced level of in-commuting and out-commuting trips made by car during peak travel times suggests a need to examine more sustainable land-use patterns within the Borough as part of the LDF;
- The high level of short distance trips within the town currently being made by car indicates that initiatives relating to public transport, travel planning, cycling and walking will be successful in reducing car usage coupled with a degree of demand management;
- Southend is very compact in nature with a high population density. As a result of this a significant proportion of the local population has good access to public transport (i.e. within one mile of a railway station or 400 metres of a bus route with regular services) but frequency, reliability and appropriate infrastructure need to be improved to encourage greater use;
- Through sharing best practice and exchanging ideas and information, Southend will be moving forward on a more regional basis. Certainly a number of key initiatives are already progresses jointly with both Essex County Council and Thurrock District Council, for example bus telematics and travel plan work (car share). This will be developed further, partly through the work of the TGSE Transport Board; Trans-national co-operation within the North Sea countries has played a significant part in positioning Southend within the context of a key regional interchange, at the same time as being located on the Thames Estuary/North Sea. The main funding stream through which the Council will be able to access funding in the future will be the Territorial Cooperation Objective (replacing the current Interreg), although some funding opportunities in specific areas such as education and research and development are also likely to be available. This will require the Council to adopt a different approach to access EU funds with a greater degree of trans-national co-operation; a longer period of 'upfront investment' to foster partnerships; and the targeting of specific opportunities. This programme is likely to provide the best opportunity to access European funding from 2007-2013. In the past, trans-national projects have had little real 'project funding' associated with them and have focussed more towards exchange of experiences. However, this has changed in recent years and the SustAccess project at



Source: Thames Gateway South Essex Business Plan for Transport November 2005

Victoria Station provides a good example of how such trans-national projects may deliver real investment in the local area;

- Experience gained in taking forward the first Major Scheme has led to a much greater understanding of the complexities of project development and delivery. This has been used in developing the Plan strategy further and having a greater confidence that the type of scheme and project will make significant difference to travel patterns. The opportunity exists to take forward these skills into LTP2. An example of this is the successful introduction into the Borough of Real Time Passenger Information systems and bus telematics;
- School travel plans have been developed across a wide range of schools with a considerable degree of interest and involvement on the part of the community. This is significant, as it is one particular area where school, residents and local businesses have joined forces to actively promote alternatives, with the Council providing start up resources and assistance at an early stage and then working alongside the school working groups who, in many instances, are making a real difference in terms of attitudes and perception.

The following points summarise key areas where opportunities exist at present that can be built upon to deliver the shared priorities:

Tackling Congestion

- Comprehensive bus network – the town benefits from two operators and a bus network linking the main areas of the town that has developed over a number of years and remains fairly stable. Although recent funding problems outside of the control of the Council have led to the removal of the bus subsidy, bus passenger numbers prior to this were increasing slightly. There is, however, a real opportunity to increase passenger numbers further by improving infrastructure, interchanges and accessibility. The application of “smarter choices”, joint ticketing and pro-active marketing campaigns will be used to increase the number of passengers. A clear view has been taken in terms of the minimum network requirements for the future and the provision of infrastructure such, as bus shelters, is guided by the network plan to encourage greater use. Through the existing Quality Bus Partnership, discussions are ongoing with the operators to agree a clear way forward;
- Nine railway stations – the town is unique in having nine mainline railway stations in a compact area, which offer frequent local services as well as to Shenfield and London. Work undertaken with the train operating companies, through the Quality Rail Partnership, has seen real improvements at Westcliff, Leigh and Chalkwell Stations. Joint working on proposals for Southend Central, Southend Victoria, Prittlewell and Southend East is ongoing, with a study commenced into proposals for Shoebury. The focus of integrated transport at the railway stations will build on this previous work to improve accessibility to and from the stations, by walking, cycling and bus and ensuring that the car parking provision is suitable for the location and does not generate further trips. The airport station will provide the opportunity to design a first class facility with excellent interchange facilities;
- Cycle network – a comprehensive cycle network has been developed and was set out in the 4th Annual Progress Report. It is currently under construction with two “flagship” projects currently being designed for the Prittle Brook Greenway and the Southend Seafront (both Sustrans routes). The integrated transport element of the LTP2 and further bids will support this, for example support through the TGSE Green Grid strategy and Lottery bids..
- Travel plans – both workplace and school travel plans developed over the period of LTP1 have been well supported and the number of employers and schools covered is predicted to increase further. Southend currently has the highest percentage of schools covered by “approved” travel plans in England, and is believed to have the largest number of walking buses (although no central register is available to provide confirmation of this) The skills of both the travel plan advisors that the Council employs and those of the term transportation

consultant have been combined to set up a new “Smarter Choices” team to bring together the resources and experience required to take this forward;

- Off-peak travel flows with less congestion - several routes suffer severe congestion in peak hours, but traffic levels reduce off-peak. Linked with the above, and more flexible working hours at both employers and schools, a reduction in congestion may be achieved. The reliability of bus services outside these congested times improves at the moment. With the introduction of bus priority more widely across the town the aim will be to achieve similar levels of reliability on the network throughout the day. This will be studied further with the need to develop a congestion target.

Delivering Accessibility

- Linking the Local Development Framework with the development of LTP2 provides a unique opportunity to align policies and ensure that they are mutually compatible to deliver land use planning that achieves maximum accessibility. Examples recently include the siting of the new University next to Southend Central Station. A Development Plan Document relating to developer planning obligations will clarify the role of contributions that are required to support accessibility, particularly in the key regeneration and less accessible parts of the borough such as Shoeburyness;
- The completion of the Accessibility Strategy has brought together key partners and recognition of shared problems. The agreement to the action plan and priorities represents a considerable step forward in the accessibility planning process;
- The joint arrangements set up between Essex, Southend and Thurrock will be expanded to ensure that the Accessibility Strategy is taken forward jointly to ensure a cross-boundary fit;
- The proximity of Southend to London by rail and the desire to make train travel more attractive will require greater accessibility to and from the stations. For example, at Southend East to construct facilities for the disabled. In the wider context, through the TGSE Transport Board, a greater degree of discussion will take place with DfT on rail priorities in South Essex, building on work already carried out in identifying priorities;
- Both the airport and water borne transport (hovercraft) offer considerable potential for carrying greater passenger numbers. The strategy integrates these within the transport networks to ensure that both are accessible to all modes.

Safer Roads

The successful establishment of the Southend Road Safety Partnership, provides for a coordinated input to future road safety activities, to reduce casualties in the Borough for all road users;

- the new Essex KSI Partnership and changes to funding for the Essex Safety Camera Partnership will provide opportunities for further joint road safety work, especially publicity campaigns such as “young drivers” supporting the casualty reduction programme;
- the impending introduction of Speed Awareness courses will bring about opportunities to directly engage with speed offenders and influence their future driving behaviour;
- the introduction of the National Cyclist Training Standard will a more comprehensive approach to child cycle training.
- LTP1 policies such as Environmental Rooms and Distributors and Safer Journeys to School have brought real benefits to the road safety programme and jointly have seen a significant reduction in casualties.

Better Air Quality

Currently Southend does not have a particular air quality issue, and there are no air quality management areas within Southend. However it is necessary to continue to improve the air quality within Southend by encouraging greater use of sustainable transport modes, cycling, trains etc.

Other Quality of Life Issues

A theme that has been repeated through both the LSP meetings, Integrated Transportation Partnership meetings, surveys and questionnaires is the issue of crime and the reluctance of many users to travel on public transport, particularly alone or at night. Reduction of crime is a key priority for Southend and in particular the Southend Crime and Disorder Partnership.

With this in mind greater emphasis is now given to the quality of the street scene (as evidenced in the A13 Passenger Transport Corridor) and a variety of smaller schemes, where the services of landscape architects and street planners have been employed (the development of the Pier Hill project, Hamlet Court Road and Prittle Brook Greenway are good examples of this).

One of the supporting documents to the Local Development Framework is the Southend on Sea Design and Townscape Guide, which sets standards of quality and appearance for the built environment. It is recognised that a good standard of street furniture, paving and lighting will enhance areas and bring the public back to use transport modes such as walking, cycling, bus and rail. The appearance of car parks and the public transport interchanges likewise are important to create attractive local centres that are vibrant, popular and accessible.

Funding Opportunities

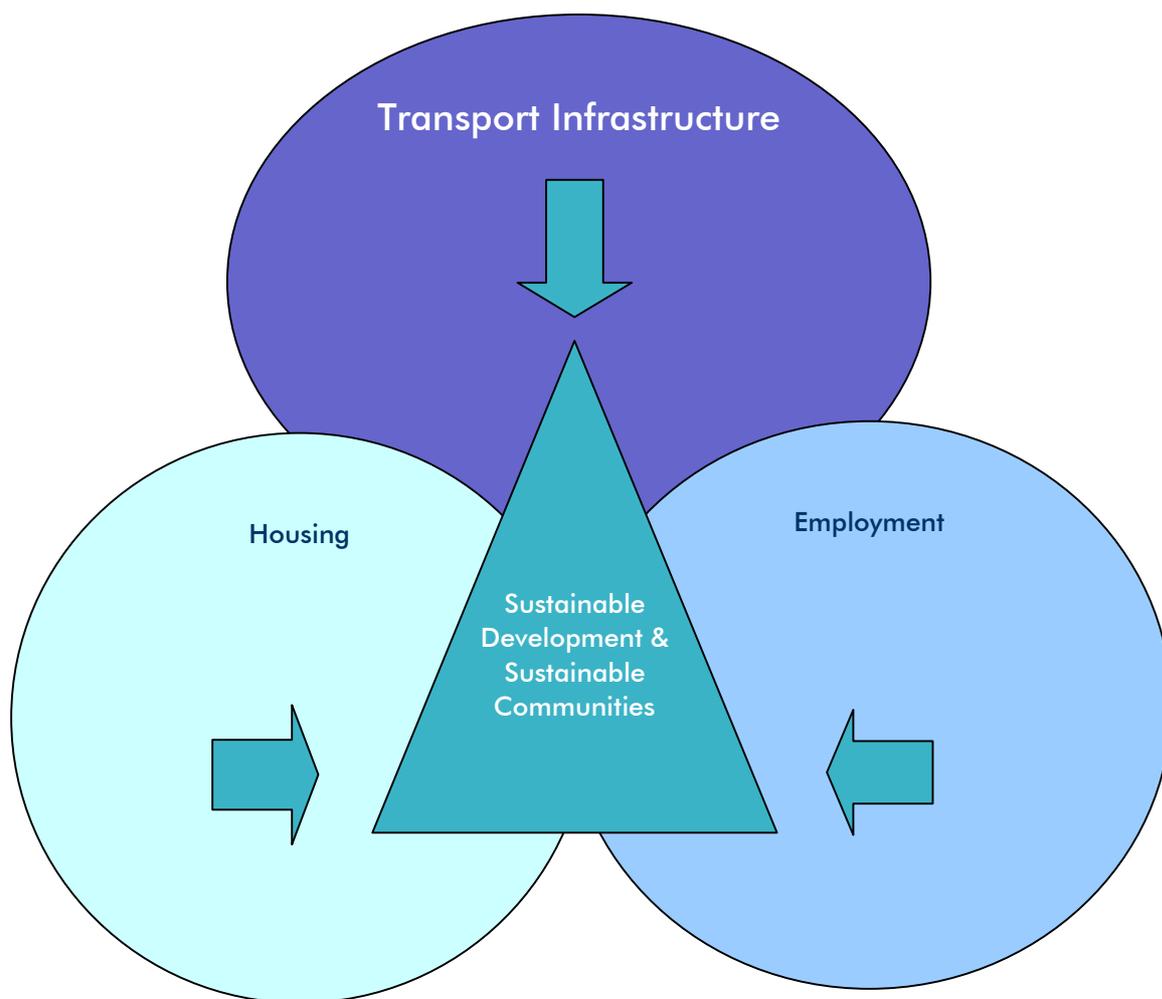
The TGSE Business Plan for Transport sets out the funding challenges facing TGSE partners for the delivery of the transport infrastructure required to successfully meet the housing allocations and jobs growth sought by Government between 2006 and 2021 in a balanced and sustainable way (see **Figure 4.3**).

A key objective of the Board will be to make best use of existing resources and to seek additional funding sources to improve transport infrastructure within TGSE, in particular by means of :

- European funding;
- The Transport Innovation Fund;
- Demand Management; and
- Planning Obligations.

Whilst Demand Management is a crucial tool in providing for effective and efficient transport planning, it is not a panacea. Research into demand management and empirical studies suggest that it may be possible to reduce the need to travel by around 10-15%. If this is achieved it will help ensure that more efficient use of the network is made through matching demand with the available capacity. However, the scale of the transportation problems in TGSE is such that demand management alone will not realistically solve the problems and there is no escaping the need for significant investment in transport infrastructure and services.

Similarly whilst Planning Obligations has an important role to play in ensuring that new development makes an appropriate contribution to the funding of related community and transport infrastructure, the scope for such funding will be limited. This is due to the densely developed characteristics of TGSE and in particular Southend which has no Greenfield sites, and limitations placed on development gain due to other site constraints and the economic viability of development associated with brownfield sites.



Problem/Issue	Comment
Imbalance between supply and demand	<p>Key sections of the highway network operate at or close to capacity during peak travel times.</p> <p>Forecasts of up to 25% additional growth in travel demand is expected by 2011 resulting in increases in morning peak traffic flow on the A13 and the A127 of around 10% by 2011 relative to 2003, and 15% by 2016.</p>
System inefficiencies	<p>Delay and congestion in the transport system. In 2001 delay accounts for 35% to 45% of the total time spent travelling along the A127 during peak travel times, and 35% to 45% on the A13. On the A1159 around 75% of the travel time is spent in queues.</p> <p>Should nothing be done to better manage growth and alleviate congestion, total delay experienced by all motorists during peak travel times will double. By 2011 the average delay per vehicle during peak travel times would increase by 50% to 75% on the A127 and by 25% to 60% on the A13. In 2011 the proportion of journey times along the A127 spent in queues will increase to just under 70% in 2011 and up to 75% in 2016.</p> <p>Has adverse impacts on trip-makers, public transport and freight operators, local business</p> <p>High propensity to make short distance trips to the town centre by car. Around a fifth of trips within the Borough are less than 1 mile with half less than 2 miles.</p> <p>Despite a reduction in household size, car ownership in Southend-on-Sea has increased from at least 0.92 cars per household in 1991 to 1.04 in 2001, equating to an increase of at least an additional 10,500 cars (+17%).</p>
Environmental impact of high traffic movements	<p>High levels of traffic have significant impact on local communities in terms of pollution, severance and safety. This is particularly so on the A127, A1159 and Queensway in the central area.</p>
Congestion hotspots	<p>Key points of congestion on the road network contribute to delay and unreliability.</p> <p>Congestion regularly occurs on:</p> <ul style="list-style-type: none"> the A127 between the Borough boundary, Progress Road and Kent Elms Corner; the A127 between Nestuda Way and Cuckoo Corner; the A13 between the Borough boundary and Thames Drive; the A13 between Hamlet Court Road and West Road; the A127 Victoria Avenue; and the A1159 at Sutton Road.
Reluctance/deterrence of using existing public transport provision	<p>Perceptions of poor quality - journey time, reliability, cost, and waiting environment. In 2001 around 7% of people working in Southend travelled by bus.</p> <p>Recent improvements to the A13 corridor resulted in a 10% increase in patronage between 2000 and 2004.</p>
Funding Challenges	<p>The Regional allocations announced by Government to 2008 and planning assumptions to 2016 will result in a shortfall in funding necessary to provide the infrastructure required to provide for sustainable regeneration and growth in accordance with the Government's Sustainable Communities Plan objectives.</p>
Modal cost imbalance	<p>Public transport does not compete with the car for many movements to, from and within Southend, due to the perceived costs of public transport travel (including level of service and fare) relative to car (including parking costs and availability of spaces).</p>