

secure and safe environment for travellers through the careful design of interchange sites and related developments, improved street lighting and footway maintenance (see paragraph D5.3).

D6 Planning and Managing the Highway Network

Maintenance and Bridge Strengthening

D6.1 Since Southend obtained Unitary Status in April 1998, the Borough Council has been able to better integrate highway and bridge maintenance with other policy areas. Draft strategies for these two important highway aspects, which build upon the work of the Partnership, are set out in the accompanying Technical Paper. This also details the programme for highway maintenance and bridge strengthening expenditure.

Highway Maintenance

D6.2 The current highway maintenance plan is to target maintenance expenditure, both revenue and capital, on the routes that;

- *support the road hierarchy – the routes intended to carry the highest volumes of traffic, particularly HGV's and pedestrians;*
- *assist in the delivery of the Local Transport Plan strategy to widen travel choice, particularly the provision of high quality pedestrian, cycle and bus routes; and*
- *target road safety problems.*

D6.3 The development of a route hierarchy – 'Environmental Rooms and Distributors' – by the Partnership (see paragraph D4.2) has provided the opportunity for the Borough Council to reappraise its road maintenance and bridge strengthening programmes in a more integrated manner. Accordingly, a maintenance strategy for the identified 'Distributors' will be developed in partnership which will replace the current Principal, Classified and Unclassified maintenance strategy.

D6.4 Highway maintenance work is currently carried out in accordance with the second edition of the Local Authority Associations' 'Highway Maintenance – A Code of Good Practice' adapted where appropriate to meet the needs and resources of the Borough. In order to determine and prioritise the programme of works in accordance with the Local Transport Plan strategy a variety of tools and techniques are used, namely;

- *deflectograph surveys – carried out annually on a four year cycle to determine the residual life expectancy of the principal route network;*
- *inspections – quantitative Coarse Visual Ranking Surveys and Detailed Visual Inspections carried out annually in order to prioritise planned maintenance schemes for both footways and carriageways on all categories of highway;*
- *multifunction road monitor – survey carried out on an annual basis, 'A' roads being carried out one year and 'B' and 'C' roads the next, to gauge riding quality, rutting, texture depth, alignment, gradient and crossfall;*
- *skid resistance (SCRIM) surveys – carried out annually on 'A' and 'B' roads to identify sites for anti skid or other treatment to reduce accidents.*

D6.5 Since April 1998, the Borough Council, Essex County Council and Thurrock Borough Council have collected data as part of a consortium to obtain highway condition surveys cost effectively. A computerised Geographical Information System (GIS) is being developed by the Borough Council to ensure best use of resources. Visual inspection data is collected in accordance with UKPMS standards.

Bridge Strengthening

D6.6 Similarly, priorities for expenditure on bridge strengthening have been determined from the condition of structures on the strategic A127/A1159 and A13 corridors, and the development of the route hierarchy – 'Environmental Rooms and Distributors'.

D6.7 Target strengths have been determined for each bridge structure, based on the perceived minimum strength requirement (e.g. fire tender, refuse freighter, up to 40t gvwt) and the location on the route

hierarchy. In this way weight restrictions can be used to support heavy vehicle control measures in order to ensure routing through appropriate corridors, thus combining effective targeting of funds, with environmental controls within residential areas. This data will also form the basis of performance monitoring of the Council's bridge management, in terms of the number and degree of sub-standard (against target strength) structures.

D6.8 Bridge strengthening works have been carried out on strategic routes at Victoria Avenue Bridge on the A127 and Priory Bridge on the A1159. In combination with a re-assessment of other structures on the A1159 this results in clearing limitations on both routes as far as Danger Bridge, Ness Road in Shoeburyness. First stage assessment of Danger Bridge indicates a possible problem. This is a Railtrack structure and the assessment requires approval of Railtrack's consultant before it can be either considered acceptable or commented on. As a Railtrack structure the programming of works is uncertain at present.

D6.9 The proposed programmes of work, one based on completion within five years, and the other based on completion within 10 years are set out in the accompanying Technical Paper .

Major Improvement Scheme

Context

D6.10 The aim of the Major Scheme is to tackle the serious inadequacies of the principal carriageway network serving the town, namely the A13 and A127/A1159, thereby improving accessibility along the two major highway corridors within the Borough (see **Map 13**). The A13 is an important access route and is also the town's main bus route, whilst the A127/A1159 provides access to the town's principal employment areas and development opportunity sites. Both routes are currently subject to extensive traffic congestion.

D6.11 Implementation of the Major Scheme is essential if;

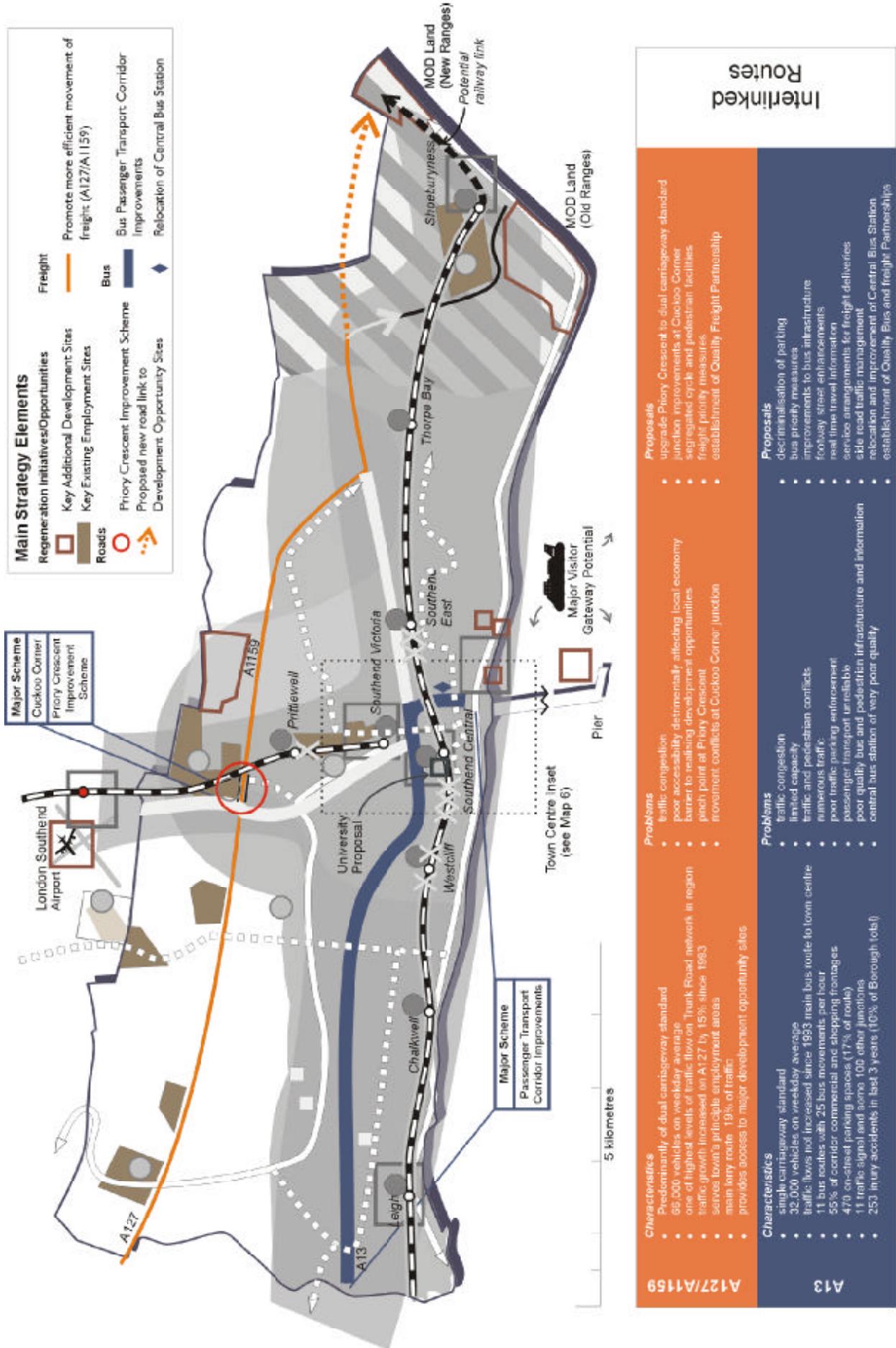
- *the strategy objectives are to be met;*
- *traffic congestion is to be reduced;*
- *accessibility improved;*
- *development and regeneration opportunities realised;*
- *travel choice widened;*
- *the more efficient movement of freight achieved; and*
- *the economic regeneration and growth of the town facilitated.*

D6.12 The Scheme **lays the foundation** for the development of the Local Transport Plan and **lies at the heart of the strategy**.

D6.13 **Problems and their solution on these two corridors are interdependent and therefore form a single scheme.** Because of the geography of the area, these parallel roads are the only highway arteries serving the town from the national and regional network and linking with London World City. Limited capacity on the A13 has meant that traffic levels have remained constant since 1993. In contrast the A127 has witnessed a 15% increase over the same period reflecting its role as the only alternative route into the town and one of the most heavily utilised roads in the region. Whilst some of the increase in local traffic growth has been deflected onto other routes, it is clear that some has been shifted onto the A127 reflecting the **interlinked** nature and role of the routes.

D6.14 Having regard to these factors, and after considering alternatives, the Partnership has come to the conclusion that due to the networks connectivity action to resolve the traffic problems on these routes cannot be treated in isolation or be dealt with on different time frames. They must be tackled in a **comprehensive** manner or improvements on one route will simply result in problems being created on the other, thus perpetuating the problems of the past. They must also be dealt with **within the period of the plan** if the regeneration of Southend and the success of the Local Transport Plan is to be achieved. A piecemeal approach to implementing improvements would ;

- *result in the diversion of traffic to other routes to the detriment of the Rooms and Distributors initiative;*



Interlinked Routes	
<p>A127/A1159</p> <p>Characteristics</p> <ul style="list-style-type: none"> Predominantly of dual carriageway standard 95,000 vehicles on weekday average one of highest levels of traffic flow on Trunk Road network in region traffic growth increased on A127 by 15% since 1993 serves town's principal employment areas main lorry route, 19% of traffic provides access to major development opportunity sites <p>Problems</p> <ul style="list-style-type: none"> traffic congestion poor accessibility detrimentally affecting local economy barrier to realising development opportunities pinch point at Priory Crescent movement conflicts at Cuckoo Corner junction <p>Proposals</p> <ul style="list-style-type: none"> upgrade Priory Crescent to dual carriageway standard junction improvements at Cuckoo Corner segregated cycle and pedestrian facilities freight priority measures establishment of Quality Freight Partnership 	<p>A13</p> <p>Characteristics</p> <ul style="list-style-type: none"> single carriageway standard 32,000 vehicles on weekday average traffic flows not increased since 1993 main bus route to town centre 11 bus routes with 25 bus movements per hour 55% of corridor commercial and shopping frontages 470 on-street parking spaces (71% of route) 11 traffic signal and some 100 other junctions 253 injury accidents in last 3 years (10% of Borough total) <p>Problems</p> <ul style="list-style-type: none"> traffic congestion limited capacity traffic and pedestrian conflicts numerous traffic poor traffic parking enforcement passenger transport unreliable poor quality bus and pedestrian infrastructure and information central bus station of very poor quality <p>Proposals</p> <ul style="list-style-type: none"> decentralisation of parking bus priority measures improvements to bus infrastructure footway, street enhancements real time travel information service arrangements for freight deliveries relocate and improve management of Central Bus Station establishment of Quality Buses and Freight Partnerships

- *not deliver the improvements in accessibility required to regenerate Southend; and*
- *not deliver a significant improvement in bus passenger transport movement .*

This would undermine the scheme and place at risk its further development as public confidence in the proposals diminished.

- D6.15 The Major Scheme also provides the framework upon which the concept of “Environmental Rooms and Distributors” (see paragraph D4.2 and **Map 8**) was developed by the Partnership. All other defined distributor routes feed into the A13 and A127/A1159. Improvements to these principal routes will therefore be paramount to achieving better accessibility in the town and making best use of the existing network. It will also be important to achieving environmental improvements in the many Environmental Rooms that align the routes to the benefit of local residents.
- D6.16 In the longer term the strategy seeks to extend the bus passenger transport corridor improvements to Southchurch, to serve the eastern part of the town, and along the north-south corridor between London Southend Airport and the town centre which follows that part of the A127 and A1159. This will provide for an integrated service that links the town’s key land uses, major tourist attractions and passenger transport termini.

Scheme proposals

A13 (Leigh to Southend Town Centre)

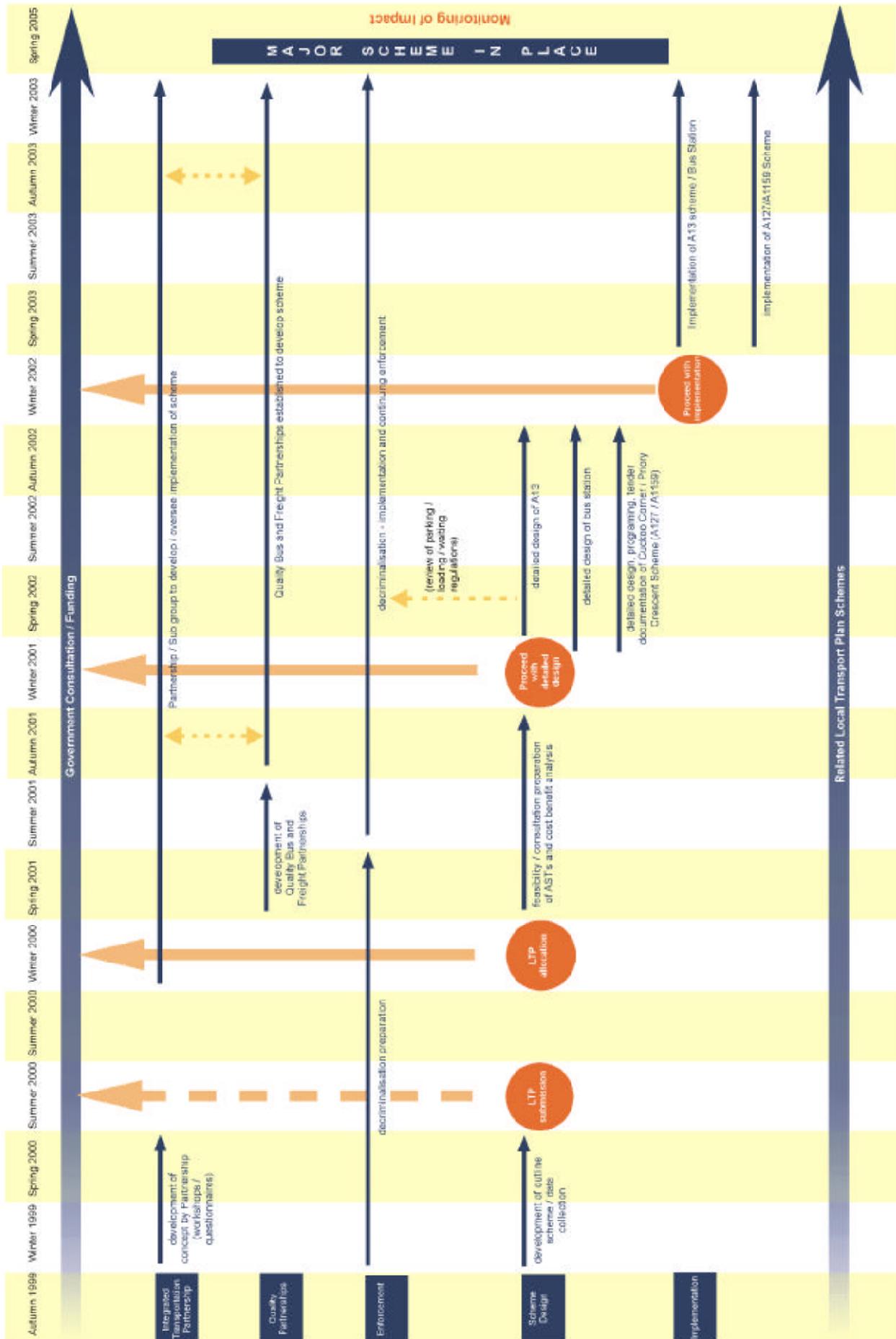
- D6.17 The A13 is of single carriageway standard and over 50% of its frontage comprises of commercial and retail premises. A combination of limited capacity, traffic and pedestrian conflicts; numerous junctions/build outs and poor traffic parking enforcement, result in congestion along this route. This significantly affects accessibility and the reliability of buses, coaches and taxis and the quality of service offered making these modes unattractive as an alternative means of travel. The facilities and fabric of the Central Bus Station are very poor (see paragraph C2.12) and improvements to the quality of service on the corridor would be negated by the negative impact of the bus station to the user.
- D6.18 To address these problems the Scheme seeks to;
- *achieve a quality passenger transport and movement corridor on the A13 from Leigh to the town centre area through a series of bus priority measures, improvements to the bus infrastructure and associated environment;*
 - *relocate the Central Bus Station to provide for a quality town centre interchange facility (see also paragraph D5.3).*

It will also provide for the provision of real time travel information, footway enhancements, parking and servicing facilities, cycling facilities, junction reconfiguration and bus gating, associated side road traffic calming and traffic management measures, and carriageway resurfacing/reconstruction.

- D6.19 To pave the way for the introduction of these, the Local Transport Plan provides for;
- *the introduction of decriminalisation as a priority to tackle parking enforcement problems;*
 - *establishment of Freight and Bus Quality Partnerships to establish best practice and provision for appropriate freight delivery facilities for the numerous commercial premises that align the route.*

The Partnership has already established a working group of key stakeholders, including resident groups, businesses, the Police, Freight Transport Association, bus companies and other interest groups (see paragraph D3.9) to develop the proposals.

- D6.20 As a working framework to guide the implementation of the scheme, the Partnership has developed a set of core values and underlying principles, namely the need to;
- *protect and strengthen the uniqueness and economic vitality of existing commercial centres along the London Road (Southchurch Road);*
 - *improve the quality of the built environment through design and materials;*
 - *have regard to safety considerations; and*



- *protect the amenities of the adjacent Environmental Rooms.*

A127/A1159

D6.21 The A127/A1159 is predominantly of dual carriageway standard. However, the 800 metre length of highway at Priory Crescent is of single carriageway status, the only section of single carriageway between East Southend and the national motorway network. With its junction (Cuckoo Corner) it is a significant pinchpoint in the network and results in congestion and delays, particularly for business traffic. It affects the viability of local businesses in the eastern sector of the town in terms of poor accessibility and acts as a major deterrent to potential inward investors to such areas (see paragraph C2.6). It also is a major barrier to realising the significant development opportunities in the town, particularly on former Ministry of Defence land at Shoeburyness (see paragraph C3.27).

- D6.22 To address these problems the major scheme seeks to;
- *upgrade Priory Crescent to dual carriageway status; and*
 - *provide for junction improvements at Cuckoo Corner .*

The latter will also be essential to realise the proposed bus priority measures between London Southend Airport and the town centre which traverse the junction. This will form an integral part of the development of an *Airport Surface Access Strategy*. In addition the scheme will introduce segregated cycleway and pedestrian facilities and new and replacement landscaping.

D6.23 The scheme will permit the introduction of freight priority measures which will be developed through a Quality Freight Partnership to which the Freight Transport Association, as an active partner, are committed.

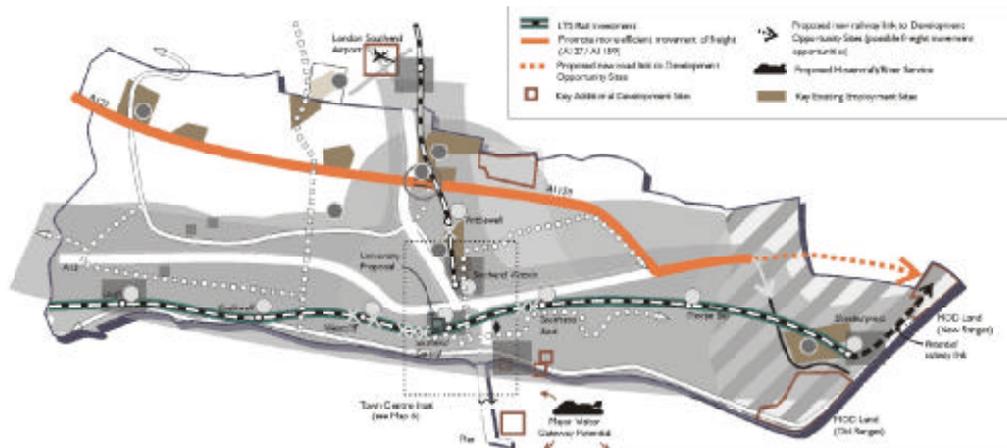
- D6.24 The scheme can be pursued in the short term due to a number of factors;
- *land required for the road widening and junction improvements can be taken entirely from land and property within the Borough Council's ownership;*
 - *additional landscaping to soften the impact of the scheme can be accommodated in adjoining parkland;*
 - *the provision of cycleway and pedestrian facilities can also be accommodated in adjoining parkland*
 - *the concept of improving Priory Crescent is contained in the adopted Southend on Sea Borough Local Plan.*

Realising the Major Scheme

D6.25 Having established its aim and objectives and strategy for taking the Local Transport Plan forward, the Partnership during the period from Autumn 1999 to Spring 2000 has developed the above Major Scheme and related projects. The issues have been a source of major thought by many bodies with different perspectives and have been developed with sensitivity. Through a series of workshops and questionnaires the Partners developed the provisions of the Major Scheme in a structured way to achieve a consensus view as to how these issues should be taken forward (see accompanying Partnership and Public Involvement document).

D6.26 The principles of the Major Scheme therefore have community support which is essential to its future development and success. Due to time constraints it was not possible to work up full details of the scheme prior to submission of the Local Transport Plan to Government in July 2000 and that work would continue. However, solid foundations have been put in place for taking its provisions forward and to ensure its success, namely decriminalisation and the provision of Quality Bus and Freight Partnerships.

D6.27 This Local Transport Plan therefore seeks approval in principle of the Major Scheme and funding to permit detailed appraisals and design work to be carried out in partnership. This work would be undertaken whilst other key elements of the scheme, essential for its successful implementation, are put into place. **Diagram 10** sets out the proposed programme.



Achievements
(Private and Public (TPP25/LTP) Investment)

Sustainable Distribution

Freight

- The Partnership has identified:
 - the A127/A1159 as the main freight access into the Borough serving the town's principal employment sites within the town
 - inadequate links in freight distribution network (ie Priory Crescent/Cuckoo Corner pinch point)
 - Distributor roads around the town
 - limited role of rail freight movements at the present time

Inland Waterways

- RPG 9 identifies the potential of the River Thames for passenger transport

Integration with Wider Policies

Promoting Social Inclusion/ Welfare to Work

- Programme of improvements to crossing points to assist the mobility impaired and blind considerably advanced
- Shop Mobility Scheme established
- Administrative and financial support for Dial-a-Ride
- Tactile maps at 4 of 7 stations on c2c railway line
- Partnership recognised the isolation felt by some sections of the community/areas of the Borough

Action on Climate Change, Air Quality and Noise

- Development of LTP has run in tandem with the development of the Council's Quality of Life Strategy
- Rolling programme of air quality management to monitor NOx emissions PM₁₀ and NO₂ pollutants at selection of roadside and urban background sites
- Airport development strategy has regard to Noise pollution levels

Data Collection

- New automatic counting programme established with Council's consultants from virtually zero base in 1998 to 26 monitoring sites
- Road Traffic monitoring related to RTRA
- Travel Diary and Attitudes Survey progressing
- MORI household survey completed 1999

Ambitions

Sustainable Distribution

Freight

- Establish Quality Freight Partnership
- Effective management of road freight, in particular improvements to:
 - A127/A1159 freight route
 - Freight management measures (including signage, weight restrictions, unloading restrictions at peak times)
 - Improvements to local business servicing as part of Major Scheme including resolution of issues in Central Area Environmental Room (Town Centre)
 - Safeguard rail link to New Ranges, Shoeburyness for potential freight movements

Inland Waterways

- Establish a passenger hovercraft service on the River Thames linking Southend - Kent - London

Integration with Wider Policies

Promoting Social Inclusion/ Welfare to Work

- Interchange and station improvements to provide for the needs of the mobility impaired
- Strategy developed to facilitate access to low floor buses
- Footway improvements to cater for the needs of the mobility impaired
- Integration of Community Transport to provide improved services for mobility impaired and other excluded groups
- Review concessionary fares policy

Action on Climate Change, Air Quality and Noise

- Action to reduce traffic growth and increase the number of journeys undertaken by sustainable modes
- Establish Car Club scheme
- Introduce specific target flow measurements directly related to air quality monitoring at each site
- Review impact of traffic noise in the Borough
- Rolling programme of traffic calming measures in Environmental Rooms to reduce ambient noise levels

Data Collection

- Computerised data bases and where appropriate GIS systems established to effectively capture, co-ordinate and analyse data required for Monitoring Plan

- D6.28 A technical document is currently being prepared on the impact and benefits of the Major Scheme in consultation with the Borough Council's consultants to include;
- *cost benefit analysis; and*
 - *a more detailed NATA appraisal.*

This will be prepared in consultation with, and submitted to Government in Autumn 2000 to provide further justification for the Major Scheme and to illustrate its benefits and the significant impact it will have on improving the transport situation in the Borough.

- D6.29 Further details of the Major Scheme are set out in Part E. Part G includes a preliminary Appraisal Summary Table for the Major Scheme dependant upon further detailed appraisal and design work.

D7 Sustainable Distribution

- D7.1 Discussions with Railtrack, the Rail Operators and Freight Transport Association reveal that there are limited opportunities in Southend for transferring freight from road to rail in a manner that would be regarded as economically viable. This is due to a number of factors which can be summarised as follows;
- *the main industrial estates generating freight movements are located along the A127/A1159 away from the rail network;*
 - *due to the densely developed nature of the town there are limited opportunities for rail freight facilities that could connect with users physically;*
 - *the majority of Southend's businesses do not generate significant freight of the type normally considered suitable for rail movement;*
 - *more and more businesses have reduced the amount of stock they hold and thus require daily deliveries to supply local customers needs;*
 - *many traders and most supermarkets schedule deliveries around the clock and insist on "just in time" deliveries to suit customers requirements. Such requirements limit the opportunities for direct delivery of freight by rail.*
- D7.2 As a result of these factors it is likely that even with improved rail borne facilities the majority of the town's freight distribution will be made by road and the lorry will continue to play an indispensable role in servicing the town for the foreseeable future.
- D7.3 Mainly because of greater efficiency in distribution, lorry movements are reducing in number and are small in comparison to the number of cars on the road (see Table1). Because of the geography of the area none of these lorry movements represent through traffic, all of them serve local requirements. It must also be recognised that for effective distribution a rail freight facility would generate significant internal lorry movements.
- D7.4 However, the major employment generating development opportunity on former MOD land at Shoeburyness (New Ranges – see paragraphs C3.29, D3.16 and D3.22) has been identified as ***offering the potential to be accessed by rail for freight movements***. This would be dependant upon the scheme providing the critical mass of freight that would be necessary to make the service economically viable to a rail freight operator. The site is currently served by 21 kilometres of operational standard railway which is used for maintenance works (Pigs Bay) and links with the London Fenchurch Street to Shoeburyness line. This Local Transport Plan therefore seeks to safeguard the line for freight movements until such time as the redevelopment proposals for the site have been clearly established.
- D7.5 However, given the sites peripheral location and relative isolation to the rest of the Borough and Thames Gateway in particular, improved rail accessibility will not solely provide the ingredients necessary for the successful redevelopment of the site. Improvements to the highway network will also be essential if the full commercial potential of the site is to be realised. This Local Transport Plan therefore identifies the need for an upgraded improved access road from Parsons Corner at Shoeburyness to the New Ranges site in the interests of maximising its regeneration potential. This road although originating and terminating in the Southend Borough would for part of its length pass through the neighbouring Rochford District. The proposal is therefore also identified in the Essex Local Transport Plan. It is proposed that the road would be entirely funded by the developer and

appropriate conditions secured to the planning consent to prohibit any other egress being obtained from the road to access adjoining Green Belt land.

- D7.6 Congestion on the main routes, particularly the A127, continues to affect the efficient movement of freight to the detriment of local businesses and the economy of the Borough as a whole. The Partnership, which includes freight organisations and businesses, recognises that an integrated approach and Local Transport Plan offer the opportunity to pursue initiatives to reduce this congestion, and to consider other schemes that provide priority for freight movements. The A127 and A1159 provides a highway spine through the town and is predominantly of dual carriageway standard. ***It offers the potential for introducing a priority scheme to improve the movement of freight and business traffic.*** Such improvements must also be considered alongside the opportunity for improving passenger transport movement and cycling facilities on this key route .
- D7.7 The movement of road borne freight along this priority route to reach key business and industrial destinations within the town will be pursued as part of the route hierarchy – “Environmental Rooms and Distributors” - to protect the local environment and amenities of residents whilst maximising road safety. To achieve this the Borough Council will continue to pursue;
- *traffic management schemes;*
 - *unloading restrictions during peak hours; and*
 - *7.5 tonne weight restrictions.*
- D7.8 The opportunities for the establishment of out of town transshipment depots to enable goods to be transferred to smaller less intrusive vehicles are considered to be limited in the Southend situation given the limited access points to the town and environmental constraints (see Park and Ride paragraph D5.12 above). They are also considered to be uneconomic by a number of organisations in the distribution industry and would in any event generate many more vehicle movements in the town to the detriment of its environment.

Freight Quality Partnerships

- D7.9 As part of the above initiatives, the importance of establishing quality partnerships with freight organisations is recognised as essential if successful schemes are to be developed.
- D7.10 A number of freight organisations are already committed to the partnership approach, including the Freight Transport Association, and to the development of a ***Freight Quality Partnership***. This will be pursued by the Borough Council under the umbrella of a Bus, Rail and Freight Forum to provide for the true integration of transport facilities (see also paragraph D2.4).

Inland Waterways

- D7.11 The River Thames offers significant potential for introducing water passenger facilities for both business and leisure purposes. However, because of its estuarial location, water depths on the Southend foreshore restrict the opportunities to craft not requiring deep water, such as hovercraft, and those which can safely berth at the end of the Pier. Leisure craft already successfully use the Pier Head in the summer months to provide a number of services mainly to Kent and London which are a significant tourist attraction.
- D7.12 In order to maximise the potential of the River Thames, the Borough Council has investigated the potential for introducing hovercraft services to the town for foot passengers with links to Kent, London and major tourist attractions, such as the Millennium Dome.
- D7.13 To obtain a better understanding of the operation of hovercraft and its potential impact in terms of noise and displacement of mud on the foreshore, which is subject to a number of statutory nature conservation designations, visits to the Southsea – Ryde hovercraft service were made in liaison with the operator. This service has operated for over 30 years utilising AP188 craft across the River Solent between the mainland and the Isle of Wight. It operates within a designated Site of Special Scientific Interest and in tidal conditions similar to those in Southend. It also operates in close proximity to businesses and residential properties apparently without major conflicts. The down

draft from the craft is very low and has been demonstrated to cause minimal disturbance to the sand/mud on the sea bed.

- D7.14 Based on the knowledge and experience gained from these visits a potential landing site between the Pier and Corporation Loading Jetty has been identified and a draft design of the landing facilities prepared.
- D7.15 The Borough Council will pursue the possibilities for introducing a hovercraft service to town with potential operators as part of the development of this Local Transport Plan. It will be essential that such a facility is successfully linked into the local transport network as part of an integrated approach (see paragraph D5.3). The potential of the River will also be investigated as part of the proposed multi-modal study from London to Southend identified in the Regional Transport Strategy. Further details are set out in paragraph B1.19).

D8 Integration with Wider Policies

- D8.1 ***The Borough Council is committed to providing equal travel opportunities and an accessible and convenient environment for all and to minimising the impacts of transportation on the quality of life and the local environment.*** This is of particular importance in the Southend Borough with a third of all households not having access to a car.

Promoting Social Inclusion

Disability Issues

- D8.2 Objectives specifically aimed at improving conditions for the mobility impaired pursued by the Borough Council include:
- *improving mobility and accessibility by improving/updating facilities and providing facilities where a need has been identified;*
 - *balancing the needs/interests of pedestrians and disabled people; and*
 - *updating and improving all existing crossing facilities including the associated provisions for visually impaired people.*
- D8.3 These form part of the policies for Pedestrian Mobility and Making People Mobile, together with the provisions of the Joint Committee on Mobility of Blind and Partially Sighted People.
- D8.4 In addition to these objectives the approved Borough Local Plan seeks improvements to the design and layout of the built environment to provide safe and easy access for all members of the community (Policy U5), and encourages developers to provide priority parking spaces for the disabled which are designed to accommodate wheelchair transfer and are located adjacent to accessible entrances.
- D8.5 Building on these strategies, the Borough Council has successfully implemented a number of schemes to improve the pedestrian environment and transportation infrastructure for people with mobility handicaps. These include:
- *general improvements to controlled and uncontrolled crossing points to benefit wheelchair users and the blind and partially sighted through the installation of pedestrian guard railing, tactile paving, dropped kerbs, improved surface treatment and upgraded lighting;*
 - *the continuance of a programme of introducing tactile knob and bleeper equipment at signal crossings and the introduction of Puffin technology;*
 - *administration and financial support for a telephone request, Dial-a-Ride service for disabled people unable to use public transport (see paragraph D3.28);*
 - *administration of Education and Social Services Transport including the provision of transport for people with mobility problems and special transportation needs;*
 - *provision of a shop mobility scheme in the town centre;*
 - *administration of Hackney Carriage and Hire Car Licensing to ensure the personal safety of all users, especially the most vulnerable members of the community;*
 - *provision of parking bays for the disabled close to services and facilities including within the pedestrianised Queens Road adjacent to the High Street;*

- *location of a taxi rank immediately adjacent to the extended pedestrianised area at the northern end of the High Street; and*
- *improvement of facilities at bus stopping places to provide access to low floor buses.*

- D8.6 All highway schemes are subject to an independent external safety audit to ensure they provide safe and secure access for the disabled, blind and partially sighted. The needs of those with mobility difficulties are considered in all stages of design and maintenance of transportation schemes through consultation with the Borough Council's Access Officer and the Southend Access Group which represents disabled and sensorily impaired users. This includes discussing schemes after implementation to advise users of site features and consider and carry out any revision requests. This process has directly resulted in improvements in the design of segregated cycleways in the Borough. Previously the introduction of white line segregation between cycle and foot ways had made the blind and partially sighted feel vulnerable. Subsequent meetings regarding kerbed segregation and treatment at now installed Toucan crossings, have led to agreed changes which will be incorporated in future design.
- D8.7 The rail and bus companies are also committed to improving facilities for the disabled and a number of improvements have already been made (see paragraphs D3.10 and D3.18). The provision of further improvements will be pursued as part of the development of Quality Bus and Rail Partnerships and as part of the improvements to interchange sites (see paragraph D5.3).
- D8.8 Organisations in the Borough representing people with disabilities have already indicated their commitment to the Integrated Transportation Partnership. This will continue to bring the Borough Council, transport operators and disabled groups together to maintain the impetus for still further progress towards a more accessible Borough for all.

Welfare to Work

- D8.9 The Partnership has identified the isolation felt by some members of the community, particularly the unemployed and low paid living on the peripheral housing estates in Shoeburyness. The establishment of an information shop at Shoeburyness utilising SRB funds has successfully brought job and training opportunities to the people of Shoebury. However, it has not addressed the transportation issues.
- D8.10 Opportunities for improving accessibility for this sector are being pursued as part of the provision of Voluntary Community Transport (see paragraph D3.29) and review of bus passenger transport network and services offered. The Borough Council will also be reviewing its Concessionary Fares policy to consider providing wider access for the unemployed and low paid.

Urban Renaissance

- D8.11 The Partnership recognises the important role that the Local Transport Plan has to play in creating a vibrant and prosperous town, particularly in improving the management of the public realm. This lies at the heart of emerging Structure Plan policies, the Strategy of this Local Transport Plan and the development of local strategies such as the Town Centre Enhancement Scheme. These will be reinforced in the development of the Replacement Southend on Sea Borough Local Plan.

Integration With Action on Climate Change, Air Quality and Noise

Local Agenda 21

- D8.12 As part of its Corporate Strategy approved in 1998, the Borough Council has committed itself to preparing a Local Agenda 21 strategy building on the 'Environmental Charter' and 'State of the Environment' reports produced in 1995 and 1997 respectively.
- D8.13 A Forum of community representatives was established in November 1999 to take a fresh look at the town and to develop a 'Quality of Life Plan'. A 'First Steps' document was published in June

2000 setting out the initial findings of the Forum. Four over-riding themes were identified as constituting the perfect vision for Southend in 2020, namely;

- ***better transport***
- *a healthy economy*
- *a thriving community, and*
- *a greener environment*

D8.14 The Forum will now be turning its attention to developing Quality of Life Action Plans in consultation with the wider public. It is proposed that the implementation process will commence in 2001.

D8.15 Transportation issues will have a significant central input into this process and clear linkages have already been established between the Forum and the Partnership to provide for an integrated approach.

Climate Change

D8.16 The Partnership and Quality of Life Forum have a shared objective for the protection and enhancement of the environment and quality of life and the commitment to reducing CO₂ emissions caused by transport. Measures contained in this Local Transport Plan to reduce dependency on the private car will make a significant contribution to this objective.

Local Air Quality Management

D8.17 The Borough Council is committed to carrying out a programme of air pollution monitoring at a selection of roadside and urban background sites using the Council's two mobile monitoring stations.

D8.18 During 1999, nine locations in the Borough were monitored for both PM₁₀ and NO₂ pollutants. At the same time traffic flow data was collected to enable a comparison to be made between traffic volume, time of day and pollutant levels.

D8.19 The monitoring period at each site was relatively short and the results therefore can only be treated as indicative. However, the initial assessment shows that the PM₁₀ and NO₂ objectives set out in the National Air Quality Strategy should be achieved. Details of the results are set out in the accompanying Transport Data Report. These initial findings will be used as part of the development of the future monitoring requirements and to inform the broad study currently being carried out. It is probable that further monitoring will be concentrated on fewer semi-permanent sites encompassing three summer and three winter months.

D8.20 The Borough Council will be assisted in the assessment of local air quality by the establishment of a DETR funded air quality monitoring station as part of the national Automatic Urban and Rural Network (AURN). The site, located within the 'Visitor' Environment Centre' at Chalkwell Park is expected to be fully operational from the end of July 2000 and will be recording data in respect of all air quality parameters of concern

D8.21 Initiatives to improve air quality will be pursued further in conjunction with local community groups, businesses and transportation providers including awareness measures.

Noise

D8.22 As part of its initiatives to improve air quality and introduce various traffic management measures, the Borough Council wherever possible will also take the opportunity to reduce ambient noise levels caused by traffic, particularly in relation to traffic calming measures (see paragraph D4.19).

- D8.23 During implementation of the Local Transport Plan regard will be given to the changes in ambient noise levels that will arise as a result of traffic flows. The siting of noise measurement equipment within the mobile air quality monitoring units is under current consideration. The objective is to link air quality, noise and traffic flow data to provide for a comprehensive monitoring facility.
- D8.24 The need to review the impact of traffic noise is fully recognised. Whilst traffic generated noise has not traditionally been a problem within the Borough, there is the potential to improve the quality of life of those living, working or visiting the area by appropriate traffic management controls. This will be developed as part of a rolling programme of traffic calming measures in Environmental Rooms to reduce ambient noise levels in liaison with the Partnership. The Borough Council is also pursuing the use of quieter surfacing material in road resurfacing schemes.

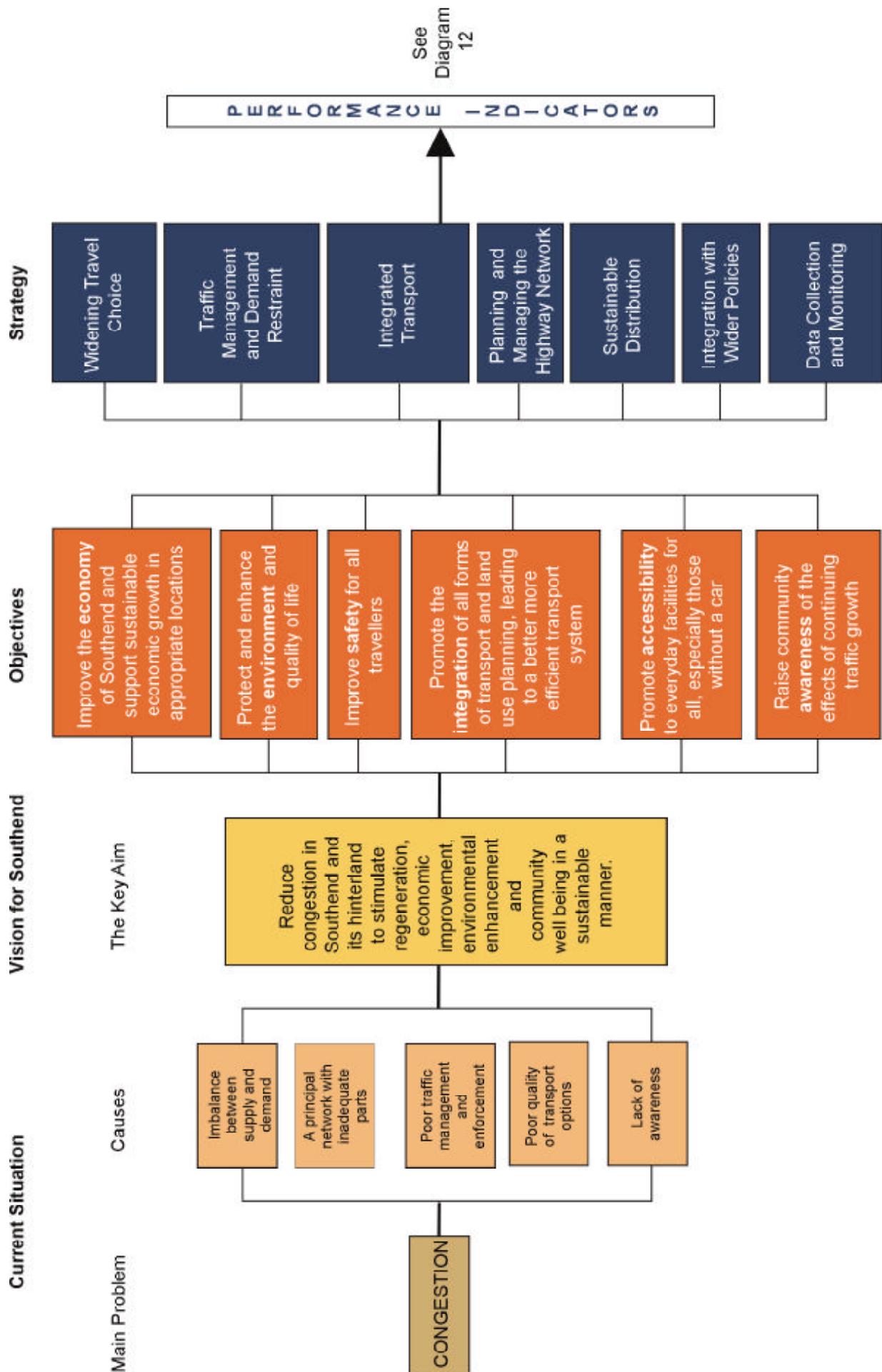
D9 Data Collection

- D9.1 To address the inadequate and outdated transportation data sources available for the Borough, in 1998 a new automatic counting programme was established in consultation with the Council's consultants W S Atkins to monitor traffic flows throughout Southend. This data collecting strategy will contribute towards compliance with the requirements of the Road Traffic Reduction Act and will provide information to help gain a fuller understanding of traffic patterns within the Borough. The programme is based on 26 monitoring locations providing a cordon around the Borough and two north south screen lines, which broadly separate the commercial area in the town centre from the residential areas of Leigh in the west and Shoebury and Thorpe Bay to the east. The monitoring of these sites was repeated in 1999 and will be repeated in subsequent years. In view of the various objectives of the Local Transport Plan, the scope of the data captured was expanded in 1999 as detailed in the accompanying Transport Data Report. These provisions supplement the limited annual DETR manually classified counts carried out for the purposes of making estimates of traffic trends and volumes.
- D9.2 In addition to this monitoring W S Atkins have been commissioned to undertake a Road Traffic Reduction Report which will permit the Partnership to appraise the impact of projects and schemes as these are developed over the coming years. Travel information and data supplied by the transport operators together with the detailed findings of the MORI household survey and Travel and Attitudes survey, have contributed to the development of a comprehensive database.
- D9.3 This data will be refined and developed further in partnership to ensure that an effective monitoring process is established enabling Partners to gauge the progress and impact of schemes. This will be essential to the implementation process and to achieving best value.

D10 Relationship with Partnership's Aim and Objectives

- D10.1 The strategy and its relationship with the Partnership's aim and objectives, are set out in **Diagram 11**. Details of specific projects that form the financial element of this Plan, are contained in Part E.
- D10.2 The direct effects of implementing the provisions of the Strategy will be to:
- *improve accessibility and movement within the Borough;*
 - *contribute to the process of developing and regenerating Southend;*
 - *raise community awareness of the benefits of alternative modes of travel to the car;*
 - *encourage a shift to more sustainable transport modes;*
 - *reduce the demand for unnecessary travel by motorised users;*
 - *encourage more walking and cycling;*
 - *improve access for disabled and disadvantaged people;*
 - *improve safety and security; and*
 - *send a positive message to members of the Partnership.*

The latter will be essential to maintain the momentum of the Partnership's work and retain enthusiasm and commitment amongst partners; a vital ingredient if the Local Transport Plan is to be successfully implemented.



D10.3 Consequential effects within the town will be:

- *reduced congestion leading to improvements in accessibility;*
- *the realisation of significant development opportunities;*
- *reliability of passenger transport, and economic performance;*
- *a wider choice of transportation mode;*
- *providing real benefits for those sectors of the community with no access to a car;*
- *improved living conditions through enhanced environment, improved safety and better air quality; and*
- *promotion of a healthier life style.*

D11 Testing of Potential Solutions

D11.1 The continuing refinement of the projects by the Partnership over the full plan period will continue to enable the range of specific solutions to be tested to establish the combination of affordable measures most likely to meet the objectives. However, it is already clear from the assessment made of the Major Scheme that in an urban area of Southend's size, the traditional rules of assessment do not fit the need to evaluate a package of smaller scale measures that together produce the marriage value that is greater than the sum of its parts.

D12 Justification for Choice of Strategy

D12.1 The strategy has been developed as an integral part of the Partnership's work. Given Southend's predominant east-west transportation links, compact urban characteristics and geography, alternatives to the strategy which will effectively meet the objectives and provide *best value* are extremely limited. The Partnership considers that the way forward is through a transport policy which integrates transport within and between modes, with the environment, with land use planning and with policies for education, health and wealth creation. It is also recognised that such an approach will take time to "bite" and will require community leadership as indicated in the MORI Survey undertaken in 1999 for the Borough Council and other partners.

D12.2 The Partnership has developed a consensus view as to the appropriate way forward and established ownership of the process. Alternative strategies which do not have this support are unlikely to succeed and must be regarded as second best.

D13 Priorities

D13.1 The main priorities for implementing the Strategy can be summarised as follows;

- *implementation of the Major Scheme which lies at the heart of Strategy, to improve accessibility on the town's two main access routes;*
- *introduction of traffic demand management (with priority to parking decriminalisation);*
- *establishment of Quality Bus, Rail and Freight Partnerships;*

These aspects will be key to the successful implementation of a number of projects and it will be important to ensure that they are implemented as soon as possible.

- *improvement of accessibility and movement in the Borough;*
- *widening travel choice, particularly through improvements to passenger transport services and facilities;*
- *expansion of safety initiatives, such as safer routes to school and the 'Walking Bus';*
- *raising community awareness;*
- *improved cycleway and pedestrian network ;*
- *improved data collection; and*
- *continuation of the Partnership Approach*

D13.2 The Borough Council is committed to the Partnership Approach and to facilitating its development. This is crucial to the successful implementation of the Plan.