SECTION 2

The Transport Framework

The transport component of the Masterplan recognises five fundamental principles:

- the need for safe, convenient and efficient movement;
- the objective of supporting economic prosperity into the future:
- protection of the local and wider environment
- the need to serve and support the new development sites;
- consistency with the County Council's sustainable transport objectives

Fortunately, Bognor Regis is well-placed to realise a transport system consistent with those principles within the mid to longer-term. The town centre is presently well served by road, rail and bus, though clearly all modes offer opportunity for improvement. For example, though providing a well located mainline rail station, it offers poor interchange with other modes. For those on foot or cycle, the generally flat terrain is accommodating but the penetration of motorised traffic causes delay to these movements and offers a sometimes unwelcoming environment.

As with the majority of our towns and cities, Bognor Regis is experiencing the effects of the present transitional period between the dominance of the motor car and the presently held long-term national policy objective of discouraging car use. The convenience and accessibility of the car offer many advantages to those with access to one. However, many do not enjoy such access and are reliant upon an inconvenient and sometimes inaccessible public transport system relative to the car. Whilst developments offering generous on-site parking provision and access may be attractive to site developers, the impact of the related car movements on the road network come at a longer-term cost in terms of the local living environment.

In looking to the future, the Masterplan seeks to strike a balance between the five principles identified earlier anticipating continuance of the now established principle of demand restraint in relation to car use. In overview, it looks to rationalise access by road and draw the maximum benefit from the present network and facilities

The development sites and present activities will be supported with regard to car access, whilst over time, other transport modes are enhanced and their use encouraged.

In the following, we describe how these principles relate to the development sites and transport modes. These principles form the framework of the transport element of the Masterplan and have been used to inform the other related components of the Masterplan.



SWOT Analysis Overview by Travel Mode SWOT Analysis Overview by Travel Mode (Principal Modes/Users Only)

Strengths	Weaknesses
Road Good connection to A259 Strategic road network and A29 (A27, A23, A24) Availability of town centre 'bypass routes' Parking Sufficient existing on and off-street supply at non-peak period times Off-street supply available at several locations throughout town centre	Road Congestion on main road network at peak times Through traffic movements on unsuitable town centre roads – residential in nature Irregular road layout Parking Some car parks poorly utilised Some car parks of poor quality Insufficient capacity during peak season
Strong network of local bus routesGood potential patronage potential	 Services affected by road congestion Services patchy and often unreliable owing to congestion Poor information on bus services
Rail Station centrally located Connection to main south coast rail Spacious and attractive station building	Rail Indirect services Service unreliability concerns Train and carriage quality concerns Perceived as costly compared to car use
Walking/Cycling Flat terrain and equable local climate Town centre on a manageable scale to walk and cycle High percentage of local 'walkers' compared to national average	Walking/Cycling ■ Delays owing to traffic measures ■ Severance at seafront and other locations too ■ Poor east-west links ■ Inconsistent walk/cycle route signing ■ Lack of defined cycle network routes



SWOT Analysis Overview by Travel Mode SWOT Analysis Overview by Travel Mode (Principal Modes/Users Only)

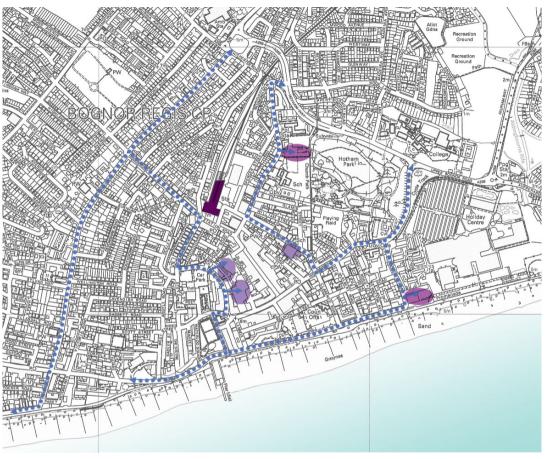
Opportunities	Threats
 Road Restrict through traffic in town centre, re-direct traffic around it Relief Road will ease local congestion Promote employer Travel Plan actions to manage car use demand 	Road Car travel demand restraint in part dependent upon provision/take-up of alternatives
 Parking Make better use of present spare parking capacity, through traffic management and tarriff control Extend CPZ, protecting resident parking and adding onstreet visitor capacity Provide on-street car park supply information Better coordinate on and off-street parking supply Better use of non-car modes may release capacity Possible out-of-town Park and Ride site (not examined) Possible alternative car park locations (not examined) 	 Parking Need to balance requirements of accessibility, economic vitality, environment, car demand restraint policy and sustaining development sites Inadequate parking enforcement limits CPZ scale and efficacy New development sites to occupy off-street parking capacity
 Bus Provide bus priority measures Provide better bus/rail and other mode interchange at rail station Provide real-time bus arrival information at shelters, plus timetables 	 Carriageway constrained in many areas – limits possibilities for bus priority Need for release of developable area to provide new interchange
 Rail Provide multi-mode interchange at station Station to become focus for town centre 'gateway activity' 	Rail service and building improvements require significant 3rd party cooperation
 Walking/Cycling Provide more dedicated pedestrian and cyclist facilities, including route signing Give greater priority over traffic movements Provide attractive routes through and between development sites Provide comprehensive safe cycling route network 	 Walking/Cycling Maintenance of traffic flow may take priority over pedestrain and cycle needs



Car Parking

The provision and usage of car parks in the town centre will continue to play an important role into the town's development for the foreseeable future. However, the general pools of parking provided on sites such as the Hothamton car park are most likely going to be largely lost in favour of parking dedicated to the site occupiers, consistent with general demand restraint policies. With some 209 spaces currently at that site and 180 at the Regis Centre site, these may be seen as substantial losses. There is though considerable under-used capacity presently offered at other existing locations, namely the Fitzleet multistorey, Lyon Street and London Road car parks. Though detailed surveys have not been undertaken, we estimate that under-used capacity to be in the order of 250-300 spaces on a typical weekday. To this, we should add the present on-street capacity for short-term on-street parking. Though the efficacy of wider transport policies to encourage non-car travel is very difficult to predict, it is perhaps reasonable to assume that it may at least keep demand at around present day levels for the foreseeable future, though they may increase in the longer term with the development of site 6.

It is suggested as part of the Masterplan and transport framework, that facilities at the longer stay car and coach park be improved.



Car Parks - access routes and usage



The means to bring about that rationalisation of the parking supply will be through encouraging use of those alternative locations through traffic management methods including road signing and the application of differential parking tariffs designed to attract motorists to those locations. Long-stay motorists, such as business users and visitors are directed to those further from the centre, whilst short-stay shoppers pay a relatively higher tariff for the convenience of a town-centre parking location, whether on or off-street

We should note at this point too the tremendous variety of options for managing the car parking stock dependent upon the 'package' of new development realised at any one point of time in the future. This is of course true of the other elements of the transport system too.

Road Access

The general principles underlying road access within the Masterplan are that:

- access to town centre roads should be restricted to 'local' traffic, i.e. those living or working there;
- through traffic is diverted away from the less suitable town centre roads to more peripheral and higher capacity routes;
- through this traffic management, wider benefits to the town centre environment are realised.

At present, the town centre is characterised by a variety of vehicles on a range of purposes, all serving to impact upon the amenity of those visiting or living and working in Bognor Regis. As with car park use, that traffic would be directed to and along those routes by way of comprehensive road signing, and in all likelihood, supporting physical traffic management measures. An example of the latter may be the conversion of the northern section of Victoria Drive to two-way operation between Annandale Avenue and the roundabout (though a traffic engineering assessment would be required to prove the feasibility of such an arrangement).

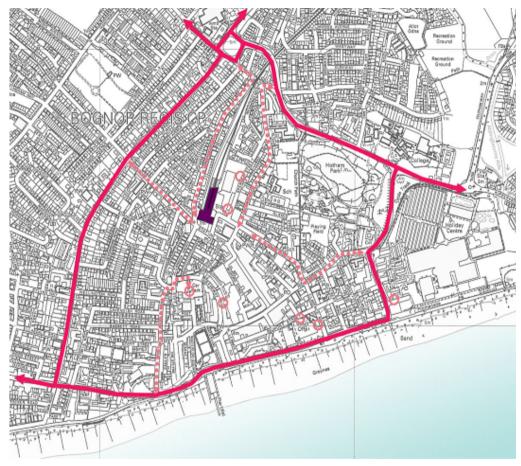
In this example, Victoria Drive becomes the primary north-south route for through traffic, relieving the present B2166, Argyle Road, Canada Grove, Longford Road corridor, which for the most part is unsuitable for the purpose. Instead, town centre access traffic is directed to entry points such as Longford Road.

At the Station Road junction, we may envisage that increased pedestrian priority would mean greater delay to queuing motorists. We may also expect that those with an essential need to enter the town centre will continue to accept that small delay in return for direct access, whereas through traffic will turn to the alternative Victoria Drive route. In this way, we achieve the deterrence of through traffic in the town centre and the realisation of pedestrian priority improvements. At other locations, localised traffic calming or footway widening may achieve similar benefits. The present High Street limited access scheme is an example of how traffic management may affect



the town centre environment. Though access options are restricted for motorists on the east-west axis, there is a consequent improvement in the local environment, with benefits to pedestrians, cyclists, and the general street scene. Bus movements are catered for and benefit from the much reduced general traffic levels. Alternative routes are available via The Esplanade and Walton Road/Belmont Street. This present situation is a very good example of the pros and cons of such initiatives which need to be carefully weighed as the future town centre development scenario unfolds.

There are numerous combinations of such traffic management arrangements which could be applied over coming years to achieve the desired protection of residential areas and make best use of the present road system all of which would require detailed design and testing in terms of traffic engineering feasibility. As such, no attempt made here to present specific traffic management proposals.



Through and local traffic routes



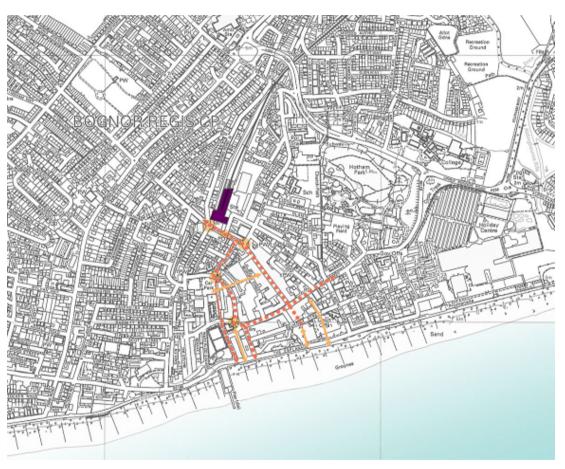
The various development sites are afforded access from the Local Access Traffic network, as they have an essential need to enter the town centre. In general terms, none cause concern in terms of traffic impact upon the local road network as they may be:

- on sites replacing substantial car parks with current accesses;
- leisure uses with relatively low trip generation rates or;
- may share parking with other town centre uses in the evening period.

Walking and Cycling

Both walking and cycling are important to the continued growth of the town centre. All journeys have at least a part of them made on foot, fewer by cycle, and will be made from home/car/bus/station origins to various locations within the town centre. Given the range of origins, both within and outside the town centre, it is important that these journeys are fully encouraged and provided for along their entire length.

As the town centre develops, so we should seek to address those links comprehensively and in detail with high quality measure. For example, the Masterplan vision places due importance upon the rail station as a gateway to the town centre with associated new and vibrant activities. Anticipated also as a much improved transport interchange (See Public Transport), the pedestrian link to London Road should be seamless and of high quality to stimulate the desired movement.



Pedestrian routes, links and facilities



Presently though, pedestrians walking from the Longford Road/ Station Road junction (northside) have to cross the Richmond Road junction with vehicles turning across their path both left and right into that one-way road section.

The remainder of the Station Road footway is narrow and of poor quality and leads to a section of guardrailing guiding pedestrians to a pelican crossing. A comprehensive improvement for such pedestrians may entail:

- a raised crossing (table) of Richmond Road, with that apron perhaps spreading to include Station Road for a limited length;
- banning of either/both turning movements by general traffic from Station Road into Richmond Street:
- widening of the Station Road Footway;
- provision of a raised table crossing of London Road with that apron extending into Station Road and Bedford Street; the guardrailing would be removed;
- narrowing of London Road between Lyon Street West and Bedford Street to one lane of traffic flow.

This one example points the many possibilities for an improvement in conditions for pedestrians. It also serves to remind of the many traffic management implications of such measures. Further detailed investigations of these would be necessary to prove their value and feasibility.

Each of the development sites presents an opportunity to provide very real benefits to town centre permeability on foot and bicycle. Most notably, the site between Queensway and Bedford Street offers the chance to provide the much needed east-west link between Queensway and the London Road retail area. The Regis Centre site offers an opportunity to provide a legible path to the seafront. Further opportunities for cycle networks include the A259.

All movement between the seafront and the town centre is inhibited by The Esplanade and to a lesser, but perhaps more manageable extent, by Belmont Street. The recent High Street restricted access scheme demonstrates how much reduced traffic levels may encourage pedestrians and reduce road severance whilst Belmont Street will retain an important function as an access route, its use as an east-west route is limited by its narrow width at its western end. There is then the possibility of improving the streetscene along Belmont Street in favour of pedestrians, though provision should be made for present traffic levels to remain. The Esplanade will need to retain its present function as a town centre through and access route, though pedestrians and cyclists would benefit from more generous crossing facilities. It may also prove advantageous to provide a shared surface for cyclists along the promenade to promote cycle travel.



In summary the Masterplan envisages a much enhanced pedestrian and cyclist environment with a clear focus made upon the achievement of seamless, convenient and hazard-free local journeys to and within the town centre.

Public Transport

As described previously, we may expect the future to offer a gradual diminishing in the reliance upon the motor car for a substantial proportion of town centre travellers. At present, the various statistics presented within the 1996 Bognor Regis Local Transport Plan (using 1991 Census data) indicate that some 56% of those employed within the town centre use the car for those journeys. For those working outside the area the proportion rises to 87%. Town Centre residential car ownership is relatively low though at 325/1000.

Therefore, as the LTP points out, such car reliance adds significantly to peak hour congestion, worsened by journeys to schools and colleges during term time, and tourists in the holiday season.

For many, bus transport could offer a meaningful alternative to car use, provided that concerns over accessibility, reliability, service information and quality are addressed. Though there is an extensive network of bus services in the area, bus use is low in the wider LTP plan area at 3% (percentage not available for the town centre).

There are though a wide range of actions that could take place during the Masterplan period to increase bus use. Some benefit will result from the anticipated continuing car use, Other more attractive enticements may include:

- Real-time bus service information for passengers;
- High quality bus shelters;
- Greater priority for buses on the road network aiding service reliability;
- A denser and more complicated service network;
- Higher quality vehicles
- Effective 'Quality Partnerships' between WSCC and bus operators;
- More and higher quality bus boarding facilities
- Effective co-ordination with rail service timetables.
- Encourage bus operators to market their product to increase bus patronage.

These and other actions are typical of those being considered/ implemented in towns and cities. However, obstacles to their introduction abound such as; cost, impact upon general traffic flows, strategy co-ordination between authority and bus operators. We are aware though that WSCC have a clear desire to progress such actions through the LTP process.



Of all the possible bus service improvement actions, increasing service coverage and reliability are high in priority. Present users may be frustrated by delays due mainly to traffic congestion and future users discouraged. In many other towns and cities, measures to provide effective bus priority at traffic signals and road links has proved beneficial in minimising bus delays. Naturally though, we often see these savings passed on to car drivers as new delays as car carrying/throughput capacity is reduced. The Masterplan anticipates a gradual introduction of this principle within the town centre and on its approaches. As noted in relation to road access earlier, essential town centre traffic may be better disposed to such delay in comparison to through traffic as it has an origin/destination within the area.

The present High Street traffic management scheme is an example of such a strategy with benefits including those to bus service access and reliability, pedestrian and cyclist accessibility and to disabled users.

A clear opportunity exists at the rail station and nearby 'Covers' site to provide a new and much needed public transport interchange between rail, bus, taxi, cycle and walk modes. The general design aspirations are described elsewhere in terms of the linking of town centre activity, but this interchange offers a new and much needed focus for public transport too. It would be a centre for service information for all modes, be a town centre meeting place, perhaps short-term layover for bus operational needs, and importantly, raise the profile of town centre public transport. It should also assist in promoting the use of rail services to/from Bognor Regis for business and leisure use.

In terms of transport, the Masterplan looks forward to a future directed in part by aspiration and part by necessity, though these are compatible in most instances. Though in the near term, unnecessary provision for the motor car in terms of access and parking may serve to provide a high degree of comfort to site sponsors, it comes at a cost, both monetary and environmental degrading the streetscene and limiting access by other modes. Added to this, there is an established national policy obligation to retrain car use and encourage non-car modes. Therefore, it is important to reach an acceptable balance between these needs such that the economic prosperity of the town centre is maintained and enhanced in the centre.



This study presens a framework for transport provision over the plan period featuring:

- The supply of sufficient on-site parking to support each of the development sites considered
- The optimisation of the present town centre parking capacity usage
- A rationalisation of local and through traffic movements to:
 - Reduce town centre congestion
 - Remove through traffic from unsuitable town centre roads
 - Enhance the town centre environment
 - Support other town centre traffic, public transport and environmental initiatives
- A focus on improving conditions and town centre links for pedestrians and cyclists:
 - To / from development sites
 - To / from important destinations including the rail station and seafront

- Support for public transport initiatives including:
 - Town centre bus priority schemes
 - Greater service coverage and reliability
 - A new and comprehensive interchange facility at the rail station.

The possibilities and options for the various measures and initiatives outlined here are very numerous, many requiring considerably greater assessment and testing than is possible within the remit of this Masterplan study. It does though point the way forward to the future Bognor Regis town centre transport system.

