

Local Plan for Bradford

Shipley and Canal Road Corridor Area Action Plan

Initial Sustainability Appraisal (Draft)

January 2013



Shipleigh and Canal Road Corridor Area Action Plan: Initial Sustainability Appraisal (Draft)

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1.0 : Introduction

This document has been prepared to present the initial sustainability appraisal relating to the Shipley and Canal Road Corridor Area Action Plan (SCRC AAP).

Sustainability Appraisal (SA) is a requirement of the Planning and Compulsory Purchase Act (2004) for Development Plan Documents (DPDs). This initial sustainability appraisal is based on the sustainability framework proposed in the Scoping Report (September 2012).

The initial SA report includes:

- A summary of the Scoping Report including sustainability objectives, baseline and context;
- A summary of the economic, social and environmental issues for the Shipley and Canal Road Corridor area.
- A summary of the results of the consultation on the Scoping Study.
- An initial Sustainability Appraisal based on the sustainability objectives and indicators from the Scoping Report.

1.1 Concept of Sustainable Development

The concept of sustainable development is central to the planning system. The term “sustainable development” has been used since 1987 following the publication of the World Commission on Environment and Development (WCED) report “Our Common Future”, commonly referred to as the Brundtland report. It called for a strategy that united development and the environment –described by the now-common term “sustainable development”, which is defined as:

‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’

In essence the term “sustainable development” not only refers to the impact of development on the environment but also to society and the economy. In order for development to be considered “sustainable” it must result in a win-win-win situation for the environment, society and the economy. Sustainable development is not about balancing these issues but ensuring that none are adversely affected and, preferably, that there is a positive impact on all three.

The UK strategy for Sustainable Development- ‘Securing the Future’¹, was published in March 2005, building on and reviewing the 1999 strategy ‘a Better Quality of Life’. Within this strategy, the five guiding principles of UK sustainability development are set out. All five of these need to be respected if a policy is going to be sustainable:

¹ *Securing the Future - UK Sustainable Development Strategy*, March 2005
http://www.defra.gov.uk/sustainable/government/publications/uk-strategy/documents/SecFut_complete.pdf

- Living within environmental needs- ensure that natural resources needed for life are left unimpaired for future generations
- Ensuring a strong, healthy and just society- meeting the needs of all sections of the community, with equal opportunities and social cohesion.
- Achieving a sustainable economy- build an economy that provides prosperity for all and in which environmental costs are paid for by those who impose them.
- Promoting good governance- promote participation and engage with all levels of society
- Using sound science responsibly- take into account sound evidence and public attitudes/values in policy development

In developing any plans, policies and programmes, local authorities need to ensure that these principles are being addressed

1.2 The Purpose of SA

The purpose of Sustainability Appraisal (SA) is to ensure that sustainable development has been integrated in the formulation of development plans and to verify that due consideration has been given to social, economic and environmental factors. The SA must also show how the requirements of the Strategic Environmental Assessment (SEA) Directive have been met.

SA is an ongoing process undertaken throughout the preparation of a plan or strategy. The aim of the appraisal process is to minimise adverse impacts and resolve as far as possible conflicting or contradictory outcomes of the plan or strategy.

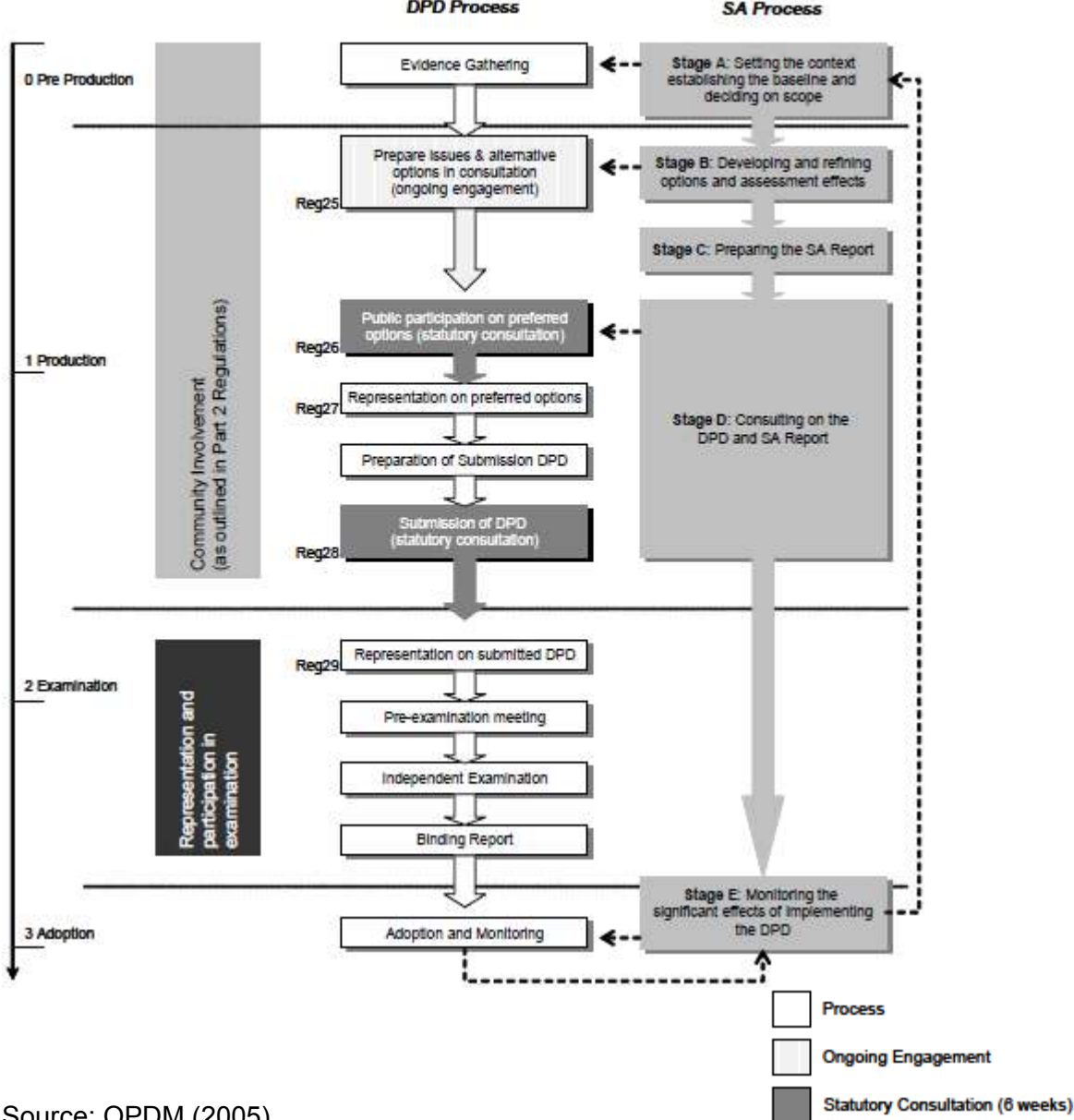
The final SA report should be able to demonstrate how the adopted AAP has addressed the sustainability agenda and how the choices were made between alternative policies and proposals.

At this stage, this initial SA covers the development and refinement of strategic policy options and delivery choices. This report will inform the selection of the preferred strategic policy option and development site options. Following consultation on this initial SA and the identification of the preferred option, an updated SA report will be produced which will include an assessment of the preferred option, identification of significant effects, and necessary mitigation measures and a monitoring programme.

1.3 Stages of the SA

SA guidance is set out in the *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents* (ODPM, November 2005). Five stages in the SA process are identified in the guidance document. The relationship between these five SA stages and the DPD process is shown below.

Figure 1: SA Process alongside DPD Process



Source: OPDM (2005)

For each of the five main SA stages, a number of sub-stages are identified in the guidance. The production of this scoping report covers stages A1 to A5 as outlined below.

Stage A	Setting the context and objectives, establishing the baseline and deciding on the scope	A1	Identifying other relevant policies, plans and programmes, and sustainability objectives	← Scoping report
		A2	Collecting baseline information	
		A3	Identifying sustainability issues and problems	
		A4	Developing the SA framework	
		A5	Consulting on the scope of the SA	
Stage B	Developing and refining options and assessing effects	B1	Testing the DPD objectives against the SA framework	
		B2	Developing the DPD options	
		B3	Predicting the effects of the DPD	
		B4	Evaluating the effects of the DPD	
		B5	Considering ways of mitigating adverse effects and maximising beneficial effects	
		B6	Proposing measures to monitor the significant effects of implementing the DPDs	
Stage C	Preparing the SA report	C1	Preparing the SA report	
Stage D	Consultation on the DPD and SA report	D1	Public participation on the preferred options of the DPD and the SA report	
		D2(i)	Appraising significant changes	
		D2(ii)	Appraising significant changes resulting from representations	
		D3	Making decisions and providing information	
Stage E	Monitoring the significant effects of implementing the DPD.	E1	Finalising aims and methods for monitoring	
		E2	Responding to adverse effects	

Stage A1-A5 of the SA process is covered within the Scoping Report published in September 2012. The initial SA follows on from the findings and information of the scoping report and involves completion of the SA stages B and C and associated tasks as outlined in the Figure above.

The Scoping Report sets out the purpose of the Sustainability Appraisal. It identifies other relevant plans and programmes to ensure that the Area Action Plan sustainability objectives are in line with sustainability objectives set elsewhere and at other spatial planning levels. The Scoping Report also provides an early indication of the issues that need to be taken into account in the Area Action Plan. As the Scoping Report sets out the sustainability objectives, key assessment criteria and indicators that will be used to assess the Area Action Plan, it forms the basis for the Sustainability Appraisal.

Consultation on the SA Scoping report was undertaken between 18 September 2012 and 31 October 2012 with the statutory consultees as well as other interested stakeholders as listed in the Council's latest consultees database. A total of 11 responses were received before the consultation deadline.

Consultation responses on the Scoping Report included suggestions for a range of minor amendments to be incorporated and also suggestions were put forward for: additional baseline information to be included in the appendices; recommendations for amending some

of the objectives; recommendations for new sustainability questions and suggestions for amending and creating new indicators.

The full list of responses to the consultation are included as Appendix 1 to this report. All these responses have been used to update the elements of this initial SA report and inform the preparation of the draft AAP. A full and complete review of all the comments will be made in the final SA report.

2.0 : Developing SA Framework

The development of a sustainability appraisal framework is a key component in completing the SA by synthesising objectives relevant to the SA, the baseline information and sustainability issues into a systematic and easily understood tool that allows the prediction and assessment of effects arising from the AAP.

2.1 Review of Relevant Plans, Policies and Programmes

The first task of a SA is the identification of other relevant plans, programmes and sustainability objectives. An AAP may be influenced in many ways by other plans and programmes and by external sustainability objectives, such as those laid down in policies and legislation.

As part of the production of the SA Scoping Report a number of relevant international, national, regional and local policies, plans, and programmes (PPPs) were reviewed. The purpose of reviewing the PPPs is to ensure that the relationship with these other documents and requirements are considered in the production of the SCRC AAP, and that any inconsistencies or constraints are dealt with as far as possible.

The review of the PPPs is attached with the SA Scoping Report and currently available online at http://www.bradford.gov.uk/bmdc/Consultations/scrc_aap_consultation_2012

This review has been updated according to the responses received during the consultation of the SA Scoping Report. The review has considered relevant guidance at the EU, national, regional and local level. Where relevant it makes specific reference to any environmental protection objectives, targets or requirements established at the EU or national level in order to comply with the SEA Directive.

2.2 Baseline Information

The next task in SA covers the collection of baseline information. The review of other plans and programmes undertaken previously has provided a considerable amount of baseline information and this information has been complemented by collection of data on key issues relating to the SEA topic areas, as well as additional social and economic indicators for the plan area. The basic aim of this task is to pull-together data on the present state of SCRC

area to enable any trends to be identified, any particular sustainability issues pinpointed and methods of monitoring of the plan's effects to be established.

The information collected aim to relate specifically to the SCRC AAP area. However, where appropriate, it has focused on data that are relevant to the district as a whole. Because it was felt that, for certain issues data at District level would be of more significance as many impacts emerging from the SCRC AAP will affect not just the immediate plan area, but also the wider community.

The baseline information, based on all available sources at the time of publication, was presented as a part of the SA Scoping Report. The baseline information has been updated since the publication of the SA Scoping Report and as result of the consultation exercise. The updated Baseline Analysis report is now available online at http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework/shipleigh_action_plan_dpd.htm

2.3 Key Sustainability Issues Identified

The next task in the SA, carried out at the scoping stage, is the identification of sustainability issues of particular significance to the plan area. The identification of sustainability issues is very important as it provides an opportunity to define key issues for the SCRC AAP to enable improvement of the plan objectives and options. The analysis of sustainability issues at scoping stage influenced the baseline and the SA framework, in particular in identifying and selecting indicators and targets.

This section describes the current situation and highlights the key issues faced within the SCRC AAP area. It does not attempt to cover all the issues but identifies those that are considered to be a priority in terms of the sustainability of SCRC AAP area.

The table below lists the economic, social and environmental issues facing SCRC, together with sources of supporting evidence. It is recognised that many issues cut across these three main topic headings, but for simplicity, each has been included within the most relevant aspect. These issues have been identified through the PPPs review and baseline data collection. They have been further informed by discussions with planning officers and refined through consultation with the statutory consultees and other key stakeholders.

Table A: Shipley and Canal Road Corridor Sustainability Issues

ENVIRONMENTAL		
Issues	Description	How can the AAP address this?
<p>Reduction of traffic dominance and congestion problem.</p>	<p>SCRC is a traffic dominated route with significant congestion and delay problems. There are a number of bottlenecks on the existing highway along the canal corridor which cause traffic congestion especially during the morning and evening peak periods.</p> <p>The pedestrian and cycle environment/facilities along the route is also unattractive.</p>	<p>The AAP will need to protect the ability of this route to deliver efficient and effective travel and ensure that any significant impacts from future development are minimised.</p> <p>The AAP should outline plans and programmes that would facilitate delivery of improved highway infrastructure to accommodate increased traffic generations as well as providing safe and efficient cycling and walking facilities. The AAP should also encourage sustainable travel such that the congestion will not be increased.</p> <p>The AAP will require any significant development within the corridor to carry out air quality assessment, and to ensure that measures are implemented to mitigate any potential deterioration in air quality.</p> <p>Additional roadside monitoring equipment should also enable accurate measurement of ongoing NO2 levels as well as assessment of the effectiveness of mitigation measures.</p> <p>The highways infrastructure improvements and measures to encourage use of sustainable modes of transport should mitigate the air quality impact of the proposed developments. These measures and any others which emerge will be examined in detail as part</p>
<p>Air pollution and noise environment.</p>	<p>Traffic-sourced air pollution/pollutants are a particular problem along the SCRC.</p> <p>The junction of Shipley Airedale Road and Churchbank/Barkerend Road located towards the Southern end of the SCRC is one of the four declared Air Quality Management Areas (AQMA) in Bradford.</p> <p>Monitoring information indicates that the NO2 annual Air Quality Objectives (AQO) are exceeded at this location. It is anticipated that the increased traffic flow from further development along the canal road corridor would lead to this AQO being exceeded at this AQMA and potentially on more parts of the corridor if no improvements are carried out.</p>	<p>The AAP will require any significant development within the corridor to carry out air quality assessment, and to ensure that measures are implemented to mitigate any potential deterioration in air quality.</p> <p>Additional roadside monitoring equipment should also enable accurate measurement of ongoing NO2 levels as well as assessment of the effectiveness of mitigation measures.</p> <p>The highways infrastructure improvements and measures to encourage use of sustainable modes of transport should mitigate the air quality impact of the proposed developments. These measures and any others which emerge will be examined in detail as part</p>

	<p>There is also a need to improve noise environments especially around the future landuse interfaces.</p>	<p>of the Local Air Quality Action Plan.</p> <p>The plan should also seek to steer residential development away from the major sources of pollution, as practically as possible, and thereby reducing the vulnerability of such developments to air and/or noise pollution.</p> <p>The need and frequency of travel by car should also be decreased by providing essential services close to where people live/work, as shorter trips are more attractive by travel modes other than car.</p> <p>Reduced traffic/sustainable mode of travel should reduce the major source of any noise pollution along the corridor. Good building design, general layout, site orientation and landscaping should also contribute towards minimizing the potential adverse effects of any high level of noise on the neighbourhood.</p>
<p>Flood risk and water management</p>	<p>Flood modelling and mapping by the EA and CBMDC confirms that significant areas of the SCRC are within Flood Zones 2 and 3 and that there are also limited areas within the functional floodplain which would be expected to flood during a 1 in 25 annual probability event or less. This elevated flood risk will have implications on the siting of new development in accordance with national and local planning policy.</p> <p>Flood risk is also influenced by other sources, mainly heavy surface runoffs, thanks to the relatively steep natural topography of the Canal Road Basin. The catchment is heavily urbanised with an unusually large</p>	<p>AAP should steer new developments away from the areas at risk of flooding through a number of measures, e.g. sequential test, requiring the finished floor level to be set above the 1 in 100 year flood level, retaining the functional floodplain for water to flow or be stored in times of flooding or for water compatible developments after the 'exception' test has been passed.</p> <p>Where development within the floodplain shouldn't be avoided due to a lack of available alternatives a strategy for flood mitigation should be developed. This should first consider strategic flood risk management</p>

	<p>proportion of hard surfaces that produce large quantities of runoff and increase the risk of local flooding.</p> <p>Bradford Beck conveys large volumes of untreated sewage during heavy rain so environmental enhancement along its route is a prime concern; A long stretch of the Beck is culverted and currently inaccessible. There is also limited capacity of Dockfield Sewer Pumping Station at Shipley which could further constrain developments around the area.</p>	<p>(e.g. flood defences, upstream storage) and then local measures within the development plots, i.e. flood resilient design.</p> <p>The AAP should help develop a SUDS strategy that will include source control measures within the plots (e.g. green roofs, permeable paving, rainwater harvesting), permeable conveyance (e.g. swales, filter drains) and passive treatment (e.g. ponds, basins, wetlands). These SUDS would reduce rate of surface water discharge and flood peak. It would also form part of a treatment train to ensure that runoff was treated to an appropriate standard prior to discharge.</p>
<p>Potential land contamination</p>	<p>There are a number industrial sites within the SCRC which contain potential 'land contamination' risk due to the nature of their former industrial uses. None of the sites however have been formally identified as contaminated and depending on the level of their potential risk some of the sites may be subject to intrusive investigation and/or remediation.</p>	<p>The AAP should encourage the use and clean up of previously developed land, including identification, remedial action and mitigation of contaminated land.</p> <p>Contextual advice should be available on remediation of any contaminated sites and on background issues connected with flood risk, health and safety, air quality, biodiversity value and water quality.</p>
<p>Reducing waste generation and reliance on energy generated from fossil fuels.</p>	<p>There is a need to reduce waste generation and increase recycling in order to minimise waste disposal and reduce the use of energy and natural resources, and to reduce emissions of the greenhouse gas, methane (landfill is a major source of this gas).</p> <p>Most energy demand is met by burning fossil fuels which are responsible for the majority of emissions of greenhouse gases in the UK. Reduced energy consumption is therefore a key requirement for tackling climate change. Energy production can affect the</p>	<p>AAP Policies should promote, where possible, the sustainable use, reuse and disposal of resources. In new developments, consideration should be given to the need for any provision that encourages recycling.</p> <p>The AAP should help stipulate better waste management and recycling areas throughout the corridor, one of the benefits of which will help to offset numbers of waste vehicles entering the area therefore reducing vehicles on the roads.</p>

	<p>environment in many other ways, including through exploration for fuel, transportation, storage, conversion, distribution and the disposal of waste products.</p> <p>One way to decrease energy consumption from fossil fuels is by increasing the amount of energy generated from renewables. There is no local data, but currently renewables make only a relatively minor contribution to energy generation in Bradford. With environmental sensitivity and low wind potentials, it is unlikely that Canal Road Corridor will be able to have a large-scale renewable energy generating scheme, such as a large wind farm. Smaller schemes, relating to individual developments, are likely to be more appropriate and should be encouraged. Increasing the energy efficiency of individual buildings will also reduce the need for energy.</p>	<p>APP would also promote energy efficient dwellings, installation of renewable energy systems and developments that reduce the need to travel by car.</p>
<p>Protection and enhancement of the environmental quality</p>	<p>Biodiversity The SCRC has many important significant areas of open land and sites that are heavens for flora and fauna. There is a statutory SSSI (Trench Meadows) within 2 km of the study area. Four records of non-statutory sites, specifically 1 SEGI and 3 BWAs, also exist within the corridor. A number of Ancient and Semi-natural Woodland are also present in close proximity to the area. Potential impacts of any future developments on these geological and biodiversity assets should be thoroughly assessed.</p> <p>Open spaces, green network and public realm Within the SCRC there are also a number designated/undesignated open areas of land comprising of playing fields, recreational open space, children's</p>	<p>The AAP should strike a balance between the sometimes conflicting aims of development to meet socio-economic needs and the need to maintain, protect and enhance the natural environment including areas of ecological/biodiversity value and other open lands within the SCRC.</p> <p>The plan will seek to maximise the protection and deliver improvements for existing habitats by providing opportunities to open up the corridor by linking key sites together for both amenity and biodiversity value.</p> <p>The inclusion of SUDS, soft landscaping and high quality green infrastructure will provide an attractive setting for regeneration which will also maximise the</p>

	<p>playground, multi-use game area, informal open space, allotments, horse grazing, unused land, pedestrian/cycleways, open land associated with scheduled monuments/listed building and private gardens. In addition to having an intrinsic ecological/ biodiversity importance, all these sites contribute significantly to the quality of life and to the attractive environment in which people in SCRC live and work. It is therefore important to ensure that developments in the SCRC contributes towards the enhancement of this environment and do not have any adverse impact on the protected species and habitats along the route.</p> <p>Built heritage The northern end of the corridor falls within the Saltaire World Heritage Site Buffer Zone, where development will need to ensure that it does not harm the Outstanding Universal Value of Saltaire. Elsewhere, there are a number of designated heritage assets both within and in the area around the corridor. It is important to ensure that those elements which contribute to the significance of these assets are not harmed</p> <p>Climate change impacts There is a need to mitigate and adapt to climate change impacts through better planning and carrying out more work to improve energy efficiency. Installations of renewable energy and a programme of energy conservation should be encouraged.</p>	<p>biodiversity, especially good quality habitats for protected and endangered species.</p> <p>The AAP programme of development should look to minimise CO2 emissions through good design standards, maximising renewable energy and energy efficiency measures- in addition to encouraging transport modal shifts to more sustainable modes.</p>
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<p>Varied topography and some steeper slopes (more than 1:8)</p>	<p>Some areas are affected by steep slopes and mining. The evidence base indicates that the western flank of Bolton Woods is affected by significant gradients. Sites including extensive steep gradients may not prove suitable for built development and alternative end-uses may need to be identified.</p>	<p>Developments on sites potentially affected by steep gradients should be regulated through the AAP proposals without adversely affecting the land adjacent to slopes;</p>
<p>SOCIAL</p>		
<p>Issues</p> <p>Reducing social exclusion and deprivation.</p>	<p>Description</p> <p>It is essential to provide for the needs of all the community, including needs relating to age, sex, ethnic background, religion, disability and income. Worklessness and economic inactivity have been an issue for the district for some time, which is further exacerbated by the impact of the recession. There are also concentrations of some of the most deprived areas of the district that are potentially accessible to the SCRC. Many individuals in those areas face multiple barriers not only to gaining employment but also health, education and other social benefits which if not addressed will mean they remain excluded from the opportunity to work and live healthy.</p> <p>Travelling to work in a timely and cost effective manner is one of the other barriers that many disadvantaged people face.</p> <p>Although there is not always a direct link, deprivation can contribute to high crime levels and a fear of crime, which can affect residents' quality of life and increase their feelings of exclusion.</p>	<p>How can the AAP address this?</p> <p>Programme and activities that increase employment/employability training opportunities should be a priority for the AAP.</p> <p>One of the aims of the AAP is to improve the transport links (in all it's forms) between these communities, plus areas further a field, and the employment opportunities in the corridor. In addition, increased housing, community facilities and other complementary works that will go 'hand in hand' with these physical infrastructure improvements, will address the other barriers.</p> <p>The AAP Policies should try to decrease deprivation generally and particularly should focus on creating a local environment that helps to create strong communities (ie good quality environment and adequate local facilities) and urban design that limits crime.</p>

<p>Delivering improved accessibility.</p>	<p>Improving accessibility to jobs, health, housing, education, shops, leisure and community facilities (both in terms of location and physical access) for all members of the community living and working in the SCRC is very important.</p> <p>SCRC is within, and bordered by, some of the most deprived areas of the district which include a concentration of Super Output areas that are within the worst 10% by the LoD rank and few within the worst 20%. Access between these areas and the SCRC is poor by public transport, walking and cycling. In particular, bus services are limited along this corridor with peak services running only 3 buses per hour. Buses from the surrounding Mannigham Lane, Bolton Road and Queens Road also do not penetrate to this area resulting in poor connection with wider localities and commercial centres.</p> <p>The existing residential communities to the north of the corridor are located on areas above the valley bottom and access to them via the steep valley side is difficult by walking or cycling.</p>	<p>The AAP will improve the links between the adjacent communities, plus areas further afield, and the employment opportunities in the corridor e.g. by improved bus routes, footpaths and cycleways.</p> <p>The promotion of more sustainable modes of transport will have associated health benefits by the encouragement of more active lifestyles. It will also improve social interaction.</p> <p>There is also scope for the AAP to facilitate opening up areas to the canal route which are not at present accessible.</p>
<p>Provision for affordable and decent housing</p>	<p>Lack of affordable housing can affect business and contribute to lowering quality of life. It may also mean that many people cannot live near their place of work. This results in long journeys to work and may increase congestion and use of fossil fuels for transport.</p>	<p>It is important to ensure that thresholds are set at a level which means that most residential developments will have a proportion of affordable housing. However, it is also important to avoid too high a burden on developers which means that new developments are not profitable, as this could curtail the overall amount of housing.</p>

ECONOMIC		
Issues	Description	How can the AAP address this?
Safeguarding of existing firms.	It is important that existing companies with the ability to sustain and hopefully grow employment have the ability to invest in new equipment and facilities. To remain competitive, businesses need to be able to invest in new facilities, while retaining their local skilled workforce.	AAP should provide opportunities for existing firms in a variety of sectors to relocate and expand. The Plan should also offer opportunities for inward investment in businesses and activities that have better prospects for employment growth.
Addressing the areas in need of economic regeneration and stimulate growth.	Office and retail development in SCRC has the risk of diluting the concept of creating a centralised business district within Bradford city centre. The exception to this within the Canal Road Corridor would be Shipley town centre, where there are scopes to encourage new office and retail development to help add to the vibrancy and mix of uses in the town centre and to help capture expenditure currently leaking from the area. Industrial areas around Shipley Town Centre appear to be occupied by lower value uses and may therefore offer more potential for change, although they provide an important local role with a healthy level of demand for space. The key challenge facing any redevelopment of this area will be its poor accessibility.	AAP should provide opportunities for local companies to build and rent new premises appropriate to modern day demands in a location that is accessible to the existing workforce and well located to wider strategic road network. The AAP should initiate a comprehensive programme of activity including investment in the corridors infrastructure, improving the environment and putting in place a presumption in favour of redeveloping existing employment sites for employment uses in the future which will help encourage the recycling for employment use of the potential brownfield opportunities that would become available in the corridor during the plan period. The land is relatively flat, is accessible to a substantial labour catchment and is well located to strategic road network and M606/M62 motorway.
Encouraging sustainable economic growth	There is a severe shortage of good quality employment land available on the market. The recent trends to redevelop the sites of old industrial premises for higher value a use, particularly housing (e.g. Midland Mills, Conditioning House etc) is likely to continue. Businesses will not be able to relocate/expand without suitable alternatives sites or premises.	

2.4 The SA Framework

The next task in the sustainability appraisal is the development of the sustainability appraisal framework. Preparation of the SA Framework involves the development of sustainability objectives and associated criteria and indicators to assess the outcomes of the AAP policies and proposals. SA objectives can include both externally imposed social, environmental and economic objectives laid down by legislation or policy and also others devised specifically in relation to the context of the plans being prepared.

A SA framework with draft objectives, key criteria and indicators was prepared at the scoping stage of the SA process. The framework has now been refined following the SA Scoping Report consultation. In particular, existing objectives and key criteria were amended and additional indicators were included.

The table B below constitutes the SA framework-

It is also particularly useful to note potential conflict between objectives, as further consideration can then be given to the potential detrimental effects of pursuing a particular objective and also to any possible ways to mitigate against or overcome these problems. The draft SA objectives therefore were tested against each other for compatibility and found either broadly complimentary or have a neutral relationship. However, it is also likely that some conflicts will always appear as the objectives cover a broad range of environmental and sustainability topics. It is the role of the AAP to weigh up potential conflicts and ensure a balanced approach is taken to ensuring sustainable development.

The compatibility matrix of SA objectives is attached in appendix 2

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
Population Human health Air Climatic factor	1. To reduce the need for travel and promote sustainable modes of travel by improving transport choice.	<p>Will it reduce the need to travel?</p> <p>Will it encourage use of public transport rather than private car?</p> <p>Will it increase accessibility to public transport?</p> <p>Will it seek to integrate public transport modes?</p> <p>Will it encourage walking and cycling?</p> <p>Will it increase car sharing?</p> <p>Will it improve journey times?</p> <p>Will it improve road safety?</p>	x		x	<p>Average distance travelled to fixed place of work.</p> <p>Average daily motor vehicle flow.</p> <p>Changes in the percentage of people using different modes of transport.</p> <p>No of development schemes approved with travel plans.</p> <p>Delay due to congestion.</p> <p>Number of road accidents.</p>	<p>Prosperity and Regeneration</p> <p>Safer Communities</p> <p>Improving the Environment</p>
Population Material assets	2. To improve the quality, range and accessibility of community services and facilities.	<p>Will it improve access to the area by all mode of travel including walking and cycling?</p> <p>Will it make navigation through the area easier?</p> <p>Will it improve local accessibility of employment, services and amenities?</p> <p>Will it improve the range of key services within easy access of the</p>		x	x	<p>Changes in the percentage of people using different modes of transport.</p> <p>Retail vacancy.</p> <p>Distance of households from key services, e.g. Post Office, school, doctors.</p> <p>Index of access to work, healthcare and shopping centres (Indices of Deprivation).</p>	<p>Prosperity and Regeneration</p> <p>Health and Wellbeing for All</p> <p>Strong and Cohesive Communities</p>

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
Material assets	3. To encourage urban regeneration by improving efficiency in land use, design, construction technique and layout.	<p>population?</p> <p>Will it improve satisfaction with local services?</p> <p>Will it promote and deliver sustainable design and construction?</p> <p>Will it ensure that new employment, office, retail and leisure developments are in locations that are accessible to those who will use them by a choice of transport modes?</p> <p>Will it encourage economic regeneration through the re-use and adaptation of existing buildings, building materials, use of previously-developed land and/or remediation of derelict and contaminated land?</p> <p>Will it support or encourage social enterprise and the development of new environmental technologies?</p> <p>Will it promote Sustainable Drainage System?</p> <p>Will it meet the anticipated demand for housing growth?</p>		x	x	<p>Percentage of residents surveyed finding it easy to access key local services.</p> <p>Percentage of new build and retrofit homes meeting EcoHomes Very Good standards.</p> <p>Percentage of commercial buildings meeting BREEAM Very Good standard.</p> <p>Proportion of residential development within 30 minutes public transport time of key services.</p> <p>Amount of vacant land and properties and derelict land.</p> <p>Proportion of development undertaken on brownfield sites.</p> <p>No. of start-up businesses in the environmental sector.</p> <p>No/% of planning permission with SUDS.</p>	<p>Prosperity and Regeneration</p> <p>Safer Communities</p> <p>Improving the Environment</p> <p>Strong and Cohesive Communities</p>
Population Human	4. To meet local housing needs by providing everyone with the opportunity to live in a decent			x		<p>Number of housing completions.</p> <p>Number of affordable homes</p>	<p>Prosperity and Regeneration</p>

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
health	affordable home.	<p>Will it ensure all groups have access to decent, appropriate and affordable housing?</p> <p>Will it reduce the amount of vacant housing?</p>				<p>developed in comparison with the total number of homes developed.</p> <p>Houses built to above minimum standards of sustainable design.</p>	Strong and Cohesive Communities
Cultural heritage Landscape	5. To protect, enhance and manage sites, features, areas and landscapes of archaeological, historical and cultural importance and their settings.	<p>Will those elements which contribute to the significance of heritage assets in and around the Area Action Plan be conserved?</p> <p>Will the history of the area be showcased?</p> <p>Will the cultural environment be protected?</p> <p>Will it protect important vistas, views and key reference points?</p>	x			<p>Proportion of vacant housing.</p> <p>Number of Grade I and Grade II* buildings at risk.</p> <p>Number of designated heritage assets whose significance, including their setting, has been harmed by the proposals of the Area Action Plan.</p> <p>Number of designated heritage assets whose significance, including their setting, has been enhanced by the proposals of the Area Action Plan.</p> <p>Proportion of scheduled monuments at risk from damage, decay or loss.</p> <p>Conservation Area Assessment.</p>	Prosperity and Regeneration Improving the Environment
Biodiversity, flora and fauna	6. To protect, enhance and, where necessary restore, existing biodiversity and natural habitats, and create new wildlife habitats including by	<p>Will it lead to habitat creation, matching BAP priorities?</p> <p>Will it maintain and enhance sites designated for their biodiversity</p>	x			<p>Number, area and condition of designated sites in appropriate management.</p> <p>Extent (and condition) of</p>	Improving the Environment

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
	establishing coherent ecological networks.	<p>interest?</p> <p>Will it link up areas of fragmented habitat?</p> <p>Will tree cover and woodland be retained and enhanced?</p> <p>Will it ensure sustainable management of natural habitats?</p> <p>Will it ensure easy accessibility to open spaces?</p> <p>Will it create a variety of functional open spaces to meet community and environmental needs?</p> <p>Will it improve physical activity and wellbeing?</p> <p>Will it improve opportunities for recreation and play?</p>	x	x		<p>designated Habitats.</p> <p>Engagement by local communities and organisations, management/ monitoring reports.</p>	
Human health	7. To protect, maintain and enhance the quality of open spaces and ensure effective access to open space.	<p>Will it exacerbate water abstraction levels?</p> <p>Will it seek to reduce water consumption?</p> <p>Will it prevent the pollution and contamination of water resources?</p> <p>Will it maintain and enhance soil</p>	x			<p>Access to and the use of open space and leisure facilities, e.g. sports pitches.</p> <p>Engagement in cultural activity by all target groups.</p>	<p>Improving the Environment</p> <p>Health and Wellbeing for All</p> <p>Strong and Cohesive Communities</p>
Water Soil	8. To maintain and improve soil and water quality.					<p>Abstractions by purpose.</p> <p>Average domestic water consumption (l/head/day)</p> <p>Area of contaminated land (ha).</p> <p>% of projects (by number and value) involving remediation of any kind.</p>	<p>Improving the Environment</p>

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
Water Climatic factor	9. To reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the environment	<p>Will it reduce land contamination quality?</p> <p>Will it reduce risk of flooding?</p> <p>Will it manage flooding from all sources effectively?</p> <p>Will it position property out of flood paths?</p> <p>Will it promote Sustainable Drainage System?</p>	x	x	x	<p>Incidents of major and significant water/soil pollution.</p> <p>% of site within flood zone 2, 3a/b.</p> <p>% of site within area vulnerable to surface water flooding.</p> <p>% of site vulnerable to different sources of flooding.</p> <p>Amount of new development (ha) situated within a 1:100 flood risk area (Flood Zone 3).</p> <p>Number of planning applications approved where Environment Agency have sustained an objection on flood risk grounds.</p> <p>Number/% of new developments with sustainable drainage Installed.</p>	Improving the Environment Safer Communities
Human health Material assets	10. To reduce waste generation and disposal, and achieve the sustainable management of waste.	<p>Will it provide an increased variety and capacity of recycling facilities?</p> <p>Will it reduce the proportion of waste landfilled?</p> <p>Will it increase the proportion of waste recycled?</p>	x			<p>Type and capacity of waste management facilities.</p> <p>Net reduction in volume of biodegradable and recyclable waste in volume to landfill.</p> <p>Household waste (a) arisings and (b) recycled or composted.</p>	Improving the Environment

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
Climatic factor	11. To ensure resilience to the effects of climate change through mitigation and effective adaptation.	<p>Will it reduce waste from construction?</p> <p>Will it seek to improve access for all to waste management facilities?</p> <p>Will it help limit the SCRC's carbon footprint?</p> <p>Will it reduce the risk of flooding?</p> <p>Will it help raise awareness of climate change mitigation?</p> <p>Will it facilitate landscape change for climate change adaptation (e.g. by protecting key landscape and biodiversity features)?</p> <p>Will it allow space for water where this is needed e.g. retaining open land within high flood risk zones and in areas vulnerable to surface water flooding in open space use?</p> <p>Will it retain land within flood zone 2 in openspace use?</p> <p>Will it encourage the development of buildings prepared for the impacts of climate change?</p>	x			<p>Reuse of recycled materials from former building stock.</p> <p>Air quality monitoring.</p> <p>Road traffic growth level.</p> <p>Emissions of greenhouse gases from energy consumption, transport and land use and waste management.</p> <p>Amount of new development (ha) situated within a 1:100 flood risk area (Flood Zone 3).</p> <p>Number of planning applications approved where Environment Agency have sustained an objection on flood risk grounds.</p> <p>Number of initiatives to increase awareness of energy efficiency.</p> <p>Number, area and condition of designated biodiversity/ecological sites in appropriate management.</p> <p>Amount of new greenspace created per capita.</p>	Improving the Environment

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
Air	12. To reduce air pollution and ensure air quality continues to improve.	<p>Will it connect habitats to allow wildlife move between areas?</p> <p>Will the plan consider the potential implications of climate change on health?</p> <p>Will it consider the potential implications of climate change on local economy?</p>	x	x		<p>No. of planning permissions incorporating SUDS, green roofs and green corridors.</p> <p>Proportion of new homes achieving a four star or above sustainability rating for the "Energy/CO2" category as stipulated by the Code for Sustainable Homes.</p> <p>Thermal efficiency of new development; % planning permissions for projects designed with passive solar design, building orientation, natural ventilation.</p> <p>No. of days when air pollution is moderate or high for NO2, SO2, O3, CO or PM10</p>	<p>Improving the Environment</p> <p>Safer Communities</p> <p>Health and Wellbeing for All</p>
Human health	13. To minimise noise pollution, especially around land use interfaces.	<p>Will it create significant noise pollution for sensitive land areas?</p> <p>Will noise issues be created around land use interfaces?</p>	x	x		<p>% of planning applications/projects involving noise assessment/ mitigation of any kind.</p>	<p>Improving the Environment</p> <p>Safer Communities</p>

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
Population Human health	14. To improve health, reduce health inequalities and promote healthy living.	<p>Will it improve access to primary healthcare facilities?</p> <p>Will it encourage healthy lifestyles and provide opportunities for sport and recreation?</p> <p>Will it seek to reduce health inequalities within society, particularly those associated with income, lifestyle and diet?</p> <p>Will it improve the health of children and young people?</p>		x	x	<p>Distance of households from key health services, e.g. hospital, GPs, chemist etc.</p> <p>% of people surveyed who visits local sport and outdoor recreation facilities regularly.</p> <p>Statistics on child obesity.</p>	<p>Health and Wellbeing for All</p> <p>Health and Wellbeing for All</p> <p>Children and Young People</p>
Population	15. To strengthen and sustain resilient local economy.	<p>Will it improve the range of employment opportunities?</p> <p>Will it enhance local employment prospects?</p> <p>Will it support collaboration between educational establishments, businesses and industry?</p>			x	<p>Percentage increase or decrease in the total number of VAT registered businesses in the area.</p> <p>Increase in number of jobs.</p> <p>Annual business start-ups and survivals.</p>	<p>Prosperity and Regeneration</p> <p>Health and Wellbeing for All</p> <p>Children and Young People</p>
Population	16. To ensure local people have access to satisfying	<p>Will it enhance local employment prospects?</p>			x	<p>Proportion of unemployed.</p>	<p>Prosperity and</p>

Table B: SA Framework of the Shipley Canal Road Corridor AAP

SEA topic	Draft SA Objectives	Key criteria	Env	Soc	Econ	Draft Indicators	SCS priority
	opportunities for employment and occupation.	Will it promote skills training?				Percentage of population of working age claiming key benefits. Index of access to work, healthcare and shopping centres (Indices of Deprivation).	Regeneration Health and Wellbeing for All Children and Young People
Population	17. To help create and sustain safe, vibrant and cohesive communities.	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life? Will it improve the satisfaction of people with their neighbourhoods as a place to live? Will it make local people feel safer in their community? Will it act to avoid the creation of isolated places?		x		Percentage of adults surveyed who feel they can influence decisions affecting their own local area. % respondents very or fairly satisfied with their neighbourhood. Percentage of people who feel that their local area is a place where people from different backgrounds and communities can live together harmoniously Level of domestic burglaries, violent offences and vehicle crimes. Crime Deprivation Index/ crime recorded by police per 1000 population.	Prosperity and Regeneration Safer Communities Strong and Cohesive Communities Children and Young People
* SCS= Bradford District's Sustainable Community Strategy (the 'Big Plan')							

3.0 : Initial SA

The initial SA follows on from the findings and information of the scoping report and involves completion of the SA stages B and C and associated tasks as outlined in the Figure in section 1.3.

3.1 Testing of AAP Objectives against SA Framework

During the early stages of production of the SCRC AAP, a number of strategic objectives were identified and developed, from the review of relevant plans that have a strategic policy influence on the AAP and taking into consideration the key issues outlined in the SA scoping report. These objectives were used as the basis from which the AAP development options have been derived.

According to the Guidance it is important that the objectives of the AAP are in accordance with sustainability objectives. Therefore, a compatibility assessment of the AAP objectives with the SA objectives set out in the Table C below was undertaken.

The results show that the objectives are largely compatible with each other. Some uncertainties have been identified in a few of the objectives which will be dependent on the implementation of the policies.

The symbols used to assess the objectives are as follows-

√- Objectives compatible

0 – No Significant link

X – Objectives incompatible

? – Dependent on policy implementation

Table C: Compatibility Testing of SCRC AAP Objectives and Sustainability Appraisal Objectives

SA Objectives		SCRC AAP Objectives									
		1	2	3	4	5	6	7	8	9	10
1	To reduce the need for travel and promote sustainable modes of travel by improving transport choice.	?	?	0	?	√	√	0	√	√	√
2	To improve the quality, range and accessibility of community services and facilities.	√	√	0	√	√	√	0	√	√	√
3	To encourage urban regeneration by improving efficiency in land use, design, construction technique and layout.	√	√	√	√	√	√	√	√	√	√
4	To meet local housing needs by providing everyone with the opportunity to live in a decent affordable home	√	√	√	0	?	0	?	?	√	√
5	To protect, enhance and manage sites, features, areas and landscapes of archaeological, historical and cultural importance and their settings.	?	√	0	?	√	√	√	?	?	0
6	To protect, enhance and, where necessary restore, existing biodiversity and natural habitats, and create new wildlife habitats including by establishing coherent ecological networks.	?	√	0	?	?	√	√	√	?	√
7	To protect, maintain and enhance the quality of open spaces and ensure effective access to open space.	?	√	√	0	0	√	√	√	?	√
8	To maintain and improve soil and water quality.	?	√	0	?	0	√	√	√	0	0
9	To reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the environment	?	√	√	0	?	√	√	√	0	0
10	To reduce waste generation and disposal, and achieve the sustainable management of waste.	?	0	0	?	?	0	0	√	0	?
11	To ensure resilience to the effects of climate change through mitigation and effective adaptation.	?	√	?	?	√	√	√	√	√	0
12	To reduce air pollution and ensure air quality continues to improve.	?	0	0	?	0	0	√	√	?	√
13	To minimise noise pollution, especially around land use interfaces.	?	0	√	?	?	?	?	√	?	√
14	To improve health, reduce health inequalities and promote healthy living.	√	√	√	0	√	√	√	√	√	√
15	To strengthen and sustain resilient local economy.	0	0	0	√	√	√	0	0	0	√
16	To ensure local people have access to satisfying opportunities for employment and occupation.	?	0	0	√	√	√	0	0	√	√
17	To help create and sustain safe, vibrant and cohesive communities.	√	√	√	0	√	√	√	0	√	√
		<p>1. Deliver an Urban Eco Settlement of over 3000 new homes within the AAP boundary by 2028.</p> <p>2. Promote the effective use of land by delivering at least 60% of new housing development within the AAP area on previously developed land.</p> <p>3. Provide a range of well designed high quality dwellings built to high environmental standards, to cater for current need and future housing growth in the City of Bradford.</p> <p>4. Promote and support a successful growing economy by enhancing established industrial areas and providing a wide range of high quality employment opportunities; including new business development in existing industrial areas and town centre uses in Shipley.</p> <p>5. Support and enhance the vitality and viability of the city and town centres of Bradford and Shipley as thriving places for shopping, leisure, tourism and business.</p> <p>6. Enhance Shipley and improve links between the town centre, Sالتايرة, Shipley station and the Leeds Liverpool Canal, through new mixed use development, enhancements to the public realm and encouraging leisure and tourist developments, whilst respecting the 'outstanding and universal value' of the UNESCO World Heritage status of Sالتايرة.</p> <p>7. Protect and enhance biodiversity and green infrastructure by establishing and protecting ecological networks and establishing a linear park; consisting of a chain of green spaces and natural environments linked to the Bradford Beck and Canal Road Greenway.</p> <p>8. Reduce the impact of climate change through mitigation and adaptation, particularly through reducing pollution and managing the risk of flooding along the Corridor, including from the Bradford Beck, and using opportunities provided by new development to maximise renewable energy generation and energy efficiency.</p> <p>9. Maintain and improve Canal Road as a key strategic transport link and promote sustainable transport options by developing critical road and public transport infrastructure including; improvements to Shipley and Frizinghall train stations, developing public transport opportunities and creating safe and attractive cycle and pedestrian routes linked to the Linear Park and Bradford Canal Greenway, connecting Shipley and Bradford.</p> <p>10. Enhance resident's health and education outcomes through improved access to good quality homes, jobs, high quality open space, recreation and community facilities and managing air quality along the Corridor, particularly in identified Air Quality Management Areas.</p>									
√- Objectives compatible		X – Objectives incompatible									
0 – No Significant link		? – Dependent on policy implementation									

3.2 Development Options of SCRC AAP

The SA process is based upon a consideration of different options. Options can be described as the range of realistic choices open to plan makers to deliver the plan objectives.

The need to consider options stems partly from the requirements of the SEA Directive which requires the assessment of 'reasonable alternatives' taking into account the plan objectives and also the geographical scope of the plan.

The OPDM guidance² further advises that:

"In preparing a DPD, a large number of options may be generated...The options need to be compared with each other and with the current social, environmental and economic characteristics of the area which is subject to the DPD and the likely future situation without the DPD. In doing so they need to be tested against the SA framework."

The guidance is also clear that it is not the role of the SA to determine the option(s) to be chosen as a basis for the preferred option and the draft plan. Instead, the role of the SA is to assist with the identification of the appropriate options by highlighting the sustainability implications of each, and by putting forward recommendations for improvement.

Based on the range of issues identified and considering the need as well as the potential of the area to meet the overall growth aspirations this initial SA has looked into two development options for the SCRC area. They are:

Option A: Do nothing/Do minimum

This option represents a continuation of current trends and does not propose any major council-led proposals. This means the option promotes the policies and proposals in the current rUDP relating to the SCRC area. In many ways this involves a number of measures aimed at facilitating the regeneration of SCRC that may result in economic and indirect social benefits but primarily it aims to consolidate the existing land uses. Emphasis is placed upon protection of the existing employment areas, phased development of housing on allocated sites, protection and enhancements of sites of landscape or wildlife interest that include local wildlife areas, allotments and Saltaire World Heritage Site Buffer Zone, and creation of new recreation open space and playing fields. There are no specific allocations for large-scale residential development or any leisure or community uses. However, rUDP policies and proposals relating Shipley Town Centre encourages retail-led development and regeneration of the area including city living, office use and leisure facilities. The Valley Road Retail Area also falls within the southern boundary of the SCRC AAP area which promotes mixed use developments including retail, residential and leisure. Overall this option represents a plan that sets out a framework to consider proposals for development, rather than providing a blueprint for long-term spatial change.

² [Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents \(ODPM, November 2005\)](#)

Option B- Emerging Development Option

This option builds on the strategic vision and growth aspirations as outlined for the SCRC in the emerging Core Strategy. The Core Strategy has identified SCRC as an area of significant economic and housing growth by 2028 which will be supported by improved and necessary physical, green and social infrastructure provisions required to deliver sustainable development. This option identifies three broad areas of opportunities across the SCRC. The areas are: Shipley, The Centre Section and City Fringe. The proposals outlined within these opportunity areas have also been informed by a range of other evidence bases including the emerging Strategic Development Framework, New Bolton Woods Masterplan other relevant masterplans and strategies.

The emerging development option identifies a variety of new land uses including large areas for open and civic spaces, residential development, leisure and business uses as well as new community uses, transport improvements and other mixed use development. This approach also identifies critical infrastructure requirements and delivery options to support the planned growth. The key purpose of this emerging development option is to identify strategic projects and spatial development options which will help deliver the overall Core Strategy vision for the SCRC.

At this stage the emerging development options are shown as broad areas. Detailed boundaries will be identified at the next stage of the AAP, the Preferred Approach.

3.3 Sustainability Appraisal of SCRC AAP Options

The appraisal was a qualitative exercise based on the professional judgement of the officers at the Council, taking into account the information gathered in the scoping stage of the SA and comments made by the Statutory Consultation Bodies and other relevant stakeholders.

The summary table D below appraises the two development options and highlight the different sustainability implications of each, so that a comparison can be made. The options are tested against the SA framework in terms of their short, medium and long term impacts towards achieving the SA objectives. The comments section summarises the likely social, environmental and economic effects of implementing the options and any considerations that may need to be taken into account during implementations.

Existing SA guidance recognises that the most familiar form of SA prediction and evaluation is generally broad-brush and qualitative. It is recognised that quantitative predictions are not always practicable and broad-based and qualitative predictions can be equally valid and appropriate. Examples of the prediction and evaluation techniques for assessing significance of effects are expert judgement, dialogue with stakeholders and public participation, geographical information systems, reference to legislation and regulations and environmental capacity. Many of these techniques have been employed in this sieving assessment.

Table D: Initial SA of SCRC AAP Options

SA objectives	Effects predicted							Comments
	Option A			Option B				
	Short	Medium	Long	Short	Medium	Long		
1. To reduce the need for travel and promote sustainable modes of travel by improving transport choice.	0	0	?	+	+	?	<p>Both options aim at maximising existing highways and public transport infrastructure by enhancing cycling and walking networks, improving accessibility to and from surrounding areas while ensuring Canal Road maintains its function as a key strategic transport corridor. Option B particularly targets enhancing links between sustainable transport modes and establishing improved and greater role of the existing train stations to cater for increased demand. This potentially would reduce traffic volumes and improve air quality as there would be fewer individual vehicles on the road network. Benefits assumed to increase over time as movement by public transport improve and other complimentary policies/proposals on sustainable travel are implemented. However increase in the housing numbers and resident population together with increased potentials for new employment opportunities could inevitably increase the risk of adverse environmental impact of traffic in the area in the medium to long term.</p> <p>An overall Transport Assessment of the Corridor will need to be undertaken to ensure new development can be accommodated without causing significant socio-economic and environmental adverse impact on the Corridor. Improvements to public transport services need to work in conjunction with policies/proposals encouraging walking and cycling that would result in a reduction in car use. Policies and site allocations should encourage complimentary land uses so that sustainable linkages particularly by walking and cycling between land uses is maximised. Specific policy regarding environmental protection and enhancement along transport corridor would strengthen sustainability objectives. However, a balance should be achieved so not to deter investment.</p>	
2. To improve the quality, range and accessibility of community services and facilities.	?	+	+	+	++	++	<p>Both options aim at improving access to community facilities. Option A particularly plans for the protection of recreation open space, playing fields, allotments and creation of new open space provisions for future. However, this option falls short of comprehensively identifying any need or sites for potential community facilities requirements. Option B on the other hand provides opportunities for new and extended provisions for community facilities with improved accessibility and a catalyst to attract investment in housing and employment sector. It would also reduce extended journeys and encourage sustainable travel modes. Residential development at higher densities would also help create vitality and generate the 'critical mass' required to sustain local services and amenities.</p> <p>Increased services and facilities will increase demand within and from outside the SCRC area and thereby would potentially increase localised traffic movement and safety issue. So disruption to journey time, safety could become a problem.</p> <p>The plan policies/proposals need to ensure the most sustainable location for community facilities. Future developments will need to meet the accessibility standards in the core strategy and help to provide the basis for improved transport services including local bus services and enhanced connections to the nearest rail station.</p>	
3. To encourage urban regeneration by improving efficiency in land use, design, construction technique and layout.	?	?	?	?	+	+	<p>Both options depend on development/redevelopment of various scales that would require high quality design, efficient use of land, construction techniques and materials. Policies and site allocations should encourage complimentary land uses</p>	

SA objectives	Effects predicted							Comments
	Option A		Option B			Long		
	Short	Medium	Long	Short	Medium			
								and innovative designs whilst creating a diverse and attractive area with high density, permeable, energy efficient and environmentally resilient development. Option B particularly would seek to deliver new housing with Eco-town Standards where feasible and/or viable. Construction should aim to follow best practice environmentally and source material locally. The AAP will also need to be flexible enough to address any issues which may arise on a site by site basis. However, it will be important that a strong design ethos is embedded throughout the AAP to ensure the SCRC develops as a functional and legible area and is able to develop its own unique character and sense of place in the future.
								Considering the issues in relation to the projected local population growth and housing affordability it will be important to ensure increased number of housings with appropriate size, mixes and tenure are available within SCRC area. This is one of the central aims of option B as opposed to option A which offers relatively limited housing development opportunities on the designated rUDP housing sites. Option B contains specific PDL and affordable housing target. However, early investigations have indicated that the sites which could generate the majority of new homes are potentially suitable with constraints. These constraints include flood risk and current planning policy protection (e.g. open space). This means they are not available in the short term and further work is required to identify and test deliverable sites. This will also potentially require land currently allocated for other uses to be reallocated for residential use through the Development Plan process. This will be subject to and informed by a full Sustainability Assessment to ensure the most appropriate and sustainable sites are allocated. The option commits to significantly improve housing stock, however the UK's current economic climate could be considered to be a barrier to sustained investment and therefore benefits may take longer to arise.
4. To meet local housing needs by providing everyone with the opportunity to live in a decent affordable home	?	?	X	?	+	++		
								Both options aim at enhancing the use and vitality of the archaeological and historical sites, buildings and other related elements present within and adjacent to the SCRC area. Overall, effects assumed to be neutral as spatial policies relating to protected sites and designated areas would protect against inappropriate development. The buffer zone for the Saltaire World Heritage Site extends into Shipley and covers the northern part of the AAP area. Option A allows development in the buffer zone only when they are unlikely to adversely affect views in out of the WHS and supported by suitable programme of mitigation. Option B seeks to maintain the buffer zone, incorporate the WHS Management Plan into the AAP and make it a material consideration to guide relevant development in the area.
5. To protect, enhance and manage sites, features, areas and landscapes of archaeological, historical and cultural importance and their settings.	?	?	?	?	?	?		There are designated SEGI and BWAs within SCRC and currently strict conditions are in place to allow any development that could adversely affect the sensitivity and importance of such areas. There are also a number of areas of open land which, in addition to having an intrinsic ecological/biodiversity importance, contribute significantly to the quality of life and to the attractive environment in which people in SCRC live and work. It is therefore important to ensure that development in the SCRC contributes towards the enhancement of these environments. Option A i.e. current rUDP approach has this principle embedded in its policies and incorporates landscape and wildlife enhancement schemes as an integral part of any development. It is therefore unlikely that the option would lead to any significant effects on biodiversity resources as no large changes are proposed. However, this would be assessed on a case by case basis as and when new development opportunities come forward.
6. To protect, enhance and, where necessary restore, existing biodiversity and natural habitats, and create new wildlife habitats including by establishing coherent ecological networks.	+	+	?	?	?	+		

SA objectives	Effects predicted							Comments
	Option A		Option B			Long		
	Short	Medium	Long	Short	Medium			
								Option B carries the principles of Option A forward and proposes schemes and measures (e.g. target for development on PDL, incorporation of SUDS in new developments, the linear park along canal corridor, improving Beck's water quality and creating a natural wetland area) that would provide significantly improved opportunity for habitats improvement and connection across SCRC. This option therefore would give the Council more control over design and locations of development which could encourage biodiversity enhancements. However, some of the proposed developments under Option B are to be located on greenspace or undeveloped green areas which would affect biodiversity and potentially could endanger certain habitats and/or species.
								Within the SCRC there are a number of recreation open space, playing fields and general areas of green open land. These sites contribute significantly to the quality of life and to the attractive environment in which people in SCRC live and work. It is therefore important to ensure that development in the SCRC contributes towards the enhancement of these environments. Under Option A the above open spaces and playing fields are protected from improper developments. There are also designated areas to create new open space provisions to cater for future demand and requirements. One of the key elements of Option B is also to ensure that green infrastructure is given a high status in the emerging Plan. However, given the scale of development proposed it is likely that there will need to be some development on areas which are currently identified as open space. This provides opportunities to rationalise these protected lands for new and improved facilities to benefit the wider community which may mean the reduction in area but with additional and improved areas located within the AAP area. It will also maximise opportunities to ensure sustainable linkages between different land uses.
7. To protect, maintain and enhance the quality of open spaces and ensure effective access to open space.	+	+	?	+	?	?		
								Both options put importance on improving soil and water quality along the corridor. Redevelopment/ refurbishment provide an opportunity to improve drainage/water conservation. Recycling of grey water and SUD's systems if applied will improve water quality in the area and in turn reduce the impact on groundwater resources. Option B particularly aims at improving the water quality of Bradford Beck in the long term which would also benefit healthy living as well as habitat restoration.
8. To maintain and improve soil and water quality.	?	?	?	?	?	?		Improved/expanded open space and woodland is likely to improve air quality. However increased residential development and resulting population growth will increase water consumption and the extra traffic movement will lead to increased risk of air pollution. Disruption of soil resources/land quality is also likely during major constructions.
								The issue relating to flood risk needs to be dealt with at a strategic level to maximise development potential while reducing flood risk. Overall approach to identify location of development will need to be informed by a district-wide Strategic Flood Risk Assessment. However at local level, both development options aim to steer future developments away from areas at highest risk of flooding within the SCRC. Sequential approach is key to deciding any development on land at risk of any level of flooding. Water compatible development (e.g. public open space), SUDS, energy efficient and flood resilient construction techniques etc are encouraged in both options. Improvement to Bradford Beck is seen as a long term ambition particularly by Option B to reduce
9. To reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the environment	++	++	?	+	?	?		

SA objectives	Effects predicted							Comments
	Option A			Option B				
	Short	Medium	Long	Short	Medium	Long		
								flood risk by creating additional flood storage and providing water retaining landscaping along its route. However, given the scale of development proposed it is likely that there will need to be some development on areas which are currently identified as open space. This would reduce the amount of natural flood water retention areas in the corridor.
10. To reduce waste generation and disposal, and achieve the sustainable management of waste.	?	?	?	+	+	+		Both options depend on development/redevelopment of various scales that would require high quality design, efficient use of land, construction techniques and materials. Construction should follow best practice environmentally and source material locally. Disposal of construction/demolition waste also an issue over the short to long term. Population increase will compound waste issues for SCRC unless design, planning and waste regulations provide innovative solutions. Compliance of new/refurbished housing to Code for Sustainable Homes will meet the objectives as the Code requires provisions to be made for recycling and storage. Option B seeks to deliver Eco Town PPS standards for the Corridor which include standards for achieving zero carbon development, climate change adaptation, housing design, healthy lifestyles, biodiversity and green infrastructure.
11. To ensure resilience to the effects of climate change through mitigation and effective adaptation.	?	?	?	?	+	+		Increased residential and employment development together with increased travel needs and traffic movement will lead to pressures in terms of increased energy consumption and pollution. Better design principles, improved technologies and careful spatial distribution of services will contribute to tackle the climate change issue. Compliance of new/refurbished housing to Code for Sustainable Homes will help meet the objectives as the Code requires provisions to be made for sustainable waste management and energy efficiency. Option B in particular seeks to deliver Eco Town PPS standards for the Corridor which include standards for achieving zero carbon development, climate change adaptation, housing design, healthy lifestyles, biodiversity and green infrastructure.
12. To reduce air pollution and ensure air quality continues to improve.	0	?	?	0	?	?		There are 2 AQMAs in close proximity to the SCRC. Any proposals that could potentially increase the level of traffic moving through these AQMAs would need specific consideration as to the potential impact on air quality in these areas, which are already highly sensitive. Introducing new residential development into areas of poor quality could lead to more AQMAs being designated. Therefore, air quality is a key consideration in both Options to locate and manage future development.
13. To minimise noise pollution, especially around land use interfaces.	0	0	?	0	+	+		Both options depend on mixed use development/redevelopment of various scales that may create potential conflict between residential and any commercial activity associated with noise nuisance issues. An important issue with the options is that should the mixed-use development involve increased evening / night time activity, particularly in Shipley Town Centre, there may be further potential issue related to noise. Potential noise related issue could also arise from increased traffic movement and commercial activities. Potential noise issues can be addressed through design and where necessary, mitigation, e.g. screening, tree planting etc. Significant improvements to the cycling and walking network, greater accessibility to services would also encourage sustainable travel choices.
14. To improve health, reduce health inequalities and promote healthy living.	0	+	?	?	+	+		General health of residents will improve by improvements to the area in both options. But option B particularly has proposals to enhance the quality of the open

SA objectives	Effects predicted						Comments
	Option A		Option B		Long	Long	
	Short	Medium	Long	Short			
							space, water and playing facilities within the area that will increase outdoor activities. Increased mobility and ease of pedestrian/cycling through improved access to open and greenspace has beneficial health effects under all options. However, given the scale of development proposed it is likely that there will need to be some development on areas which are currently identified as open space which may mean the reduction in areas for recreational and other uses. But this also provides opportunities to rationalise these protected lands for new and improved facilities to benefit the wider community located within the AAP area. Option B will also seek to maximise opportunities to ensure sustainable linkages between different land uses meaning reduction in travel time, pollution and increased opportunities for walking and cycling. There would however be a potential negative health impacts, particularly on the elderly and young due to disruption and displacement during construction.
							Option A welcomes investment into SCRC and commits to securing beneficial development particularly within the designated employment areas. This intends to benefit the local economy and improve deprivation. New development can bring about new jobs, improve wage levels and raise aspirations. However, this option does not go very far to bring about significant change and this itself could be viewed as a turn-off to investors. In addition, the current economic climate could make economic change even slower. Retail units in Shipley Town Centre currently command low rents with a low return. Significant improvements to the town centre could lead to improved investment from the private sector and improve returns over the long term. Consideration could also be included within the option to improve links with the wider area (including other regional cities and towns). Improvements proposed as part of Option B provide a direction which would help overcome initial inertia. Over the long term this could lead to an increase in economic activity and eventually SCRC becoming a more attractive place that private developers want to invest in and increase local business confidence. New development would lead to an increased job offer and could raise aspirations within SCRC along with reducing deprivation levels. This option also gives the Council more control over the types of business to meet local employment needs and achieve a sustainable economy. However, the UK's current economic climate could be considered to be a barrier for both options and therefore benefits may not be realised or take longer to arise. The two options also indicate certain degree of developer-led approach to development in SCRC which may lead to piece meal development and a concentration of undesirable business. In the long-term this may undermine overall regeneration effects. However, both options could include a new 'spearhead' development within the action plan area which could help encourage investment in the SCRC and raise local confidence.
15. To strengthen and sustain resilient local economy.	0	?	?	?	+	++	
16. To ensure local people have access to satisfying opportunities for employment and occupation.	0	0	?	+	+	+	Increased employment opportunities through continued support for business, industrial and other commercial activities along with future residential development are central to both options. Mixed use development as well as

SA objectives	Effects predicted						Comments
	Option A		Option B		Long	Long	
	Short	Medium	Short	Medium			
17. To help create and sustain safe, vibrant and cohesive communities.	0	0	?	0	?	+	<p>residential development at higher densities would also help create vitality and generate the 'critical mass' required to provide opportunities for employment and sustain local economy.</p> <p>Unlike Option B, Option A does not go far enough to plan comprehensively for thriving local communities, ensure strong economic drivers and encourage economic inclusion. In the long term, the economy and local businesses may realise few benefits, but the option carries considerable uncertainty.</p> <p>Option B further promotes a comprehensive approach to ensure improved pedestrian/cyclist/access routes within SCRC encouraging and making it easier for people to use local facilities/services and thus supporting the local economy.</p> <p>Crime and anti social behaviour can be actively tackled through good planning and design. Improvements to open space, streetscape and transport network, as identified under both option A and option B, are all likely to reduce and discourage crime in the area. The options could go further to design out opportunities for crime through improving street legibility and connectivity and adopting specific Urban Design policies with regard to the layout of new developments.</p> <p>Providing opportunities for young people both indoor and outdoor will have further beneficial effects. Continuing local pride/sense of community can also control crime and anti-social behaviour. In addition, a larger residential populace within SCRC with its own identity, services, facilities and socio-economic opportunities may contribute to making a more coherent and cohesive community.</p>

Keys:

- ++ Strong and significant beneficial impact
- + Potentially significant beneficial impact
- X Potentially significant adverse impact
- xx Strong and significant adverse impact
- 0 Neutral impacts i.e. benefits and drawbacks appear equal and effects are considered insignificant
- ? Uncertain impacts i.e. information available is insufficient to determine effects at this stage

4.0 : Proposals for Monitoring

It is important that the plan is monitored to keep track of whether it is working in the way it should. This report has identified indicators that should be used to monitor the area action plan. The most appropriate way to monitor the area action plan is through the Local Plan Annual Monitoring Report (AMR). The AMR monitors the type of development that is occurring as a result of all of the council's planning policies and guidance and what effects this development is having in terms of sustainability. Where new indicators have been identified, through the SA process, these will be added to the AMR. At the next stage of consultation, the AAP will set out a monitoring framework to ensure new development meets the objectives of the plan. These indicators will be added to our AMR once the AAP is adopted.

5.0 : Next Step

The Sustainability Appraisal process is one which gradually builds up information and assessments, resulting in the preparation of a Final Report. The Final Report will set out the baseline position and the sustainability framework, assess the preferred option, finalise the indicators, and ultimately decide on the mitigation measures and monitoring process.

The findings of this Initial SA will be used to influence the development and early analysis of the preferred option and to determine its likely performance in sustainability terms. This will help refine the option and assess the effects of emerging AAP policies and proposals.

The completing task of this Initial SA stage involves consultation on the findings of the Sustainability Appraisal. The Council will consult on this Initial SA during early 2013. The purpose of this consultation is to ensure that the sustainability framework that is developed within this report is appropriate, all key sustainability issues for the SCRC are identified and all the significant effects of the AAP are duly considered.

In addition to the required statutory consultees, this initial SA report will also be made available to key stakeholders and organisations for their comments and suggestions. Following consultation, responses will be considered and appropriate changes will be made before the full SA is carried out.

Appendices

Appendix 1: Consultation Responses on SA Scoping

Appendix 2: SA Objectives Compatibility Matrix

Appendix 1: Consultation Responses on SA Scoping

See Attachment

Appendix 2: Compatibility Testing of Sustainability Appraisal Objectives

Draft SA Objectives	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 To reduce the need for travel and promote sustainable modes of travel by improving transport choice.																	
2 To improve the quality, range and accessibility of community services and facilities.	√																
3 To encourage urban regeneration by improving efficiency in land use, design, construction technique and layout.	0	√															
4 To meet local housing needs by providing everyone with the opportunity to live in a decent affordable home	√	0	√														
5 To Protect, enhance and manage sites, features, areas and landscapes of archaeological, historical and cultural importance and their settings.	√	√	√	?													
6 To protect, enhance and, where necessary restore, existing biodiversity and natural habitats, and create new wildlife habitats including by establishing coherent ecological networks.	√	?	√	X	√												
7 To protect, maintain and enhance the quality of open spaces and ensure effective access to open space.	√	0	√	?	√	√											
8 To maintain and improve soil and water quality.	0	0	?	0	√	√	√										
9 To reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the environment	0	0	√	√	√	√	√	√									
10 To reduce waste generation and disposal, and achieve the sustainable management of waste.	0	0	0	0	√	√	√	0	0	0							
11 To ensure resilience to the effects of climate change through mitigation and effective adaptation.	√	√	√	√	0	√	√	√	√	√	√						
12 To reduce air pollution and ensure air quality continues to improve.	√	?	?	0	0	0	√	0	0	√	√						
13 To minimise noise pollution, especially around land use interfaces.	?	0	√	0	0	0	?	0	0	√	√	?					
14 To improve health, reduce health inequalities and promote healthy living.	√	√	0	√	0	√	√	√	√	√	√	√	√				
15 To strengthen and sustain resilient local economy.	√	√	0	√	√	0	0	0	0	√	X	0	0	√			
16 To ensure local people have access to satisfying opportunities for employment and occupation.	√	√	√	0	√	0	0	0	0	0	0	0	0	√			
17 To help create and sustain safe, vibrant and cohesive communities.	√	√	√	√	√	0	0	0	√	√	√	√	√	√	√	√	√

√ - Shows that Sustainability Objectives are Complementary
 X - Shows potential conflict between Sustainability Objectives
 0 - Shows a neutral relationship between Sustainability Objectives
 ? - Shows uncertainty over compatibility between Sustainability Objectives

