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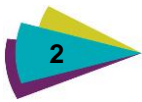
Shipley Canal Road Corridor Area Action Plan Submission Draft Report

Health Impact Assessment



April 2016

Amec Foster Wheeler Environment
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Report for

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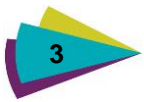
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Document revisions

No.	Details	Date
A	Draft Report	July 2015
B	Final Report	April 2016



Executive Summary

Purpose of this Report

This report has been produced for the purpose of undertaking a Health Impact Assessment of the Shipley Canal Road Corridor Area Action Plan (SCRC AAP) Submission Draft Report. It analyses the likely health impacts of the Preferred Approach document and outlines recommended measures to avoid or mitigate any identified adverse health impacts.

In the main the Submission Draft SCRC AAP Report should have positive health impacts. The vision, objectives and policies of the Submission Draft SCRC AAP Report will help to deliver a significant amount of new housing, raise wealth levels and living standards, promote and encourage use of sustainable modes of transport, deliver urban regeneration, protect the environment and improve access to the environment and open space. The health benefits of all these measures will be wide ranging.

Two potential adverse health impacts from the Submission Draft SCRC APP Report were identified for further assessment:

- ▶ Potential for adverse health impacts from an increase in vehicle emissions from the growth and highway improvements outlined for the Corridor; and
- ▶ An increase in demand for health care provision and facilities.

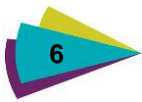
Following assessment of these two issues, mitigation measures were identified to help mitigate these adverse impacts. Four areas of mitigation have been outlined. The mitigation measures outlined will help to reduce and / or avoid potential harm to health that has been identified. This will therefore help to ensure that the Submission Draft SCRC AAP Report will take into consideration effects on human health and incorporate appropriate mitigation measures as necessary.





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1. Introduction

1.1 Shipley Canal Road Corridor Area Action Plan

The City of Bradford Metropolitan District Council (herein referred to as the Council) is currently in the process of preparing a Local Plan to guide future growth and development in the District in the period up to 2030 (see www.bradford.gov.uk/planning). This will replace the existing Replacement Unitary Development Plan for Bradford (RUDP), adopted in October 2005.

The Local Plan for the Bradford District will be made up of a collection of planning documents that will guide future growth and development for housing, employment, leisure and retail for the next 10-20 years. Two Area Action Plans (AAPs) are being produced as part of the Local Plan, one of which is for the Shipley Canal Road Corridor (SCRC) and the other for Bradford City Centre (BCC). These two AAPs will build upon the long term spatial vision for the District set out in the Core Strategy and address specific issues within each plan area.

The AAP for the SCRC will guide the transformation of the Corridor and facilitate the delivery of this key growth area identified in the Bradford District Core Strategy. There is a significant opportunity to recognise development potential of sites along the SCRC and to strengthen the role of Shipley as an important town centre, as well as protecting and enhancing the World Heritage Site of Saltaire. In consequence, the SCRC AAP will set out a detailed planning framework to direct future development and investment. It will allocate land for development, define areas which will be protected and identify the supporting infrastructure required to ensure delivery.

Following consultation on the Issues and Options for the SCRC, the Council prepared the SCRC AAP Publication Draft Report. Consultation on the SCRC AAP Publication Draft took place between December 2015 and February 2016 and the Council has now completed work on the SCRC AAP Submission Draft. The Submission Draft SCRC AAP Report sets out planning policies to guide development proposals in the Corridor, along with details of how these proposals will be delivered. It comprises of a vision, 11 strategic objectives, 29 planning policies and 28 site allocations.

1.2 Health Impact Assessment

What is Health Impact Assessment?

Health Impact Assessment (HIA) is a means of developing better, evidence-based policy by careful consideration of the impact of policies and or proposals on the health of the population. HIA uses a range of qualitative and quantitative evidence that includes socio-economic information, public health data, and public perceptions of health and wellbeing. It is particularly concerned with the distribution of effects within a population, as different groups are likely to be affected in different ways, and therefore looks at how health and social inequalities might be reduced or widened by a proposed plan or project.

The SCRC AAP, once adopted, will provide the planning policy framework for the growth of the Corridor and aims for *'an area of transformational change'* and that *'the Corridor has borne witness to the delivery of over 3000 new homes supported by business, retail, leisure and community facilities'*. Growth in the SCRC centre section would be centred on three main areas:

- ▶ Shipley;
- ▶ The Centre Section; and
- ▶ City Centre Fringe.

The AAP provides the planning objectives and policies to deliver a sustainable approach to the redevelopment of the Corridor. This includes the provision of new housing (including the creation of a new urban eco settlement), promotion of sustainable economic growth, policies to maximise the use of sustainable modes of transport, to preserve important cultural assets (in particular the World Heritage Site of



Saltaire), to protect the environment, to improve the design of the public realm and to promote access to green space. There are therefore, a number of policies where there could be effects on the health of the community. In consequence, this HIA considers the positive and negative health impacts of the Submission Draft SCRC AAP Report.

This report and HIA has been prepared by Amec Foster Wheeler Environment and Infrastructure UK Limited (Amec Foster Wheeler) working in conjunction with City of Bradford Metropolitan District Council. It has been undertaken with reference to the 2010 Department of Health guidance on HIA¹.

Health Impact Assessment and Spatial Planning

There is an important link between the planning process (both plan making and the implementation of plans) and health. The way that places are planned, developed and can change impacts on the health and wellbeing of the communities that live in them. Consequently, it is important to assess the Submission Draft SCRC AAP Report to identify how health and wellbeing benefits can be maximised and any potential negative impacts can be minimised.

The importance of planning to health is highlighted in the National Planning Policy Framework (NPPF) and the National Planning Practice Guidance (NPPG). The range of issues to be considered within this HIA includes:

- ▶ How the Submission Draft SCRC AAP Report's policies promote health, social and cultural wellbeing and support the reduction of health inequalities;
- ▶ The healthcare implications of all the new development proposed for the SCRC, both in terms of demand on existing healthcare facilities and for potential new healthcare provision;
- ▶ The health impacts of an increase in traffic generation associated with the new development proposed and from the highway improvements outlined;
- ▶ Whether access to the whole for the whole community, whether able bodied or otherwise has been promoted;
- ▶ Whether or not the Submission Draft SCRC AAP Report's policies have created opportunities for meetings between members of the community who might not otherwise come into contact with each other, including through mixed-use developments, strong neighbourhood centres and active street frontages which bring together those who work, live and play in the vicinity; and
- ▶ Whether or not the Submission Draft SCRC AAP Report's policies will create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas.

The HIA therefore aims to influence this policy direction in order to enhance the health and wellbeing of Shipley Canal Road Corridor communities and to reduce any health inequalities that may arise or be exacerbated as a result of the AAP's Preferred Approach.

Purpose of this Report

The purpose of this HIA report is to

- ▶ Present relevant community health profile information, including a review of plans and programmes to provide sufficient context for the assessment;

¹ Department of Health (2010) Health Impact Assessment of Government Policy: A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process. Available here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf



- ▶ Identify, describe and assess the likely significant health effects associated with the Submission Draft SCRC AAP Report; and
- ▶ Provide recommendations to ensure that the policies in the Submission Draft SCRC AAP Report where possible, actively promote health gain for the local population, reduce health inequalities and do not actively damage health.

The report will further help the Council and other responsible agencies respond to identified health inequalities, particularly targeting disadvantaged and marginalised groups, to encourage the full participation of those likely to be affected by the plan and promote partnership working with other health focused agencies within the District.

1.3 Relationship of HIA with Other Assessments of the Submission Draft Shipley Canal Road Corridor Area Action Plan

There are a number of other assessments being undertaken in support of the Submission Draft SCRC AAP Report, including:

- ▶ Ecological Appraisal;
- ▶ Green Infrastructure Study;
- ▶ Level 2 Strategic Flood Risk Assessment;
- ▶ Transport Study;
- ▶ Growth Assessment;
- ▶ SCRC AAP Infrastructure Delivery Plan; and
- ▶ Masterplans and Strategic Development Frameworks for key sites and development areas.

These assessments will all help to provide the supporting evidence base for the SCRC AAP to ensure that the policies and sites allocated for development have been based on sound evidence based choices. The SCRC AAP will build upon the policies in the overarching Core Strategy, which sets out the development framework for the whole of Bradford.

A Sustainability Appraisal (SA) of the Submission Draft SCRC AAP Report has been undertaken and this includes a number of SA appraisal objectives relevant to health, including:

- ▶ To improve the quality, range and accessibility of community services and facilities;
- ▶ To protect, maintain and enhance areas of open space and ensure effective access to open space;
- ▶ To reduce the risk of flooding and the resulting detriment to public wellbeing;
- ▶ To reduce air pollution and ensure air quality continues to improve;
- ▶ To improve health, reduce health and inequalities and promote healthy living; and
- ▶ To help create and sustain safe, vibrant and cohesive communities.

A HIA has also been undertaken of the Core Strategy. This was undertaken for the Core Strategy Further Engagement Draft and has been considered here as part of the preparation of the HIA of the Submission Draft SCRC AAP Report.

1.4 Report Contents

This HIA Report is structured as follows:

- ▶ **Executive Summary** - Provides a summary of the HIA Report, including information on both the Submission Draft SCRC AAP Report and the resulting assessment;
- ▶ **Section 1: Introduction** - Includes a summary of the Submission Draft SCRC AAP Report, an overview of HIA, an outline of the report contents and details of how to respond to the consultation;
- ▶ **Section 2: HIA Methodology** - Provides an outline of the approach to the assessment, including a summary of the stages, the assumptions used, and any technical difficulties encountered in completing the assessment;
- ▶ **Section 3: SCRC AAP** – Provides an overview of the AAP;
- ▶ **Section 4: Context and Baseline** - Provides details of a review of the relevant health plans and policies and the baseline conditions and summarises the key issues relevant to the assessment of the SCRC AAP;
- ▶ **Section 5: Screening of strategic objectives**;
- ▶ **Section 6: Scoping of Impacts** - Outlines the range of health impacts likely to arise from the implementation of the Submission Draft SCRC AAP Report;
- ▶ **Section 7: Assessment of Major Impacts** – Assesses the major health impacts of the policies and proposals of the Submission Draft SCRC AAP Report and the extent to which any positive impacts can be improved and any negative impacts avoided; and
- ▶ **Section 8: Conclusions and Key Findings** - Summarises the main impacts and presents views on implementation and monitoring.

2. The Health Impact Assessment Process

2.1 Overview

In completing the HIA, the following stages have been undertaken, consistent with the Government guidance²:

- ▶ Establish the policy context and gather relevant baseline information;
- ▶ Screening;
- ▶ Scoping;
- ▶ Assessment; and
- ▶ Recommendations and proposals for monitoring.

These are detailed in **Section 2.2**.

2.2 Health Impact Assessment Stages

Overview of HIA process

The first part of this report sets out some background to the Submission Draft SCRC AAP Report. The policy context and relevant baseline information are then set out to provide context for this HIA. The Submission Draft SCRC AAP Report is then screened to determine if there are likely to be any health impacts. Detailed assessment of the AAP is then carried out and any recommendations outlined to mitigate any potential adverse health impacts identified.

Policy Context and Gather Baseline Information

Public health plans and policies relevant to the HIA have been reviewed to ensure that policy objectives and aims relevant to the SCRC AAP and HIA, and any identified communities or sectors of the community within the SCRC, are included within the assessment. Relevant information relating to demographic and health characteristics has also been gathered and presented for the AAP area. Collectively, the policy review and baseline information provide the contextual information necessary to inform the assessment.

Screening

The AAP aims to provide policies and development proposals that ensure that the Shipley Canal Road Corridor becomes an area of extensive transformational change, providing over 3,000 new homes, many of which are located in an exemplar Urban Eco Settlement, supported by new businesses, retail, leisure and community facilities. These include sustainable new neighbourhoods connected by a Linear Park that includes a revitalised Bradford Beck and Canal Road Greenway. This will have a range of community health benefits from employment and improved housing, and potentially other effects from increased traffic congestion, and so the Submission Draft SCRC AAP Report has been screened into the HIA process. More detailed HIA screening has subsequently been undertaken of the Submission Draft SCRC AAP Report to determine whether it is necessary to proceed towards a more comprehensive assessment. To complete the screening, the 11 strategic objectives have been assessed against the following key questions (as used in the HIA of the Core Strategy) to determine the overall relationship between the AAP and health impacts and outcomes:

² Department of Health (2010) Health Impact Assessment of Government Policy: A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process. Available here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

- ▶ Will the Strategic Objective have a direct or indirect impact on health of the various communities? (covering the Government guidance screening questions 1 and 2 and the Public Health Outcomes Framework, see **Section 4** for more details);
- ▶ Is the Strategic Objective likely to reduce health inequalities? (covering the Marmot Review and the Joint Health and Wellbeing Strategy, see **Section 4** for more details); and
- ▶ Will there be a change in demand for and/or access to health and social care services? (covering the Government guidance screening questions 5 and the Rainbow Model, see **Section 4** for more details).

The results of the screening process, including a brief explanation of any evidence and advice used to make the judgements contained therein, are presented in **Section 5**.

Scoping

The HIA screening confirmed that the Submission Draft SCRC AAP Report should be subject to further assessment stages of the HIA. Scoping identifies the range of health impacts that could arise from the Submission Draft SCRC AAP Report policies, drawing on the relevant scientific evidence from past HIAs and other literature. The potential impact of each policy has been scored using a traffic lights matrix against the following key receptors (identified in the Government guidance, and considered relevant from an analysis of the baseline):

- ▶ Children & Young (0 yr – 18yrs);
- ▶ Older People (65+ years);
- ▶ People with physical or mental impairments;
- ▶ Minority Ethnic;
- ▶ Low Income; and
- ▶ Refugees & Travellers.

Commentary has been provided for each policy. The results of the scoping are presented in section 6 of this report.

Those aspects of the policies identified as having potentially adverse effects on receptors or likely to have major impacts on health outcomes have been taken forward for further consideration in the assessment.

Additionally, the compatibility of the proposed SCRC AAP policies in relation to the 18 key priorities of the JHWS and Health Inequality Action Plan have been assessed to analyse how well, or otherwise, the AAP policies complement the aims of the JHWS and Health Inequality Action Plan.

Assessment

For those health impacts identified during scoping that are considered significant, further more detailed assessment has been completed. This draws on the community profile information as appropriate, however remains predominately qualitative, commensurate with the detail in the policies that have been assessed.

Summary

In summary, the screening, scoping and assessment tasks that have been completed are as follows:

- ▶ The public health plans and policies relevant to the HIA have been reviewed (**Section 4**);
- ▶ A summary of health and wellbeing and a community profile for the Shipley Canal Road Corridor has been compiled (**Section 4**);
- ▶ The Submission Draft SCRC AAP Report objectives have been screened to determine whether further assessment is required based on the relationships between objectives and key questions identified (**Section 5**);

- ▶ The range and scope of health impacts that could arise from the Submission Draft SRCR AAP Report have been considered, drawing on the relevant scientific evidence from past HIAs and other literature (**Section 6**);
- ▶ The potential impacts of the Submission Draft SCRC AAP Report on health and wellbeing have been assessed and those impacts that could have important health outcomes for the planned new communities and the adjacent existing communities in the area have been determined (**Section 7**);
- ▶ The potential differential distribution effects of health impacts among groups within the population have been determined by asking ‘who is affected?’ for the impacts identified (**Section 7**);
- ▶ Recommendations that aim to minimise any potential negative health impacts and maximise potential positive health impacts have been identified, referencing where possible the most affected vulnerable group(s) (**Section 8**); and
- ▶ Health and wellbeing indicators have been proposed that can be used to monitor the implementation and operation of the SCRC AAP (**Section 8**).

The overall approach to completing the HIA has been informed by Government guidance³ and by referencing to emerging practice⁴. The stages reflect terminology and interpretations provided by the Government guidance.

2.3 Assessment Details

Study Area

The geographic scope of this HIA was the area covered by the SCRC AAP Preferred Approach (see **Section 3** and **Figure 3.1**).

Study Population

The study population included within this HIA relates to the Shipley and Canal Road Corridor AAP boundary, as shown in **Figure 3.1**. Further contextual information is provided with reference to the wider Bradford City population and national performance for key indicators. A community profile is provided in section 4.3.

The principal key receptors considered by the assessment are:

- ▶ Children & Young (0 yr – 18yrs);
- ▶ Older People (65+ years);
- ▶ People with physical or mental impairments;
- ▶ Minority Ethnic;
- ▶ Low Income; and
- ▶ Refugees & Travellers.

When the HIA was Undertaken and by Whom

This HIA has been undertaken by consultants from Amec Foster Wheeler working in conjunction with officers from the City of Bradford Metropolitan District Council Development Plan Team through 2015.

³ Department of Health (2010) Health Impact Assessment of Government Policy: A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process. Available here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216009/dh_120110.pdf

⁴ Public Health England. HIA Gateway. Available here: http://www.apho.org.uk/default.aspx?QN=P_HIA

2.4 Technical Difficulties

The HIA process is relatively new, particular in the context of spatial planning but the ideas underlying it are not. Its use in decision making settings is rapidly increasing. Specific methodologies for the implementation of HIA are still being developed and there are no specific or well defined guidelines for practitioners in local plan preparation. Although the methodology is not prescribed, it is informed by international best practice and the focus is determined by the nature of the policy, plan, programme, project or development which is being assessed.

Uncertainties and Assumptions

This HIA has been undertaken based on several uncertainties and assumptions, as detailed below:

Uncertainties

- ▶ Whilst there is substantial detail in the Submission Draft SCRC AAP Report about the amount of development proposed and the expected development for the site allocations, there is still some uncertainty around the exact timing of when development will occur (and the health impacts of this) given that the Submission Draft SCRC AAP Report is forward looking until 2030.

Assumptions

- ▶ As part of the assessment of the health impacts of the policies there have been some assumptions made around car use. For example, where highway improvements are made that there would be a resultant increase in car and HGV use and an increase in vehicle emissions, with subsequent adverse health impacts (notwithstanding other policies in the plan promoting use of sustainable transport options) associated with such impacts;
- ▶ The assumed levels of housing and economic development proposed for the SCRC are consistent with current needs, and that present challenges in achieving sustained economic recovery have not affected assessment of need;
- ▶ It is assumed that the percentage of affordable housing identified in AAP policy SCRC/H2 and Core Strategy HO11 will be delivered (we do note that there are recent changes in government policy that allow for greater discussion with developers on viability which may lower the overall % figure on any single development);
- ▶ It is assumed that there will be an overall increase in car ownership within the Corridor, and this will result in increased use. This view is supported by Highways England analysis which suggests that the New Bolton Woods and Bolton Woods Quarry sites will generate additional traffic flows and combine with traffic generated by proposed developments in Bradford city centre and South East and South West Bradford to increase traffic volume on the Strategic Road Network. As a result there could be increased vehicle emissions along routes with adverse effects in relation to air quality and human health;
- ▶ It is assumed that current energy mix will continue (and associated carbon emissions will be largely similarly to current), although it is noted that against carbon trajectories provided by the Department of Energy and Climate Change (DECC) this may lead to an overestimate of carbon emissions;
- ▶ It is assumed that there will be no new technological leaps that will substantially alter current patterns of movement, or activities or significantly reduce health effects.

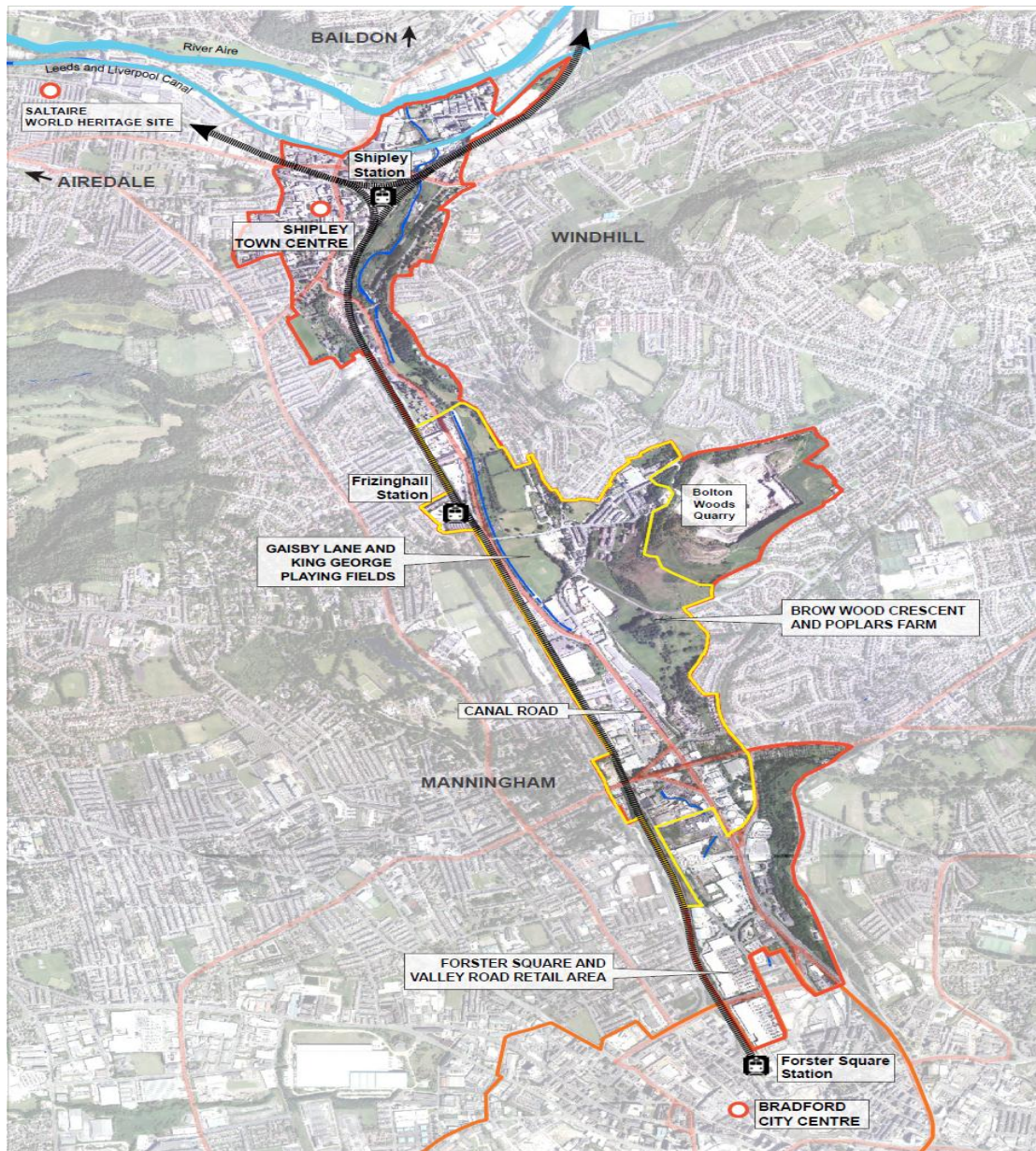
3. The Shipley Canal Road Corridor Area Action Plan

3.1 Introduction

The SCRC AAP will set out planning policies to guide development proposals in the Canal Road Corridor, along with details of how these proposals will be delivered. The Submission Draft SCRC AAP Report comprises of a vision, 11 strategic objectives, 29 planning policies and 28 site allocations.

The boundary of the Submission Draft SCRC AAP Report is shown in **Figure 3.1** below and the area covered by the Submission Draft SCRC AAP Report includes Forster Square and Valley Road retail area, Canal Road (which is a key transport route linking Shipley and Bradford), Bolton Woods Quarry, railway stations at Frizinghall and Shipley and the market town of Shipley itself.

Figure 3.1 Map of the Area Covered by the Shipley Canal Road Corridor Area Action Plan



3.2 Vision

The Vision for Shipley Canal Road Corridor as set in the Submission Draft SCRC AAP Report is that:

'The Shipley and Canal Road Corridor has truly become an area of extensive transformational change, which is regarded as an exemplar Urban Eco Settlement between Bradford city centre and Shipley. The Corridor has borne witness to the delivery of over 3000 new homes supported by new businesses, retail, leisure and community facilities. This has created a series of vibrant new sustainable neighbourhoods that provide a range of high quality homes and local employment opportunities for residents connected by the Linear Park, revitalised Bradford Beck and Canal Road Greenway running from Bradford city centre to Shipley. This multi-functional green corridor has helped enhance biodiversity and ecological networks and provides a high quality setting for walking, cycling, sport and recreation along the Corridor.'

Shipley has strengthened its role as an important town centre, through the expansion of its retail, leisure, office and housing market offer and much improved links to Saltaire, Shipley Station and the Leeds and Liverpool Canal. This redevelopment has created an area worthy of its location as a key gateway to the World Heritage Site of Saltaire and has been managed in a way which has enhanced Shipley, the World Heritage Site and other heritage and environmental assets in its vicinity, creating a better offer for workers, visitors and residents alike.

The Corridor has been reinforced as a strategic transport route, supported by improvements to highway infrastructure along Canal Road, the Shipley Eastern Relief Road and development of Shipley transport hub. Improvements to Frizinghall and Shipley railway stations, bus provision along Canal Road and completion of the Canal Road Greenway have ensured the Corridor is an integrated and sustainable location which offers opportunities for travel by a range of sustainable transport options.'

3.3 Strategic Objectives

The spatial vision for the Submission Draft SCRC AAP Report would be achieved through the following 11 strategic objectives:

1. **Deliver an Urban Eco Settlement of over 3000 new homes** within the AAP boundary by 2030 that will create exemplar sustainable neighbourhoods which encourage healthy lifestyles and contribute to the key aims of delivering a low carbon economy.
2. **Promote the effective use of land** by delivering at least 55% of new development within the AAP on previously developed land.
3. **Deliver a range of well-designed high quality dwellings** which meet the District's current and future housing needs and support low carbon living.
4. **Support sustainable economic growth** and the transition to a low carbon economy by protecting and enhancing established employment areas and promoting a wide range of high quality economic development opportunities within the Corridor.
5. **Support the vitality and viability of Bradford city centre and Shipley town centre** as thriving places for retail, residential, leisure, tourism and business.
6. **Enhance Shipley and improve links between the town centre, Saltaire, Shipley Station and the Leeds and 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 Saltaire.
7. **Protect and enhance biodiversity and green infrastructure** by strengthening ecological networks and establishing a multi-functional linear park; consisting of a chain of interconnected green spaces and natural environments linked to an improved Bradford Beck and the Canal Road Greenway.
8. **Reduce the impact of climate change through mitigation and adaptation** by managing the risk of flooding along the Corridor, including from the Bradford Beck, and using opportunities provided by new development to enhance green infrastructure and deliver low carbon developments which

maximise renewable energy generation, water and energy efficiency and sustainable urban drainage.

9. **Maintain and improve Canal Road as a key strategic transport route and maximise sustainable transport options** by developing critical road and public transport infrastructure, including improvements to Canal Road and Shipley and Frizinghall stations and creating safe and attractive cycle and pedestrian routes linked to the Linear Park and Canal Road Greenway, connecting Shipley and Bradford.
10. **Enhance resident's health and education outcomes** through supporting development which encourages healthy lifestyles, promotes integration and improves access to good quality homes, jobs, schools, green space, sport and recreation facilities, and by reducing pollution and managing air quality along the Corridor particularly in identified Air Quality Management Areas.
11. **Protect and enhance the historic environment and setting of the Saltaire World Heritage Site** by ensuring that development proposals avoid substantial harm and take account of the potential impact upon the character and setting of key heritage assets in the area, and where possible enhance the elements which contribute to their significance.

3.4 Policies

There are 6 Strategic Themes in the Submission Draft SCRC AAP Report, which contain 29 policies within them:

- ▶ Housing (2 policies);
- ▶ Economy (8 policies);
- ▶ Transport (8 policies);
- ▶ Conserving Energy and Resources (2 policies);
- ▶ Environment (6 policies); and
- ▶ Improving Health, Wellbeing and Quality of Life (3 policies).

Box 3.1 below provides a full list of the policies in the Submission Draft SCRC AAP Report.

SCRC AAP Submission Draft Policies**Policy H1 – Housing Requirements****Policy H2 – Delivering New Homes and Sustainable Neighbourhoods****Policy SE1 – Sustainable Economic Growth****Policy SE2 – Canal Road Employment Zone****Policy SE3 – Valley Road Retail Area****Policy SE4 – Strategy for Retail Development****Policy SE5 – Shipley Town Centre and Primary Shopping Area****Policy SE6 – Market Provision****Policy SE7 – Minerals Safeguarding****Policy SE8 – Existing Waste Management Facilities****Policy ST1 – Transport Improvements****Policy ST2 – Safeguarded Transport Links****Policy ST3 – Maximising Sustainable Transport Options****Policy ST4 – Station Improvements****Policy ST5 – Pedestrian and Cycle Improvements****Policy ST6 – Canal Road Greenway****Policy ST7 – Parking****Policy ST8 – Bradford Canal****Policy CC1 – Flood Risk and Water Management****Policy CC2 – Conserving Energy and Resources****Policy NBE1 – Green Infrastructure****Policy NBE2 – Waterway Environments****Policy NBE3 – The Bradford Beck****Policy NBE4 – Biodiversity and Ecology****Policy NBE5 – Heritage and Conservation****Policy NBE6 - Ensuring High Quality Design****Policy HSC1 – Hazardous Installations****Policy HSC2 – Open Space and Recreation****Policy HSC3 – Community Infrastructure**

3.5 Site Allocations

In addition to the above policies there are also 28 sites in the Submission Draft SCRC AAP Report which have been allocated for a variety of uses including:

- ▶ Housing;
- ▶ An urban eco settlement;
- ▶ Economic development;
- ▶ Town centre redevelopment opportunities in Shipley; and
- ▶ A number of mixed use developments.



4. Health Policy Context and Baseline

4.1 Introduction

The following section outlines some of the key policy and plan drivers for health improvements and the relationship with the built environment. These are discussed briefly and are then reflected, where appropriate, in the health issues considered relevant to the assessment of the Submission Draft SCRC AAP Report (**Section 4.4**).

The section also provides a brief review of the socio-economic baseline, with a particular focus on public health in order to identify key issues relevant to the assessment and to provide context for the assessment.

4.2 Review of Plans and Policies

The Marmot Review

The Marmot Review⁵ (Fair Society, Healthy Lives) was commissioned by the Secretary of State for Health in November 2008 and the final report was published in February 2010. The review showed that socio-economic inequalities, including the built environment, have a clear effect on the health outcomes of the population. It confirmed that there is a social gradient in health, and related to that, that there is a social gradient in environmental disadvantage.

The review proposed six policy objectives and related interventions aimed at reducing the gap in life expectancy between people of lower and higher socio-economic backgrounds. The six key policy objectives are:

- ▶ Give every child the best start in life;
- ▶ Enable all children, young people and adults to maximise their capabilities and have control over their lives;
- ▶ Create fair employment and good work for all;
- ▶ Ensure a healthy standard of living for all;
- ▶ Create and develop healthy and sustainable places and communities; and
- ▶ Strengthen the role and impact of ill health prevention.

Spatial planning was identified as having effects across all the objectives, but it was the effect in particular on the fifth objective, which focuses on places and communities, where the relationship is particularly strong. Issues identified as being related to this objective and having a spatial planning component included:

- ▶ Pollution;
- ▶ Green/open space;
- ▶ Transport;
- ▶ Food;
- ▶ Housing; and
- ▶ Community participation and social isolation.

⁵ The Marmot Review (2010) Strategic Review of Health Inequalities in England Post 2010, 'Fair Society, Healthy Lives'. Available here: <http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report>

In September 2014, the Institute of Health Equity launched the Marmot Indicators⁶, which provide a new suite of indicators of the social determinants of health, health outcomes and social inequality which broadly correspond to the six policy objectives proposed in Fair Society, Healthy Lives. These indicators include (but are not limited to):

- ▶ Healthy life expectancy at birth - males and females;
- ▶ Life expectancy at birth - males and females;
- ▶ Inequality in life expectancy at birth - males and females;
- ▶ People reporting low life satisfaction;
- ▶ GCSE achieved (5 A* - C including English and Maths);
- ▶ GCSE achieved (5 A* - C including English and Maths) with free school meal status;
- ▶ 19-24 year olds who are not in employment, education or training;
- ▶ Unemployment % (ONS model-based method);
- ▶ Fuel poverty for high fuel cost households; and
- ▶ Percentage of people using outdoor places for exercise/health reasons.

The Public Health Outcomes Framework

Since 2010, the Department of Health has published three 'outcomes frameworks' for the three key aspects of the health service:

- ▶ Public Health Outcomes Framework⁷;
- ▶ NHS Outcomes Framework⁸; and
- ▶ Adult Social Care Outcomes Framework⁹.

The outcomes frameworks set out the desired outcomes for a particular healthcare system and how these outcomes will be measured.

Each of the outcomes frameworks has a number of main areas, or 'domains', where the Government would like to see improvement. For example, the Public Health Outcomes Framework prioritises reduction of health inequalities through improving the wider determinants of health, such as contributing to reducing re-offending. The NHS Outcomes Framework, meanwhile, has a domain covering helping people to recover from episodes of ill health or illness. The Adult Social Care Outcomes Framework includes a domain that focuses on delaying and reducing the need for care and support.

In terms of undertaking a HIA, the most important of these frameworks is the Public Health Outcomes Framework. The Public Health Outcomes Framework consists of two overarching outcomes that set the vision for what the whole public health system wants to achieve for the public's health. The outcomes are:

- ▶ Increased healthy life expectancy (taking account of the health quality as well as the length of life); and
- ▶ Reduced differences in life expectancy and healthy life expectancy between communities (through greater improvements in more disadvantaged communities).

⁶ Institute of Health Equity (2015) Marmot Indicators 2014. Available here: <http://www.instituteoftheequity.org/projects/marmot-indicators-2014>

⁷ Department of Health (2012). Public Health Outcomes Framework. Available here: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132358

⁸ Department of Health (2013), NHS Outcomes Framework 2014 to 2015. Available here: <https://www.gov.uk/government/publications/nhs-outcomes-framework-2014-to-2015>

⁹ Department of Health (2014). Adult Social Care Outcomes Framework (ASCOF) 2015 to 2016. Available here: <https://www.gov.uk/government/publications/adult-social-care-outcomes-framework-ascof-2015-to-2016>

The Framework is not just about extending life, it also covers the factors that contribute to healthy life expectancy including, importantly, what happens at the start of life and how well we live across the life course. The two outcomes together underpin the overall vision to improve and protect the nation's health while improving the health of the poorest fastest.

These two outcomes will be delivered through improvements across a broad range of public health indicators grouped into four domains:

- ▶ improving the wider determinants of health (with the objective, 'improvements against wider factors that affect health and wellbeing, and health inequalities');
- ▶ health improvement (with the objective, 'people are helped to live healthy lifestyles, make healthy choices and reduce health inequalities');
- ▶ health protection (with the objective, 'the population's health is protected from major incidents and other threats, while reducing health inequalities'); and
- ▶ healthcare public health and preventing premature mortality (with the objective, 'reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities').

Dahlgren and Whitehead 'Policy Rainbow'

The Dahlgren and Whitehead (1991) 'Policy Rainbow'¹⁰ captures the range of factors that influences the health and well-being of individuals and populations across all age groups (both within and outside the individual's control). This model describes the layers of influence of the wider determinants of health on an individual's potential for health. These combine those factors that are fixed, such as age, sex and genetics, and a set of potentially modifiable factors such as: personal lifestyle, the physical and social environment and wider socio-economic, cultural and environment conditions. These variable factors are presented as concentric rings around the fixed factors (hence the rainbow description). This framework has helped researchers to construct a range of hypotheses about the determinants of health, to explore the relative influence of these determinants on different health outcomes and the interactions between the various determinants.

In the context of this HIA, the model is important because it gives a framework for looking at the impact of the Submission Draft SCRC AAP Report on the modifiable determinants within the model and therefore gives an indicator of likely future impacts of individual policies on the health of the District in the future. It is thus a good indicator of the impact on both the population's future health needs and the likely impact on demand for health from health services.

National Planning Policy Framework

The link between planning and health has been long established and the built and natural environments are major determinants of health and wellbeing. The importance of this role is highlighted in the promoting health communities section of the National Planning Policy Framework¹¹ (NPPF). This is further supported by the three dimensions to sustainable development (see NPPF paragraph 7) and the National Planning Practice Guidance¹² (NPPG).

Further links to planning and health are found throughout the whole of the NPPF. Key areas include the core planning principles (see NPPF paragraph 17) and the policies on transport (see NPPF chapter 4), high quality homes (see NPPF chapter 6), good design (see NPPF chapter 7), climate change (see NPPF chapter 10) and the natural environment (see NPPF chapter 11).

¹⁰ Dahlgren & Whitehead (1991) Social Model of Health. Available here:

http://www.nwci.ie/download/pdf/determinants_health_diagram.pdf

¹¹ DCLG (2012) National Planning Policy Framework. Available here:

<https://www.gov.uk/government/publications/national-planning-policy-framework--2>

¹² DCLG. Planning Practice Guidance. Available here: <http://planningguidance.planningportal.gov.uk>

Chapter 8 of the NPPF seeks to promote healthy communities and states that *‘the planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities’* and that *‘local planning authorities should aim to involve all sections of the community in the development of Local Plans and in planning decisions’*.

This section of the NPPF also highlights the important role that planning policies can play in the delivery of the social, recreational and cultural facilities and services communities need.

Paragraph 171 of the NPPF states in relation to health and well-being that *‘Local planning authorities should work with public health leads and health organisations to understand and take account of the health status and needs of the local population (such as for sports, recreation and places of worship), including expected future changes, and any information about relevant barriers to improving health and well-being.’*

Joint Strategic Needs Assessment¹³

The Joint Strategic Needs Assessment (JSNA) draws together information about a population, in order to identify the most important health and well-being issues, and helping local decision-makers to make informed decisions about how to address these issues and at the same time reduce inequalities. Completing the JSNA is a duty placed on all upper tier local authorities by the Local Government and Public Involvement in Health Act (2007).

The JSNA for Bradford provides information on

- ▶ The population of Bradford district;
- ▶ The wider determinants of health and well-being;
- ▶ Children and young people;
- ▶ Adults of working age and over; and
- ▶ Issues specific to older people.

It is a ‘living’ document, with different sections are updated at different times across the course of a year. Inevitably, this means that some sections have been updated more recently than others, and there is never a truly “current” version of the JSNA as a whole.

Some of the issues identified by the JSNA include:

- ▶ In recent years the population of Bradford and district has grown; the district is home to more young people, more old people, and is more ethnically diverse than ever before. Additionally, there are high levels of deprivation, and a particularly wide gap between the most and least deprived parts of the district;
- ▶ There are around 40,000 children aged four and under in the district, and numbers are rising. Seventy per cent of these children live in the 30.0% most deprived areas nationally;
- ▶ The key health and well-being challenges for those of working age are chronic conditions and their consequences. In the main, these diseases are a consequence of unhealthy lifestyles. It is also clear that social, economic and environmental factors also have a direct impact on health status and can exacerbate existing ill health;
- ▶ The Bradford and district population is increasing at both ends of the age range which means that there will be more people aged over 65. Demand for services is still likely to increase as current forecasts suggest there will be 83.0% more people aged over 85 by 2030. This increase of nearly 9,000 people is the biggest forecast growth in numbers across all the different age brackets.

¹³ City of Bradford MDC & NHS Airedale, Bradford & Leeds. Joint Strategic Needs Assessment. Available here: <https://jsna.bradford.gov.uk/>

The Joint Health and Wellbeing Strategy¹⁴

The Health and Social Care Act 2012¹⁵ requires Joint Health and Wellbeing Boards to prepare a Joint Health and Wellbeing Strategy (JHWS) to set out the health and wellbeing priorities for a local authority area. The strategy should support the translation of the findings of the Joint Strategic Needs Assessment into the strategic planning and commissioning of integrated local services. The Bradford and Airedale Joint Health and Wellbeing Strategy (JHWS)¹⁶ outlines how the Board aims to contribute to the improvement of the people of Bradford's health, wellbeing and quality of life. The aim of the JHWS is to give local partners a set of jointly agreed priorities to work on together in the new health and social care system.

The Joint Health and Wellbeing Board have adopted the whole life approach taken by Sir Michael Marmot in 'Fair Society, Healthy Lives' to produce the Joint Health and Wellbeing Strategy (JHWS). The Strategy sets out the 18 priorities for action grouped under the six policy objectives described by Marmot (shown in **Table 4.1**).

Table 4.1 Joint Health and Wellbeing Priorities

Marmot Review Objectives	JHWS Priorities for Action
Give every child the best start in life	<ul style="list-style-type: none"> ▶ Reduce and alleviate the impact of child poverty; ▶ Reduce infant mortality; ▶ Promote effective parenting and early years development.
Enable all children, young people and adults to maximise their capabilities and have control over their lives	<ul style="list-style-type: none"> ▶ Ensure young people are well-prepared for adulthood and work, with a focus on helping children with disabilities to maximise their capabilities; ▶ Reduce childhood obesity and increase levels of physical activity and healthy eating in children and young people; ▶ Improve oral health in the under 5's; ▶ Improve the mental health of people in Bradford; ▶ Improve health and wellbeing for people with physical disabilities, learning disabilities, sensory needs and long term conditions; ▶ Improve diagnosis, care and support for people with dementia and improve their, and their carers', quality of life; ▶ Promote the independence and wellbeing of older people.
Create fair employment and good work for all;	<ul style="list-style-type: none"> ▶ Increase employment opportunities and training; ▶ Promote healthier lifestyles in the workplace.
Ensure a healthy standard of living for all	<ul style="list-style-type: none"> ▶ Create the economic, social and environmental conditions that improve quality of life for all.
Create and develop healthy and sustainable places and communities;	<ul style="list-style-type: none"> ▶ Deliver a healthier and safer environment; ▶ Decent homes and affordable warmth; ▶ Enhance social capital and active citizenship.

¹⁴ Bradford and Airedale Health and Wellbeing Board (2013), Good Health and Wellbeing Strategy to improve health and wellbeing and reduce health inequalities 2013 – 2017. Available here:

<https://jsna.bradford.gov.uk/documents/home/Bradford%20and%20Airedale%20Joint%20Health%20and%20Wellbeing%20Strategy%202013.pdf>

¹⁵ Health and Social Care Act 2012. Available here: <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted>

¹⁶ Bradford and Airedale Health and Wellbeing Board (2014) The Bradford District Health and Wellbeing Strategy. Available here:

<https://jsna.bradford.gov.uk/documents/Home/Bradford%20and%20Airedale%20Joint%20Health%20and%20Wellbeing%20Strategy%202013.pdf>

Marmot Review Objectives	JHWS Priorities for Action
Strengthen the role and impact of ill-health prevention	<ul style="list-style-type: none"> ▶ Reduce harm from preventable disease caused by tobacco, obesity, alcohol and substance abuse; ▶ Reduce mortality from cardiovascular disease, respiratory disease and cancer.

Bradford Health Inequalities Action Plan 2013-17

The Bradford Health Inequalities Action Plan¹⁷ 2013-17 is intended to be read alongside the JHWS summarised above as it will help to ensure that, as Bradford strives to improve the health and wellbeing for the whole population of District, it also remains mindful of the significant inequalities within the District – the fact that in some parts of the District, people lead far shorter, less healthy lives than those in other areas.

Through wide consultation with partnerships across the District, each of the priorities within the JHWS has an agreed set of commitments (action points) that will be delivered against to reduce inequalities in that particular area of health and wellbeing. Full details of these action points can be found in this Inequalities Action plan which is available at:

<http://www.observatory.bradford.nhs.uk/Documents/Bradford%20and%20Airedale%20Health%20Inequalities%20Action%20Plan%202013.pdf>

Bradford District Public Health Outcomes Framework Performance Report 2013

The Bradford District Public Health Outcomes Framework (PHOF) Performance Report¹⁸ provides an overview of local performance based on the Public Health Outcomes Framework (PHOF), where Bradford compares unfavourably with the region and/or England as whole. The report sets out the activity of the Public Health department in addressing health inequalities in the District as well as how the transition of Public Health to the Local Authority has impacted on this work.

The PHOF, a key driver of Public Health at both a national and local level, came into effect on 1st April 2013 as part of new health and social care reforms which gave local authorities responsibilities for the health of their population. The PHOF sets out the desired outcomes for Public Health and how these will be measured. The framework covers a period from 2013 to 2016, and together with the Adult Social Care Outcomes Framework, and the NHS Outcomes Framework provides the structure for measuring improvement across the health and social care system.

The purpose of the PHOF is to provide transparency and accountability across the Public Health system, setting out opportunities for local partnerships to improve and protect health and improve services.

2nd Annual Report from Health and Wellbeing Board

The 2nd Annual Report¹⁹ from the Bradford and Airedale Health and Wellbeing Board outlines the development of the Health and Well Being Board (herein after referred to as the Board) in its second year of operation as the governance board that holds responsibility for the leadership of Health and Wellbeing across the District.

The report includes details of the findings of an invited peer challenge of the District's Health and Wellbeing arrangements and the future development plans for the Board including the creation of a new framework for managing performance outcomes.

¹⁷ Bradford and Airedale Health and Wellbeing Board (2014) Health Inequalities Action Plan. Available here: <https://jsna.bradford.gov.uk/documents/home/Bradford%20and%20Airedale%20Health%20Inequalities%20Action%20Plan%202013.pdf>

¹⁸ City of Bradford Metropolitan Council (2013) Bradford District Public Health Outcomes Framework Performance Report 2013. Available [here](#)

¹⁹ Bradford and Airedale Health and Wellbeing Board. Annual Report. Available here: http://www.cnet.org.uk/bradford-district-assembly/Health-and-Wellbeing-Forum/Representatives-and-Feedback/HWBBoard_Feedback

This report notes that the main challenges for the Board in 2015/6 are the following:

- a. To continue to develop the strategic focus on health inequalities across the District; leading focused partnership action to reduce health inequalities, with particular reference to the six priority areas for action as agreed at Council Executive on 13th January 2015;
- b. To address the recommendations of the peer challenge, using development time across member organisations that will meet the challenge of leading the transformation and integration agenda for the health and social care economy across the District;
- c. To progress at greater scale and pace the integration of health and social care systems across the Bradford district so that citizens will experience the positive difference and the system will benefit from the efficiencies and wider benefits of a joined up integrated approach to the commissioning and delivery of health and social care services;
- d. To build on the positive relationships fostered between Board members with a particular emphasis on supporting the above challenges, emerging joint work and fostering joint commissioning when appropriate; and
- e. Developing a clear and detailed performance framework that will allow the Board to review progress against identified priorities, including the Health Inequality Action Plan, the peer review outcomes and other statutory commitments expected.

Bradford Community Strategy for Bradford District 2011-14

The Community Strategy for Bradford²⁰ sets out the big issues the District faces and the priorities to address them. To deliver the vision in the Strategy, three transformational priorities were agreed:

- ▶ Regenerating the city centre;
- ▶ Improving education; and
- ▶ Developing people's skills.

The 2020 Vision is broken down into four broader outcomes for the District, which includes the following in relation to health and well-being:

- ▶ **Improving the health, wellbeing and quality of life:** Bradford's people experience improving good health, wellbeing and quality of life, irrespective of their community, background or neighbourhood.

This outcome will be delivered through the following strategic aims:

- ▶ To improve people's capacity to make informed decisions about healthy lifestyle choices and minimise risky behaviour;
- ▶ To close the health inequalities gap, while raising wellbeing levels across the whole district; and
- ▶ To support people to sustain their own health and wellbeing during life changes or transitions in circumstances.

Shipley and Canal Road Area Action Plan Infrastructure Delivery Plan 2015

The health section of the Infrastructure Delivery Plan²¹ notes that the Shipley and Canal Road Corridor is currently served by two Clinical Commissioning Groups. There are nine GP surgeries either within the AAP

²⁰ Bradford District Partnership (2012) Community Strategy 2011-14 for Bradford District. Available here: http://www.bradford.gov.uk/bmdc/bdp/our_work/community_strategy

²¹ Arup (2015) Shipley and Canal Road Area Action Plan Infrastructure Delivery Plan. Available here: <https://www.bradford.gov.uk/NR/rdonlyres/4899D0BF-3840-4B63-84D3-7F740FC6FB7C/0/SCRCAAPInfrastructureDeliveryPlan.pdf>

boundary or close to the boundary. There are no hospitals in the SCRC; however the closest hospital is the Bradford Royal Infirmary.

There are a number of GP providers within the vicinity of the proposed new development on the Shipley and Canal Road corridor. The number of current registered patients will be monitored and additional provision for new residents could be provided as required. The IDP indicates that there may also be interest from the existing GPs to provide further services or alternatively, there may be an opportunity to provide a City Centre GP or GP in the corridor, dependent on the total level of new residents.

All of the proposed development sites would have adequate access to existing hospital and accident and emergency services and the Bradford Royal Infirmary. It is considered that there is no funding gap for the provision of health services in Shipley and Canal Road Corridor.

4.3 Baseline

The following sub-sections provide a brief socio-economic baseline profile of Bradford District and the Shipley Canal Road Corridor to help provide context for this HIA of the Submission Draft SCRC AAP Report.

Bradford District

Population

According to the 2011 census, the population of the District was 522,500, representing an increase of 11.0% since 2001, compared with an average increase for England and Wales of 7.1%. This population increase is related to high birth rates in the district and longer life expectancy. Bradford District has become more ethnically diverse since 2001. Using the Office for National Statistics (ONS) category descriptions from the census, the largest ethnic group in the Bradford District is White British which accounts for 64.0% of the population (a decrease from 76.0% in 2001). According to the ONS, Bradford District now has the largest proportion of people of Pakistani ethnic origin (20.4%) in England. There are also increasing numbers of people from Bangladeshi, mixed multiple ethnic groups, Other Asian, Black/African/Caribbean/Black British and other ethnic groups. The projected population increases, in particular in older populations, will increase demand for health and social care services. Careful planning and commissioning is required to ensure that services are ready to meet this demand whilst also responding to the changing characteristics of the population.

Furthermore, the ONS 2012-based sub national population projections forecast the population of the Bradford Local Authority to increase from 525,000 in 2012 to 580,000 in 2030²³, which is an 11.0% increase²³.

Health, Well Being and Life Expectancy

The distribution of health and wellbeing is determined by a wide variety of individual, community and environmental factors. In most communities, the distribution of health and access to healthcare is not equal, leading to inequalities in health. Health and wellbeing can be influenced by factors such as deprivation, gender and ethnicity. Each of these can lead to inequalities in health and wellbeing.

In Bradford, around 45.0% of the Bradford District population live in areas within the 20.0% most deprived in England. These higher levels of deprivation have a significant impact on the health needs of the population, with Bradford having higher levels of chronic disease than neighbouring areas. Areas of particular concern are cardiovascular disease, diabetes and respiratory disease. The local population also does not follow national trend with the majority of the population being younger, with a smaller proportion of older people.

²² 2012-based Sub national Population Projections for England. 2014. ONS. Available at:

<http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2012-based-projections/stb-2012-based-snpp.html>

²³ Office for National Statistics. Rise of the population in Bradford. Available here: <http://www.ons.gov.uk/about-ons/business-transparency/freedom-of-information/previous-foi-requests/people--population-and-community/rise-of-the-population-in-bradford/index.html>

Whilst life expectancy has improved in line with national and regional trends, it is still lower than the England average. Importantly, not everyone has benefited equally from these changes and within Bradford District, the differences in life expectancy between different areas can be stark. For example, people living in Wharfedale to the north of the district typically live about five years longer than people living in Tong in the south and life expectancy is 9.6 years lower for men and 8.0 years lower for women in the most deprived areas of Bradford than in the least deprived areas. In Bradford, there are more deaths as a result of smoking, more premature deaths from cancer, heart disease and stroke, and higher rates of mortality in children.

Priorities in Bradford include addressing health inequalities, reducing infant mortality, and reducing harm from preventable disease caused by tobacco, obesity, alcohol and substance abuse.

Bradford faces a range of specific challenges. Amongst these is the fact that it sits within the 10% most deprived local authorities in the country. These higher levels of deprivation have a significant impact on the health needs of the population, with Bradford having higher levels of chronic disease than neighbouring areas. Areas of particular concern are cardiovascular disease, diabetes and respiratory disease. The local population also does not follow national trend with the majority of the population being younger, with a smaller proportion of older people.

Life expectancy in the District is 9.6 years lower for men and 8.0 years lower for women in the most deprived areas of Bradford than in the least deprived areas. The average life expectancy for men is 77 and for women is 81²⁴.

Child Health

In Year 6, 22.3% (1,330) of children in the District were classified as obese, higher than the overall proportion of children classified as obese (19.1%) in England. The rate of alcohol-specific hospital stays among those under 18 was 32.5 per 100,000, better than the average for England. This represents 45 stays per year. Levels of teenage pregnancy, GCSE attainment, breastfeeding and smoking at time of delivery are worse than the England average²⁵.

Statistics from the 2015 Bradford Health profile²⁶ show:

- ▶ There are higher numbers of children classified as obese; and
- ▶ There is greater numbers of infant mortality.

Adult Health

In 2012, 26.7% of adults were classified as obese, which was higher than the overall proportion of adults classified as obese (25.0%) in England. The rate of alcohol related harm hospital stays was 787 per 100,000, higher than the average for England. This represents 3,700 stays per year²⁷. The rate of self-harm hospital stays was 261.7 per 100,000, higher than the average for England. This represents 1,420 stays per year²⁸. The rate of smoking related deaths was 354.0 per 100,000, worse than the average for England. This represents 825²⁹ deaths per year. Estimated levels of adult smoking were worse than the England average. The rate of TB was worse than the average for the UK. The rate of sexually transmitted infections was better than average³⁰.

²⁴ Public Health England (2015) Bradford Unitary Authority Health Profile 2015. Available here:

<http://www.apho.org.uk/resource/view.aspx?RID=171673>

²⁵ Public Health England (2015) Bradford Unitary Authority Health Profile 2015. Available here:

<http://www.apho.org.uk/resource/view.aspx?RID=171673>

²⁶ Public Health England (2015) Bradford Unitary Authority Health Profile 2015. Available here:

<http://www.apho.org.uk/resource/view.aspx?RID=171673>

²⁷ Figures per 100,000 population

²⁸ Figures per 100,000 population

²⁹ Figures per 100,000 population

³⁰ Public Health England (2015) Bradford Unitary Authority Health Profile 2015. Available here:

<http://www.apho.org.uk/resource/view.aspx?RID=171673>

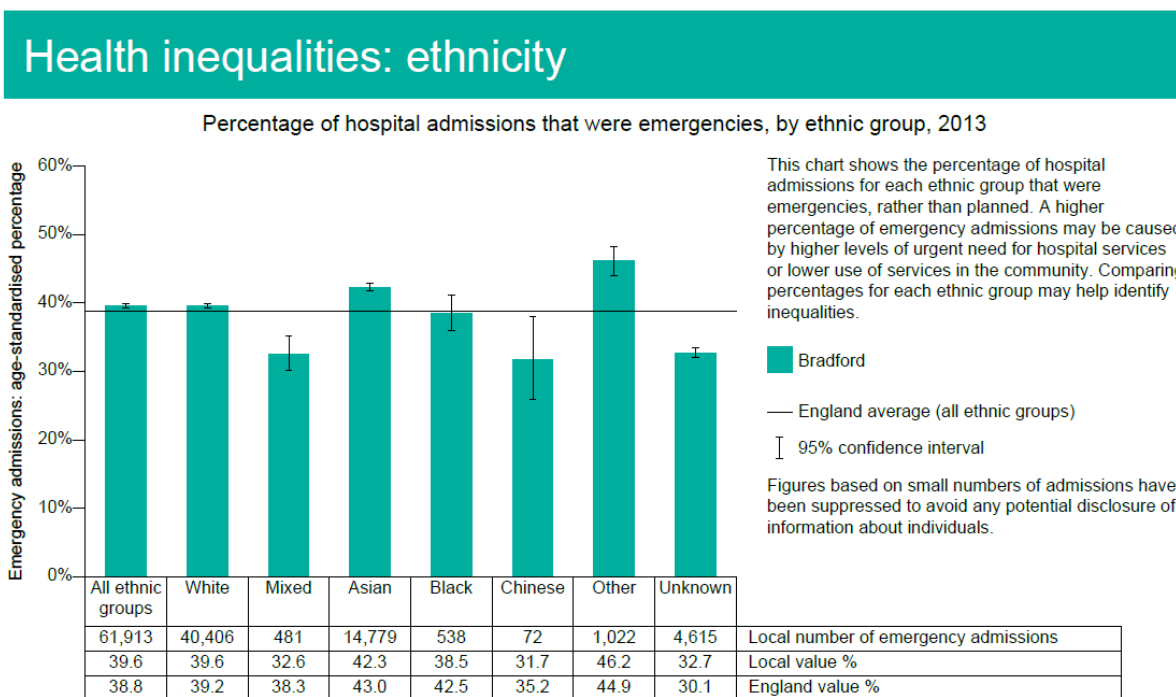
In 2015 the statistics from the Bradford Health³¹ profile provides a number of statistics about the health of the population of Bradford:

- ▶ Lower number of physically active adults compared to England as whole;
- ▶ More adults classified as obese when compared to England as a whole;
- ▶ Higher excess weight compared to England as a whole;
- ▶ Higher number of recorded diabetes;
- ▶ Higher rates of smoking, and hospital stays for alcohol related harm; and
- ▶ Lower life expectancy for males and females.

Hospital Admissions

As can be seen from **Figure 4.1** below, there are varying rates of hospital admissions for the different ethnic groups in Bradford, with rates higher for Asian and other ethnic backgrounds, compared to white and mixed ethnic groups.

Figure 4.1 Health Inequalities Relating to Ethnicity in the Bradford District



Source: Bradford District Health Profile 2015

Indices of Deprivation

A key characteristic of Bradford District is a significant variation in the levels of deprivation, both between Bradford and other areas and between different neighbourhoods and communities within the district. There is a clear link between deprivation and differing experiences of health and wellbeing which presents Bradford District with the challenge of narrowing this gap in experience.

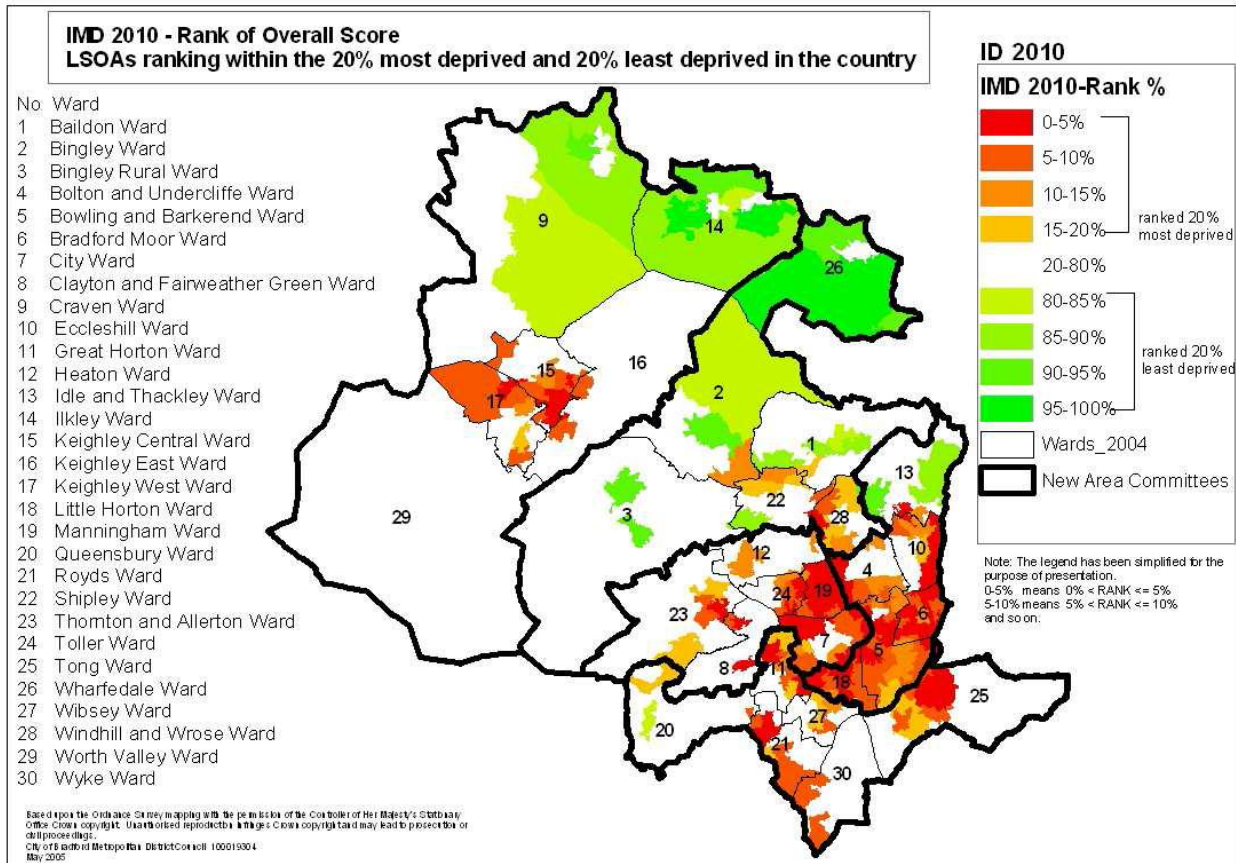
The Index of Multiple Deprivation 2015 (IMD) provides relative measures of deprivation. It places Bradford as the 19th most deprived out of 326 local authority districts in England. Relative to other English districts,

³¹ Public Health England (2015) Bradford Unitary Authority Health Profile 2015. Available here: <http://www.apho.org.uk/resource/view.aspx?RID=171673>

Bradford's position has worsened by 7 places, moving up the rankings from 26th place in 2010. Bradford has the widest gap between its most and least deprived Lower Super Output Areas (LSOAs) of any district in the country, showing a high degree of polarisation within the district.

Figure 4.2 below provides an overview of the findings of the IMD 2010³² for Bradford District. The IMD are based on relative measures of deprivation. As can be seen below there is a concentration of the most deprived wards in the City Centre and parts of the SCRC, compared to the wider district of Bradford. Manningham for example is particularly deprived, with Shipley much less deprived.

Figure 4.2 LSOAs Ranking in the Bradford District



Source: Indices of Multiple Deprivation 2010 Ward Profiles

The map above shows that a significant proportion of the Lower Super Output Areas (LSOA) in areas surrounding the SCRC sit within the 10.0% most deprived, particularly in the southern end, City Ward, Manningham and parts of Bolton and Undercliffe.

Incomes

Bradford and district as a whole faces significant economic challenges. These result in low levels of income and high numbers of people in poverty. Poverty and deprivation can mean that people have a standard of living well below that which most people would consider acceptable in Britain today. Bradford has one of the lowest proportions of residents of working age in employment of any local authority in the Yorkshire and Humber region, and it is lower than the national average. Numbers of working age people who are either unemployed or unable to work are significantly higher amongst the younger population, disabled people and black and minority ethnic groups. This disproportionately affects particular wards, with district-wide statistics masking areas of concern.

³² The figure from 2010 is included here for context in absence of an updated figure for 2015 data.

The mean annual household income in Bradford was £ 30,932 in 2014³³. Apart from Shipley the ward surrounding the SCRC had lower average household incomes than the Bradford average with Manningham and City Wards well below the average.

Housing

People's homes are an important factor in health and well-being. Modern expectations demand proper kitchens and indoor bathrooms, yet 40.0% of current housing in Bradford dates to before 1919. This ageing housing presents problems, with just over 40.0% of housing in the private sector being classed as non-decent in the most recent stock condition survey (2007). As assessed by the Housing Health and Safety Ratings System, 25.0% of private sector housing was found to have the most serious 'category one' failures. This was largely due to the risk of falls on the stairs and excessive cold which is generally associated with steep staircases and poor insulation in older housing. Poor housing quality leads to a higher risk of accidents, as well as a greater likelihood of illness related to cold and issues such as damp, mould and poor hygiene.

As health has improved, so too has life expectancy and a high birth rate means a need for more homes. With pressures on green belt land this is always challenging and especially so in the current economic circumstances.

There are a total of 9,181 households across Bradford District living in overcrowded conditions. **Table 4.2** below provides further information about overcrowding. The table shows that the proportion of households who were overcrowded averaged 4.8% across Bradford District and was highest in the City Central sub-area (10.7%³⁴).

Table 4.2 Overcrowding in Bradford Sub Areas

Sub Area	No of Overcrowded Households	Total Households	% Over Crowded
City Central	4,644	43,467	10.7
City North East	1,047	29,418	3.6
City South	941	24,791	3.8
City West	705	22,145	3.2
Bingley	770	28,072	2.7
Wharfedale	436	18,585	2.3
Keighley & Worth Valley	638	23,239	2.7
Bradford	9,181	189,717	4.8

Source: Bradford SHMA 2010

Shipley Canal Road Corridor

Demographic and economic information for the LSOAs in the SCRC³⁵ has been obtained. This information is summarised below, along with a map of the LSOAs. **Figure 4.3** shows the LSOA's in the SCRC.

³³<https://www.bradford.gov.uk/NR/rdonlyres/369C4C97-09F3-4931-87D0-117DD07E790F/0/HouseholdIncomes2014.pdf>

³⁴ City of Bradford Metropolitan District Council (2013) Shipley and Canal Road Corridor Area Action Plan: Baseline analysis report. Available here: <http://www.bradford.gov.uk/NR/rdonlyres/093C2189-3762-411E-8758-5BF3D38FE662/0/2ShipleyandCanalRoadCorridorAreaActionPlanBaselineEvidenceReport2013.pdf>

³⁵ Office for National Statistics. Neighbourhood Statistics. Lower Super Output Areas. Available here: <http://neighbourhood.statistics.gov.uk>

Population

In 2011 the population of the SCRC was 31,274, which is an increase of 31.0% from the 2001 population figure of 23,870³⁶. In the majority of the SCRC LSOAs there is a near 50/50 split in terms of the % of the population which is male and female. The population of SCRC is relatively evenly spread through the different age groups. The largest age group is those aged from 16 to 29 which includes 23.3% of the population. This age range is followed closely by 30 to 44, 0 to 15 and 45 to 64 containing 22.4%, 22.0% and 21.3% of the population respectively. The smallest age group is those aged 65 and over which is 11.1% of the population. Density of population varies, with some of the LSOAs achieving a high density of population (for example over 90 people per hectare in Heaton and almost 80 people per hectare in Shipley, and lower in Manningham at 20 people per hectare).

Between 2001 and 2011 the population has generally been rising in the LSOAs in the SCRC with an increase of 39.0% in Heaton and increases of over 20.0% in Shipley and Windmill and Wrose. In some areas there has been a significant increase in the 0-15 age range with a more mixed pattern for the over 65's – some increases (for example a 50.0% increase in Windmill and Wrose but a 32.0% decrease in Bolton and Undercliffe).

In the absence of forecast population growth for the SCRC, information relating to the growth of the wider Bradford population is set out here for context. The population of Bradford is expected to continue growing for the foreseeable future with ONS forecasts to 2031 showing a further rise in the population to 655,100 by 2031, an increase of 27.8%³⁷ since 2009. Over a quarter of the projected growth is in the 60-plus age group, in common with national trends which also shows a shift to a greater proportion of older people in the population. At the same time, over a quarter of the projected growth predicted will be amongst children and young people. This means that Bradford will continue to have a relatively young population and a growing number of working age people. If the 2011 SCRC population rose in line with the forecast population rise for the whole district, this would lead to approximately 8,700 more people living in the Corridor by 2031.

Ethnic Breakdown

The ethnic breakdown of the population is quite diverse. Using the ONS category descriptions from the census, White and British accounts for a high % of the population in the majority of the LSOA's, with Windmill and Wrose for example over 90.0% of the population is white. In several of the LSOA's Pakistani accounts for 50.0% of the population. Other ethnic groups are generally represented in smaller numbers, with Bangladeshi the next highest ethnic group. **Table 4.3** below shows how ethnicity has changed between 2001 and 2011 in the SCRC LSOA's.

³⁶ Approximate Population Figures Obtained From <http://observatory.bradford.gov.uk>

³⁷ City of Bradford Metropolitan District Council (2013) Shipley and Canal Road Corridor Area Action Plan: Baseline analysis report. Available here: <http://www.bradford.gov.uk/NR/rdonlyres/093C2189-3762-411E-8758-5BF3D38FE662/0/2ShipleyandCanalRoadCorridorAreaActionPlanBaselineEvidenceReport2013.pdf>

Table 4.3 Ethnicity Changes Between 2001 and 2011 in the SCRC LSOA's

LSOA's	White: English/Welsh/Scottish/Northern Irish/British	White: Irish	White: Other White	Mixed/multiple ethnic group: White and Black Caribbean	Mixed/multiple ethnic group: White and Black African	Mixed/multiple ethnic group: White and Asian	Mixed/multiple ethnic group: Other Mixed	Asian/Asian British: Indian	Asian/Asian British: Pakistani	Asian/Asian British: Bangladeshi	Asian/Asian British: Chinese	Asian/Asian British: Other Asian	Black/African/Carib bean/Black British: African	Black/African/Carib bean/Black British: Caribbean	Black/African/Carib bean/Black British: Other Black
Bolton and Undercliffe E01010597	-157	-5	15	18	-3	14	1	-60	52	83	1	-14	3	9	-2
Bolton and Undercliffe E01010599	-248	2	-21	17	-2	17	2	-89	114	124	-2	16	5	-5	3
Bolton and Undercliffe E01010602	-286	-3	28	15	1	6	2	44	101	80	5	18	3	-5	1
Windhill and Wrose E01010603	-155	1	10	5	3	9	12	15	51	8	5	-2	1	7	3
Windhill and Wrose E01010776	103	-10	34	27	-1	9	8	1	14	-3	-3	28	4	3	1
Windhill and Wrose E01010777	-137	-8	54	19	3	14	5	0	18	4	1	11	15	-4	2
Windhill and Wrose E01010778	109	-6	57	9	-2	8	2	30	60	11	3	8	28	0	-1
Windhill and Wrose E01010779	-142	-8	12	1	4	2	5	-8	12	0	-2	0	6	12	0
Windhill and	30	-1	35	12	-2	12	8	12	0	5	0	7	17	-2	0

LSOA's	White: English/Welsh/Scottish/Northern Irish/British	White: Irish	White: Other White	Mixed/multiple ethnic group: White and Black Caribbean	Mixed/multiple ethnic group: White and Black African	Mixed/multiple ethnic group: White and Asian	Mixed/multiple ethnic group: Other Mixed	Asian/Asian British: Indian	Asian/Asian British: Pakistani	Asian/Asian British: Bangladeshi	Asian/Asian British: Chinese	Asian/Asian British: Other Asian	Black/African/Caribbean/Black British: African	Black/African/Caribbean/Black British: Caribbean	Black/African/Caribbean/Black British: Other Black
Wrose E01010782															
ShIPLEY E01010787	-76	-6	17	5	-2	15	1	10	57	-1	-1	10	2	11	1
ShIPLEY E01010788	-156	1	27	13	5	22	1	-1	71	9	12	28	3	6	0
ShIPLEY E01010789	-216	-5	38	25	3	16	-3	16	319	93	-1	27	2	3	1
Heaton E01010792	-134	-1	66	-3	3	8	-8	-23	273	64	-1	28	3	5	-1
Heaton E01010793	-220	-10	43	3	1	-9	2	0	445	40	18	22	35	7	2
Manningham E01010824	-175	-9	143	-9	-3	17	1	7	212	83	8	51	39	0	0
Bolton and Undercliffe E01010830	-403	-6	23	5	6	29	-1	23	442	43	7	37	8	6	6

Source: www.ons.gov.uk

As can be seen from the table above the population of the SCRC has become a more ethnically diverse population between 2001 and 2011, with an overall reduction in the numbers of white people, and an increase in other ethnic groups, with a notable increase in the Pakistani and Bangladeshi populations. There were also smaller increases in the Asian, African and Caribbean populations.

Housing

The quality of housing is a very important factor in people's health and wellbeing. The quality of housing in the SCRC varies. Manningham and City ward both have high levels of non-decent housing³⁸. The level of non-decency is a reflection of the underlying stock profile of private sector dwellings. Across Bradford District, dwellings are proportionately older (39.6% built before 1919 compared with 24.9% nationally) and 48.8% of dwellings are terraced (compared with 28.9% nationally).

Back to back houses account for around 6.0% of private sector dwellings (11,070 properties) and around half are located in the City Central sub-area. These are small terraced houses built so that the rear of the property forms a party wall with another house behind, which faces onto the next street. 57.8% of back-to-back houses are classified as non-decent.

The energy efficiency of the housing stock follows a similar pattern to non-decency with Manningham and City ward in particular having poor levels of energy efficiency.

The overall vacancy rate of the district is around 6.0% which is much higher than the regional average of 4.1% and 3.9% of dwellings are classed as long-term empty (empty for at least 6 months). Table 4.2 shows that the overall vacancy rate is highest in the City Central sub-area (10.7 %). Bingley and Shipley sub area has the second lowest vacancy rates in the district.

There are concentrations of empty properties in areas bordering the SCRC particularly in the Heaton and Manningham wards.

Economic Activity

There is varying rates of economic activity within the SCRC. The highest rate of activity in the LSOA's in the Corridor is 54.0% for Shipley (of the working age population). The economic activity rates for the other LSOA's are all under 50.0%, with the lowest economic activity figure of 20.2% for Bowling and Barkerend.

Employment rates for males and females who are of working age and in full time employment vary; in Shipley and Windhill, for example, over 50.0% of males are in employment, with rates in other areas such as Heaton only 32.0%. For females, the activity rate is lower and again varies with 47.0% of females in Shipley economically active but with the lowest level of only 18.0% in Heaton.

The numbers of people on long term sick varies greatly within the LSOA's. 12.1% of the working age population of the Manningham LSOA are on long term sick, with the lowest figure of 2.2% recorded for the population of Shipley. Long term unemployment rates vary but are generally below 5.0%, except for Windhill and Wrose where it is 6.3%.

Health

For the Bradford Districts Clinical Care Group (within which the SCRC falls), the top 15 causes of death were as follows:

- ▶ Ischaemic heart diseases;
- ▶ Cerebrovascular diseases;
- ▶ Chronic lower respiratory diseases;
- ▶ Malignant neoplasm of trachea, bronchus and lung;
- ▶ Dementia and Alzheimer's disease;

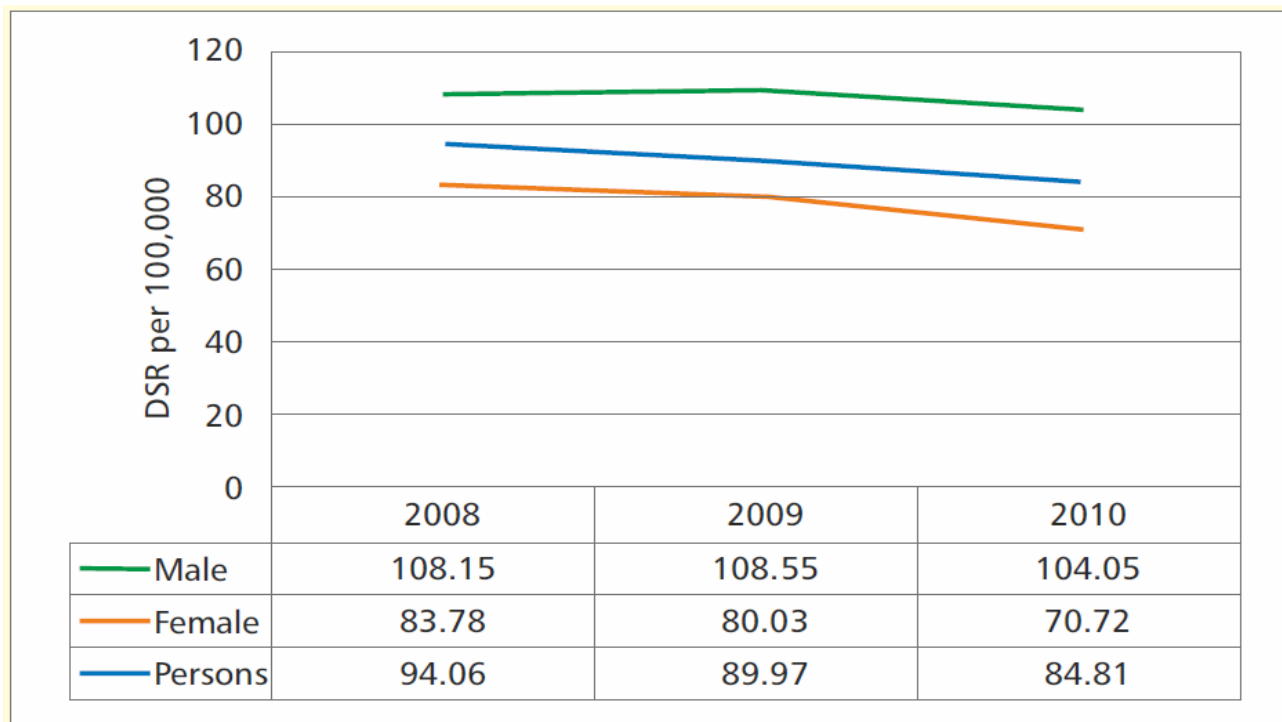
³⁸ The level of non-decency is a reflection of the underlying stock profile of private sector dwellings.

- ▶ Influenza and pneumonia;
- ▶ Symptoms, signs and ill-defined conditions;
- ▶ Malignant neoplasm of colon, sigmoid, rectum and anus;
- ▶ Heart failure and complications and ill-defined heart disease;
- ▶ Malignant neoplasm's of lymphoid, haematopoietic and related tissue;
- ▶ Diseases of the urinary system;
- ▶ Malignant neoplasm's of breast;
- ▶ Cirrhosis and other diseases of liver;
- ▶ Malignant neoplasm of prostate; and
- ▶ Malignant neoplasm of pancreas.

These causes of deaths have varying average number of deaths per year. Chronic lower respiratory diseases and lung cancer accounted for over 150 deaths (based on average number of deaths per year) per year. Rates for premature death from respiratory disease, whilst similar to the district as a whole, are higher amongst men than women.

As can be seen from **Figure 4.4** below, the figures suggest that there may have been a long-term downward trend in the number of deaths due to respiratory disease; however, the reductions between 2008 and 2010 were marginal.

Figure 4.4 Mortality Rates for Respiratory Disease



Source: Bradford Districts CCG Strategic Plan, Executive Summary 2012

In relation to disease prevalence, asthma was prevalent in 6.5%³⁹ of the population in the Bradford Districts CCG, which was the 4th highest of diseases recorded for this CCG.

For the Lower Super Output Areas (LSOA's) of the SCRC, the % of the population classed as in very good health is below 50.0% in all of the LSOA's within the SCRC, with the % as low as 37.0% for Windhill and Wrose. In general, along with some of the other key statistics highlighted above (such as economic activity rate), the figure for Shipley is higher which is not surprising given the links between income levels and health.

Almost 7.0% of the population in Windhill and Wrose is in bad health and 1.5% in very bad health, which suggests that a number of residents of this LSOA are in poor health. For the Windhill and Wrose LSOA over 12.0% of the population is recorded as having day to day activities limited a lot. For the population of the Manningham LSOA, over 11.0% of the population is recorded as having day to day activities limited a lot. This suggests that a proportion of the residents in these areas suffer from sort of health impairment that impacts on their daily life.

Existing Healthcare Provision

As highlighted in the SA of the site allocations all of the residential, mixed use and town centre redevelopment allocations are within 800m of a GP surgery. Bradford City Clinical Commissioning Group (CCG) indicates that currently there are 1,977 patients per GP within the Bradford City Centre Area, where as the surrounding Bradford Districts CCG (within which the SCRC falls within) has 1,355 patients per GP and the UK average is 1,580 patients per GP. This suggests that for the SCRC there are fewer patients per GP compared to the UK as a whole.

However, the forecast population growth in the Bradford Districts Clinical Care Group is expected to be faster than the national average meaning that pressure on healthcare services will not diminish and is likely to increase in line with this population rise.

However, the baseline evidence report for the SCRC notes that there are very limited provisions of community facilities within the SCRC area due to the relatively small population in the area. The facilities that do exist are primarily outdoor facilities such as outdoor sporting facilities and allotments/community gardens. People living within this area have to travel to neighbouring areas for essential facilities such as health care, education and other community facilities such as a library, or a post office.

The baseline evidence report also notes that no existing health facilities are located within the SCRC area, there are three medical centres located close to the area and with easy accessibility. The Windhill Green Medical Centre and Shipley Medical Centre serve the north of the area while the Hillside Bridge Health Centre and Farrow Medical Centre covers the south of the corridor. The Frizinghall Medical Centre is also located approximately 1 mile from the area to the west of Canal Road, the other side of the railway.

With regards to future healthcare provision in Bradford, Bradford Teaching Hospitals NHS Foundation Trust has developed an Operational Plan⁴⁰ for the period 2014-16; and this includes the following key goals:

- ▶ Create a sustainable health and care economy that supports people to be healthy, well and independent through 7 day, 24/7 integrated services;
- ▶ Create an increased community based capacity to prevent avoidable demand on the system including community access to diagnostics and assessment;
- ▶ Understand the population through the use of predictive risk stratification and embed self-care as core to service delivery;

³⁹All figures from <http://www.bradforddistrictscgg.nhs.uk/wp-content/uploads/2012/05/Bradford-Districts-CCG-strategic-plan-2012.pdf>

⁴⁰Bradford Teaching Hospitals NHS Foundation Trust (2014) Operational Plan Document for 2014-16. Available here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/337748/BRADFORD_Operational_Plan_1_.pdf

- ▶ Become a digital health and care economy, implementing a connected digital care record across primary, secondary, community and social care services to achieve a seamless patient record, with the NHS number as the unique identifier; and
- ▶ Expand intermediate care services maximising step-up capacity and capability, delivered through hybrid health and social care services in the community to meet the whole spectrum of an individual's needs.

4.4 Key Issues

Following consideration of the review of plans and policies including the findings of the Joint Strategic Needs Assessment and the issues identified in the Joint Health and Wellbeing Strategy and the analysis of the baseline, the following are identified as the “key issues” pertinent to the health of the population of Bradford District and the SCRC:

- ▶ Population growth in Bradford is placing a strain on existing healthcare services and potentially increasing demand for new healthcare provision;
- ▶ In general the health of the population of Bradford is worse than the average for England as a whole; this is demonstrated through a range of statistics, including life expectancy, infant mortality, smoking and alcohol related hospital stays, the proportion of physically active adults and the percentage of the population in good health;
- ▶ Reducing health inequalities by narrowing the gap between the most and least deprived fifths of the population is critical for future improved health. Current health outcome inequalities include mortality rates (all ages and all causes), infant mortality rates, standardised cardiovascular disease and stroke rates;
- ▶ The prevalence of diabetes is higher in Bradford District than many other areas. It is associated with a substantial burden of premature mortality, morbidity, suffering and financial cost, both through its macrovascular and microvascular complications; some or most of which are avoidable or can be delayed; and
- ▶ Respiratory illness, particularly Asthma and COPD, account for 8.0% of deaths and a significant burden of morbidity and avoidable health care cost. Implementation of simple effective care pathways and quality improvement in primary care carries great potential for reducing morbidity, improving quality of life and possibly increasing survival.

Clearly many of these are beyond the scope of the SCRC AAP to affect directly, but their inclusion recognises the indirect relationship that the SCRC AAP could have on some of the wider determinants of health and health outcomes.



5. Screening

5.1 Introduction

The SCRC AAP has been screened to determine whether it is necessary to undertake a more detailed and comprehensive assessment of health impacts. This has been completed by assessing the 11 strategic objectives of the Submission Draft SCRC AAP Report against three key questions that reflect a range of policy drivers to determine the overall relationship between the AAP and health impacts and outcomes. This section presents the findings of the screening exercise.

5.2 Screening

Table 5.1 below presents the screening of the SCRC AAP 11 strategic objectives. Where boxes have ticks it means there is an impact on that particular screening question, and where there are no ticks there is no impact. If there are health impacts, these are described further in commentary column.

SCRC AAP Strategic Objectives	Will the Strategic Objective have a direct or indirect impact on health of the various communities?	Is the Strategic Objective likely to reduce health inequalities?	Will there be a change in demand for and/or access to health and social care services?	Commentary
Deliver an urban eco settlement of over 3000 new homes within the AAP boundary by 2030 that will create exemplar sustainable neighbourhoods which encourage healthy lifestyles and contribute to the key aims of delivering a low carbon economy.	Y	Y	Y	Housing standards are of particular importance in relation to public health. Conditions such as asthma are detrimentally affected by poor quality housing. The provision of a significant number of high quality houses will help to provide housing to meet local need across the SCRC. The health of the community can improve if people are able to live in good quality housing, particularly if they have moved from poor quality homes. The health benefits from this are many and well documented.
Promote the effective use of land by delivering at least 55% of new development within the AAP on previously developed land.	Y	N	N	Delivering at least 55% of new development on previously developed land will help to ensure that some of this new development is in sustainable locations with good access to existing services, including health facilities. This will have associated positive health impacts.
Deliver a range of well-designed high quality dwellings which meet the District's current and future housing needs and support low carbon living.	Y	Y	Y	Community health can benefit if local people live in quality housing, particularly from deprived communities. The health benefits from this are many and well documented. Housing standards are of particular importance in relation to public health. Conditions such as asthma are detrimentally affected by poor quality housing. There may be some short term and localised effects on health from construction (related to noise, vibration, disturbance and air quality impacts and associated increases in anxiety and stress). If developments not well planned, with reference to integration into sustainable transport options, there is the potential that an increase in population could lead to an increase in traffic movements (with attendant health effects).

SCRC AAP Strategic Objectives	Will the Strategic Objective have a direct or indirect impact on health of the various communities?	Is the Strategic Objective likely to reduce health inequalities?	Will there be a change in demand for and/or access to health and social care services?	Commentary
Support sustainable economic growth and the transition to a low carbon economy by protecting and enhancing established employment areas and promoting a wide range of high quality economic development opportunities within the Corridor.	Y	Y	Y	Sustainable economic growth will help to increase opportunities for high quality jobs and raise income levels. The health benefits from this are many and well documented
Support the vitality and viability of Bradford City Centre and Shipley Town Centre as thriving places for retail, residential, leisure, tourism and business.	Y	Y	N	Supporting the vitality and viability of Shipley and Bradford Centres will help to bring employment opportunities and it is anticipated that this will be reflected in the overall prosperity and health of local people.
Enhance Shipley and improve links between the town centre, Saltaire, 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 value' of the UNESCO World Heritage status of Saltaire.	Y	Y	Y	Encouragement for leisure and tourism developments will help to promote indoor and outdoor activities and increase levels of exercise, the health benefits of which are well known.
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.	Y	N	N	The countryside around Bradford District needs to be promoted more effectively for local people to enjoy. For example, for young children and adults living in the urban environment and those adults with mental health problems, the countryside can provide a relaxing alternative to the stresses of everyday life. The provision of green infrastructure can also support healthy lifestyles by encouraging walking and cycling.

SCRC AAP Strategic Objectives	Will the Strategic Objective have a direct or indirect impact on health of the various communities?	Is the Strategic Objective likely to reduce health inequalities?	Will there be a change in demand for and/or access to health and social care services?	Commentary
<p>Reduce the impact of climate change through mitigation and adaptation by managing the risk of flooding along the corridor, including from the Bradford Beck, and using opportunities provided by new development to enhance green infrastructure and deliver low carbon developments which maximise renewable energy generation, water and energy efficiency and sustainable urban drainage systems.</p>	Y	Y	N	<p>Climate change is one of the greatest environmental challenges facing the world and requires significant efforts and intervention to alleviate the consequences and it will help to reduce flood risk, all of which will help to reduce associated adverse health impacts.</p> <p>Green space and green infrastructure also has strong links to health and is an essential element of any community. In particular green spaces' relevance to mental health is often over looked.</p>
<p>Maintain and improve the Canal Road as a key strategic transport link and promote sustainable transport options by developing critical highway infrastructure and public transport opportunities including; Shipley Eastern Relief Road and highway improvements to Canal road, improvements to Shipley and Frizinghall stations bus service provision along Canal road; and creating safe and attractive cycle and pedestrian routes linked to the linear park and Canal Road Greenway, connecting Shipley and Bradford.</p>	Y	Y	N	<p>Increasing use of sustainable modes of transport and creation of safe walking and cycling routes will have wide ranging positive health impacts from a reduction in vehicle emissions and exercise associated with walking and cycling.</p> <p>The Shipley Eastern relief road could exacerbate health problems e.g. respiratory diseases although it is recognised that will help to alleviate traffic congestion.</p>
<p>Enhance resident's health and education outcomes through improved access to good quality homes, jobs, schools, green space, sport and recreation facilities, and by reducing pollution and managing air quality along the Corridor, particularly in identified Air Quality Management Areas.</p>	Y	Y	Y	<p>Improved access to homes, schools, jobs and sport and recreation facilities will all help to boost health of local residents. Improvements in local air quality in the District are to be welcomed. The benefits of lower levels of traffic pollution to health are well documented and could contribute towards a lower level of hospital admissions. This will be of particular benefit to local residents with existing respiratory conditions.</p>

SCRC AAP Strategic Objectives	Will the Strategic Objective have a direct or indirect impact on health of the various communities?	Is the Strategic Objective likely to reduce health inequalities?	Will there be a change in demand for and/or access to health and social care services?	Commentary
Protect and enhance the historic environment and setting of Saltaire World Heritage Site by ensuring that development proposals take account of the potential impact upon the character and setting of key heritage assets in the area, and where possible enhance the elements which contribute to their significance.	Y	Y	N	Preserving the character of Saltaire, and historic parks, buildings and gardens is welcomed. The historic environment, and in particular parks play a key role in providing areas for physical activity, and conservation areas can also provide areas of stability by offering continuity of place against the stresses of everyday life. As a result these will be beneficial to public health.

Commentary

All of the strategic objectives are expected to have a direct or indirect impact on health of the various communities within Shipley Canal Road Corridor, and whilst the majority of effects are considered to be positive, there is potential for adverse effects associated with construction activity and the potential increase in vehicle movements. It is not unexpected that relationships have been identified between the strategic objectives and the health of the community, given the broad nature of the strategic objectives and the links to health.

All but two of the strategic objectives are expected to reduce health inequalities within the Shipley Canal Road Corridor AAP due to the linkages between the strategic objectives and supporting mechanisms to reduce health inequality (through the provision of high quality housing, increased employment opportunities, more open space). The two strategic objectives that were assessed as unlikely to reduce health inequalities concerned the efficient use of land and the promotion of biodiversity. Whilst these objectives are expected to directly or indirectly impact upon the health of the communities, it is not necessarily assumed that these will also reduce health inequalities within the Submission Draft SCRC AAP Report area.

Six of the strategic objectives will not materially change the demand of and / or access to health and social care services, whilst the remainder are considered likely to affect overall demand for access to health and social care services. Demand and access to health and social care services will change when the population, whether at home, work or leisure, shifts to an area of city where the supply and demand of facilities is unbalanced. This shift could be influenced by increased development, improved access or population trends.

5.3 Outcome of Screening

The outcome of screening has been to determine that due to the relationship identified between the strategic objectives and the key policy questions posed that the Submission Draft SCRC AAP Report will be subject to further assessment. This reflects the aims of the AAP to create *an area of extensive transformational change, which is regarded as an exemplar Urban Eco Settlement between Bradford City Centre and Shipley.*

6. Scoping

6.1 Introduction

This section contains the findings of the scoping stage of the HIA of the Submission Draft SCRC AAP Report. This presents the range of health impacts that could arise from the Submission Draft SCRC AAP Report policies. The impact of each policy will be scored using a traffic lights matrix against the following key receptors:

- ▶ Children & Young (0 yr – 18yrs);
- ▶ Older People (65+ years);
- ▶ People with physical or mental impairments;
- ▶ Minority Ethnic;
- ▶ Low Income; and
- ▶ Refugees & Travellers.

Commentary is provided for each policy.

Additionally, the compatibility the proposed Submission Draft SCRC AAP Report policies in relation to the 18 key priorities of the JHWS and Health Inequality Action Plan have been assessed.

6.2 Health Impacts of the SCRC AAP policies

Table 6.1 presents the findings of the assessment of the health impacts of each proposed policy on each of the key receptors. This assessment has focussed on those AAP policies that will clearly progress / restrain the healthy communities section of the NPPF and therefore policies where there is no clear health link have not been considered further within the assessment.

Table 6.1 Health Impacts of SCRC AAP Proposed Policies

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
H1 – Housing Requirements	+	+	+	+	+	+	<p>Living conditions should improve through the delivery of over 3,100 new homes in the SCRC; however conditions may not improve for the existing population unless improvements are made to existing housing stock. There is a clear link between an increase in living standards and an improvement in health, which will benefit all sections of the community. Given that as highlighted by the baseline information in section 4 above, less than 50% of the population in the SCRC is classed as in very good health, good quality housing could make a positive impact on this statistic, although housing is only one of the factors that will affect assessments of overall health and wellbeing.</p> <p>Mixed use developments will help to ensure that there are greater opportunities for all sections of the community come into contact with each other and help to promote healthy communities.</p> <p>There may be some short term and localised effects on health from construction (related to noise, vibration, disturbance and air quality impacts and associated increases in anxiety and stress).</p> <p>As there is a significant amount of new housing proposed, the demand for healthcare services will increase, which will have negative impacts (notwithstanding that there would be opportunities to provide new and improved healthcare facilities as part of new housing development).</p> <p>There will also be an increase in car and HGV use associated with the delivery of new homes, which would increase vehicle emissions. Notwithstanding other policies in the plan that seek to increase sustainable modes of transport this would have negative impacts in relation to health issues associated with vehicle emissions.</p> <p>There is therefore a mixture of positive and negative health impacts from this policy given the potential for a significant increase in demand for healthcare services and an</p>

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
							increase in vehicle emissions.
H2 – Delivering New Homes and Sustainable Neighbourhoods	++	++	++	++	++	++	<p>A better quality and more affordable housing stock (and social housing stock) will be important in the context of health impacts. Living and working conditions should improve as people move into newer housing stock, and social and community networks should start to develop around new housing developments. The policy will also help to deliver appropriate housing needs for all sections of society including for example those with disabilities or mental health problems. All of this will have significant positive health impacts given the clear link between good quality housing and overall health levels.</p> <p>As with Policy H1 above, there may be some short term and localised effects on health from construction (related to noise, vibration, disturbance and air quality impacts and associated increases in anxiety and stress). There could also be an increase in car and HGV use associated with the delivery of new homes, which would increase vehicle emissions. Notwithstanding other policies in the plan that seek to increase sustainable modes of transport, this would have minor negative impacts in relation to health issues associated with vehicle emissions.</p> <p>There will also be potential for an increase in demand for healthcare services associated with the delivery of new homes which will have negative health impacts.</p>
	-	-	-	-	-	-	

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
SE1 – Sustainable Economic Growth	+	+	+	+	+	+	<p>This policy will help to reduce unemployment and improve living conditions through raising wealth levels. This will have positive health impacts given the important association between employment, income and health. Sustainable economic growth will help to have positive health impacts upon all sections of the community.</p> <p>However, there would inevitably be an increase in car and HGV use associated with economic growth, which would increase vehicle emissions. Notwithstanding other policies in the plan that seek to increase sustainable modes of transport, this would have uncertain impacts in relation to health issues associated with vehicle emissions. Furthermore, there could be an increase in demand for healthcare services resulting from the increased number of workers located within the Corridor associated with the economic growth which would also have uncertain impacts.</p>
	?	?	?	?	?	?	
SE2 – Canal Road Employment Zone	+	+	+	+	+	+	<p>This policy will help to increase employment opportunities in the Canal Road employment zone. New employment opportunities would have positive health impacts given the important association between employment, income and health.</p> <p>However, there would inevitably be an increase in car and HGV use associated with new employment development in this location, which would increase vehicle emissions. Notwithstanding other policies in the plan that seek to increase sustainable modes of transport, this would have uncertain impacts in relation to health issues associated with vehicle emissions. Furthermore, there could be an increase in demand for healthcare services resulting from the increased number of workers located within the Corridor associated with the economic growth which would also have uncertain impacts.</p>
	?	?	?	?	?	?	
SE3 – Valley Road Retail Area	0	0	0	0	0	0	<p>Health impacts from this policy will be neutral and therefore this policy has not been considered any further here.</p>

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
SE4 – Strategy for Retail Development	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.
SE5 – Shipley Town Centre and Primary Shopping Area	+	+	+	+	+	+	<p>The policy makes provision that Shipley town centre is the focus for accommodating main town centre uses including the function of the Primary Shopping Area. This will help to reduce unemployment in Shipley through the creation of new job opportunities in the retail sector. Living and working conditions should improve with a fall in unemployment and this will therefore have positive health impacts.</p> <p>Demand for healthcare services may increase in Shipley with increased development in the Town Centre, which would have uncertain impacts. However, there will be opportunities to enhance existing facilities and to provide new health facilities where required.</p> <p>Overall there will be a mixture of positive and uncertain health impacts from this policy.</p>
	?	?	?	?	?	?	
SE6 – Market Provision	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.
SE7 – Minerals Safeguarding	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.
SE8 – Existing Waste Management Facilities	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
ST1 – Transport Improvements	++	++	++	++	++	++	The policy will have both positive and negative health impacts. The transport improvements outlined will help to increase use of public transport which will help to reduce reliance upon the car as the primary means of transport and in turn will reduce vehicle emissions and improve air quality. This will have significant positive health impacts in relation to respiratory diseases for example. The support for pedestrian and cycle movements will have positive impacts given that the benefits of exercise are well known and wide ranging.
	-	-	-	-	-	-	The highway improvements outlined in the policy could exacerbate health problems e.g. respiratory diseases through an increase in vehicle emissions from increased traffic and this would have negative health impacts. This could, over time, increase demand for healthcare. This aspect would also conflict with the NPPF requirement to promote healthy communities. It will be important that transport improvements are phased in relation to housing developments in order to ensure that there is adequate public transport provision for such developments and that opportunities are taken to maximise health impacts for example through pedestrian and cycle routes and a reduction in reliance upon the car.
ST2 – Safeguarded Transport Links	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.
ST3 – Maximising Sustainable Transport Options	++	++	++	++	++	++	Maximising sustainable transport options will help to reduce reliance upon the car and in turn to reduce vehicle emissions. The benefits of lower levels of traffic pollution to health are well documented and could contribute towards a lower level of hospital admissions (e.g. from respiratory type illnesses) and therefore reduce demand upon healthcare services, all of which will have significant positive health impacts. Furthermore, the NPPF requires that in preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so,

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
							facilitates the use of sustainable modes of transport.
ST4 – Station Improvements	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.
ST5 – Pedestrian and Cycle Movements	++	++	++	++	++	++	The policy sets out that the Council will actively promote new and enhanced pedestrian and cycle routes within the Corridor. This will help to increase levels of walking and cycling. The health benefits of exercise are well known and wide ranging and will help to reduce demand for healthcare through healthier lifestyles. There will therefore be positive impacts upon all sections of the community. Furthermore this policy links in well with the NPPF objective of promoting healthy communities, and in particular that planning policies should aim to achieve developments which promote safe and accessible developments, containing clear and legible pedestrian routes.
ST6 – Canal Road Greenway	+	+	+	+	+	+	The Canal Road Greenway is a key sustainable transport route as it provides a safe and attractive pedestrian and cycle route connecting Shipley and Bradford. The policy will help to protect this important route and ensure that it is integrated with any new neighbouring development. The health benefits of exercise are well known and wide ranging and there can also be mental benefits from access to the countryside. On this basis the policy will have positive health impacts and may help to reduce demand for healthcare provision and services through increased exercise.
ST7 - Parking	+	+	+	+	+	+	The policy will help to see a progressive reduction in parking in line with the Core Strategy requirements. This will help to encourage the use of more sustainable modes of transport which will have positive associated health impacts from a reduction in vehicle emissions. It will be important that a reduction in parking does not result in a loss of disabled parking as this would have adverse impacts for those people with disabilities who may for example depend upon parking to access to healthcare

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
							provision.
ST8 – Bradford Canal	?	?	?	?	?	?	As it is currently uncertain whether the canal will be re-instated and in consequence it is uncertain what health impacts there may be from this policy at this stage.
CC1 – Flood Risk	+	+	+	+	+	+	Flooding and flood risk can have a number of adverse impacts and can result in displacement from homes and places of work, all of which can adversely impact upon health. This policy will help to reduce risks of flooding from new development and help to make people and property safer from flooding. There will be associated positive health impacts from a reduction in flood risk and this will have benefits for the whole community.
CC2 – Conserving Energy and Resources	+	+	+	+	+	+	Conserving energy and resources is important in the context of climate change. Global warming and increases in air pollution from harmful emissions can have adverse health impacts (given the links between poor air quality and respiratory diseases). This policy will help to combat the adverse impacts of climate change and this would help to have minor positive health impacts.
NBE1 – Green Infrastructure	+	+	+	+	+	+	The policy requires that all new development will be expected to protect and enhance key green infrastructure and ecological networks. Greater access to the countryside and green spaces can have significant positive health impacts. For example, for young children and adults living in the urban environment and those adults with mental health problems, the countryside can provide a relaxing alternative to the stresses of everyday life.
NBE2 – Waterway Environments	+	+	+	+	+	+	The policy requires that development proposals which impact upon waterways will be expected to create opportunities for recreation along pathways that follow the waterways as well as maintain and improve access to waterways.

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
							<p>The health benefits associated with exercise are well known. Furthermore, there can be also be positive health impacts associated with greater access to green space and open spaces, for example for young children and adults living in the urban environment and those adults with mental health problems.</p> <p>This policy has good links with the NPPF regarding the requirement that planning policies should aim to create places which contain high quality public space, and which encourage active and continual use of public areas.</p>
NBE3 – The Bradford Beck	+	+	+	+	+	+	<p>The policy includes support for development of sites adjacent to the Bradford Beck that will include maintaining, improving and providing pedestrian and cycle links to, and alongside, the Beck as part of the intention noted under Policy NBE1 Green Infrastructure to create a linear park. This would consist of a chain of green spaces linked to the Canal Road Greenway and the Bradford Beck, stretching from Bradford to Shipley. This will help to increase access to open space and provide greater opportunities for exercise. The associated health benefits of this are wide ranging and well known. This policy will therefore have positive health impacts.</p> <p>It will be important that this policy considers improvements to the water quality of the Beck as well, as this would further help to have positive health impacts.</p>
NBE4 – Biodiversity and Ecology	+	+	+	+	+	+	<p>The policy seeks to minimise adverse impacts upon biodiversity and to provide for an improvement in local biodiversity where possible. The policy also supports the delivery of ecological enhancements outlined in the AAP in line with the ecological assessment undertaken in support of the SCRC. This will help to improve the quality of green spaces.</p> <p>As noted above for policies NBE1, NBE2 and NBE3 greater access to the countryside and green spaces can have significant positive health impacts, particular in relation to those who are suffering from mental health</p>

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
							problems. Overall the policy will therefore have positive health impacts for all sections of the community. The policy is also well aligned with NPPF requirements to conserve and enhance the natural environment.
NBE5 – Heritage and Conservation	0	0	0	0	0	0	Health impacts from this policy will be neutral and therefore this policy has not been assessed any further here.
NBE6 – Ensuring High Quality Design	++	++	++	++	++	++	The policy will help to ensure that new development prioritises the needs of pedestrians and cyclists and that high quality public areas are designed. The policy will also help to facilitate movement along safe, attractive and legible pedestrian and cycle routes. The health benefits associated with exercise are well known and wide ranging. In the context of promoting healthy communities, the NPPF states that planning policies should aim to achieve places which promote safe and accessible environments and developments, containing clear and legible pedestrian use and high quality public space, which encourage active and continual use of public areas. This policy is well aligned with these NPPF aims.
HSC1 – Hazardous Installations	+	+	+	+	+	+	This policy would have a health benefit through minimising risks to the community from works on hazardous installation in line with the requirements for development and consultation distances from hazardous installations (and in line with the PADHI ⁴¹ tool used by the Health and Safety executive).
HSC2 – Open Space and Recreation	++	++	++	++	++	++	The policy will have significant positive health impacts for all sections of the community as it will help to increase access to open space for all sections of the community. It will also encourage healthier lifestyles associated with the use of open space, and in turn to reduce demand for

⁴¹ <http://www.hse.gov.uk/landuseplanning/padhi.pdf>

Policy	Children and Young People	Older People	People with physical or mental impairments	Minority Ethnic	Low Income	Refugees and Travellers	Commentary
							healthcare. The policy links in well with NPPF requirements in relation to access to high quality open spaces and protection of existing space.
HSC3 – Community Infrastructure	?	?	?	?	?	?	<p>New community infrastructure could have positive health impacts if it resulted in new healthcare provision. However, it would depend upon exactly what new community infrastructure was provided as to whether or not there were any positive health impacts.</p> <p>New community infrastructure could have positive impacts in relation to social cohesion by providing opportunities for meetings between members of the community who do not come into contact with each other, in line with NPPF requirements to promote healthy communities.</p> <p>The provision of a new two stage primary school within the new Bolton Woods site will have positive health impacts given the clear link between education and health outcomes. Given that this relates to a primary school there will be significant positive impacts for young children. There would also be positive benefits in the case of minority ethnic groups and refugees and travellers where they are young children.</p> <p>This relates well to the NPPF requirement that Local Planning Authorities should take a proactive and positive approach to ensuring that a sufficient choice of school places is available to meet the needs of new communities.</p>
	++	0	0	++	0	++	

Score Key:

++ Significant positive health impact	+ Minor positive health impact	0 No overall impact	- Minor negative health impact	-- Significant negative health impact	? Score uncertain
---	--	-------------------------------	--	---	-----------------------------

Summary of Health Impacts of Policies

The majority of the policies analysed above are anticipated to have positive health outcomes for the SCRC. The provision of a significant amount of new housing will help to ensure that people have access to good quality housing to live in. This will increase standards of living for residents in the SCRC and help to reduce adverse health impacts associated with poor quality housing within the Corridor. Policy SE1 will help to increase economic growth in the SCRC, in part through creating new employment opportunities. Increases in employment opportunities are likely to help increase incomes which in turn is strongly associated with improved health outcomes.

The transport policies will on the whole help to reduce reliance upon the car and increase use of more sustainable modes of transport. In turn this will help to reduce vehicle emissions and improve air quality. This will have positive health impacts both in terms of a reduction in respiratory diseases associated with poor air quality and through a reduction in demand for healthcare linked to the treatment of these types of illnesses. This is particularly important for the SCRC, given that traffic-sourced air pollution/pollutants are a particular problem along the SCRC and 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.

The majority of the environmental policies are anticipated to have positive health impacts. A number of the environmental policies, (including NBE2, NBE3 and HSC2), will help to increase access to open space, particularly in relation to provision for walking and cycling. The positive health impacts associated with exercise are well known and wide ranging. Furthermore, the increased access to open space and the countryside can have positive mental health benefits, for young children and adults living in the urban environment and those adults with mental health problems, as green open space can provide a relaxing alternative to the stresses of everyday life.

Given the scale of new housing and economic growth proposed, there will be uncertain impacts from these policies in relation to the demand for new healthcare, notwithstanding that there would be opportunities to improve existing provision and to provide new facilities to meet this additional demand. New community infrastructure could help to provide new healthcare facilities and services', depending upon the exact nature of what infrastructure is delivered, therefore the health impacts of policy.

Given the scale of development proposed within the Submission Draft SCRC AAP Report (such as that contained in policy SCRC/H1), there may be some short term and localised effects on health from construction (related to noise, vibration, disturbance and air quality impacts and associated increases in anxiety and stress). A mixture of AAP policies and construction best practice, required as part of any planning application approval should minimise the extent to which such effects are detrimental to the health of the community within the SCRC AAP.

Policy ST1 will, in part, have negative impacts in relation to the highway improvements outlined in this policy. This will lead to an increase in car and HGV use which will have adverse health impacts from an increase in vehicle emissions and on air quality. This may exacerbate health problems associated with poor air quality such as respiratory diseases and as a consequence may increase demand for healthcare to treat such illnesses. However, it is recognised that this has the potential to be balanced out by improvements in vehicle technology and greater use of public transport systems.

In addition, the SA of the Submission Draft SCRC AAP Report policies includes an appraisal of effects against an objective that references health –SA Objective 14 - *'To improve health, reduce health inequalities and promote healthy living'*. As detailed in the SA report for the Submission Draft SCRC AAP Report, the overall assessment of the Submission Draft SCRC AAP Report policies in relation to this objective is positive, notwithstanding that uncertain impacts were identified from the highway improvements outlined, as well as impacts from air quality, which will also impact on human health, although.

6.3 Outcome of Scoping

The policy assessment above has identified the potential for some uncertain and negative health impacts from a number of the policies. This primarily relates to two main issues:

- ▶ Potential for adverse health impacts associated with increased car and HGV use (.e.g. respiratory illness such as asthma), either from the highway network improvements outlined, or in relation to economic growth; and
- ▶ An increase in demand for healthcare associated with new housing developments and economic growth and how this will impact upon the existing healthcare provision in the SCRC and potential requirement for new healthcare facilities.

These issues will be considered further in **sections 7 and 8** below.

6.4 Impact of Submission Draft SCRC AAP Policies on the Priorities of the Bradford JHWS and Health Inequality Action Plan

The compatibility matrix in **Table 6.2** considers the Submission Draft SCRC AAP Report policies in relation to the 18 key priorities of the JHWS and Health Inequality Action Plan in order to assess the compatibility or otherwise of these policies in relation to the priorities.

Table 6.2 Compatibility Assessment of Submission Draft SCRC AAP Policies Against the JHWS and Health Inequality Action Plan

JHWS and Health Inequality Action Plan Key Priorities	H1	H2	SE1	SE2	SE3	SE4	SE5	SE6	SE7	SE8	ST1	ST2	ST3	ST4	ST5	ST6	ST7	ST8	CC1	CC2	NBE1	NBE2	NBE3	NBE4	NBE5	NBE6	HSC1	HSC2	HSC3	
1. Reduce and Alleviate Impact of Child Poverty	++	++	++	++	+	+	+	0	0	0	+	0	+	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	+	++
2. Reduce Infant Mortality	++	++	+	+	0	0	0	0	0	0	+	0	+	0	+	0	0	?	+	+	0	0	0	0	0	0	0	0	+	+
3. Promote Effective Parenting and Early Years Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	0	+
4. Ensure Young People Are Well Prepared for Adulthood, with a Focus on Helping Children with Disabilities to Maximise Their Capabilities	+	+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	0	0
5. Reduce Childhood Obesity and Increase Levels of Physical Activity and Healthy Eating in Children and Young People	0	0	0	0	0	0	0	0	0	0	+	0	+	0	++	+	0	?	0	0	+	+	0	0	0	0	0	0	++	+
6. Improve Oral Health in the Under 5's	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	0	

JHWS and Health Inequality Action Plan Key Priorities	H1	H2	SE1	SE2	SE3	SE4	SE5	SE6	SE7	SE8	ST1	ST2	ST3	ST4	ST5	ST6	ST7	ST8	CC1	CC2	NBE1	NBE2	NBE3	NBE4	NBE5	NBE6	HSC1	HSC2	HSC3	
7..Improve Mental Health of People in Bradford District	+	+	0	0	0	0	0	0	0	0	0	0	0	0	+	0	0	?	0	0	+	+	+	+	+	+	+	0	+	0
8. Improve Health and Wellbeing for People with Physical Disabilities, Learning Disabilities	+	+	0	0	0	0	0	0	0	0	0	+	+	0	+	+	0	?	0	0	0	0	0	0	0	0	0	0	++	+
9. Improve Diagnosis, Care and Support for People with Physical Disabilities, Learning Disabilities, Sensory Needs and Long Term Conditions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	0	+
10. Promote the Independence and Wellbeing of Older People	+	+	+	+	+	+	+	+	0	0	+	0	+	0	+	+	0	?	0	0	+	+	+	0	0	+	0	++	+	
11. Increase Employment Opportunities and Training	0	0	++	++	++	++	++	++	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	0	+
12. Promote Healthier Lifestyles	0	0	0	0	0	0	0	0	0	0	++	0	++	0	++	+	0	?	0	0	+	+	+	0	0	0	0	++	+	

JHWS and Health Inequality Action Plan Key Priorities	H1	H2	SE1	SE2	SE3	SE4	SE5	SE6	SE7	SE8	ST1	ST2	ST3	ST4	ST5	ST6	ST7	ST8	CC1	CC2	NBE1	NBE2	NBE3	NBE4	NBE5	NBE6	HSC1	HSC2	HSC3		
13. Create the Economic, Social and Environmental Conditions That Improve Quality of Life For All	++	++	++	+	+	+	+	+	0	0	++	?	++	+	+	+	0	?	+	+	++	++	++	++	++	++	++	++	0	++	+
14. Deliver a Healthier and Safer Environment	+	+	0	0	0	0	0	0	0	0	++/?	0	++	+	++	++	0	?	++	++	++	++	++	++	++	++	++	++	++	++	+
15. Increase the Number of Decent Homes and Ensure Affordable Warmth	++	++	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	+	0	0	0	0	0	0	0	0	0	0	
16. Enhance Social Capital and Active Citizenship	0	0	++	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	0	0	0	0	0	0	0	0	0	0	
17. Reduce Harm from Preventable Disease Caused by Tobacco, Obesity, Alcohol and Substance Abuse	0	0	0	0	0	0	0	0	0	0	+	0	+	0	+	0	+	?	0	0	0	0	0	0	0	0	+	0	++	+	
18. Reduce Mortality from Cardiovascular Disease, Respiratory Disease, Diabetes and Cancer	+	+	?/-	0	0	0	0	0	0	0	++/?	0	++	0	+	0	+	?	0	0	+	+	+	0	0	+	0	++	0		
KEY	--		Move away significantly		-		Move away marginally			+		Move towards marginally		++			Move towards significantly		0		Neutral			?		Uncertain					

Summary of Impacts of Submission Draft AAP Policies on JHWS and Health Inequality Action Plan Key Priorities

As can be seen from the compatibility matrix above, a number of the policies will have positive impacts in relation to the JHWS and Health Inequality Action Plan Key Priorities. In particular the majority of the policies will have positive impacts in relation to priority 13, given that the policies will help to create the economic, social and environmental conditions in the SCRC that aim to improve quality of life for all. There will also be a number of positive impacts in relation to priority 14; in particular the environmental policies will help to deliver a healthier environment. Some of the transport policies and the design policy will help to deliver a safer environment.

The housing and economic growth policies will have positive impacts in relation to health of children and therefore are compatible with priorities 1 and 2. The economic policies are highly compatible with priority 11 as they have the potential to create a significant amount of new jobs and increase training opportunities associated with economic growth.

The housing, transport and several of the design policies will help to promote the independence and wellbeing of older people and are therefore highly compatible with priority 10. A number of the policies are also compatible with priority 18. In particular the transport policies will help to increase use of sustainable modes of transport and in turn reduce vehicle emissions. This will have positive impacts in relation reducing respiratory disease.

Policy ST8 has uncertain impacts in relation to all of the priorities given the uncertainty over whether or not the Bradford Canal will be re-instated and therefore what health impacts this may have. Some of the other policies will also have uncertain impacts on some of the priorities, particularly in relation to the scale of development proposed and what impacts an inevitable increase in car use will have on health. This is also relevant in relation to the proposed highway improvements outlined in policy ST1, as an increase in car use and associated increase in vehicle emissions would be incompatible with priority 18 in relation to respiratory disease.

There are a few negative impacts identified other than in relation to an increase in car use associated with economic growth and the highway network improvements outlined in policy ST1, which is incompatible with objective 18.

There are a number of policies which have no direct relationship with JHWS and Health Inequality Action Plan key priorities and therefore impacts are neutral. Furthermore, there is a limit to the extent that the Submission Draft SCRC AAP can impact upon some of the above priorities, for example in relation priorities 3, 6, 9, 16 and 17.

Overall the above matrix suggests that the majority of the policies are compatible with at least one and in some cases a number of the key priorities. At worst the policies will have neutral or uncertain impacts.



7. Assessment

7.1 Introduction

As set out **Section 6.3**, two main health issues have been identified from the HIA of the Submission Draft SCRC AAP Report policies:

- ▶ Potential for adverse health impacts associated with increased car and HGV use (e.g. respiratory illness such as asthma), either from the highway network improvements outlined, or in relation to the delivery of over 3,000 new homes and the economic growth proposed; and
- ▶ An increase in demand for healthcare associated with new housing developments and economic growth and how this will impact upon the existing healthcare provision in the SCRC and potential requirement for new healthcare facilities.

These are discussed in more detail in **section 7.2** below.

7.2 Health Issues

Potential for Adverse Health Impacts Associated With Increased Car and HGV Use

There are a number of highway network improvements identified for the SCRC under Policy ST1. In addition to this, Highways England analysis shows that the New Bolton Woods and Bolton Woods Quarry sites (which are allocated for new housing and other supporting uses) together generate a southbound flow of 70 vehicles on the M606 between the Staygate roundabout and M62 junction 26 Chain Bar. This will combine with traffic generated by proposed developments in Bradford city centre and South East and South West Bradford to increase traffic volume on the Strategic Road Network. Whilst the highway improvements identified will help there will be an overall increase in car and HGV use within the corridor.

There is considerable evidence regarding the adverse health impacts of road traffic emissions, for example through British Medical Association research⁴². Such emissions can increase existing health problems such as asthma and other respiratory diseases and / or can lead to new health problems for people who were previously in good health. Such issues will be particularly pertinent for Bradford's Air Quality Management Areas where it has been identified that air quality is poor, and due to the fact that statistics show that more than 50.0% of the population of the SCRC is classed as not being in good health. Compared against national and regional averages, chronic obstructive pulmonary disease prevalence in Bradford is 1.8%, in comparison to England which is 1.5% and the prevalence of asthma is 6.1% compared against 5.7% in England⁴³. Furthermore, and as noted above in section 4.3 respiratory diseases are of particular concern for Bradford, accounting for 8.0% of deaths and a significant burden of morbidity and avoidable health care cost.

It is difficult to quantify exactly how many of these diseases are specifically linked to vehicle emissions/poor air quality, but there is wider evidence which links poor air quality and health problems. For example it is estimated that 40,000⁴⁴ premature deaths are caused by poor air quality in the UK, and that for those affected, air pollution reduces life expectancy by an average of over eleven years. As noted by DEFRA⁴⁵, in general exposure to moderate air pollution levels are unlikely to have any serious short term effects if those affected are young and in a good state of health. However, elevated levels and/or long term exposure to air pollution can lead to more serious symptoms and conditions affecting human health. This mainly affects the respiratory and inflammatory systems, but can also lead to more serious conditions such as heart disease and cancer.

⁴² Healthy Transport = Healthy Lives. British Medical Association. 2012. BMA. Available at <http://bma.org.uk/transport>

⁴³ Respiratory Conditions – Overview of Data, Bradford Observatory Public Health. 2010

⁴⁴ Figures from <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

⁴⁵ <http://uk-air.defra.gov.uk/air-pollution/effects>

Notwithstanding the potential adverse health impacts from increased vehicle emissions, there are considerable efforts in the SCRC AAP Preferred Approach and more widely in the Core Strategy to promote and maximise the use of sustainable modes of transport. In addition, there are low emission and air quality strategies in place for Bradford, all of which will aim to reduce vehicle emissions and improve air quality. 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. The AQMA was designated in this area in light of monitoring information indicating that the NO₂ annual Air Quality Objectives (AQO) were 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 out⁴⁶. There are also efforts more widely in both plans to improve health.

The transport study⁴⁷ undertaken for the SCRC has looked at the amount of traffic which would be generated from all the new development proposed for the SCRC. **Table 7.1** below details total predicted traffic trips for the SCRC split by AM and PM, and for trips into and out of the SCRC.

Table 7.1 Total Predicted Future Traffic Trips for SCRC

Total Trips	In	Out
AM Peak - SCRC	539	1167
PM Peak - SCRC	1178	770
All Trips	1717	1937

Source: Transport Study in Support of the Shipley and Canal Road Corridor AAP, May 2015

As can be seen from the table above, there will be a significant amount of new trips generated for the SCRC from new development with slightly higher numbers of trips out of the Corridor, compared to trips into the Corridor from elsewhere, including the City Centre.

Furthermore the Highways England Comments mentioned above state that new housing developments at New Bolton Woods and Bolton Woods Quarry will combine with traffic generated by proposed developments in Bradford city centre and South East and South West Bradford to increase traffic volume on the Strategic Road Network. In addition AADT data⁴⁸ shows a steady overall increase in total traffic from motor vehicles, with an increase from 679,832 in 2000 to 693,844 in 2014, based upon thousand vehicle miles.

The above information demonstrates an overall picture of increased vehicle use in the SCRC and therefore linked to this an increase in vehicle emissions.

The transport improvements outlined in Policy ST1 in the AAP will help to alleviate congestion in terms of the wider highway network in the Corridor and Section 106 agreements for individual site allocations will help to mitigate to an extent the impacts of additional traffic generation. However, as the figures above demonstrate there will still be a significant amount of new trips and associated traffic generation which will result in an increase in vehicle emissions and in turn will impact upon air quality.

In relation to the AQMA at Shipley Aire Road, the 2013 Baseline Evidence Report⁴⁹ for the SCRC notes that air pollutant concentrations in this AQMA are predicted to exceed the objective through to 2015 at least unless action is taken to reduce pollutant contributions (NO₂ in particular) from road transport by 25.0-40.0%.

⁴⁶ Statement Taken from Bradford Air Quality Action Plan – Consultation Draft. AEA. 2009. Available at: <http://www.bradford.gov.uk/NR/ronlyres/087E4D90-F5EE-4AF8-B13A-E129B262D65E/0/CompleteDraftAirQualityActionPlanv6FinalDraft.pdf>

⁴⁷ Transport Study in Support of the Shipley and Canal Road Corridor AAP, May 2015, Steer Davies Gleave. Available here: <https://www.bradford.gov.uk/NR/ronlyres/E0BC450A-3D87-48AB-82B1-6E7295D456C5/0/SCRCAPTransportStudy.pdf>

⁴⁸ <http://www.dft.gov.uk/traffic-counts/area.php?region=Yorkshire+and+The+Humber&la=Bradford>

⁴⁹ <http://www.bradford.gov.uk/NR/ronlyres/093C2189-3762-411E-8758-5BF3D38FE662/0/2ShipleyandCanalRoadCorridorAreaActionPlanBaselineEvidenceReport2013.pdf>

However, readings⁵⁰ taken from 14th March this year show that dioxide levels⁵¹ from nitrogen and sulphur were classed as low⁵² in this AQMA. Further air quality monitoring would be needed at peak traffic periods in this location to confirm whether or not the recently observed trend regarding air quality will continue to decline.

Notwithstanding the above evidence from the recent air quality monitoring reading, the baseline evidence for the Bradford District Clinical Care Group area (within which the SCRC falls), has shown that chronic lower respiratory disease is one of the top 15 causes of death and the incidence of asthma is elevated above national averages which suggests that the population of the SCRC is susceptible to suffering from illnesses associated with poor air quality. The predicted increase in traffic in the SCRC may exacerbate health problems of residents in the SCRC without intervention. Consequently, implementation of the AAP will need to take account of wider strategies to combat air pollution, including the Air Quality Management Plans and Strategies for Bradford.

An Increase in Demand for Healthcare Provision Associated with New Development

A considerable amount of new development is proposed for the SCRC. Policy H1 proposes a minimum of 3,100 new dwellings within the SCRC by 2030 and policy SE1 sets out new economic development for the Corridor. As the new development is completed and subsequently occupied, the new residents could require access to a range of health care facilities. This additional demand could affect existing healthcare provision in the SCRC. Furthermore, the ONS 2012-based sub national population projections forecast the population of the Bradford Local Authority to increase from 525,000 in 2012 to 580,000 in 2030⁵³, which is an 11.0% increase.

Based on the evidence provided in section 4, there is a higher proportion of the SCRC in the lower age ranges, with those aged over 75 accounting for only 11.1% of the population. Fewer than 50.0% of the population are classed as in good health. It is assumed that the population in the new homes will be of similar composition (in terms of demographics and health) as the existing population. If this were the case; and taking account of wider predicted population growth for the Bradford district this would lead to an increase in pressure on health care facilities. However, this will to an extent be balanced out by all the measures in the submission draft SCRC AAP to improve health and a provision within HSC2 and HSC3 for open space and community facilities. HSC2 notes that larger scale housing sites should the required supporting infrastructure necessary to meet local needs and create sustainable neighbourhoods, such as health and social care facilities.

As noted above and in the baseline section, the population of Bradford is rising and is expected to increase by 11.0% by 2030. In terms of ensuring that the increase in population is sufficiently provided for, this would mean in the order of four additional full time GPs would need to be provided in the SCRC (assuming GP-patient ratios similar to England average). This could potentially be provided through Policy HSC3, which requires the provision of new community infrastructure as part of new large-scale development in the SCRC.

With regards to wider health care provision, given that Bradford NHS does have plans for expansion (see **section 4.3** above in relation to existing healthcare provision) this should help to cater for the expected increased growth in the population of Bradford. However, this is a qualitative judgement and so careful monitoring of demand on healthcare services will be required to ensure that supply is meeting demand through the lifetime of the AAP plan period, given that it is in primary care that greatest pressure will come.

⁵⁰ Figure from 14th March reading, available at http://www.bradford.gov.uk/asp/air_quality/air_quality_shipley.asp

⁵¹ Figures from http://www.bradford.gov.uk/asp/air_quality/air_quality_shipley.asp

⁵² Low means that effects are unlikely to be noticed, even by people who know they are sensitive to air pollutants

⁵³ 2012-based Sub national Population Projections for England. 2014. ONS. Available at:

<http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2012-based-projections/stb-2012-based-snpp.html>



8. Conclusions and Recommendations

8.1 Conclusions

In the main the Submission Draft SCRC AAP should have positive health impacts. The vision, objectives and policies of the Submission Draft SCRC AAP will help to deliver a significant amount of new housing, raise wealth levels and living standards, promote and encourage use of sustainable modes of transport, deliver urban regeneration, protect the environment and improve access to the environment and open space. The health benefits of all these measures will be wide ranging.

The potentially biggest beneficiaries of the regeneration are likely to be those on low income/unemployed if there is local targeting of the new job opportunities that are generated by the AAP new developments. Multi-use buildings/ mixed use developments have the greatest potential to maximise the positive health and wellbeing impacts with clustering of key uses.

Of the twenty nine policies in the SCRC AAP Preferred Approach, four have been assessed as having significant positive health impacts, 9 policies as having minor positive health impacts, one policy as having a mixture of significant positive and negative impacts (reflecting the positive impacts of maximising sustainable transport and negative impacts of highway improvements and associated traffic increase), one policy as having minor positive and negative impacts, and the other policies a mixture of positive and uncertain impacts. A few policies have been assessed as having no major impacts on health, so were not considered any further.

Furthermore, it should be noted that the AAP policies are well aligned with NPPF requirements in relation to promoting healthy communities; and in particular the following aspects:

- ▶ Opportunities for meetings between members of the community who might not otherwise come into contact with each other, including through mixed-use developments, strong neighbourhood centres and active street frontages which bring together those who work, live and play in the vicinity;
- ▶ Safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and
- ▶ Safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas.

8.2 Recommendations

This section gives a series of recommendations for consideration as part of the progression of the SCRC AAP towards adoption. Recommendations are framed with the aim of enhancing any benefits and minimising, reducing or avoiding any potential harm to health that had been identified. The key recommendations are as follows:

- ▶ Ensure that as part of new development in the SCRC, either through Policy HSC3 or through section 106 agreements or other developer contributions that there is provision to meet the anticipated future need for four GP's in the SCRC;
- ▶ Ensure that Bradford NHS and other health organisations are consulted as part of the consideration of planning applications that will come forward for the development of sites in the SCRC once the AAP is adopted to ensure that the health impacts from all the new development proposed is factored in to assessing future healthcare needs;
- ▶ Reference should be made to the Air Quality Management Plans and Strategies for Bradford when taking forward allocated sites for development in order to mitigate adverse health impacts from poor air quality associated with an increase in vehicle use and reduce incidence of respiratory illness; and

- ▶ Ensure that as part of new development in the SCRC, either through Policies HSC2, HSC3 or through section 106 agreements or other developer contributions that access to new and existing open space is maximised to help increase health benefits associated with exercise. Reference should also be made to the SCRC AAP Infrastructure Delivery Plan to ensure that the delivery of infrastructure meets needs.

8.3 Proposals for Monitoring

It will be important that there are adequate monitoring proposals in place to measure progress and performance of the SCRC AAP against specific indicators. This will help to review the health impacts of the AAP on an ongoing regular basis. Suggested proposed indicators for monitoring the health impacts of the SCRC Preferred Approach AAP are set out below. The proposed indicators are:

- ▶ Healthy life expectancy at birth - males and females;
- ▶ Life expectancy at birth - males and females;
- ▶ Inequality in life expectancy at birth - males and females;
- ▶ People reporting low life satisfaction;
- ▶ Good level of development at age 5;
- ▶ Good level of development at age 5 with free school meal status;
- ▶ GCSE achieved (5A* - C including English and Maths);
- ▶ GCSE achieved (5A* - C including English and Maths) with free school meal status;
- ▶ 19-24 year olds who are not in employment, education or training;
- ▶ Unemployment % (ONS model-based method);
- ▶ Long-term claimants of Jobseeker's Allowance;
- ▶ Work-related illness;
- ▶ Households not reaching Minimum Income Standard;
- ▶ Fuel poverty for high fuel cost households; and
- ▶ Percentage of people using outdoor places for exercise/health reasons.

