Health Impact Assessment:
Local guidance for developers and their agents wanting to conduct a health impact assessment

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Halton’s Core Strategy policy C22 states that all major developments should have a Health Impact Assessment conducted on them, as part of the planning application process.

This document describes what a Health Impact Assessment is and offers guidelines on when and how they should be conducted.

<table>
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Contact

Sharon.mcateer@halton.gov.uk

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1. Introduction

Since the first Community Strategy, health has been one of the objectives of the Local Strategic Partnership and is reflected in Halton Borough Council’s corporate plan. This reflects the challenging health issues the borough faces. Despite significant improvements in health, the socio-economic circumstances means the relative health status of the borough is poor.

There is a long accepted relationship between a person’s health status and the broad social and environmental context within which they live. The social, economic and environmental context at whatever level, regional, sub regional or local, is the focus of spatial planning policy. As such it is important to ensure that measures to promote, protect and improve health are maximised through spatial planning developments.

The Health Impact Assessment (HIA) process offers a systematic approach involving an evidence-based assessment of the potential health impacts developments, strategies and projects may have on health, identifying both negative and positive elements. It offers recommendations for action that can be taken to minimise or eliminate potential negative impacts on health before a project, development or strategy is implemented. It also looks at the opportunities to maximise positive contributions. In this way it is prospective assessment of potential health consequences of proposed actions.

In early 2009, the then Halton & St Helens Health Impact Assessment Group, co-ordinated by Halton & St Helens Primary Care Trust’s Public Health Team, were approached by Halton Borough Council’s planning team to conduct a HIA screening exercise on the draft Preferred Options stage of the Core Strategy prior to it going to public consultation. A report was produced in July 2009 detailing a range of recommendations to make best use of the health opportunities to Core Strategy could divest to the local population.

Within the Core Strategy a specific policy was developed making it a requirement of the planning application process to carry out a HIA on all large scale developments.

However, the policy gave no guidance on what constitutes a large development or guidance on how to conduct a HIA. This document aims to address these issues.
2. Background

2.1 The Core Strategy

The Core Strategy sets out in ‘Halton’s Story of Place’ how the Borough has developed over time and introduces the Borough’s characteristics, including the issues and challenges that the Borough now faces and those likely to have an impact and drive further change during the period to 2028 and beyond. The Core Strategy then introduces a vision for the Borough, imagining the place we would like Halton to be by 2028 and identifies a series of 13 Strategic Objectives that will help us to deliver that vision. From this, a Spatial Strategy has been prepared, showing how development will be distributed throughout the Borough, and indicating which areas will be subject to the most substantial change. This is followed by a series of core policies relating to key themes of development including transport, urban design, conservation and health.

The Core Strategy will significantly contribute to the delivery of a prosperous, well connected and attractive Borough, supporting healthy communities, performing a key role within the Liverpool City Region and well positioned to respond to future economic and social changes and challenges.

The Halton Core Strategy Local Plan is the lead document within Halton’s Planning Policy Framework setting out the overall strategy for future development in the Borough looking ahead to 2028.

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**Policy CS22: Health and Well-Being**

Healthy environments will be supported and healthy lifestyles encouraged across the Borough by ensuring:

- proposals for new and relocated health and community services and facilities are located in accessible locations with adequate access by walking, cycling and public transport;

- applications for large scale major developments are supported by a Health Impact Assessment to enhance potential positive impacts of development and mitigate against any negative impacts;

- the proliferation of Hot Food Take-Away outlets (Use Class A5) is managed; and,

- opportunities to widen the Borough’s cultural, sport, recreation and leisure offer are supported.

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On 17th April 2013 Halton Borough Council resolved to approve the formal adoption of the Halton Core Strategy Local Plan as part of the development plan for the Borough, and to delete certain of the saved policies from the Halton UDP (as set out in Appendix 4 of the Core Strategy document). As such, planning decisions will be taken in accordance with its contents, unless material considerations indicate otherwise.

2.2 Health as a local Strategic Priority

The challenges and opportunities facing Halton has led to the identification of a number of priorities for the Borough - outlined in the Sustainable Communities Strategy (SCS) 2011-2026 - over the medium term with the overall aim of making it a better place to live and work. The current Strategy is Halton’s third. It recognises the substantial improvements that have been made but that more still needs to be done. In particular the strategy comes at a time of significant financial challenges to the public sector as well as to individuals with the implementation of the Welfare Reforms. The SCS provides an overarching framework through which the corporate, strategic and operational plans of all the partners can contribute. Each of the five strategic priorities is overseen by a specialist strategic partnership, with an overarching Local Strategic Partnership bring key issues from each together, to manage priorities in a co-ordinated and integrated way.

Figure 1: Integration of the Sustainable Communities Strategy with other strategies and plans
The overall aim for Health in Halton, identified in the SCS is:

- To create a healthier community and work together to promote well being and a positive experience of life with good health, not simply an absence of disease, and offer opportunities for people to take responsibility for their health with the necessary support available.

Objectives

- To understand fully the causes of ill health in Halton and act together to improve the overall health and well-being of local people.
- To lay firm foundations for a healthy start in life and support those most in need in the community by increasing community engagement in health issues and promoting autonomy.
- To reduce the burden of disease and preventable causes of death in Halton by reducing smoking levels, alcohol consumption and by increasing physical activity, improving diet and the early detection and treatment of disease.
- To respond to the needs of an ageing population improving their quality of life and thus enabling them to lead longer, active and more fulfilled lives.
- To remove barriers that disable people and contribute to poor health by working across partnerships to address the wider determinants of health such as unemployment, education and skills, housing, crime and environment.
- To improve access to health services, including primary care.

It thus recognises that health is created and maintained within the social, environmental and economic environment in which people live. More details about the SCS can be found at [www.haltonpartnership.net](http://www.haltonpartnership.net)

The Health and Wellbeing Board operates as the Health Strategic Partnership. It has been operating in shadow form for over a year and has developed its first Joint Health & Wellbeing Strategy 2013-2016, based in the findings of the Joint Strategic Needs Assessment and consultation with staff and local residents. It has five priorities for action:

- Prevention and early detection of cancer
- Improved child development
- Reduction in the number of falls in adults
- Reduction in the harm from alcohol
- Prevention and early detection of mental health conditions
3. What is Health Impact Assessment (HIA)?

3.1 What is health impact assessment?

HIA can be defined as the estimation of the effects of a specified action on the health of a defined population.

Its purpose is:

• To assess the potential health impacts - positive and negative - of policies, programmes and projects; and
• to improve the quality of public policy decision making through recommendations to enhance predicted positive health impacts and minimise negative ones.

3.2 What can HIA offer?

There is no statutory requirement to carry out HIAs. However, they are increasingly recognised as having an important contribution towards establishing the potential impacts and benefits of schemes, designs and policies. HIA's strength lies in providing a tool which enables informed policy decisions to be made based on a valid assessment of their potential health impacts, at the same time adding health awareness to policy making at every level. In the longer term it has the potential to make concern for improving public health the norm and a routine part of all public policy development.

3.3 A social model of health and well-being

HIA is based on a holistic, social model of health which recognises that the well-being of individuals and communities is determined by a wide range of economic, social and environmental influences as well as by heredity and health care.

Figure 2: Social determinants of health

3.4. Use of expertise, evidence and local knowledge

HIA seeks to utilise a wide range of professional and wider stakeholder expertise and knowledge, including the local communities whose lives will be affected by the policy or development being assessed. It uses both quantitative, scientific evidence together with qualitative information. This may include the opinions, experience and expectations of people most directly affected by public policies and tries to balance the various types of evidence.

3.8 How can HIA be applied?

Ideally, HIA should be applied prospectively (before policy, programme or project implementation) to ensure that steps are taken, at the planning stage, to maximise positive health impacts and to minimise the negative effects. If this is not possible it can be carried out concurrently (during the implementation stage) or retrospectively (after it has finished) in order to inform the ongoing development of existing work.
4. When should a HIA be carried out?

The planning team within Halton Borough Council have developed some guidelines on the range of assessments that need to be carried out in different types and sizes of development.

**Table 1: Requirement for a HIA to be carried out**

<table>
<thead>
<tr>
<th>Type of Development</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>&gt;200 dwellings/&gt;4ha</td>
</tr>
<tr>
<td>Retail and Leisure Proposals: Shops; financial and professional services; Restaurants and cafes; Drinking establishments; Hot food takeaways; non-residential institutions; Assembly and leisure</td>
<td>10Ksqm /2ha commercial or more</td>
</tr>
<tr>
<td>Business, General Industrial, Storage and Distribution</td>
<td>10Ksqm /2ha commercial or more</td>
</tr>
</tbody>
</table>

Depending on the nature of the development, a number of other assessments will be required. Given the social model of health adopted for HIAs locally, it is likely these can and should be used as evidence within the HIA process.

**Table 2: Core Strategy related policies and assessment requirements**

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Applicable Planning Policy</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>All development that will have significant transport implications</td>
<td>TP14</td>
<td>Transport Assessment. The scope of the assessment should reflect the scale of the development</td>
</tr>
<tr>
<td>All development</td>
<td>PR1</td>
<td>An air quality assessment may be required before determining applications with a potential to pollute</td>
</tr>
<tr>
<td>All development</td>
<td>PR14</td>
<td>Submit contaminated land assessment Submit Details of mitigation measures</td>
</tr>
<tr>
<td>All development</td>
<td>PR16</td>
<td>A flood Risk assessment will be required where it is considered that there would be an increased risk of flooding as a result of the development</td>
</tr>
<tr>
<td>All residential development</td>
<td>CS19</td>
<td>Encourage minimum standard Code for Sustainable homes 2013 level 4, 2016 level 6</td>
</tr>
<tr>
<td>All residential development</td>
<td>H3</td>
<td>Provision of open space - 0.8ha per thousand population for children’s play and casual</td>
</tr>
</tbody>
</table>

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iii Subject to separate Supplementary Planning Document
| **Residential development that will have significant transport implications** | TP14 | Transport Assessment  
The scope of the assessment should reflect the scale of the development |
| **Protection of outdoor playing space for formal sport and recreation** | GE12 | An assessment of current and future needs for the school/educational establishment or local community, which has demonstrated that there is an excess of playing field provision and the site has no special significance to the interests of sport. |
| **2,500sqm education**  
**100 trips peak hours**  
**100 spaces** | TP16 | Green Travel Plan |
| **Smaller development proposals comprising jobs, shopping, leisure and services which would generate significant amounts of travel in or near to air quality management areas.** | TP16 | Green Travel Plan |
| **Proposals that are likely to generate a significant number of trips** | CS15 | Production of Travel Plans and Transport Assessments (speak to J.Farmer) |
| **Non-residential development** | CS19 | Encourage minimum BREEAM ‘very good’ standard |
What type of HIA should be carried out?

HIA can be conducted at different levels depending on a range of factors including:

- the status and complexity of the policy, programme or project
- locally determined health priorities and targets
- the potential scale and severity of health impacts
- the quality of the evidence base and availability of data
- the support for HIA at regional and local level
- the resources available to conduct HIA.

The terms desktop, rapid and comprehensive are used to describe the different levels of a particular HIA:

**Desktop HIA**: This is conducted quickly and with limited resources. Only evidence which is easily accessible is used. A desktop HIA is usually conducted when there is only a short timeframe available or if the scale of the proposal does not warrant more in-depth investigation.

**Rapid HIA**: This type of HIA includes a broader range of evidence but is still conducted within tight time and resource constraints.

**Comprehensive HIA**: This is undertaken over a longer period of time and involves more resources. It is useful when the potential scale and severity of health impacts warrant an in-depth investigation.

Irrespective of the level of HIA to be carried out, a similar process should be followed. This is described in the next section.
6. Process for carrying out a HIA?

Methods for undertaking HIA involve:

- policy analysis (where appropriate)
- profiling the areas and communities affected
- involving stakeholders and key informants in predicting potential health impacts, using a predefined model of health
- using available evidence
- evaluating the importance, scale and likelihood of predicted impacts
- considering alternative options and making recommendations for action to enhance or mitigate impacts

**Policy analysis**

It is important that the HIA recognises the unique set of local circumstances in which the development is located. The first step in considering this is to understand and reflect on relevant national and local policy contexts. How will the development enhance local life and outcomes for those living, working and with ties to the area/borough in which the development is planned to happen.

**Profiling the areas and communities affected**

Moving on from the overall policy context the HIA should recognise that certain communities will be more affected, both positively and negatively, by the development. The most obvious way is the physical location of the development. However, it is also vital to consider that some groups are more vulnerable and whilst a development may not impact of the population as a whole, it may nevertheless have a serious impact on certain groups. These need to be identified and described and the assessment of impact tailored to these groups. Socio-demographic and health data as well as information from key informants should be accessed and used.

So not only geography but also in combination with age, sex, income, or other social, economic or environmental characteristics as well as communities of interest, e.g. sport enthusiasts, ramblers or cyclists.

**Stakeholder involvement**

Routinely available or specifically gathered data only tell part of the story. The social model of health used in HIAs locally indicates that it is important to gather information from many different perspectives. It is this richness of information – not just but including data – that helps develop a robust HIA and offers creative mitigating solutions and opportunities to enhance planned development specifications.
Stakeholder involvement is also a central tenant of HIA ethos of equity, democracy, accountability and sustainability. Not only will gathering the views of individuals and groups likely to be affected together with professional stakeholders, give a round understanding of the issues but the process of listening and involving is much more likely to generate acceptance and support for a development and reduce actual and potential conflict, distrust and anger.

There are five key reasons why we would want to get stakeholders involved in a HIA:
- to elicit the views of local people and others about a development;
- residents both existing and new will face the direct positive and negative health consequences of the development;
- residents and other stakeholders have valuable experiential knowledge that they have built up over the years about the locality in which they live and work and the impacts of past developments;
- not adequately and appropriately addressing resident’s concerns can and does lead to residents experiencing social and psychological distress; and
- allowing residents and others to have a voice and influence in community processes and thereby reducing the sense of social exclusion, democratic deficit and inequity.

Using available evidence
In addition to the profile of the community it is likely that several different types of evidence will be used in conducting the HIA.

- Published research on the relationships between the kind of development under consideration and health e.g. housing, transport, green space.
- Other reports, data and information that has already been gathered for the development e.g. Environmental Statement, Transport Assessment and/or plan, noise or air pollution modelling reports. Some of the relevant ones have been detailed in section 4.
- There may be unpublished local reports that you are given access to
- Opinions of key informants and stakeholders

Evaluating the likelihood and scale of potential impacts
Using the social model of health detailed in Figure 2 the HIA should consider the likely impact the development under investigation could have on health of the immediate and wider community. It may be likely to affect anyone equally or may be of greater relevance to a particular group, either because of their proximity, their demographics (age/gender/ethnicity) or existing health issues they face. All angles need to be considered – the information in the community profile, from evidence and from stakeholders will all provide valuable insights.

It will be necessary to assess both the likelihood of the impact to happen and the scale of the impact, whether this is assessed to be a positive impact or a negative one.
Table 3: assessing the size and level of risk to health associated with the development

<table>
<thead>
<tr>
<th>Category of health</th>
<th>nature and where possible, size of impact and how measurable impact is - i.e., is it qualitative (Q), estimable (E), or calculable (C)?</th>
<th>Risk of impact: Is it definite (D), probable (P), or speculative (S)?</th>
<th>Actions: remedial for negatives and maximising for positives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive impact</td>
<td>Description/rationale including what evidence was used</td>
<td>Description/rationale including what evidence was used</td>
<td></td>
</tr>
<tr>
<td>Size: 1+ 2+ 3+</td>
<td></td>
<td>1- 2- 3-</td>
<td></td>
</tr>
<tr>
<td>Negative impact</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It may not be possible to quantify the impacts as:

- many of the effects on an individual’s or community’s health are not easily measurable,
- many health effects are indirect and take many years to manifest themselves,
- the methodology to collect quantifiable health impact evidence and make judgements based upon it is currently not well developed, and finally
- there is argument about the tendency for quantifiable estimates developed for HIAs to give a false sense of reassurance and precision on what are a range of complex interactions between a range of social, cultural, economic, political, environmental and personal determinants of health.

It is likely that some impacts will be quantifiable but even these should be used with caution. There are likely to be modelled and caution needs to be taken about the level of accuracy that can be gleaned from this if broad, and crude, judgements have had to be made to feed in to the model. They provide a valuable insight to the scale of the issue but need to be contextualised.

**Recommendations for action to enhance or mitigate impacts**

After examining all the evidence and discussing the issues this raises with local stakeholders, the HIA should seek to make recommendations:

- are there actions that could be taken to further enhance the positive impacts
- are there actions needed to eliminate or reduce, to mitigate, any potential negative impacts
The recommendations should make it clear what, by whom and by when such actions can expect to be taken. The recommendations can be written up as a Health Management Plan which identifies these elements. Each action will need to be discussed and agreed with the lead person/agency prior to the plan being written. The plan should be included within the HIA report.
7. How should HIAs be carried out?

There are two options available locally. There is a local group of staff based within the Public Health team of the local authority. They are trained in conducting HIAs and have all attended either a 1-day or the full 5-day HIA course run by IMPACT. This is considered the ‘gold standard’ course and staff are able to conduct desktop or rapid HIAs.

Alternatively you can carry out or commission a HIA independently. This can then be sent to the HIA lead within the public health team or via the planning team, for review.

There are several guidance documents and toolkits that you can utilise for framing the HIA. Locally, the Halton HIA group use the Devon Health Forum model and examples of past HIAs conducted using this can be found on the council website at:

http://www3.halton.gov.uk/healthandsocialcare/318895/

We would recommend that you contact the Public Health team as soon as possible to discuss the HIA scope with them. They may be able to support the HIA by providing local data & information as well as facilitating a stakeholder workshop.

You may also wish to consider the Spatial Planning and Health group report and checklist that is freely downloadable from their website. The checklist is included in the Appendix of this guidance.

http://www.spahg.org.uk/

The Association of Public Health Observatories houses the HIA Gateway where both guidance documents and examples of completed HIAs can be accessed.


Appraisal of received HIAs
On receipt of a draft or completed HIA report the HIA team within the council will appraise the scope, methodology and findings of the HIA. In particular they will be asking the following kind of questions:

- What was the scope of the HIA and the definitions of health used? How was the scope justified?
- Was the methodology used appropriate, explicit and logical?
- What evidence and sources of evidence were included and excluded and was the justification given explicit, reasonable and appropriate?
- Was there any stakeholder involvement, if so were a range of stakeholders consulted and was the justification for having or not having stakeholder involvement explicit, reasonable and appropriate?
• Was the appraisal of impacts systematic and the reasons for judging the significance and extent of the positive and negative health effects explicit, appropriate and justified?
• Where there any recommendations made? Did these include mitigation and enhancement measures and was there a clear link between the recommendations and the key issues emerging from the assessment?
### 1: Spatial Planning and Health Group Checklist

<table>
<thead>
<tr>
<th>Area</th>
<th>Questions to ask of strategies, plans and proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mix of land use</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>• Provide a diverse mix of land uses?</td>
</tr>
<tr>
<td></td>
<td>• Improve the availability, affordability and quality of housing?</td>
</tr>
<tr>
<td></td>
<td>• Improve water management and reduce flood risk?</td>
</tr>
<tr>
<td></td>
<td>• Promote diversity?</td>
</tr>
<tr>
<td><strong>Street layout and connectivity and active travel</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>• Enhance neighbourhood attractiveness, layout and design?</td>
</tr>
<tr>
<td></td>
<td>• Improve walkability and cyclability?</td>
</tr>
<tr>
<td></td>
<td>• Promote physically active travel (such as walking and cycling) and general levels of physical activity?</td>
</tr>
<tr>
<td></td>
<td>• Limit traffic speeds and traffic noise, and make the street environment safer and more pleasant for walking and cycling and community interaction?</td>
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<tr>
<td></td>
<td>• Reduce or avoid steady flows of traffic preventing communal use of the street on streets where people live?</td>
</tr>
<tr>
<td><strong>Access to public and other services</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>• Improve access to health care, education, employment, leisure facilities, and social, cultural and sporting facilities?</td>
</tr>
<tr>
<td></td>
<td>• Increase access to services for marginalized groups?</td>
</tr>
<tr>
<td><strong>Safety and security</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>• Increase the resilience of the area to the potential impacts of climate change?</td>
</tr>
<tr>
<td></td>
<td>• Reduce crime and fear of crime?</td>
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<tr>
<td><strong>Open and green space</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>• Provide open spaces and a green infrastructure (such as tree planting in urban areas)?</td>
</tr>
<tr>
<td></td>
<td>• Preserve and enhance existing green infrastructure, for example with green roofs, green security, planted areas, living walls?</td>
</tr>
<tr>
<td><strong>Affordable and energy efficient housing</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>• Reduce energy use?</td>
</tr>
</tbody>
</table>
|                                           | • Help the development of practices and/or technologies that are low-
<table>
<thead>
<tr>
<th>Category</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food access</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>- Improve the location of food production and availability of local food</td>
</tr>
<tr>
<td></td>
<td>outlets to meet local needs?</td>
</tr>
<tr>
<td></td>
<td>- Improve opportunities for growing local produce such as allotments?</td>
</tr>
<tr>
<td></td>
<td>- Provide for the control of outlets for unhealthy food?</td>
</tr>
<tr>
<td><strong>Air quality and noise</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>- Enhance land, air and water quality?</td>
</tr>
<tr>
<td></td>
<td>- Enhance pollution prevention and control?</td>
</tr>
<tr>
<td><strong>Access to Employment</strong></td>
<td>Will the proposal:</td>
</tr>
<tr>
<td></td>
<td>- Influence investment, including the creation of employment and the</td>
</tr>
<tr>
<td></td>
<td>development of employment skills, including for vulnerable groups?</td>
</tr>
<tr>
<td></td>
<td>- Offer opportunities for training?</td>
</tr>
</tbody>
</table>
2. How planning policy can impact upon the main determinants of health

Individual behaviour and lifestyle
The physical environment is shaped by planning decisions and can deter or enable a healthy lifestyle. The propensity of people to walk, cycle, or play in the open air is affected by the convenience, quality and safety of pedestrian and cycling routes and by the availability of local open space. It is especially important that children are encouraged to adopt regular exercise in childhood – regular exercise ‘protects against heart disease and by limiting obesity, reduces onset of diabetes. It promotes a sense of wellbeing and protects older people from depression.’

Social and community influences
Insufficient attention to maintaining and creating community cohesion in urban renewal projects can lead to the destruction of social networks. Regeneration can also produce a rich community life, by providing opportunities needed for social interaction such as common activities and meeting places: schools, post offices, pubs and convivial, safe streets. Sustaining local facilities and networks depends upon long-term strategies for housing, economic development and transport. Social support is also necessary for the most vulnerable groups.

Local structural conditions
Planning policy can directly affect personal health in a number of ways. For example a lack of supply of affordable quality housing contributes to homelessness and overcrowding; accessible work opportunities can alleviate poverty and depression caused by unemployment; an accessible urban structure together with an efficient and affordable transport system can reduce social exclusion by opening up opportunities for people who are socially and economically marginalised. Transport planning also reduces the likelihood of accidents and well-designed parks and public spaces reduce fear of crime.

General socioeconomic, cultural and environmental conditions
At the broadest level, local urban planning impacts upon the quality of air, water and soil resources. It also affects the emissions of greenhouse gases that through climate change will have significant health consequences.

Spatial plans are about controlling the way development takes place in the future – how much takes place, where, when and in what way? The critically important factor is to ensure that the spatial planning policies and the interventions explicitly address health and are calculated to improve health outcomes by facilitating or requiring conditions that support healthier living conditions. It is acknowledged that evidence of what works, and of causality, is difficult to identify in many areas of public health and environment.

(extract ends)
Potential Spatial Planning Interventions to promote health

The Healthy Urban Development Unit has outlined a series of possible spatial planning interventions. They were used to support the development of the Halton Core Strategy preferred options and relevant ones are replicated here in Figures 11 to 18. Well planned, this development has the potential to have a positive impact on many areas of health, some in a fairly limited and indirect way, others more directly. Within each of the areas of health, suggested areas for consideration within this development are highlighted in bold. They formed useful questions to discuss at the HIA session.

Figure 3: Mental Illness

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Where the issue is located</th>
<th>Pathway / causal link</th>
<th>Potential options for addressing the issue – actionable insights</th>
<th>Health objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental illnesses, including depression and anxiety occur in 1 in 4 of the population.</td>
<td>Concentrated in certain areas with high deprivation</td>
<td>Lack of green space High and persistent noise Lifestyle choices Fear of crime High levels of unemployment</td>
<td>Access to good quality open space Provide opportunities for physical activity Improve housing quality Noise management Reduction in worklessness</td>
<td>To reduce rates of depression and in patient attendance</td>
</tr>
</tbody>
</table>

Spatial planning interventions

- Have standards of open space been set for existing and new areas in terms of accessibility, quality and size?
- Have standards of green space been set for existing and new areas in terms of accessibility, quality and size?
- Will access to open space be enhanced for those communities that are deficient?
- Will access to green space be enhanced for those communities that are deficient?
- Will the management of open and green space ensure that the needs of all sections of the community be met?
- Will a high density of tree planting be achieved?
- Will access to exercise opportunities be required from new development?
- Will the appropriate quantity and quality of housing reduce levels of overcrowding?
- Have maximum noise levels been set that will protect physical and mental health and have enforcement mechanisms clearly set out?
- Will design and access standards seek to reduce crime?
- Will diverse local employment opportunities reflecting a range of skill, levels be provided and worklessness reduced?
- Will local employment agreements be secured in development consents or obligations?
### Figure 4: Obesity and Diabetes

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Where the issue is located</th>
<th>Pathway / causal link</th>
<th>Potential options for addressing the issue – actionable insights</th>
<th>Health objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>High prevalence of obesity and type 2 diabetes.</td>
<td>Particular neighbourhoods. Rising rates in children</td>
<td>Low levels of physical activity Poor diet</td>
<td>Access to good quality open space Provide opportunities for physical activity Create active travel routes Encourage walking to school Improve access to fresh good food</td>
<td>To reduce rates of obesity To increase levels of physical activity</td>
</tr>
</tbody>
</table>

**Spatial planning interventions**

- Have standards of open space been set for existing and new areas in terms of accessibility, quality and size?
- Have standards of green space been set for existing and new areas in terms of accessibility, quality and size?
- Will access to open space be enhanced for those communities that are deficient?
- Will access to green space be enhanced for those communities that are deficient?
- Will the management of open and green space ensure that the needs of all sections of the community be met?

### Figure 5: Cardiovascular Disease

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Where the issue is located</th>
<th>Pathway / causal link</th>
<th>Potential options for addressing the issue – actionable insights</th>
<th>Health objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates of Cardiovascular Disease are high</td>
<td>Distributed across the borough but with prevalence in certain ethnic groups</td>
<td>Low levels of physical activity Air pollution Poor diet</td>
<td>Open space management for physical activity Provide opportunities for physical activity Improve air quality Active travel patterns Green space and food growing</td>
<td>To reduce incidence of Cardiovascular Disease To increase life expectancy</td>
</tr>
</tbody>
</table>

**Spatial planning interventions**

- Will air quality improve to above minimum standards for all parts of the community?
- Will active travel be required in travel plans for major developments?
- Are walking routes to centres, facilities and schools identified and protected and steps to enhance or provide them where deficient identified?
- Will a safe and continuous cycle network be created?
- Will good access to fresh food be achieved for all communities?
- Will access to food growing opportunities be provided for all who need it?
### Figure 6: Respiratory Disease

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Where the issue is located</th>
<th>Pathway / causal link</th>
<th>Potential options for addressing the issue – actionable insights</th>
<th>Health objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory disease is a common problem</td>
<td>Prevalent in major transport corridors and in certain neighbourhoods</td>
<td>Particulate levels caused by vehicles, Climatic conditions exacerbating effects</td>
<td>More green spaces, Control development and traffic levels – improve air quality, Design buildings and public realm protected from excessive sun, Improve housing energy efficiency performance, Increase tree cover</td>
<td>To reduce incidence of various types of respiratory disease, To reduce levels of air borne pollution</td>
</tr>
</tbody>
</table>

**Spatial planning interventions**

- Will access to green space be enhanced for those communities that are deficient?
- Will sustainable travel be required in travel plans for major developments?
- Will road traffic levels be reduced?
- Will air quality improve to above minimum standards for all parts of the community?
- Are interventions for managing air quality focussed on air quality ‘blackspots’?
- Will all dwellings meet minimum insulation and optimum energy efficiency standards so as to meet targets for home energy consumption?
- Will the public realm be protected from excessive sun and cooling surfaces introduced?
- Will a high density of tree planting be achieved?

### Figure 7: Road and Traffic Injuries

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Where the issue is located</th>
<th>Pathway / causal link</th>
<th>Potential options for addressing the issue – actionable insights</th>
<th>Health objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>High rates of road and traffic injuries</td>
<td>Fluctuating road traffic injuries, High levels of accidents in certain deprived neighbourhoods</td>
<td>High traffic speeds, Lack of road safety awareness, Community severance, Chaotic lifestyles</td>
<td>Control development and traffic levels, Vehicle speed reduction, Introduction of traffic calmed neighbourhoods, Safe routes to school</td>
<td>To reduce the rate of ‘Killed and Seriously Injured’, To reduce injury rates in key social and ethnic groups</td>
</tr>
</tbody>
</table>

**Spatial planning interventions**

- Will sustainable travel be required in travel plans for major developments?
- Will road traffic levels be reduced?
- Will clear standards for walkability be applied to new neighbourhoods?
- Are steps identified to meet deficiencies in walkability of existing neighbourhoods?
- Will vehicle speeds be reduced by traffic calming to Manual for Streets standards?
- Will road design and layout everywhere except on segregated high speed roads prioritise pedestrians?
- Are walking routes to centres, facilities and schools identified and protected and steps to enhance or provide them where deficient identified?
- Will a safe and continuous cycle network be created?
- Are interventions focussed or prioritised on deprived neighbourhoods?
**Figure 8: Health Inequalities**

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Where the issue is located</th>
<th>Pathway / causal link</th>
<th>Potential options for addressing the issue – actionable insights</th>
<th>Health objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health inequalities persist across the borough, with large differences between wards</td>
<td>Disparity in life expectancy high between wards; Incidence of self reported ill health high in certain groups</td>
<td>Worklessness Low and erratic income Education attainment Environmental conditions Poor access to health services</td>
<td>Increase local employment opportunities Improve housing quality Improve access to health and related services</td>
<td>To reduce life expectancy disparities To improve equality in access to services</td>
</tr>
</tbody>
</table>

---

**Spatial planning interventions**
- Will diverse local employment opportunities reflecting a range of skill, levels be provided and worklessness reduced?
- Will local employment agreements be secured in development consents or obligations?
- Will the provision been made for appropriate housing reduce levels of overcrowding?
- Are sites identified for co-location and coordinated social and community services?
- Is it clear under what circumstances developer contributions for new social infrastructure will be required?
- Are all anticipated changes to the health estate facilitated?
- Will necessary new capacity of healthcare facilities be provided for when and where it is needed?
- Has a spatial investment plan for health infrastructure been agreed and funding sources identified?

The use of open space can be a key vehicle for maintaining and promoting good health. This has been recognised by the NHS in producing National Institute for Health & Clinical Excellence (NICE) public health guidance *Promoting and creating built or natural environments that encourage and support physical activity* (January 2008). The guidance offers the first national, evidence-based recommendations on how to improve the physical environment to encourage physical activity. It demonstrates the importance of such improvements and the need to evaluate how they impact on the public’s health.
2. Housing and health

Figure 9: Housing Quality and Health

The direct and indirect effects of poor housing conditions on the health of individuals are shown in table 1. It is important to address the whole issue of poor housing as this encompasses the construction of buildings, standards and environmental aspects of location. All are potential stressors to the physical and mental health of individuals. Securing improvements in housing stock provides for a potentially significant positive effect on population health.
## Figure 10: Summary of the Impact of Housing on Health

<table>
<thead>
<tr>
<th>Direct effects</th>
<th>Indirect effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Poor housing contributes to a range of physical conditions, including influenza, tuberculosis, some cancers and respiratory conditions arising from insufficient ventilation and indoor pollutants such as nitrogen dioxide and radon.</td>
<td>- The cumulative effects of living in a poor, stressful and uncongenial setting reduce levels of resistance to physical and mental illness.</td>
</tr>
<tr>
<td>- The inability to heat homes adequately, because of low income, poor design or poor insulation, contributes to temperature-related deaths in winter, not just through hypothermia but also increased susceptibility to coronary and cerebral thrombosis and respiratory disease. About 10% of the population, are classified as ‘fuel poor’. It particularly affects families with young children and pensioners.</td>
<td>- This cumulative stress may also affect residents ability to follow treatment plans for existing conditions, exacerbating their and their children’s ill health.</td>
</tr>
<tr>
<td>- Poor quality housing and overcrowding are associated with a range of problems – such as stress, anxiety, depression and insomnia – which affect mental health.</td>
<td>- Apparently ‘unhealthy’ habits may be adopted, some of which may be coping strategies rather than a freely exercised choice of lifestyle.</td>
</tr>
<tr>
<td></td>
<td>- Living in ‘not decent’ homes can affect children’s educational attainment, access to balanced nutrition and development. For those with disabilities it can reduce their life opportunities.</td>
</tr>
</tbody>
</table>
4. Transport and health

Transport is a facilitator to much of this development by enabling equitable access to opportunities for a good quality of life. These include education, employment, healthcare facilities, other social, retail and leisure amenities. This supports the concept of social connectivity. In particular Gardner et al\textsuperscript{4} have noted from the literature that transport can influence health in a positive way by:

- helping people to improve their health through walking or cycling;
- enabling access to health, employment and other services; and
- building social capital through allowing people to get to friends and families and other social networks.

However, the transport system also has negative influences on health and the environment, notably through

- Inactivity due to car dependence;
- road traffic injuries;
- air pollution;
- traffic noise;
- impacts on climate change and psychological and social impacts.

Note that the evidence leads us to prioritise actions that aim to increase the proportion of journeys undertaken by walking and cycling. This is because such a modal shift from car travel would be associated with positive changes in all the above health impacts. While interventions focusing on improving road safety, improving air quality or fuel efficiency are also important, they do not have the same broad benefits to public health\textsuperscript{5}. These relationships can be described thus:
There are four main documents that detail the most relevant, scientifically robust, evidence of effective interventions by which transport planning can protect and promote health & wellbeing. These are:

A shortened summary of the overall findings of the research is shown below:

**Table 4: Examples of policy interventions and their potential health-related outcomes (Gardner et al, 2009).**

<table>
<thead>
<tr>
<th>Policy Intervention</th>
<th>Promoting physical activity</th>
<th>Reducing crashes and road traffic injury</th>
<th>Reducing air pollution</th>
<th>Reducing noise pollution</th>
<th>Reducing greenhouse gas emissions</th>
<th>Increasing social inclusion</th>
<th>Improving access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of safe walking and cycling</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Investment in infrastructure for safer walking and cycling</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Travel planning and accessibility planning</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Traffic-calming and speed reduction in residential areas</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Enforcement of speed limits/speed management</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Reducing transport demand (e.g. promoting telecommunication)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Congestion charging (road pricing) and parking charges</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Cleaner fuels and more efficient vehicles</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>+</td>
<td>+</td>
<td>○</td>
</tr>
<tr>
<td>Noise reduction</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>+</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Safer cars (including safety for pedestrians)</td>
<td>+</td>
<td>+</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>+</td>
<td>○</td>
</tr>
<tr>
<td>Enforcement (e.g. seatbelts/child restraints)</td>
<td>+</td>
<td>+</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

+ = Policy intervention likely to lead to positive health-related outcome  
○ = Policy intervention not likely to lead to health-related outcome

Investment in infrastructure which enables increased activity levels through cycling and walking is likely to provide low cost, high value and thus cost effective, even cost saving, options providing benefits for the individual, the NHS and transport as a whole.

In relation to child accident prevention, NICE guidance on reducing unintentional injuries among those under the age of 15 has highlighted the following in relation to transport:
PH29: Strategies to prevent unintentional injuries among under-15s’

- Recommendation 1 Incorporating unintentional injury prevention within local and national plans and strategies for children and young people’s health and wellbeing
- Recommendation 2 Coordinating unintentional injury prevention activities
- Recommendation 3 Identifying and responding to attendances at emergency departments and minor injuries units
- Recommendation 4 Developing professional standards for injury prevention (National)
- Recommendation 5 Funding the development of injury prevention standards and curricula (national)
- Recommendation 6 Providing the wider childcare workforce with access to injury prevention training
- Recommendation 7 Establishing a national injuries surveillance resource (national)
- Recommendation 8 Gathering high quality injury data from emergency departments
- Recommendation 15 Advising on off-road cycle safety
- Recommendation 17 Maintaining and managing road safety partnerships
- Recommendation 18 Carrying out local child road safety reviews and consultations
- Recommendation 19 Aligning local child road safety policies
- Recommendation 20 Promoting and enforcing speed reduction
- Recommendation 21 Involving the police in driver education initiatives and activities to reduce traffic speed

Additionally, NICE guidance PH31: Preventing unintentional injuries among under-15s: road design and modification makes four recommendations on how to design roads in such a way as to help prevent accidents amongst those aged 15 and under.

**Recommendation 1 Health advocacy and engagement**

**Who should take action?**
- Directors of public health and other health professionals with responsibility for preventing or treating injuries.
- Local strategic partnerships.

**What action should they take?**
- Ensure a senior public health position includes leading on, and responsibility for, the health sector’s involvement in injury prevention and risk reduction.
- Support and promote changes to the road environment as part of a broader strategy to prevent injuries and the risk of injuries.
- Support coordinated working between health professionals and local highways authorities to promote changes to the road environment.

**Recommendation 2 Needs assessment and planning**

**Who should take action?**
Local highways authorities.

**What action should they take?**
Work with other partners to introduce engineering measures to reduce speed as part of a broad strategy to prevent injuries and the risk of injuries (see recommendation 1).

These measures should be:

- developed after considering data on risk of injury (such as traffic speed and volume) and injuries (including levels of casualties, their age, the groups involved and where they occur)
- designed and constructed in line with current good practice guidelines and case studies (such as ‘Manual for streets’), and determined by local context and the characteristics of the site (including physical limitations such as geological considerations)
- designed taking into account all road users (not just car users), including vulnerable road users (such as pedestrians, cyclists and those with impaired mobility)
- developed using effective processes of community engagement to seek the views of children, young people, their parents and carers (as outlined in NICE public health guidance 9 ‘Community engagement’) and with involvement of other interested parties such as the emergency services and local businesses
- implemented based on local priorities for modifying the transport infrastructure
- evaluated for their effect in terms of reducing the risk of injury and reducing the number of actual injuries
- evaluated for any unintended consequences, such as the impact on the number of people walking or cycling or on injury rates in neighbouring streets.

**Recommendation 3 Measures to reduce speed**

**Who should take action?**
- Local highways authorities.
- Local strategic partnerships.

**What action should they take?**
- Introduce engineering measures to reduce speed in streets that are primarily residential or where pedestrian and cyclist movements are high. These measures could include:
  - speed reduction features (for example, traffic-calming measures on single streets, or 20 mph zones across wider areas)
  - changes to the speed limit with signing only (20 mph limits) where current average speeds are low enough, in line with Department for Transport guidelines.
- Implement city or town-wide 20 mph limits and zones on appropriate roads. Use factors such as traffic volume, speed and function to determine which roads are appropriate.
- Consider changes to speed limits and appropriate engineering measures on rural roads where the risk of injury is relatively high, in line with Department for Transport guidance.
- Take account of the factors identified in recommendation 2 when introducing measures.

[www.dft.gov.uk/pgr/sustainable/manforstreets/](http://www.dft.gov.uk/pgr/sustainable/manforstreets/)
**Recommendation 4 Popular routes**

**Who should take action?**
- Directors of public health.
- Local highways authorities.
- Local strategic partnerships.
- Public health professionals with an injury prevention remit.
- School travel planners.

**What action should they take?**
- Consider opportunities to develop engineering measures to provide safer routes commonly used by children and young people, including to school and other destinations (such as parks, colleges and recreational sites). This should be done as part of the development of a broad package of measures to address travel, for instance when developing school travel plans.
- Include school governors and head teachers in discussions about changes relating to school travel.

It is important that local transport planning is integral to wider urban planning as it is crucial to connectivity. It also has the potential role to play in reducing social segregation. For example through good public transport to new housing developments which allow people from different social background and circumstances to live together by being able to get access to the educational, employment, and social amenities they need. Good transport planning supports the development and maintenance of social networks. However, highways can act as barriers, limiting/disrupting interpersonal networks and reducing social contact. This impact on greater on those with limited transport options.

Transport planning needs to consider the needs of the elderly, children and those with mobility problems. This will include people whose first language is not English who may experience difficulties in obtaining information on public transport.

In conclusion, transport planning must be seen as part of a whole system to create and maintain safe, healthy and economically vibrant communities. Consideration of health-promoting transport initiatives, particularly boosting non-motorised travel and public transport, is likely to have economic as well as health and environmental benefits. It also helps people to cope with natural and man-made disasters and should be a key part of emergency plans.

It has roles to play in:
- Creating sustainable natural environments
• Ensuring public safety through measures to minimise road accidents as well as reducing noise, congestion and air pollution levels
• Creating vibrant built environments
• Enabling healthier lifestyles through walking and cycling schemes as well as access to key services and amenities such as food, healthcare and leisure/physical activity opportunities
• Promoting equity and reducing social exclusion through measures to enable those without access to personal transportation to access facilities and services
• Supporting the development and maintenance of social networks
• Reducing the negative impacts of major emergencies

In addition to the impact transport can have on physical health, it also plays a role in mental wellbeing. This is especially important given the high prevalence of mental ill health, where one in six people in the UK will suffer from mental ill-health (e.g. anxiety or depression) at some time during their life\(^9\). Access to green space can reduce the symptoms of Attention Deficient Hyperactivity Disorder (ADHD) in children and people who are more physically active tend to have lower rates of depression. It also has wider social and work productivity benefits\(^10\). Further research suggests there are benefits to mental wellbeing of simple exposure to the natural environment, with those with mental ill health showing improvements in self-esteem and this can be gained through views of nature, being within the natural environment or exercising in these environments\(^11\).
References


2. Spatial Planning and Health Group (2011) Steps to Healthy Planning – Proposals for Action


10. Faculty of Public Health (2010) Great Outdoors: How Our Natural Health Service Uses Green Space to Improve Wellbeing London, Faculty of Public Health