
Report authored by:-

Sophie Grinnell BEng (Hons) MSc 
Health Impact Assessment Research Fellow 
University of Liverpool 

December 2013

Authors Contact Details
sophie.grinnell@liverpool.ac.uk
**Acknowledgements**

Thanks are given to the Liverpool Public Health team for commissioning this piece of work, with a big thank you to Karen Stevens (Cycling Strategy Proponent) who supported this HIA without any prior knowledge of Health Impact Assessment before it landed on her desk.

Many thanks go to Francesca Bailey for proof reading this report.
Health Impact Assessment is defined as:-

‘A combination of procedures, methods and tools by which a project, programme, policy or legislative proposal may be judged for its potential effects on the health of a population and the distribution of these effects within it.’

Health Impact Assessment (HIA) is a globally recognised assessment tool designed to aid the decision makers on supporting their strategies, policies or programmes, to be healthy, in order to improve health and reduce health inequalities.

This HIA on the Liverpool Cycling Strategy was commissioned by the Liverpool Public Health Team.

Purpose of the HIA.

The purpose of this HIA is to examine likely health impacts - positive or negative - of the Cycling Strategy by offering an independent, systematic and robust analysis of the likely impacts of the implementation of the Cycling Strategy on the population of Liverpool as well as supporting the decision makers.

It aims to focus on the wider determinants of health as identified in the social model of care and not the medical health impacts.

This HIA is undertaken as a Prospective Desk-top HIA. This report will describe the scope of the HIA, including methods and process, the data collected and the evidence defined by this data.

The assessment section of the report brings together a range of evidence, including a literature review, policy analysis and a localised demographic profile. Based on the evidence collected a set of recommendations are proposed.

The following recommendations are advised:-

**Recommendation 1** – Develop a robust evaluation framework to assess the health impacts of the Strategy.

**Recommendation 2** - Extended local research of the barriers to cycling.

**Recommendation 3** - Ensure the development of a multi-departmental working group to ensure cycling focused policies, particularly through urban design and land-use planning.

**Recommendation 4** - Further assessment to determine the implications to accommodate the predicted rise in number of cyclists.

**Recommendation 5** – Ensure City Centre Cycle Connectivity/Permeability Continuity.

---

1 European Centre for Health Policy, Gothenburg 1999
## Contents

1.0 The Liverpool Cycling Strategy Health Impact Assessment ............................................ 6  
    1.1 Introduction ........................................................................................................... 6  
    1.2 ‘Get Liverpool Cycling’ 2013 - 2026 .................................................................. 6  
2.0 Health and Health Impact Assessment ........................................................................ 7  
    2.1 Health Impact Assessment .................................................................................. 7  
3.0 Assessment of the Strategy ....................................................................................... 8  
    3.1 Screening and Scoping ....................................................................................... 8  
    3.2 Evidence Gathering ............................................................................................ 13  
        3.2.1 Literature Review ...................................................................................... 13  
            Cycling – a Determinant of Health? .............................................................. 13  
            Facts About Cycling ..................................................................................... 14  
            Cycling as a Mode of Transport .................................................................. 15  
            Cycling and Sustainability/Environment ..................................................... 16  
            Cycling and Infrastructure ......................................................................... 16  
            Cycling and the Economy ......................................................................... 17  
        Making the Change ......................................................................................... 18  
        3.2.2 Policy Analysis ......................................................................................... 20  
        3.2.3 Profile ....................................................................................................... 20  
    3.3 Impact Analysis .................................................................................................... 20  
    3.4 Conclusion and Recommendations ....................................................................... 21  
        3.4.1 Conclusion ................................................................................................. 21  
        3.4.2 Recommendations ................................................................................... 21  
        3.4.3 Limitations of the HIA ............................................................................. 22  

## Appendix

A – Summary of the Liverpool Cycling Strategy ................................................................ 24  
    Historical Context – Liverpool and Cycling ............................................................ 24  
    Current Cycling in Liverpool .................................................................................. 24  
    The Liverpool Cycling Strategy – ‘Get Liverpool Cycling’ ....................................... 25  
B – Health Impact Assessment and HIA Methodology .................................................... 27  
    Social Determinants of Health .............................................................................. 27  
    Social Model of Health ......................................................................................... 27  
    Health Inequalities and Health Equity .................................................................. 28  
    Policy Context of Health Inequalities .................................................................. 28  
    When and What Type of HIA? .............................................................................. 28  
    HIA Methodology ................................................................................................... 29  
    Screening .................................................................................................................. 29
1.0 The Liverpool Cycling Strategy Health Impact Assessment

1.1 Introduction

This Health Impact Assessment (HIA) was undertaken on the Liverpool Cycling Strategy through the Liverpool HIA Capacity Building Project. The HIA was overseen, researched and authored by HIA Research Fellow, Sophie Grinnell.

1.2 ‘Get Liverpool Cycling’ 2013 - 2026

The new Liverpool Cycling Strategy has the vision:-

‘Liverpool will be a city where cycling is a popular mainstream mode of travel for local journeys with routes which are safe, convenient, accessible, comfortable and attractive for adults and children.’

The overarching aim for this strategy is:-

‘to get more people cycling, more often.’

With the objective to:-

- Increase levels of cycling within the city to 10% of all trips by 2025.

See Appendix A for summary of the Cycling Strategy and historical context relating to Liverpool and cycling.
2.0 Health and Health Impact Assessment

“Health is a state of complete physical, mental and social well-being not just the absence of disease or infirmity.”

As stated in the Ottawa Charter for Health Promotion, good health is a major resource for social, economic and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural and biological factors can all favour health or be harmful to it. Health promotion is the ‘process which enables people to increase control over, and improve their health.’

2.1 Health Impact Assessment

HIA offers the opportunity to ‘potentially prevent negative health effects and maximise the positive health effects.’ It also supports the strengthening of partnership working between organisations.

People’s health is affected by a variety of factors, such as individual, social, economic and environmental. These factors are commonly referred to as the Social Determinants of Health. It is these factors that HIA links and examines.

See Appendix B for further detail of HIA and HIA methodology.

---

3 World Health Organisation, 1946
4 Ottawa Charter for Health Promotion, 1986
5 Health Impact Assessment Toolkit for Cities Document 1, Vision to Action, WHO, 2005
3.0 Assessment of the Strategy

3.1 Screening and Scoping – To determine if an HIA is required.

**Step A - HIA Steering Group Formed** – Not required for this HIA

**HIA Facilitator (name/contact details)** – Sophie Grinnell (SG)
(sophie.grinnell@liverpool.ac.uk)

**Proposal Proponent (name/contact details)** – Karen Stevens (KS)
(Karen.stevens@liverpool.gov.uk)

### Section A – Policy Context

**Title of Proposal** – ‘Get Liverpool Cycling’ – 2013-2026

**HIA Screening Commissioned by** – Liverpool Public Health Team.

**Date of Screening** – Oct 2013 (SG) & Dec 2013 (SG/KS)

Rationale of Proposal (please summarise aim and objectives of the Proposal).

**Aim:**

to get more people cycling, more often.’

With the objective to:

- Increase levels of cycling within the city to 10% of all trips by 2025.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the Proposal new or existing?</td>
<td>New ☒ Existing ☐</td>
</tr>
<tr>
<td>2</td>
<td>Who does the Proposal belong to? (for example Public Health, Municipality/Local Authority Community)</td>
<td>LA</td>
</tr>
<tr>
<td>3</td>
<td>Is the Proposal statutory?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td></td>
<td>If yes please give details –</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Are there links to existing or proposed strategies? Please mark as appropriate.</td>
<td>Yes ☒ No ☐</td>
</tr>
<tr>
<td></td>
<td>If yes please give details –</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regeneration, Public Health, Physical Activity.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Which Directorate/Portfolio does the Proposal ‘sit’ within? (e.g. Housing, Regeneration, Public Health)–</td>
<td>Regeneration</td>
</tr>
<tr>
<td>6</td>
<td>What stage is the Proposal at:- Scope/Draft/Review Stage/Final/Other? (please mark appropriate stage)</td>
<td>Refresh ☐ Draft ☒ Final ☐ No ☐</td>
</tr>
<tr>
<td>7</td>
<td>Location of the Proposal to be implemented (for example City Wide, a particular community), please state:</td>
<td>Location City Wide</td>
</tr>
</tbody>
</table>
### Section B - Please answer the following screening questions to identify any known effects on health with the implementation of the Proposal

<table>
<thead>
<tr>
<th>Screening Question</th>
<th>Yes/No/Unknown (Y/N/UK)</th>
<th>Justification/Description of likely health impact (− or +). Add as much detail as you can, rather than just bullet points.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1 – Identification of Health Impacts</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| (a) Will the Proposal have any positive impacts on the determinants of health? | Yes | • Increasing physical activity will have positive impacts on health, associated with improved and increased physical activity. Reduces sedentary lifestyles.  
• Increase social inclusion and social cohesion.  
• Positive impact on the local economy.  
• Positive impact on sustainability.  
• Mental health & well-being.  
• Quality of life.  
• Positive impact on individuals (cycling is a low cost mode of transport).  
• Communication to potential cyclists through the City Council’s cycling activities. |
| (b) Will the Proposal have any negative impacts on the determinants of health? | Yes | • Road traffic accidents.  
• Communication should be considered particularly amongst cultural groups. |
| Include the impact on mental health & well-being. | | |

**Question 2 – Population Groups**

| Are there any population groups likely to be affected by the Proposal (either positively or negatively)? | Yes | • Adolescents (RTA’s) – (−ve)  
• Male (evidence suggests cycling impacts more on men’s health than females – although the up-take of cycling is by females) – (+ve)  
• Ethnic groups (cultures) – communication (both positive and negative).  
• Those with disability (mental ill-health and physical disabilities).  
• Those living in areas of disadvantage. |

**Question 3 – Health Inequity**
### Question 4 - Community Concerns

| Is there any community concern/s over the Proposal? | Yes | - Consideration of street furniture for example bike parking/showers etc.  
- Consideration of bike storage in homes (both new and old).  
- Bike ownership in Liverpool is low. |

### Question 5 - Limitations

| Are there any limitations from a HIA or Proposal perspective? (e.g. evidence base, profile data) | Yes | - Funding will restrict the full delivery of this project.  
- Needs high level buy-in and leadership.  
- Capital and revenue investment. |

If the answer is **YES** or **UNKOWN** to questions 1, 2 or 3 then a HIA must be undertaken.

HIA to be undertaken **Yes ☒ / No ☐**

If **NO** please proceed to the ‘No HIA required pro forma’ – found after Section C – **not included within this HIA report.**

---

6 Health inequalities/inequities are:

“Systematic, socially produced (and, therefore, avoidable or modifiable), unfair or unjust differences in health determinants or health outcomes between groups with different levels of underlying social advantage/disadvantage.”

Health Equity Impact Assessment Project Report, IMPACT, 2010
Section C - Scoping Section ‘Developing the HIA’

Date HIA to be competed? - December 2013

**Step B – Aims and Objectives of the HIA**

**Aim of HIA:**
To research both positive and negative health impacts of implementation of The Strategy.

**Objectives of HIA:**
1. To complete a comprehensive literature search of available evidence of the effects of an increase in cycling activity.
2. To identify the established positive impacts of increased cycling.
3. To identify the established negative impacts of increased cycling.
4. To analyse the researched information and make recommendations.
5. Evaluate the HIA and the implementation of the Recommendations.

**Step C – Determine type of HIA to be Undertaken**

(Bold as appropriate)

<table>
<thead>
<tr>
<th>Type of HIA</th>
<th>‘When to’ HIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk-top</td>
<td>Prospective</td>
</tr>
<tr>
<td>Rapid</td>
<td>Concurrent</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>Retrospective</td>
</tr>
</tbody>
</table>

Will Community Participation be undertaken as part of the HIA (e.g. Focus Groups / Workshops)

Yes ☐
No ☒

**Step D – Associated Risks**

The Steering Group should consider if there are likely to be any resource or budgetary risks associated with undertaking the HIA or the implementation of the Proposal, for example staffing resources/skills to undertake the HIA, costs for undertaking focus groups, HIA printing costs.

State identified associated risks in the box below.

- Timescale for completing the HIA is of concern.
- No focus groups or workshops, due to the timescales of this HIA.

**Step E – Recommendations**

Who will be responsible/oversee the implementation of the recommendations:

How will the implementation of the recommendation be monitored/reported?

Both to be decided upon development of recommendations.

**Step F – Dissemination of the HIA**

Where will the HIA report be reported to and by whom? (Boards/Committees)

Where –
<table>
<thead>
<tr>
<th>Who – Policy Proponent and HIA Author.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport and Climate Change Select Committee.</td>
</tr>
<tr>
<td>Cabinet.</td>
</tr>
<tr>
<td>Relevant HIA websites.</td>
</tr>
</tbody>
</table>
3.2 Evidence Gathering

This includes a literature review, policy analysis (Appendix C) and localised community profile (Appendix D).

3.2.1 Literature Review

This section of the HIA report provides a brief literature review on cycling and physical activity.

The literature review is an essential part of the evidence gathering and is important ‘in order to explore the field of work’ to enable an understanding of the topic area under review.¹

Literature/evidence can be collected from a number of different sources:-

- Primary Literature – individual research published in peer reviewed journals,
- Secondary Literature – reviews (e.g. systematic, review of reviews), published in academic press,
- Grey Literature – anything not reported in peer reviewed journals, magazine articles.

The initial literature review was conducted in order to explore the area of cycling as a determinant of health, in broad terms.

Key Words: cycling, health impacts, physical activity, economy, infrastructure, sustainability.

The literature review included secondary and grey literature and used sources such as the World Health Organisation (WHO) and British Medical Journals.

It explores the context of cycling as a determinant of health; the barriers to why there appear to be inequalities in cycling and the subsequent wider health impacts that these may have on different populations. Where possible, vulnerable populations or those groups which are ‘easy to miss’ will be identified.

Cycling – a Determinant of Health?

Cycling is a form of healthy transport, providing physical activity – which is a determinant of health.

Physical activity is defined as:-

*any bodily movement produced by skeletal muscles that requires energy expenditure.*²

---

¹ The Literature Review, Ridley, D. 2010
² World Health Organisation www.who.int/topics/physical_activity/en
Facts About Cycling

- More cycling reduces obesity and other chronic diseases – improvement in Public Health.
- Lower number of journeys made by bikes in UK than counterpart European Countries.
- To continue the drive to increase cycling there must be long term investment (both capital and revenue) not short lived projects.
- Ensure cycling friendly routes with appropriate road junctions and cycle facilities.
- Cycling is a low-impact activity.\(^9\)
- No matter what age, being physically active is good.\(^10\)
- Most typical cyclists are white men aged between 25-44 years (with an average than higher income).
- Benefits of cycling include, moving more, spending less and being happier.
- To develop a cycling culture a cycling budget per head must be in place.
- Need to invest in both capital and revenue budgets.
- Cycling is a safe activity but could be more so.
- Political leadership is required to get more people cycling.\(^11\)
- Participation in sport and physical activity is not equitable, and there continue to be sectors of the community that face additional barriers.\(^12\)

Key messages from the literature:

- Physical inactivity globally has been identified as the fourth leading risk factor for mortality and is a global health problem.\(^13\)
- It is acknowledged that physical inactivity is a major risk factor for numerous diseases, including cardiovascular diseases and several types of cancer.\(^14\) In fact increasing levels of physical activity will prevent or manage over 20 conditions and diseases.\(^15\)
- It is estimated (2006 – 2007) that diet-related ill health cost the NHS in the UK £5.8 billion, physical inactivity cost £0.9 billion and overweight and obesity £5.1 billion.\(^16\)
- Increasing physical activity not only has a positive impact on medical concerns of health but also on well-being and depression.\(^17\)
- There is strong evidence that there is a positive correlation between leisure time, physical health and health related quality of life for everyone.\(^18\)
- Evidence from observations, from as far back as the 1950s undertaken by Morris and Crawford suggested that workers who had more sedentary work suffered more heart disease than their more active counterparts.\(^19\)
- A literature review of the Built Environment focused on three ‘key built environment interventions that support human health.’
  - The Built Environment and Getting People Active,

\(^9\) World Health Organisation www.who.int/topics/physical_activity/en
\(^10\) Be Active; Be Health, Creating a Moving Culture Strategy 2012 – 2017, Liverpool John Moore’s University for Liverpool City Council
\(^11\) Get Britain Cycling, All Parliamentary Cycling Group, 2013
\(^12\) Be Active; Be Health, Creating a Moving Culture Strategy 2012 – 2017, Liverpool John Moore’s University for Liverpool City Council
\(^13\) World Health Organisation www.who.int/topics/physical_activity/en
\(^14\) Health Impact Assessment of increased cycling to place of work or education in Copenhagen, holm et al. 2012 www.bmjopen.bmj.com
\(^15\) Physical Activity and the Environment, PH8, National Institute for Health Care Excellence (NICE), 2008
\(^16\) Be Active; Be Health, Creating a Moving Culture Strategy 2012 – 2017, Liverpool John Moore’s University for Liverpool City Council
\(^18\) Be Active; Be Health, Creating a Moving Culture Strategy 2012 – 2017, Liverpool John Moore’s University for Liverpool City Council
\(^19\) Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin,B, Healthy Built Environment Programme, The University of New South Wales, 2011
The Built Environment and Connecting and Strengthening Communities and The Built Environment and Providing Healthy Food Options. These three areas address what is regarded as ‘major risk factors for contemporary chronic disease’ which are:

- Physical inactivity,
- Social isolation and
- Obesity.  

Physical activity such as walking and cycling can increase social contact. Social isolation and lack of community interaction are associated with poorer health.

Changes within society and people’s lives have become more sedentary which is adding to the problem of lack of exercise.

This lack of exercise is adding to the growing epidemic of obesity.

Building exercise into daily routines will support the combating of this sedentary lifestyle.

Evidence also suggests that physical activity can help older people maintain independent lives.

It is recognised that physical activity levels will vary due to a number of factors such as age, gender, disability, socioeconomic status and ethnicity.

Recommendations have been developed for the minimum amount of physical activity undertaken per day – 30 minutes per day of moderate-intensity activity. Research undertaken in 2004 by the Joint Health Surveys, suggest that many people, both adults and young people (and children) do not achieve this. A more recent survey ‘National Travel Survey’ undertaken in 2007 by the Department for Transport suggests that the distance people walk and cycle has decreased.

The Bicycle Helmet Research Foundation state that the benefits of cycling include:

- Cycling is widely acknowledged to be one of the best ways of achieving good health,
- Those who cycle live longer and lead healthier lives,
- Cycling to work, school and other regular journeys can be the most effective thing a person can do to improve their health,

- It is widely recognised that there is a considerable way to go in promoting the benefits to health through health promotion.

Cycling as a Mode of Transport

A report by the British Medical Association (BMA) states a number of facts regarding transport and that healthy transport = healthy lives. It explains people’s need to ‘reach destinations quickly, safely and efficiently,’ with an increasingly complex transport system.

Key messages from this report include:

---

20 Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin, B, Healthy Built Environment Programme, The University of New South Wales, 2011
23 Physical Activity and the Environment, PH8, National Institute for Health Care Excellence (NICE), 2008
24 Physical Activity and the Environment, PH8, National Institute for Health Care Excellence (NICE), 2008
25 Physical Activity and the Environment, PH8, National Institute for Health Care Excellence (NICE), 2008
26 Physical Activity and the Environment, PH8, National Institute for Health Care Excellence (NICE), 2008
27 European Cyclists’ Federation, 2013
- Road traffic deaths have increased over the last 60 years,
- Congestion is a significant issue in many urban areas,
- Change of transport mode to more use of the car – which have become relatively more affordable,
- Policies, particularly land use policies, have prioritised mobility over accessibility,
- Long term exposure to air pollutants decreases life-expectancy,
- Areas of deprivation are most likely to suffer from air-pollution-related morbidity and mortality,
- Poor urban planning can lead to community severance,
- Combine active travel and public transport use.\(^{28}\)

**Cycling and Sustainability/Environment**

Key messages from the literature:-

- Evidence shows there is a well-established link between "the composition of the built environment and our ability to be physically active."\(^{29}\)
- Cycling (or walking) as a mode of transport can reduce air pollution.
- Noise pollution will decrease with less motorised traffic – bikes create little noise.\(^{30}\)
- Evidence suggests that roads should give precedence to cycling.\(^{31}\)
- To encourage behaviour change, surrounding environmental factors also need to change.\(^{32}\)
- Whilst recognising built environments can be changed to accommodate increasing physical activity and reduce barriers, it should be noted that characteristics of the built environment can differ with regards to different population groups, such as the elderly, the young, those with disabilities and ethnic populations, and those who are socially and economically deprived.\(^{33}\)
- To create and achieve a change in modal transport and increase physical activity, areas have to be accessible and connected in order to influence a change in lifestyle behaviours.\(^{34}\)

**Cycling and Infrastructure**

Key Messages from the Literature:-

- Creating an ‘Active City’ includes providing an environment that enables and allows pedestrians and cyclists to have ‘precedence over the movement of private vehicles.’\(^{35}\)
- Developing an ‘Active City’ is not without cars or motorised vehicles but one that is developed for a number of reasons including ‘human health, civic liveability and

---

\(^{28}\) Improving and Protecting Health, Healthy Transport = Healthy Lives, British Medical Association (website report undated), www.bma.org.uk/transport

\(^{29}\) Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin,B, Healthy Built Environment Programme, The University of New South Wales, 2011


\(^{32}\) Physical Activity and the Environment, PH8, National Institute for Health Care Excellence (NICE), 2008

\(^{33}\) Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin,B, Healthy Built Environment Programme, The University of New South Wales, 2011

\(^{34}\) Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin,B, Healthy Built Environment Programme, The University of New South Wales, 2011

\(^{35}\) The Active City, Low, N, Urban Policy and Research, 2003 (dx.doi.org/10.1080/081111403000062119)
increased transport choice.\textsuperscript{36}

- Evidence suggests that reducing motorised road traffic will reduce road traffic accidents, although this has to be taken within the context of the potential serious risk injury to cyclists and pedestrians.\textsuperscript{37}
- Car usage can create split communities, developing divides. There is some evidence which suggests this could lead to less pedestrian/cyclists and could create a perceived fear of crime.
- Location of some areas that are car dependent could create access issues and concerns.\textsuperscript{38}
- Well planned urban areas for cyclists and pedestrians can increase the safety of those cycling or walking.\textsuperscript{39}
- Several studies indicate a number of barriers which prohibit people walking – these include time, danger from motor cars, fears about personal safety, weather, poor health, quality and amenity of pedestrian facilities, distance, dependants/baggage and a degree of ‘lack of glamour’.\textsuperscript{40}
- With regards to cycling, the barriers appear to be time, safety, perceptions of social norm and impracticable distance.\textsuperscript{41}
- A further survey undertaken in 2006 by Gerrard et al of 2,403 cyclists concluded further barriers to the take-up of cycling. These included confidence, motivation, skills, opportunity and perceptions of enjoyment. This study would indicate that some of the resistance to cycling is a combination of ‘attitudinal’ and the built environment.
- Evidence suggests that children and young adolescents from deprived areas are more likely to be involved in road traffic accidents.\textsuperscript{42}

**Cycling and the Economy**

Key Messages from the Literature:-

- An Economic Assessment of Walking and Cycling references that most studies undertaken on physical activity and economic considerations have focused on the inactivity of specific diseases or illnesses, of which many have concentrated on direct health care costs.\textsuperscript{43}
- The study by SQW Consulting 2007, states that only 1.5% of all trips (on average) are made by cycling.
- Research indicates that Cost Benefit Analysis of active travel, which encourages cycling and walking, is rare.\textsuperscript{44}
- Studies have shown that active travel interventions such as transforming routes to become high use commuter routes and route quality surfacing had a significant

\textsuperscript{36} The Active City, Low, N, Urban Policy and Research, 2003 (dx.doi.org/10.1080/081111403000062119)
\textsuperscript{40} Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin,B, Healthy Built Environment Programme, The University of New South Wales, 2011
\textsuperscript{41} Healthy Built Environments, A Review of the Literature, Kent, J: Thompson, SM and Jalaludin,B, Healthy Built Environment Programme, The University of New South Wales, 2011
\textsuperscript{42} Social Differences in Traffic Injury Risks in Childhood and Youth – a literature review and research agenda, Laflamme, L; Diderichsen, F; Injury Prevention Journal, 2000
\textsuperscript{43} Value for Money: An Economic Assessment of the Health Benefits of Active Travel. Davies, A, NHS Bristol / Bristol City Council, 2009
\textsuperscript{44} Value for Money: An Economic Assessment of the Health Benefits of Active Travel. Davies, A, NHS Bristol / Bristol City Council, 2009
impact on usage. One study showed significant savings through reduced absenteeism – predominately due to an increase of physical activity.

- Other factors supporting an increase in cycling include construction of new cycle routes, road markings, signage and lighting.
- In 2005, Sustrans produced guidance notes for the economic appraisal of cycling and walking schemes at schools. Grants were awarded for the construction of specific road crossings and general infrastructure improvements.
- Research undertaken by SQW Consulting for Cycling England, created a scenario for one new cyclist and concluded that if people can be encouraged to cycle, around two-thirds of the economic benefit generated does not depend on the location or type of facility.
- Other economic factors of cycling consider not only value of cost of life, health benefits and savings to the health service but also productivity gains, pollution and ambience.\(^\text{45}\)
- Research has shown for 10,000 people taking up regular cycling (aged between 20 and 60 years) for commuting, it would result in 50 fewer deaths per year aggregated between health benefits and road traffic accidents.\(^\text{46}\)

**Making the Change**

*Key Messages from the Literature:-*

- Indications suggest that car journeys are on the increase whilst other forms of transport (particularly cycling and walking) have decreased.\(^\text{47}\)
- Public transport needs to be improved for longer journeys.\(^\text{48}\)
- Changes in land use to support cycle/pedestrian travel need to happen, such as dedicating roads to the use of pedestrians and cyclists and increasing bus and cycle lanes.\(^\text{49}\)
- All sectors across all levels of government, both external and internal have a part to play in increasing levels of physical activity.\(^\text{50}\)
- Research suggests that in order to create and encourage a change in physical activity a mix of social, economic, political and built environmental policies is required.\(^\text{51}\)
- Studies have shown that retrofitting streets for cycling can prove to have a positive impact, along with the implementation of restricted speeds (20mph speed limit).
- Evidence suggests that cycling can bring about benefits not just for those cycling, but for society as a whole.\(^\text{52}\)
- This can be more than just the impacts of reduced pollution, tackling congestion and improved health benefits. But also, the more indirect impacts such as children having increased independence, improving quality of lives and communities and supporting tourism.\(^\text{53}\)
- Messages from the European Cyclists’ Federation include:-

---

\(^{45}\) Value for Money: An Economic Assessment of the Health Benefits of Active Travel. Davies, A, NHS Bristol / Bristol City Council, 2009

\(^{46}\) Value for Money: An Economic Assessment of the Health Benefits of Active Travel. Davies, A, NHS Bristol / Bristol City Council, 2009


\(^{50}\) World Health Organisation www.who.int/topics/physical_activity/en

\(^{51}\) Healthy Built Environments, A Review of the Literature, Kent, J; Thompson, SM and Jalaludin, B, Healthy Built Environment Programme, The University of New South Wales, 2011

\(^{52}\) Valuing the Benefits of Cycling, SQW Consulting, 2007

\(^{53}\) Valuing the Benefits of Cycling, SQW Consulting, 2007
- Cycling policies need continuous political leadership and co-ordination from the top down,
- Cross-disciplinary cycling plans, particularly to create fully inclusive cycling policies.\textsuperscript{54}

\textsuperscript{54} European Cyclists’ Federation, 2013
3.2.2 Policy Analysis

The policy analysis examines a range of policies and national and local strategies, relating to cycling and physical activity. The policy analysis will help identify where in the wider context the policies ‘sit.’ Examples of the policies analysed include:- Merseyside Local Transport Plan 3, Start Active, Stay Active and Public Health Guidance on Walking and Cycling.

3.2.3 Profile

A City wide demographic profile was generated, bringing together a wide range of data sets to represent the health of the local population in its widest context. The data profile comes from a number of available data sets including the 2008 & 2009 Joint Strategic Needs Assessment (JSNA) for Liverpool and the Association of Public Health Observatories and some specific cycling data.

It should be noted that whilst the Joint Strategic Needs Assessment does not focus Physical Activity as a priority, the Liverpool Active City Strategy creates the focus required.

3.3 Impact Analysis

A manual theme analysis was undertaken to establish the ‘most common’ themes running through the evidence. For the purposes of this HIA they were split into three groups Personal, Environmental and Societal.

Personal
- Quality of life (positive impact),
- Social inclusion (positive impact),
- Physical and mental well-being (positive impact),
- Prevention of disease (positive impact).

Environmental
- Air quality (positive impact),
- Noise quality (positive impact),
- Connectivity (positive and negative impact).

Societal
- Road Traffic Accidents (negative impact),
- Community Cohesion (positive impact),
- Accessibility (positive impact).
3.4 Conclusion and Recommendations

3.4.1 Conclusion

The Liverpool Cycling Strategy is likely to have a positive impact on the population of Liverpool as evidence regarding cycling and physical health is both well researched and well-established.

However, in order to achieve all aspects of The Strategy and taking into consideration the potential barriers to both achieving the number of cyclists and journeys taken by bicycle and creating a long-term sustainable and safe environment for cycling, the following recommendations are advised.

3.4.2 Recommendations

In view of the aims of the HIA and the identified health impacts most likely to be affected through the implementation of the Cycling Strategy, the following evidenced recommendations are being put forward.

<table>
<thead>
<tr>
<th>Recommendation 1 – Develop a robust evaluation framework to assess the health impacts of the Strategy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
</tr>
<tr>
<td>The evidence suggests that there are a number of barriers to encourage people to begin cycling. Whilst the evidence of improved health is well known and respected, to determine the actual changes in health impacts from the Strategy it would be essential to develop criteria, based on statistics and data that is already collected in order for comparable analysis, supported by a pilot test area, such as the City Centre.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 2 – Extended local research of the barriers to cycling.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
</tr>
<tr>
<td>Identifying local needs and barriers by undertaking focus groups to support the implementation of the Strategy.</td>
</tr>
</tbody>
</table>

It would be useful to explore the different population groups that may be prevented from cycling and what, if any, barriers exclude people from taking up cycling. For example, the elderly population - the evidence suggests that the older population benefit greatly from cycling and with Liverpool’s expected increase in aging population this could be very relevant, and how to encourage those from disadvantaged or ethnic groups to start cycling.

<table>
<thead>
<tr>
<th>Recommendation 3 – Ensure the development of a multi-departmental working group to ensure cycling focused policies, particularly through urban design and land-use planning.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale</strong></td>
</tr>
<tr>
<td>The evidence suggests that for cycling to become more of the ‘norm,’ certain aspects need to happen, such as good quality, well connected and safe cycle ways that are well lit and well signposted to encourage accessibility for everyone.</td>
</tr>
</tbody>
</table>

This will crucial to ensuring Liverpool becomes a cyclable city and that cycling (and pedestrians) requirements are considered at the start of all projects and policies. Cycling policies need continuous political leadership and co-ordination from the top down, as well as long-term sustainable capital funding.
### Recommendation 4 – Further assessment to determine the implications to accommodate the predicted rise in number of cyclists.

**Rationale**

As the Strategy has the potential to positively impact on the number of people cycling, this could create a number of issues that would need to be addressed. Those issues likely to be impacted on would be parking of bikes – consideration to remove some car parking spaces in contracted/supervised car parks. Can bicycles be taken onto buses within the City to ensure connected and joined up journeys? Consideration of rent-a-bike (rent-a-ride). Work with local businesses and workplaces to ensure adequate bike and accessories storage, both internal and external. (A recent HIA on a Housing planning application in Liverpool, highlighted the need for secure external storage of cycles).

### Recommendation 5 – City Centre Cycle Connectivity/Permeability Continuity.\(^{55}\)

**Rationale**

Given the recent bus lane closure pilot, it will be essential to ensure cycle connectivity is still facilitated and any gaps identified and reported.

---

3.4.3 Limitations of the HIA

The main limitation of this HIA was the timescales, which prohibited possible focus groups and local community engagement.

---

\(^{55}\) **Definition of connectivity/permeability** – refers to the directness of links and the density of connections in a transport network. For example, a highly permeable network has many short links, numerous intersections, and minimal dead ends.

A – Summary of the Liverpool Cycling Strategy

Historical Context – Liverpool and Cycling

Liverpool has a long and rich history of cycling, with the first velocipede (pedal driven recreational vehicle) club in Britain being created in 1869 with the import of bikes from New York.

The novelty of bikes brought about interest across Liverpool with, ‘thousands of people, rich and poor,’ watching the first bike road race between Chester and Rock Ferry. More cycle clubs started to emerge and a number of events, including the 'Monster Meet of Bicyclists,' which met in Sefton Park. Cycling became such a prominent feature in Liverpool that in the 1930s the Rock Ferry boat was unable to take any more cyclists (particularly on Sundays) and cyclists were advised to take different ferries or cycle through the Mersey Queensway Tunnel.

Local cyclists played a crucial part during World War II with the ARP Corps of Cyclists being used to assist communication during this period.

Finally, albeit anecdotal, there were three million vehicles that passed through the Queensway Tunnel in 1934 of which 330,681 were made by people on bicycles - approximately 905 per day.

Current Cycling in Liverpool

As reported in an 'Environmental Audit for Liverpool,' 2013 in terms of cycling, Liverpool has 108.5km of cycle lanes. This is split between:-

- 22.3km on-road advisory.
- 6.2km on-road mandatory,
- 13.6km bus lanes and
- 56km off-road (for example routes through parks).

The off-road cycle lane includes 16km of loop-line, which is a disused railway line.

In terms of population, cycle lanes in Liverpool equate to, ‘each kilometre being shared by 4292 residents, or 23cms of cycle lane per person.’

The report compares Liverpool unfavourably with some European cities, such as Hamburg, which has 88% of mandatory cycle lanes as compared to 11% in Liverpool.

The Audit report comments about other forms of transport within Liverpool which consist of the fully electric railway service, that connects across Liverpool, and ‘the connectivity of the city’s bus network being excellent.’

---

56 www.cyclingnorthwales.co.uk
57 www.cyclingnorthwales.co.uk
58 Low Carbon Liverpool, An Environmental Audit of Liverpool, Nurse, A. University of Liverpool, 2013
59 Low Carbon Liverpool, An Environmental Audit of Liverpool, Nurse, A. University of Liverpool, 2013
The production of this Cycling Strategy also comes at a time of the instigation of a pilot project to remove all bus lanes from being exclusive to buses and not cars, to assess the effect upon congestion levels. These bus lanes are often classed and recognised as cycle lanes as well.

The City also has a varied range of cycling activities that cover all ranges, needs and activity levels including Active Parks, Bikeability, Cycle for Health, Merseyside Freewheeling Courses – free cycle training and bicycle maintenance sessions.

**The Liverpool Cycling Strategy – ‘Get Liverpool Cycling’**

This new Strategy moves on from the previous 1997 Cycling Strategy in Liverpool ‘Cycling Strategy for Liverpool.’ Its key objectives were:

- increase cycle use within the city to 10% of all urban journeys by 2005, in line with Royal Commission on Environmental Pollution recommendations (1994),
- to reduce accidents to cyclists in line with overall accident reduction targets and
- to develop an ongoing programme of measures, setting out priorities for implementation against a financial expenditure plan.

In order to achieve the aim of more people cycling more often, the strategy will promote measures to support and engage with people to encourage cycling, whilst recognising the need for road safety by all.

For this change to occur the City Council will:

- Deliver a safer cycling environment (improve the City’s infrastructure),
- Improve cyclist safety,
- Promote positive messages and provide information to raise awareness of and encourage, sustained cycling,
- Deliver and monitor the implementation of the strategy.

There are a number of expected outcomes including improved health and well-being, better environment, less congestion, improved air quality, increased accessibility, economic benefits and increased numbers of people cycling.

There are a number of drivers which underpin the development of this Strategy which are listed below.

- Primarily to reflect ‘changes in policies, strategies and funding available.’ Additionally, the desire to get more people cycling more often for commuting and short trips as well as for recreational and sporting purposes.
- The Liverpool Mayor was an early signatory to The Times campaign, ‘Cities Fit for Cycling.’ Whilst some of the initiatives for this campaign emanate from Government, some can be driven locally and have been included within the strategies implementation Action Plan.
- Liverpool has pledged to be ‘a more cleaner and greener city.’
- The development of a masterplan for the city has highlighted the principles of improving connectivity of the city centre through the provision of cycle routes.
- Finally, improved support for ‘Health in All Policies’ through the development and production of new strategies across a range of sectors within the Council.

The Liverpool Cycling Strategy has been produced to develop a change in focus for Liverpool with the emphasis on cycling becoming an everyday mode of transport as opposed to occasional use or purely for physical activity. It has been developed by Liverpool City Council along with a number of partners and stakeholders.
The motivation behind this strategy is for cycling to be seen as a low cost, healthier and more environmentally friendly form of transport. Alongside these are further advantages for the City including a possible saving of over £1 million in reducing premature deaths and National Health Service (NHS) costs.
Health Impact Assessment (HIA) is a globally recognised tool which is used to assess the health impacts, either positive or negative, of a strategy, policy or programme. HIA is a flexible tool and has a range of approaches as described below.

HIA also offers the opportunity to ‘potentially prevent negative health effects and maximise the positive health effects.’ It also supports the strengthening of partnership working between organisations.

People’s health is affected by a variety of factors, such as individual, social, economic and environmental. These factors are commonly referred to as the social determinants of health. It is these factors that HIA links and examines.

### Social Determinants of Health

Factors such as environment, income, employment, transport, housing, crime and the social and physical condition of local neighbourhoods, all contribute to both good and poor health. These factors are known as the Determinants of Health.

### Social Model of Health

HIA uses the social model of health (Dahlgren and Whitehead). This is shown below (diagram 1). This model is widely recognised and is commonly referred to as ‘The Rainbow.’ This multi-level rainbow model highlights the complex interactions between a range of factors – biological, lifestyle, environmental, social and economic.

The Rainbow offers a framework which supports the identification of potential health impacts within each layer. Identifying these health impacts within this framework can support the most suitable interventions be it a policy, plan or programme depending on within which layer the impact falls, as it helps explore the different interactions between the layers and the determinants.

*Diagram 1: The Rainbow Model*
Health Inequalities and Health Equity

Health inequalities are defined by the World Health Organisation, as differences in health status or in the distribution of health determinants between different population groups.60

As stated in a paper, ‘A Glossary for Health Inequalities’ (2002), ‘Health inequality is the generic term used to designate differences, variations, and disparities in the health achievements of individuals and groups’.61

This paper quotes, ‘Most of the health inequalities across social groups such as class and race are unjust because they reflect an unfair distribution of the underlying social determinants of health, for example access to educational opportunities, safe jobs, health care, and the social bases of self-respect.’

Policy Context of Health Inequalities

A number of important reports have been produced over the years concerning the importance of dealing with health inequalities. Key works include the Black Report (1980),62 the Acheson Report (1998)63 and more recently the final report of the WHO Commission on the Social Determinants of Health (2008)64 and the Marmot report ‘Fair Society, Healthy Lives’ (2010).65

When and What Type of HIA?

There are a range of options of the type and depths of HIA. The decision of which type and to what depth will be influenced by a number of scoping questions such as:-

• time,
• resources and
• HIA skills,
• along with the ‘type’ and the ‘when’ to undertake a HIA.

Types of HIA:-

• **Desk-top HIA** - Undertaken with limited resources, unlikely to include any community participation.
• **Rapid HIA** - Includes a broader evidence search and some community participation. Still undertaken with some constraints (such as limited resources and time).
• **Comprehensive HIA** - More in-depth and carried out over a longer period of time.

The “when” is an important factor to consider and will be determined by what stage the strategy, proposal or program is at.

‘When’ to undertake a HIA:-

• **Prospective HIA** - Conducted before a proposal is implemented
• **Retrospective HIA** - Conducted after proposal implementation
• **Concurrent HIA** - Conducted during proposal implementation.

---

62 The Black Report, Black, D, 1980
63 Independent Inquiry into Inequalities in Health (Acheson Report), Acheson, D, Department of Health, 1998
64 Closing the Gap in a generation: Health equity through action on the social determinants of health, WHO Commission on Social Determinants, WHO, 2008
65 Fair Society Healthy Lives (Marmot Review), Marmot, M, Department of Health, 2010
**HIA Methodology**

**Figure 1** A generic HIA methodology (Abrahams et al, 2004)

**Screening**

This first stage initially assesses any likely health impacts that could occur with the implementation of a strategy, policy or programme and determine if a HIA is required. Generic screening will ensure a systematic approach to strategies, policies or programmes selected for a more in-depth HIA. It also requires the creation of a Steering Group ensuring there is a body that will take responsibility for the HIA.

A number of immediate considerations can be identified at this stage:-
- Understanding of the proposal,
- Likely health impact (either positive or negative),
- Capacity and resources required to complete the HIA,
- Limitations,
- Determination of the type of HIA to be undertaken (Desk-top, Rapid or Comprehensive).

**Scoping**

Completing the scope will set the blueprint of the HIA. The Steering Group will take responsibility for agreeing the Terms of Reference for the HIA. This will then enable the HIA to be guided. Aspects to be considered and involved within the Terms of Reference include:- timescale, geographical boundaries, those to be involved in the HIA process (either as...
stakeholder or key informant) and dates (where possible dates of meetings decided). The scope will ensure the HIA is kept on schedule and with meetings minuted and any barriers, difficulties or limitations that appear through the HIA process can be dealt with swiftly.

**Literature Review**

This stage involves the collation of a body of knowledge or key evidence and the systematic analysis of the potential impacts, their significance, the population groups likely to be most affected and the strength of evidence for these impacts.

A literature review should be undertaken to source robust evidence which supports or negates the potential health impacts that are identified, firstly at the screening stage and then throughout the HIA process.

A literature review should still be regarded as part of the evidence gathering but may be viewed separately for its initial purpose of setting the scene.

**Evidence Gathering**

Both qualitative and quantitative evidence can be used within HIAs. Anecdotal evidence within a HIA is as important and can often add to local health impacts that a policy, programme or project may have on local population groups.

Quantitative evidence for HIAs can usually be in the form of stakeholder workshops or smaller focus groups. Other methods of collating this ‘data’ can be collected through a range of other different methods such as questionnaires and Delphi studies or case studies, for example.

Qualitative evidence for HIAs usually consists of the following:-

**Policy Analysis**

A comprehensive policy analysis should be undertaken in order to set the context. National and local strategies and policies are examined for their relation to health in its widest context.

**Profile (Community Profile)**

The purpose of creating a community profile allows a localised picture to be created.

The broader the data collected the better – so not only specific health data collected but data that is broader in its relation to health, for example those who find themselves in fuel poverty, and those in receipt of free school meals.

The data collected will be invaluable when identifying a range of factors relating to populations/communities such as size of population, age and gender structure, health status, educational attainment and lifestyle factors.

Data collected can be sourced from a number of data sets and if necessary can be compared to national data. Undertaking the profile can also help identify vulnerable population groups that may be affected that have been overlooked or missed.

**Collating the Health Impacts**

Once all the health impacts have been identified through the process described above, a theme analysis is usually undertaken or a consensus workshop to identify the priority, or
most ‘common’ health impacts that could have an impact on health (either positively or negatively).

NB The literature review is part of the evidence gathering process but is carried out during the early stage of the HIA process to help develop topic/subject areas, backgrounds and new areas which may emerge.

**Impact Analysis**

As part of the impact analysis stage it may be that a more specific evidence search is required, for example, many on-going HIAs highlight social isolation as a main health impact, so further searches of the literature around this theme may be required.

**Characterisation of the Impacts Identified**

Characterising the impacts looks at certain characteristics such as direction of change either positive or negative (+ or -), the likelihood of the impact and given the evidence, when the impact could occur. The detail is shown in table 1 and description below along with an example of social isolation.

<table>
<thead>
<tr>
<th>Table 1 Characterisation Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health impacts</strong></td>
</tr>
<tr>
<td><strong>Direction of change</strong></td>
</tr>
<tr>
<td><strong>Scale</strong></td>
</tr>
<tr>
<td><strong>Likelihood of impact</strong></td>
</tr>
<tr>
<td><strong>Latency</strong></td>
</tr>
</tbody>
</table>

- **Speculative** = may or may not happen; no direct evidence to support
- **Possible** = more likely to happen than not; direct evidence but from limited sources;
- **Probable** = very likely to happen; direct strong evidence from a range of data sources collected using different methods
- **Definite** = will happen; overwhelming, strong evidence from a range of data sources collected using different methods.

<table>
<thead>
<tr>
<th>Table 2 Example of Characterisation of an Identified Health Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact</strong></td>
</tr>
<tr>
<td>Social Isolation</td>
</tr>
</tbody>
</table>

**Conclusion and Recommendations**

The HIA report concludes with a set of evidence based recommendations which, whilst SMART, should ensure they achieve the aim of the HIA, thus improving health and reducing health inequalities.
## C – Policy Analysis

<table>
<thead>
<tr>
<th>Strategy/policy</th>
<th>Date</th>
<th>Lead Agency</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liverpool 2024 A Thriving International City – Sustainable Community Strategy</td>
<td>2009</td>
<td>Liverpool City Council</td>
<td>Competitiveness, connectivity, Distinct sense of place, thriving neighbourhoods, health &amp; well-being.</td>
</tr>
<tr>
<td>Every Child Matters</td>
<td>2003</td>
<td>Department for Education</td>
<td>Security, family life, danger, risk, non-separation of services, educational failure, anti-social behaviour, ill health.</td>
</tr>
<tr>
<td>Be Active: Be Healthy Creating a Moving Culture. Liverpool Active City</td>
<td>2013</td>
<td>Liverpool John Moores University</td>
<td>Improve life expectancy, healthier and happier lives, active lifestyles, change to lifestyle choices.</td>
</tr>
<tr>
<td>New Horizons: a shared vision for Mental Health</td>
<td>2009</td>
<td>HM Government</td>
<td>Safeguarding good mental health, stigma, prejudice, partnership working, decent homes, exclusion, individuals and communities.</td>
</tr>
<tr>
<td>Liverpool Green Infrastructure Strategy</td>
<td>2013</td>
<td>Mersey Forest</td>
<td>Sustainability, health impacts of low levels green space (coronary heart disease, poor mental health, poor air quality), inclusiveness, healthy living.</td>
</tr>
<tr>
<td>Joining It Up Locally (PAT 17 of the Neighbourhood Renewal Strategy)</td>
<td>2000</td>
<td>Department of Environment and the Regions</td>
<td>Social exclusion, improving skills, ownership of neighbourhoods.</td>
</tr>
<tr>
<td>Liverpool Sustainable Community Strategy ‘Liverpool 2024 A thriving International City</td>
<td>2010</td>
<td>Liverpool First</td>
<td>Transport, employment, housing, environment, crime and community cohesion.</td>
</tr>
<tr>
<td>A New Mobility Culture for Merseyside Merseyside Local Transport Plan 3 (Creating Growth, Cutting Carbon Local Transport White Paper DATE)</td>
<td>2011</td>
<td>Merseytravel</td>
<td>Economic growth, health and well-being, low carbon emissions, quality of transport, inclusiveness, road safety, access to services.</td>
</tr>
<tr>
<td>Neighbourhood Renewal Strategy</td>
<td>2001</td>
<td>Cabinet Office</td>
<td>Unemployment, educational failure, crime, social exclusion, literacy and numeracy, housing &amp;</td>
</tr>
<tr>
<td>Report Title</td>
<td>Year</td>
<td>Author</td>
<td>Key Themes</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>Choosing Health White Paper</td>
<td>2004</td>
<td>Department of Health</td>
<td>Health inequalities, lifestyle choices e.g. smoking, obesity and improved mental health &amp; well-being.</td>
</tr>
<tr>
<td>Liverpool City Centre Strategic Investment Framework.</td>
<td>2012</td>
<td>Liverpool Vision</td>
<td>Carbon emissions, partnership, quality of life, neighbourhood improvement, sustainable transport.</td>
</tr>
<tr>
<td>NHS White Paper</td>
<td>2011</td>
<td>Department of Health</td>
<td>Access to information, control, choice.</td>
</tr>
<tr>
<td>The Joint Strategic Framework for Public Health: 2009-12</td>
<td>2012</td>
<td>Liverpool PCT</td>
<td>‘Mental Health is everyone’s business.’ An integrated framework for mental health and well-being for Liverpool that recognises that mental health is a whole population issue.</td>
</tr>
<tr>
<td>Walking and Cycling: Local Measures to promote walking and cycling as forms of travel or recreation Public Health Guidance (PH41)</td>
<td>2012</td>
<td>National Institute for Health and Care Excellence</td>
<td>Increase cycling and walking, reduce number of environmental concerns (traffic congestion), inclusiveness, improve health and well-being.</td>
</tr>
<tr>
<td>Start Active, Stay Active</td>
<td>2011</td>
<td>Department of Health</td>
<td>Reducing medical health issues, cost saving for NHS, improved quality of life and life expectancy, environmental concerns, barriers to cultures and access, partnerships.</td>
</tr>
<tr>
<td>Supplementary Planning Document ‘Ensuring a Choice of Travel’</td>
<td>2008</td>
<td>Liverpool City Council</td>
<td>Access, reduce environmental impact of travel choices, improve road safety, promote healthier lifestyles, reduce congestion &amp; traffic growth, improve quality of life.</td>
</tr>
</tbody>
</table>
D - Community Profile

Liverpool Specific Profile Data

This section of the HIA brings together a range of population data for Liverpool, primarily using the Liverpool Joint Strategic Needs Assessment (JSNA) 2010 and the more recent JSNA 2012. Data is ‘topped up’ with data from recent HIAs undertaken in Liverpool, Liverpool Annual Monitoring Report, any further data collected by the Healthy Homes team.

This will provide a snapshot of the demographics of the population groups, including those who are most vulnerable, and take into consideration the age groups and expected aging population within Liverpool.

The health and social care priorities as stated in the JSNA for Liverpool are as the previous year, these include:-

- Cancers
- Heart Disease
- Mental health
- Respiratory Diseases
- Impacts of Alcohol
- Health inequalities within Liverpool and between Liverpool and elsewhere

The Health and Well-being Board will focus on the following four priorities:-

- Reducing the impact on child poverty,
- Reducing cancer deaths,
- Reducing the impact of alcohol and
- Improving mental health.

Liverpool and deprivation – context.

Liverpool has a long and well documented history of health inequalities and continues to be the most deprived local authority area in England on the Index of Multiple Deprivation (IMD). 66

The IMD is used as the accepted method of measuring deprivation. It combines a number of indicators which cover a range of economic, social and housing issues, into a single deprivation score. 67

At Lower Super Output Areas (LSOAs) – areas with a population of approximately 1,500 – Liverpool has 29 LSOAs with 51% of these being in the most deprived 10% in England. This is more than any other local authority in the UK.

Regarding life expectancy, boys born in Liverpool today are expected to live three years longer as compared to 10 years ago, with girls expected to live two years longer.

However, women have the second worst life expectancy in England and Wales at 79.2 years, as compared to men who have the fifth worst in the country at 74.8 years.

Across the city the life expectancy gap is 11 years for men and 8.1 years for women.

Mortality rate for deaths from all causes for all ages ranks third worst (nationally) with a rate

66 Annual Report of the Joint Director of Public Health, Liverpool Primary Care Trust, NHS, 2011-2012
of 752.7 deaths per 100,000 (2008/2010) as compared to the Northwest as 603.1 and England 533.3.

Infant deaths – it is recognised that children from less affluent households are more likely to die before their first birthday. 2008/2010 data indicates that Liverpool had 5.2 deaths per 1,000 live births.\(^{68}\)
General Liverpool Population

- The population of Liverpool is 445,800 (2012) and is projected to increase to 465,600 by 2033 – an expected increase of 4.4%.
- The city’s population has increased by almost 1% since 2002. Most notable increase in age groups are the 20-24 year age group (a 31% increase) and the 25-29 age group, (46% increase).
- In lower age groups the 0-4 age group has seen an increase, whereas the 5-14 age group has decreased.
- The population is expected to age quite significantly over the next 20 years with the 65+ year’s population projected to increase by a third.
- Liverpool has a small but growing BME population. Currently BME residents account for approximately 9.0% of Liverpool’s overall population.
- During 2011/12 13,226 people received social care from Liverpool City Council, approximately 4% of the adult population of Liverpool, the majority (68%) being people over 65 years. The most common primary need group is Physical Disability (71%) followed by Mental Health, inclusive of dementia, with 16%.

Merseyside Cycling Data

- Around 3,000 Merseyside children and adults are injured by motor vehicles each year, either as a pedestrian or cyclist.
- In 2012, Merseyside cycle total death rates were at a 16 year high.
- 52% of deaths or serious road injuries occurred in pedestrians or cyclists.
- Bike ownership in Liverpool is low.

Other socio-economic related Liverpool Data

- Liverpool fails to meet EU legal air quality standards.
- Worklessness – Liverpool’s unemployment rate is two thirds higher than the England rate.
- Homelessness – as at the end of July 2011, Liverpool only had 39 statutory homeless people, in temporary accommodation, along with a record low number of rough sleepers.
- Children living in poverty – recognising the importance to give every child a good start in life and the impacts this can have on their futures, on average 1 in 5 children in the UK are classified as living below the poverty line, Liverpool has 1 in 3 children living in poverty, 13th highest of all local authorities in the UK, and equating to 30,000 children.
- Smoking during Pregnancy – The JSNA makes reference to the likelihood that babies from deprived backgrounds are more likely to be born to mothers who smoke as well as being exposed to second hand smoke. Smoking during pregnancy can cause a host of problems from lower birth weight to perinatal mortality. Although prevalence remains relatively high, Liverpool has reduced the proportion of mothers who smoke by the time of delivery by more than 25% since 2005/6.
- Breastfeeding – evidence shows that breastfeeding has positive health benefits, just over half of mothers in Liverpool start breastfeeding as compared to three quarters nationally. This appears to drop at the 6-8 week period to just a quarter of mothers.
- Childhood Weight – based on data collected through the National Child Measurement Programme (NCMP), in 2010 obesity rates had risen for boys to 12.5% and for girls to 11.6% - reception class data collection. For Year 6, by 2010 obesity rates for boys and girls had risen to 22.6% and 19.7% respectively.
- Educational Attainment – Pupils gaining 5+ GCSEs Grade A – C in Liverpool has risen from 37% (2006) to 60% (2011) an increase of 62%.
- Not in Education, Employment or Training (NEET) – 11.5% of 16-18 year olds in Liverpool are NEET, the third highest in the country.
- Childhood Accidents – Emergency Hospital Admissions for accidents to children has risen by almost a quarter between 2004/5-2010/11.

---

69 Liverpool Joint Strategic Needs Assessment (JSNA), Liverpool City Council & Liverpool Primary Care Trust, 2012
70 Liverpool Joint Strategic Needs Assessment (JSNA), Liverpool City Council & Liverpool Primary Care Trust, 2012
• **Teenage Pregnancies** – Liverpool experiences a higher rate of teenage conceptions, higher than both regional and national rates, although since 1999 Liverpool has seen an overall reduction.

• **Cancer** – There were 1,374 cancer deaths in Liverpool in 2010.
  - 301 were attributable to lung cancers,
  - 9% were colorectal cancers and
  - 7% breast cancers.

• **Smoking Prevalence** – Liverpool has seen a decrease in smoking prevalence from 35% (2005) to 25.9% (2011).

• **Adult obesity** – data estimates that 22.9% of Liverpool adults are obese.

• **Cancer Screening** –
  - **Breast** – 2010/11 – 69% of eligible women had screening.
  - **Cervical** – 2010/11 – 73% of eligible women were screened.

• **Alcohol** –
  - **Binge drinking** – it is estimated that 22.6% of adults in Liverpool binge drink, compared to the national average of 20.1%.
  - **Alcohol Related Hospital Admissions** – data for 2010/11 shows that Liverpool’s admission rates were slowing and data for 2012 indicates rates are starting to fall. Liverpool is now ranked sixth worst in the country.
  - **Alcohol Related Mortality** – alcohol contributes to deaths from Chronic Liver Disease (CLD). Analysis of data suggests that, between 2006-2010, Liverpool has a directly age standardised mortality rate of 20.94 years per 100,000 of its population, twice the national average.
  - **Alcohol Related Crime** – analysis suggests that Liverpool has seen a decline in the number of alcohol related recorded crime at a rate of 6 per 1,000 (2010/11).
  - **Alcohol Related Incapacity Benefit** – Liverpool has 540 claimants and is 23rd highest rated in the country.

• **Mental Health** – for 2010/11, 13.5% of Liverpool patients 18+ years were on the register for depression, equating to the 31st highest in the country. The prevalence of more serious mental illness was 1.1% (2010/11) as compared to 0.8% for England.
  - **Dementia** – the proportion of the Liverpool population suffering with dementia is 0.48%, which is the same as national figures. With an expected rise in the aging population of over 65+, being diagnosed with dementia is expected to increase to 42% by 2030.
  - **Suicide deaths** – since 2000 there has been an average number of 25 deaths, lower than national and regional rates, however, there is some concern of the potential impact on mental health due to the current economic downturn.

• **Welfare Reforms** – recent welfare reforms will have a substantial impact on residents in Liverpool. Areas expected to have the most impact include:-
  - Residents will have to pay towards Council Tax,
  - Housing Benefit (Bedroom Tax) – likely to affect 11,600 Liverpool residents,
  - Housing Allowance – likely to affect 65,000 residents in Liverpool.\(^{71}\)

\(^{71}\) Wider Determinants; Housing and Homelessness, Liverpool City Council 2013
This page is intentionally left blank.