University of the West of England

Review 3
Spatial Planning & Health
Identifying barriers & facilitators to the integration of health into planning

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List of abbreviations

Abbreviation	Meaning
AAP	Area action plan
DPD	Development plan document
EIA	Environmental impact assessment
EqIA	Equality impact assessment
HIA	Health impact assessment
IA	Integrated appraisal
IIA	Integrated impact assessment
LDF	Local development framework
LPA	Local planning authority
LTP	Local transport plan
RTP	Regional transport plan
SA	Sustainability appraisal
SEA	Strategic environmental assessment
SIA	Social impact assessment

Glossary of terms

Term	Definition
Appraisal	Formal processes of assessing plans or projects for their potential positive and negative impacts (e.g. EIA, HIA).
Area Action Plan	These are documents contained within the local development framework which are prepared when there is a need to provide the framework for areas where significant change or conservation is needed. They are usually used for the delivery of planned growth areas or area based regeneration initiatives.
Core Strategy	Contains the overall spatial vision for a local planning authority's area, which sets out how the area and places within it should develop.
Development Plan	An aspect of spatial planning in the UK comprising a set of documents, which set out a local authority's policies and proposals for the development and use of land in their area. The development plan guides and informs day to day decisions as to whether or not planning permission should be granted. In order to ensure that these decisions are rational and consistent, they must be considered against the development plan adopted by the authority, after public consultation and having proper regard to other material factors. All development plans should be prepared within the context of strategic environmental appraisal.
Environmental Impact Assessment	A systematic process to identify, predict and evaluate the environmental effects of proposed actions in order to aid decision making regarding the significant environmental consequences of projects, developments and programmes.
Environmental health issues	As considered in appraisal processes (EIA, SEA etc) including for example, air and water quality, noise, odour or contamination.
Equality Impact Assessment	A process for identifying the potential impact of a project or land use policy, service and function on a population to ensure it reflects the needs of the whole community and minimise the potential for discrimination.
Health	A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
Health Impact Assessment	A combination of procedures, methods, and tools by which a policy, program or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects[1].
Integrated appraisal	The combination of any of the following appraisal processes:

[1] Gothenburg Consensus definition added to by the IAIA (Quigley et al 2006)

	environmental impact assessment, social impact assessment, health impact assessment, equality impact appraisal.
Local Development Framework	The collection of local development documents produced by a local planning authority which collectively delivers the spatial planning strategy for its area. The core strategy is the key development plan document within the local development framework.
Plan	Spatial plan relating to a whole region, city, town or neighbourhood. It can include topic plans (e.g. for transport, housing and air quality).
Project	Specific development proposals requiring determination through a land use (spatial) planning process.
Social Impact Assessment	A methodology to review the social effects of infrastructure projects and other development interventions.
Spatial planning	A process intended to promote sustainable development and is defined as 'going beyond' traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they function.
Strategic Environmental Assessment	Strategic environmental assessment is required by European and UK law and has been adopted as an appraisal process in many countries across the world. It is a way of systematically identifying and evaluating the impacts that a plan is likely to have on the environment. The aim is to provide information, in the form of an Environmental Report that can be used to enable decision makers to take account of the environment and minimise the risk of the plan causing significant environmental damage. UK government guidance advises that where a plan requires both strategic environmental assessment and sustainability appraisal, that the former process should be integrated into the latter one.
Sustainability Appraisal	The term sustainability appraisal is normally applied to plans rather than projects, and in the UK is a required part of plan making, including social, economic and environmental criteria, and explicitly including SEA (see above). It is not legally required for project appraisal but many UK local authorities request that some form of sustainability appraisal accompanies major applications.
Sustainable development	Is development that meets the needs of the present generation without compromising the needs of future generations (Brundtland, 1987)

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SUMMARY

Introduction

This is the third of a series of seven reports to NICE concerned with the degree to which the spatial planning system incorporates health and well-being effectively in its processes. The purpose of this review is to look at the UK spatial planning system and assess the degree to which health and well-being are part of planning processes and as such assess how much they influence policy and implementation. In that context the aim is to identify barriers that impede the full integration of health into planning, and facilitators that enable or promote that integration. Review 3 will be complemented by two other studies: one commissioned by NICE and being undertaken by Strategic Solutions, which is examining similar issues through a series of in-depth qualitative studies of some local planning authorities; the other commissioned by the Department of Health/Department of Communities and Local Government on the institutional and legislative context, called 'Spatial Planning & Health', being tackled by Buchanan and Partners.

Following on from R3, Review 4 will examine design criteria and indicators as devices which can assist rational and effective spatial planning for health. Review 5 and 6 will then draw together all the previous work and reach some conclusions about priorities for achieving health-integrated planning.

The research process

The aims of R3 are very broad, and the range of potentially relevant material immense. It has therefore been necessary define the scope of the research in quite specific ways, agreed with the NICE team. There are two research objectives:

- to investigate the extent to which health issues are being addressed in local spatial planning documents
- to identify and understand the barriers and facilitators to addressing health issues in the spatial planning process at the local level.

The first of these has been achieved by examining spatial planning documents from ten varied local authorities. In each case the initial focus has been on the Core

Strategy (or its equivalent in Wales and Scotland) which is at the heart of the Development Plan Documents (DPPs). Then we have studied the relationship of the Core Strategy to other key documents, tracking the degree to which health is incorporated - namely the Regional Spatial Strategy (RSS) which until July 6th 2010 set the planning context for local authorities; an Area Action Plan (AAP), which nests within the Core Strategy and should reflect its priorities; and the Local Transport Plan (LTP), which should be consistent with all the above. These plans have been analysed through word search techniques to establish whether health and health-related policies are present, followed by qualitative examination where appropriate.

	Local Authority	**Region**	**Characteristics**
1	Lancaster City (core strategy 2008)	North West	• One of the few LPAs in region with a core strategy
2	South Tyneside (core strategy 2007)	North East	• One of the few LPAs in region with a core strategy
3	Horsham (core strategy 2007)	South East	• Pressure for development
4	North Northants Joint Planning Unit (core strategy 2008)	East Midlands	• A joint planning unit comprising Kettering, Wellingborough, & East Northants. • Major growth area
5	South Cambridgeshire District (core strategy 2006)	Eastern Region	• Large number of development plan documents
6	London Borough of Redbridge (core strategy 2008)	London	• North East London
7	Plymouth City (core strategy 2006)	South West	• Well advanced LDF • Regeneration • Joint working with South Hams District • Largely urban
8	South Hams District (core strategy 2006)	South West	• Well advanced LDF • Joint working with Plymouth Council • Mainly rural
9	City of Swansea UDP 2008	Wales	• Unitary Authority • Has an adopted Unitary Development Plan
10	City of Glasgow (City Plan 2009)	Scotland	• Unitary Authority • Regeneration • Good planning & health

The key words were based on the five health issues used in R1 and R2 – physical activity, mental well-being, environmental health, unintentional injury and health inequalities.The analysis distinguishes between explicit and implicit consideration of health issues in DPDs. 'Explicit' consideration was judged to have been made when the key words for each of the five health issues were used within objectives or policy in a core strategy, or in the policies, proposals or explanation in an AAP. 'Implicit' consideration was judged to be where a policy or proposal should result in a health benefit, but was not the benefit envisaged or recognised as such by the document.

The second research objective was fulfilled through a literature review. This built on the systematic reviews undertaken for R1and R2, which were about the appraisal of plans and projects, but often indentified barriers and facilitators to health inclusion as part of the analysis. These sources were supplemented by other papers and reports derived from the NICE call for evidence, and others which have been noted in the process of research

Four main categories of obstacles and facilitators were identified to scope a data extraction form that could be used systematically on the literature. The four categories are:

- **Knowledge:** Barriers/facilitators linked to the knowledge and conceptual understanding of health by different actors/stakeholders;
- **Partnership:** Partnership barriers/facilitators linked to the governance system in place and the political context;
- **Management and resources:** Barriers/facilitators linked to the way institutions work, the responsibilities they have and their capacity and resources;
- **Policy process:** barriers/facilitators linked to the policy process, its effectiveness and inclusiveness.

Data has then been collected to identify key recurring barriers and facilitators to the integration of health considerations into spatial planning. The literature covers both the UK and non-UK experience of this issue, in particular since a number of R1 and R2 studies were considered as highly relevant and applicable to the UK context.

The review of plans

The review of plans in relation to ten local authorities cannot claim to represent an authoritative picture of the whole country, but it does indicate very clearly the wide range of current experience. Some of the strategic/regional plans, and some of the core strategies, have made health and well-being central to the plan. This is most obvious in the cases of Plymouth and Glasgow. In both case the rhetoric of broad health objectives is translated into policies explicitly intended to achieve healthy ends. Health inequality is the most significant issue, with physical activity also important. At this level these could well be appropriate, as both can only be tackled effectively through overarching city-wide strategies.

It is also clear that many – probably a large majority – of regional plans and core strategies treat the spatial determinants of health in an inadequate way – either by considering only a limited agenda, or by not explicitly considering health and well-being at all.

In general the pattern established by the core strategy is then reflected in related plans. All the AAPs in areas where core strategies featured health fully or partially, themselves had explicit health-oriented policies. In one case (South Hams) the AAP was much more explicit and comprehensive than the broader plan. The LTPs were found to be consistent with the AAPs, reinforcing the healthy elements particularly in relation to physical activity.

The fact that some authorities perform quite impressively in relation to health, while others do poorly, does highlight an important conclusion: it is not primarily the planning system which inhibits health-integrated plans, but the attitudes, resources and knowledge of the actors.

The rationale for the difference between the exemplary local authorities and others is difficult to explain without a more detailed study and knowing more background. However some explanations can be tentatively proffered.

Plymouth and Glasgow demonstrate seamless planning policy to improve health and health equality. From the limited evidence, the underlying reason may well be based

on the need for those local authorities to take fundamental action to overcome an unacceptable and worsening level of deprivation, health inequality and urban decay. In both cases there must have been the political will to press for action, and stakeholder agencies must also have been willing to join partnerships to prepare and sign up to the policy delivery mechanisms. In addition both in both cities strong partnerships have been built between planning and health agencies. In Plymouth the establishment of a Health Action Zone in 1998, and subsequently joint working in the Devonport Regeneration Community Partnership, have been influential. In Glasgow the membership of the WHO Healthy Cities programme, with its strong emphasis on 'healthy urban planning', and the multi-agency 'health action plan' are symptomatic of engagement.

What this research does not tell us, however, is how far the good intentions sometimes encompassed in plans are actually being realized in practice. Implementation relies on development projects coming forward and being approved which progressively move the shape of settlements towards health-promoting environments.

There is an important issue to be considered about the significance of implicit as opposed to explicit health content in plans. A number of plans where the aspiration for sustainable development was carried through into detailed policies, but health was not itself highlighted, include strongly health promoting elements. In the case of the South Cambridgeshire AAP for a major urban extension, for example, physical activity, mental well-being and social equality were supported by a good range of policies. There is nothing (in the absence of implementation evidence) to say that good policies under the guise of sustainable development will be any less effective that good policies with an explicit health perspective.

The literature review

Overall, then, the empirical evidence suggests that only a small minority of local authorities are fully integrating health objectives into plans, while many authorities are not engaging with the health agenda at all. However, there are some authorities who occupy a halfway position, with a limited range of explicit and/or implicit health-

oriented policies. The second part of the research tries to illuminate the factors which are significant, acting either as barriers to health integrated planning, or facilitating it. Fifty-five studies have been examined which identified barriers and facilitators for the better integration of health into spatial planning. Findings were generally consistent across studies, including those looking at policies and projects, as well across countries. The majority of studies were of moderate (+) internal and external quality scores and findings were mostly incidental in the authors' discussions.

Twenty-six of the studies recognised that addressing deficiencies in ***knowledge and conceptual understanding*** is a key facilitator for the better integration of health into the spatial planning process. Evidence suggests that those responsible for decisions on and assessments of planning proposals often view health in narrow terms, focussing on physical environment concerns such as air quality, rather than taking a broader definition of health that recognises the role of the social environment and seeks to address the wider determinants of health. This narrow focus is seen to be primarily a result of a lack of engagement between health and planning professionals, coupled with the rigid boundaries around the development of knowledge between these two professions. Facilitators include training both professions to embrace a broader definition of health, such as that used by WHO, and developing closer working between health professionals and planners to develop a shared understanding of health and spatial planning issues. More specifically there was advocacy for the creation of a database reflecting the wider determinants of health, and for use of HIA as a trigger for developing shared understanding.

Thirty-seven studies identified building ***partnerships*** as vital for health-integrated planning. Ineffective partnership working is identified as an important barrier to progress. The problem of different cultures between the various actors, with differing terminologies and languages, priorities and structures, coupled with limited resources, hinders partnership working and leads to a lack of trust which impacts on the potential for developing effective partnerships. Facilitators include joint working from an early stage, developing a jargon-free language style, consensus building and developing a shared vision, with explicit roles and responsibilities for all parties. This joint working may be through formalised arrangements – building on the Local

Strategic Partnerships or funding joint health/planning posts - and facilitated through brokering organisations. Committing resources for multi-agency training and time to engage with partners, including the community, is seen as an important facilitator in this process, as it can address issues of trust.

The issues of ***management and resources*** link strongly to the practicality of partnerships and indeed the re-orientation needed to increase understanding and skills. Thirty-one studies highlighted management and resources as key in the delivery of healthy planning policy. The existence of silo mentality, the lack of appropriate delivery mechanisms both within and between organisations, the lack of time and lack of dedicated financial resources for health integration, were all cited as barriers.

The facilitators were the mirror image: building links and between health and spatial planning agencies, building capacity through practical experience, involving the policy-makers actively in health appraisal, releasing resources and time. Some stressed the importance of healthy planning champions providing inspiration and leadership, breaking down institutional inertia and bureaucratic defensiveness. Some highlighted the catalytic effect of requiring HIA (or health integrated sustainability appraisal) of plans and major projects.

This concern for effective appraisal leads us naturally into the ***policy process.*** Eighty percent (44) of studies emphasized this perspective. The barriers encompassed regulation, structures, lack of knowledge and inadequate methodology. Bearing mind that many of the commentators were expressly evaluating appraisal processes, there is some bias in the balance of response. Nevertheless the general consistency across all studies gives a sense of confidence. Planning regulations were perceived by some to be inflexible, failing to highlight health, in particular health in appraisal processes. The lack of inter-sectoral participation was seen to exacerbate this, as was the frequently late timing of any assessment which might have had the chance to raise key health issues. Concerns were also raised about gaps in the quality and range of the local evidence base which is supposed to underpin the ‘soundness’ of plans, and inadequate scoping processes in plans, resulting in the exclusion of health and well-being.

The facilitators stressed in many studies were about government guidance, timing of appraisal, the quality of data and the methodology of plan preparation/appraisal. In terms of government guidance there should be a requirement for EIA (as well as SA/SEA) to include human health fully and explicitly, including distributional/equity issues. Some suggested a legal requirement for HIA, while others advocated integrated appraisal. Appraisal should be throughout the plan-making process, allowing thereby assessment to influence the key decisions, with stakeholders and the public effectively involved. That involvement could enhance the quality of evidence (combining expert and lay knowledge) and the whole process should gain in consistency and transparency. The decision-makers should be engaged in the appraisal, though external consultants also have a role in providing wider perspective. Options presented for evaluation should be realistic and clear. The reports need to be readable and facilitate engagement.

Underlying all the procedural and participatory facilitators is – many studies emphasize - the necessity of a broad view of health, emphasizing the social and environmental determinants not simply the symptoms, recognising the cumulative, interactive and health equity issues, and stressing the precautionary principle.

Conclusion

The four aspects highlighted through the literature review above are mutually supportive, or cumulatively undermining. The evidence of the case studies is that authorities (currently few in number) that strongly promote health integrated planning are able to do so in the present dispensation. Conversely it is clear that most authorities have found neither the motivation nor the institutional culture/structures to progress very far down the healthy planning road. And there remain uncertainties about the degree to which the best intentions of plans are implemented on the ground. Even in current straightened times, when increased resources are not on offer, the analysis above suggests there may be modest adjustments to the planning system which could make a difference: one is a stronger obligation to encompass health in plan and project appraisal. Another is guidance on scoping which could result in more efficient use of resources as well as health integration and better plans.

1. Introduction

1.1 This is the third of a series of seven reports to NICE concerned with the degree to which the spatial planning system incorporates health and well-being effectively in its processes. Report 1 examined how projects (concerned with land use) are appraised as part of the planning process. It examined how far and in what ways the statutory and non-statutory appraisal of projects account for potential positive and negative impacts on health and the social and environmental determinants of health, and what lessons emerge from current practices. Report 2 examined the same issues, but looks specifically at plan appraisal.

1.2 The purpose of this review (Review 3) is to look at the UK planning system and assess the degree to which health and well-being are part of planning processes and as such assess how well they influence policy and implementation. In that context the aim is to identify barriers and facilitators to the full integration of health into planning. This review will complement other work commissioned by NICE on local authority studies and also by the Department of Health/Department of Communites and Local Government on Spatial Planning & Health. In due course Review 4 will examine design criteria and indicators as devices which can assist rational and effective planning.

1.3 The objectives of this research are:

to investigate the extent to which health issues are being addressed in local spatial planning documents; and

to identify and understand the barriers and facilitators to addressing health issues in the spatial planning process at the local level.

2. Methods

2.1 A two-pronged research strategy has been devised for R3 which firstly establishes empirically how spatial planning policies at the local authority level address health issues, and secondly, undertake a literature review to identify barriers and facilitators to the effective incorporation of health in plans.

Empirical Research Methodology

2.2 The first element of the R3 research is to gather empirical data from a sample of local authorities to learn how health is influencing development plans. The UK operates a 'plan-led system' whereby all local spatial planning decisions (on for example, the location and mix of development, or on planning applications & appeals) must be determined in conformity with the development plan, unless there are material considerations that dictate otherwise. Hence, in order to ensure that health issues are factored into these decisions, it is firstly vitally important that the development plan does so too.

2.3 The 'core strategy' ('unitary development plan' in the Welsh context and the 'local plan' in the Scottish context[2]) has been reviewed, together with a selection of relevant development plan documents that follow in the local development framework/suite of documents. Where the core strategy is not applicable, the unitary development plan (UDP) is reviewed. Additionally, we have reviewed the relevant 'parent' or strategic-level policy document (the regional spatial strategy in England, Planning Policy Wales, or the structure plan in Scotland) to follow health related policies. To this end it is desirable to understand if and how any higher level policy related to health issues, cascades down through the policy hierarchy.

2.4 At least one other relevant development plan document (DPD) is reviewed, to track policy down to a more specific level. Normally this is an area action plan (AAP).

[2] Northern Ireland has been omitted from review as it is not deemed to offer examples of good planning policy practice in relation to health.

2.5 Additionally, relevant objectives, policies or proposals from local transport plans for each local authority, is reviewed.

2.6 A set of inclusion criteria for identifying a set of local authorities to sample has been developed, based on a purposive non-random sampling approach. Inclusion criteria include:

a. a range to include authorities which reflect:
    - Urban & rural authorities
    - City, district/borough & unitary examples (not County level as these only prepare Minerals & Waste core strategies)
    - Different regions of England (north, midlands & south)
    - England, Scotland & Wales
b. those with completed core strategies approved; or
c. those with adopted plans in Wales or Scotland; or
d. those known to be using good practice regarding planning & health; or
e. Those with 'interesting' characteristics, for example a growth area or where local planning authorities are engaging in 'joint working'.

2.7 The following ten local planning authorities (LPAs) have been examined:

	Local Authority	**Region**	**Characteristics**
1	Lancaster City (core strategy 2008)	North West	• One of the few LPAs in region with a core strategy
2	South Tyneside (core strategy 2007)	North East	• One of the few LPAs in region with a core strategy
3	Horsham (core strategy 2007)	South East	• Pressure for development
4	North Northants Joint Planning Unit (core strategy 2008)	East Midlands	• A joint planning unit comprising Kettering, Wellingborough, & East Northants. • Major growth area
5	South Cambridgeshire District (core strategy 2006)	Eastern Region	• Large number of development plan documents
6	London Borough of Redbridge (core strategy 2008)	London	• North East London

7	Plymouth City (core strategy 2006)	South West	• Well advanced LDF • Regeneration • Joint working with South Hams District • Largely urban
8	South Hams District (core strategy 2006)	South West	• Well advanced LDF • Joint working with Plymouth Council • Mainly rural
9	City of Swansea UDP 2008	Wales	• Unitary Authority • Has an adopted Unitary Development Plan
10	City of Glasgow (City Plan 2009)	Scotland	• Unitary Authority • Regeneration • Good planning & health

2.8 Further details of the process of analysing the development plan documents can be found in Appendix A.

Literature Review Methodology

2.9 The purpose of the literature review was to identify the barriers and facilitators for including health into planning, mainly through the appraisal processes spatial planning's plans, programmes and projects as these processes (including HIA, EIA etc) are recognised as a critical way in which health considerations can be incorporating into planning. Additionally, appraisal processes contribute in two key ways towards the mainstreaming of health into planning and decision-making. Firstly they offer a broad intellectual or knowledge framework to understand and develop the links between planning and health. Secondly their implementation tests the existing institutional and organisational system in place to consider health in planning, highlighting deficiencies and good practice in partnership working, management and resources committed by organisations and partnerships. In addition, the analysis of key characteristics of the assessment processes in place further highlights the barriers and facilitating factors towards a fuller integration of health into planning. Thus the purpose of the literature review was to identify barriers and facilitating factors in these three key aspects of policy integration.

2.10 For that purpose, we have collected primary evidence on the barriers and facilitators that have occurred in case studies and review evidence included in R1 and R2. In addition, we have collected further case study evidence from additional studies initially selected in R1 and R2 but later rejected at full text review stage, empirical studies collected in the NICE call for evidence and further studies collected as background research studies in the initial R1 and R2 research strategies. We have also looked for primary research studies snowballed from R1 and R2 included studies. No studies were identified in the snowballing as they were already identified by our search strategy or did not relate to empirical research.

2.11 Four main categories of obstacles and facilitators were identified to scope a data extraction form that could be used systematically on the literature. The four categories reflect the evidence collected from the sample R1 and R2 studies and the rationale explained above. From these, similar issues recurred, as well as the hypothesis that barriers and facilitators for the integration of health into planning depend mainly on the policy process and the management (or institutional) and partnership (or governance system) systems.

2.12 The four categories are:

- **Knowledge:** Barriers/facilitators linked to the knowledge and conceptual understanding of health by different actors/stakeholders;
- **Partnership:** Partnership barriers/facilitators linked to the governance system in place and the political context;
- **Management and resources:** Barriers/facilitators linked to the way institutions work, the responsibilities they have and their capacity and resources;
- **Policy process:** barriers/facilitators linked to the policy process, its effectiveness and inclusiveness.

2.13 Critical appraisal has been carried out on the studies that had not been the object of a critical appraisal in R1 or R2. Critial appraisal forms were adapted from NICE guidance on quality appraisal for qualitative studies.

2.14 The data extraction form has then been applied to identified literature including:

- All citations identified for inclusion in R1 and R2
- Literature rejected at title and abstract stage in R1 and R2, but considered as useful background literature
- Literature identified from the NICE call for evidence
- Literature identified in Supplement to R1 & R2: ‘Review Evidence’

2.15 Data has then been collected to identify key recurring barriers and facilitators to the integration of health considerations into spatial planning. The literature covers both the UK and non-UK experience of this issue, in particular since a number of R1 and R2 studies were considered as highly relevant and applicable to the UK context.

3. RESULTS OF EMPIRICAL RESEARCH

Introduction

3.1 The intention of analysing the core strategy (or unitary development plan in Wales, or local plan in Scotland) and related documents of ten UK local authorities (LAs – listed in table below) was to gather empirical data on the extent to which health issues are influencing the content of statutory development plans[3].

3.2 This is important because in the UK we have a 'plan-led system': the way in which places are shaped and individual developments designed, is largely determined by the policies of adopted development plan documents (DPDs) for a particular area. DPDs should be framed so as to require positive health outcomes in order to ensure the full integration of health measures into development schemes. As well as the Core Strategy we have examined one Area Action Plan (AAP) in each local authority to track the process of implementation down to more detailed level. We have also examined the Regional Spatial Strategy within which the Core Strategy sits.

3.3 Additionally, and where relevant or possible, the local transport plan (LTP) or equivalent was analysed to determine if this supported the detailed policies. The strategic policy (regional spatial strategy in England, the structure plan in Scotland - there is no equivalent in Wales) for the LAs was also reviewed to identify specific policies which may have influenced the DPDs

3.4 The analysis sought evidence of whether:

- Health issues are incorporated into the plan
- Policies for these health issues are embedded/incorporated into the subsequent plan documents

[3] In England the statutory development plan comprises the regional spatial strategy and the documents in the local development framework; in Scotland it comprises the structure plan and local plan, and in Wales it comprises the unitary development plan. At the time of writing the Government has revoked regional spatial strategies in place and has signalled its intention to abolish the requirement for them in due course.

- The local transport plan (or equivalent) facilitates the provision of health outcomes.

3.5 The analysis is presented in the following formats:

Core strategy – objectives and policies checked for key words related to the five key health issues and summarised in table format;

Area action plan (AAP) – analysis of AAP's follow through of core strategy's heath objectives/policies, summarised in table format. An analysis of how the **Local transport plan** supports the AAP is added to the end of the AAP analysis table;

Summary – discussion.

3.6 The analysis results' tables in Appendix F, with summaries of the results in Appendix G.

3.7 The analysis distinguishes between explicit and implicit consideration of health issues in DPDs. 'Explicit' consideration was judged to have been made when the key words for each of the five health issues were used within objectives or policy in a core strategy, or in the policies, proposals or explanation in an AAP. 'Implicit' consideration was judged to be where a policy or proposal would result in a health outcome, but was not the benefit envisaged or recognised as such by the document.

Overview of findings

3.8 This analysis highlights the varying degrees to which DPDs explicitly consider the health issues targeted in this Review. Only the plans of two of the ten authorities reviewed (Plymouth and Glasgow) demonstrated an explicit link between health issues and the formation of objectives and policies. South Hams also demonstrated this link, but only in its AAP. The remaining DPDs showed varying degrees of this link from 'some' to 'none'. Table 1 attempts

to assess how well health issues are explicitly considered, with the findings discussed in sections following. The 'ticks' imply an explicit consideration of health.

Table 1: An assessment of how well health issues are explicitly considered in DPDs

Local Authority	Core Strategy/ UDP or local plan	AAP/development management policies	Does LTP support AAP?	Cascade through policy levels?
Plymouth	✓✓	✓✓	✓✓	✓✓
Glasgow	✓✓	✓✓	n/a	✓✓
LB Redbridge	✓	✓	✓	**x**
Swansea	✓	✓	✓✓	**x**
Horsham	✓	✓	n/a	✓
Lancaster	✓	n/a	✓✓	n/a
South Hams	**x**	✓✓	n/a	**x**
South Cambridgeshire	**x**	✓	n/a	**x**
South Tyneside	**x**	**x**	✓	**x**
North Northamptonshire	**x**	**x**	✓	**x**

Key: ✓✓ Well considered **x** Poorly, or not considered

✓ To an extent considered n/a Not available or not applicable

Core Strategy, Unitary Development Plan or Local Plan

3.9 It is judged that only two of the ten LAs explicitly recognised health issues in their core strategies to a reasonably full degree : Plymouth and Glasgow City Councils (in the case of Glasgow the local plan was analysed, but for simplicity we will refer generically to the core strategy). In the Plymouth Core Strategy in particular, the strategic objectives were continually expressed in 'health terms' or terms that gave the impression that wellbeing, accessibility and equality lay at their heart, and an objective was devoted to delivering community wellbeing.

3.10 Glasgow's City Plan had as one of its three guiding principles 'improving the health of the City and its residents'. As with Plymouth, the strategic development policies were clearly informed by recognition of health issues.

3.11 Horsham, Lancaster, the London Borough of Redbridge and Swansea contain some explicit reference to health issues in their core strategies, but these are not frequent within the documents. Horsham and Swansea were perhaps the best of the four, but the disparity in the number of objectives and policies in these DPDs makes it difficult to compare one with the other.

3.12 South Hams, South Cambridgeshire, South Tyneside and North Northamptonshire's core strategies only occasionally or rarely link objectives and policies to health issues. Of these three LAs, North Northamptonshire was the most successful in respect of the key health issues reviewed. Whilst South Cambridgeshire does not explicitly deliver health in its core strategy, its strong focus on 'sustainability' means that there is an implicit concern for some aspects of health, and some health-related policies are included.

Area Action Plan/Development Management Policy (DMP)

3.13 Plymouth, Glasgow and South Hams' AAP/DMPs were all explicit in recognising health within objectives and policies.

3.14 London Borough of Redbridge, South Cambridgeshire and Horsham do not explicitly recognise health issues to any great degree, yet many of the policies within the individual AAPs would contribute to positive health outcomes. Examples of such policies include the promotion of walking and cycling networks, removal of street clutter, comprehensive lighting schemes and expanding the retail offer to ensure accessibility. Swansea (in its development management policies) includes a mix of explicit and implicit references.

3.15 South Tyneside and North Northamptonshire AAPs' generally fail to link policies with health issues altogether.

Cascade of 'health influence'

3.16 As the core strategy sets the overall vision, strategic objectives and delivery strategy for the more detailed DPDs coming after it, it should be possible to identify its influence in the subsequent documents. They should contain the policies which implement the higher level objectives of the core strategy, without losing track of the issues that the objectives sought to address or the qualities they sought to apply.

3.17 This influence can be followed easily in the Plymouth and Glasgow DPDs and to a more limited extent in the Horsham DPDs. There appears to be no such relationship between the DPDs of the remaining LAs.

3.18 In theory this cascade should also occur between the RSS (or structure plan) and the core strategy however as can be seen from the RSS review in the summaries for the individual authorities, apart from health facility provision, health is not a major issue for the majority of Strategic plans. However, there are several notable exceptions to this rule, namely Glasgow and Clyde Valley Structure Plan, the South East RSS and the East Midlands RSS.

Local/Regional Transport Plan

3.19 The relationship between the LTP/RTP and the DPD is difficult. Firstly, they are not necessarily prepared to the same cycles. The LTP is prepared every five years and has different national objectives set for each interpretation. A core strategy must cover a 15 year period, but is reviewed as and when necessary. Secondly, transport proposals and programmes are sometimes largely dependent on Government funding and so, whereas it would seem beneficial for the LTP to implement the DPDs transport requirements, this is not always possible.

3.20 The LTP/DPD relationships examined in these case studies showed that where the timing and funding coincided, the LTP could have a very positive impact on the implementation of the health outcomes sought by policy in both

core strategy and/or AAP. This is striking in Plymouth where the LTP is explicit in its provisions towards the health outcomes sought for Devonport's regeneration. The relationship between North Northamptonshire's LTP and AAP is also supportive, but not as seamlessly as in the Plymouth case.

3.21 In a few cases reviewed where the AAP related to a major urban extension, and even when the LTP was in step with the AAP, the developer was expected to provide the entire transport infrastructure required, and the LTP was not specific.

Consideration of the Key Health Issues in DPDs

3.22 The five key health issues were found in different proportions within core strategies and AAPs. In all but two core strategies (North Northamptonshire and Glasgow) *equality* was the most frequently considered health issue, with *physical activity* more likely to be the next most frequently considered issue. However in the case of the AAP (or development management policies), *physical activity* was most frequently considered, with *mental wellbeing* and *equality* sharing joint place for the next most frequently considered.

3.23 One thought for this difference is perhaps because *physical activity* lends itself more to the more detailed policies and proposals in the AAP.

3.24 *Mental wellbeing* and *environmental health* issues generally fared equally well in consideration, with *unintentional injury* rarely being considered in the top three issues considered in either core strategy or AAP.

Conclusions and explanations

3.25 This review of plans in relation to ten local authorities cannot claim to represent an authoritative picture of the whole country, but it does indicate very clearly the wide range of current experience. Some of the strategic/regional plans, and some of the core strategies, have made health and well-being central to the plan. They also illustrate that the rhetoric of the broad objectives is translated into policies explicitly intended to achieve healthy ends. Health inequality is the most significant issue, with physical

activity also important. At this level these could well be appropriate, as both can only be tackled effectively through overarching strategies.

3.26 It is also clear that many – probably a large majority – of regional plans and core strategies treat the spatial determinants of health in an inadequate way – either by considering only a limited agenda, or by not explicitly considering health and well-being at all.

3.27 In general the pattern established by the core strategy is then reflected in related plans. All the AAPs in areas where core strategies featured health fully or partially, themselves had explicit health-oriented policies. In one case (South Hams) the AAP was much more explicit and comprehensive than the broader plan. The LTPs were found to be consistent with the AAPs, reinforcing the healthy elements particularly in relation to physical activity.

3.28 The fact that some authorities perform quite impressively in relation to health, while others do poorly, does highlight an important conclusion: it is not primarily the planning system which inhibits health-integrated plans, but the attitudes and knowledge of the actors. What this research does not tell us, however, is how far the good intentions sometimes encompassed in plans are actually being realized in practice. Implementation relies on development projects coming forward and being approved which progressively move the shape of settlements towards health-promoting environments.

3.29 The rationale for the difference between the exemplary local authorities and others is difficult to explain without a more detailed study and knowing more background, however some explanations can be proffered.

3.30 Some clues have been found to Plymouth's good showing in this review. Firstly Plymouth learned valuable lessons in joint working between agencies (including planning and health) when it was established as a Health Action Zone in 1998[4], a seven year Government initiative. Secondly those agencies have again been required to work together as partners in the Devonport

[4] Cole M. (2003) *The Health Action Zone Initiative: Lessons from Plymouth*, Local Government Studies, 29:3, 99-117

Regeneration Community Partnership which was awarded £48.73m over 10 years in 2001 as part of the New Deal for Communities initiative. This partnership working between planning and health may be the reason why health features so well in Plymouth's Core Strategy and in its Devonport AAP. The excellent health credentials of the South Hams AAP may be because the LA has benefitted from the experience of its neighbour Plymouth, and we are aware that a major HIA informed the development of the new community and its AAP.

3.31 A clue for Glasgow's good performance could in large part be due to that City's involvement in the WHO's Healthy Cities' programme, which requires corporate buy-in from Council leaders to the following themes (in place at the time of preparation of the City Plan 2):

- an overall commitment to health development with emphasis on equity, tackling the determinants of health, sustainable development and participatory and democratic governance; and
- a commitment to working on three core themes: healthy ageing; healthy urban planning and health impact assessment, with a complementary theme: physical activity and active living.

3.32 Glasgow's City Plan 2 had also been informed by its multi agency Health Action Plan. Glasgow has recently been accepted onto Phase V of the WHO European Healthy Cities Network, joining other cities working towards the common goal of health and health equity in all local policies.

3.33 Plymouth and Glasgow demonstrate seamless planning policy to improve health and health equality. From the limited evidence, the underlying reason may well be based on the need for those local authorities to take fundamental action to overcome an unacceptable and worsening level of deprivation, health inequality and urban decay. In both cases there must have been the political will to press for action, and stakeholder agencies must also have

been willing to join partnerships to prepare and sign up to the policy delivery mechanisms.

3.34 With the evidence of this part of the review we can only speculate on the reasons why many local authorities which have not as yet got health-integrated plans

- the absence of major regeneration, deprivation and inequality pressures
- the lack of awareness and knowledge amongst politicians and planners
- the absence of individual champions within the local authority
- the age of the RSS or structure plan and the national policy regime in place when this was drafted
- a lack of active pressure from the PCT
- the assumption that health is subsumed within sustainable development.

3.35 This last point receives some backing from the evidence available here. There is an important issue to be considered about the significance of implicit as opposed to explicit health content in plans. A number of plans where the aspiration for sustainable development was carried through into detailed policies, but health was not itself highlighted, include strongly health promoting elements. In the case of the South Cambridgeshire AAP for a major urban extension, for example, physical activity, mental well-being and social equality were supported by a good range of policies. There is nothing (in the absence of implementation evidence) to say that good policies under the guise of sustainable development will be any less effective that good policies with an explicit health perspective.

3.36 One factor which might help explain the degree to which good health and sustainability policies are included could well be the cascade effect. In the case of South Cambridgeshire there has been a long-standing orientation towards sustainable development stemming from the 2000 Regional Planning Guidance (forerunner to the RSS) and the 2003 Structure Plan. The sustainability focus is maintained into the 2008 RSS (for example encouraging walking and cycling, sustainable mixed use development, energy efficient

developments). Health objectives are actually less explicit and less frequently mentioned in the later plans, but the East Cambridge AAP is a serious attempt to produce a more sustainable (and, as part of that, healthier) urban environment.

4. RESULTS OF LITERATURE REVIEW

Research Question

4.1 The evidence for the literature review addresses the following question:

What barriers and facilitators were identified in addressing health in the spatial planning process?

4.2 As outlined in the methodology, the literature was analysed by examining barriers and facilitators in four categories:

Knowledge
Partnership
Management and resources
Policy process

4.3 For each category, a summary table of barriers and facilitators (derived from the full data extraction tables which are included in Appendix E), together with a summary and related evidence statement follows below.

Quantity of research

4.4 In total, we identified 54 studies with empirical results to help us find barriers and facilitators. The list is in table 2 below and full references are in B. The following numbers of studies were identified for each category:

Reviews 1 and 2 included studies: 37
Supplementary reviews: 5

4.5 In addition, as per our methodology, we searched relevant studies from a number of other sources and following screening the studies were identified of potential relevance:

Additional studies selected from full text list for reviews 1 and 2: 5
Studies selected from NICE call for evidence literature: 3

Studies selected from the background refworks folder: 4

Quality of research

4.6 As the majority of empirical studies identified for review 3 consist of reviews 1 and 2 included studies, we have reproduced in table 1 below their internal and external quality scores with the knowledge that these score purported to the main objectives of the studies, i.e. process and outcome evaluation of assessment processes. Full details are given in Reviews 1 and 2. In the majority of cases, identification of barriers and facilitators in these studies was incidental and was derived from the authors' discussion on the level of integration of health into spatial planning. Details of how barriers and facilitators were derived are included in the data extraction tables.

4.7 For the other included studies, the main criteria for their selection from the various sources was that they reported case study research and offered commentaries on barriers and facilitators based on research findings. Purely conceptual studies or studies of an advocacy nature were excluded. Critical appraisal forms are in Appendix C.

Summary of studies analysed

4.8 A list of the' included' studies, together with their internal quality and external validity scores can be found below. The full reference list is in Appendix B.

Table 2: Summary of all 'included' studies by source

(Alphabetical order, by first named author)

Study identification Author, year of publication	Country	Source	Internal validity score ++/+/-	External validity score ++/+/-	Appraisal type
Ahmad, B. et al. (2008)	UK	Refworks folder	+	+	HIA
Bekker, M., *et al* (2005)	NL	R1	+	++	HIA
Bendel, N & Owen-Smith, V. (2005)	UK	R1	+	+	HIA
Bhatia, R., & Wernham, A. (2008)	USA	R1	+	++	IA
Blau, G. and Malony,	Australia	Call for evidence	+	+	HIA

M. (2005)					
Bond, R., *et al* (2001)	Mali, Senegal & Mauritania	R1	+	+	EIA
Bronson, J. and Noble, B. (2006)	Canada	Supplementary review	+	+	EIA
Burns, J. and Bond, A. (2008)	England	Additional studies selected from full text list for reviews 1 and 2	+	+	SEA
Caussy, D., et al (2003)	SE Asia	Refworks folder	+	+	HIA
Corburn, J. & Bhatia, R. (2007)	USA	R1/R2	+	++	IA
Dannenberg, A., *et al* (2008)	USA	R1/R2	+	+	HIA
Davenport, C. et al (2006)	N/R	Supplementary review	++	++	HIA
Douglas, M., et al (2001)	UK	R2	+	+	HIA
Douglas, M., et al (2007)	UK	R1/R2	++	++	HIA
Elliott, E. and Francis, S. (2005)	Wales	Additional studies selected from full text list for reviews 1 and 2	–	–	HIA
Farhang, L. et al (2008)	USA	R2	+	++	HIA
Fischer, T. (2010)	UK	Additional studies selected from full text list for reviews 1 and 2	++	++	SEA
Fischer, T., et al (2009)	UK Germany NL	R2	+	++	SA/SEA
France, C. (2004)	UK	R2	+	+	HIA
Glasgow Centre for Population Health (2007)	UK	R2	+	-	HIA
Gow, A., & Dubois, L. (2007)	Australia	R2	+	+	HIA
Greig, S. et al (2004)	UK	R2	+	+	HIA
Harris, P. et al. (2009)	Australia	Additional studies selected from full text list for reviews 1 and 2	++	++	EIA
Hay, L., & Kitcher, C. (2004)	UK	R1	+	+	HIA
Jobin, W. (2003)	Chad & Cameroon	R1	+	+	IA
Kemm, J. Et al (2004)	NL/UK	R1	+	+	HIA
Kjellstrom, T., *et al* (2003)	Australia	R1	+	+	IA
Kørnøv, L. (2009)	Denmark	R2 supplementary review	+	++	SEA
Kosa, K., *et al* (2007)	Hungary	R1	+	+	HIA
Kwiatkowski, R., & Ooi, M. (2003)	Canada	R1	+	++	IA
Lester, C., & Temple, M. (2006)	UK	R1	+	+	HIA

Mathias, K, Harris-Roxa, B. (2009)	NZ	R2	+	+	HIA
Mindell, J., et al (2004)	UK	R2	+	+	HIA
Mwalyosi, R. & Hughes, R. (1998)	Tanzania	R1	++	+	EIA
Neville, L. et al (2005)	Australia	R2	+	+	HIA
Ng, K., & Obbard, J. (2005)	Hong Kong	R2	+	+	SEA
NHS London (2008)	UK	Call for evidence	+	+	N/A planning applications
NHS London (2009)	UK	Call for evidence	+	+	N/A Planning applications
Noble, B. and Bronson, J. (2006)	Northern Canada	Additional studies selected from full text list for reviews 1 and 2	+	+	EA
Noble, B. F. & Bronson, J. E. (2005)	Canada	R1	+	+	EIA
Planning Advisory Service (2008a)	UK	R2	+	+	EqIA
Planning Advisory Service (PAS). (2008b)	UK	R1	+	+	HIA
Plant, P. et al (2007)	UK	R2	+	_	IIA
Steinemann, A. (2000)	USA	Refworks folder			EIA
Stevenson, A. et al (2007)	NZ	R2	+	+	HIA
Sutcliffe, J. (1995)	UK	R1	+	+	EIA
Taylor, L. and Quigley, R. (2002)	N/R	Supplementary review	++	++	HIA
Taylor, N. et al (2003)	NZ	R1	+	+	SIA
Utzinger, J., *et al* (2005)	Chad & Cameroon	R1	++	++	IA
Viinikainen, T., & Kaehoe, T. (2007)	Finland	R1	+	+	IA
Wismar, et al. (2007a)	UK	R1/R2	+	++	HIA SIA
Wismar et al (2007b)	UK, Italy, Sweden, Germany	R1	+	++	HIA
Wright, J et al. (2005)	Europe	Refworks folder	+	+	SEA/HIA
York Health Economics Consortium (2006)	UK	Supplementary review	+	++	HIA

Findings on barriers and facilitators – Knowledge and conceptual understanding

Barriers

4.9 Several studies note that an overly narrow view of what health is and means is a major barrier to the better integration of health into the spatial planning system (Ahmad et al, 2008; Bekker et al, 2005; Bronson and Noble, 2006;

Corburn and Bhatia, 2007; Fischer et al, 2009; Noble and Bronson, 2005; PAS, 2008b). In appraisals of planning proposals there is seen to be a focus on physical. environmental health concerns, such as air, water and noise issues, rather than an approach that recognises the broader social and cultural determinants of health (Fischer et al, 2009; Noble and Bronson, 2005). Two main explanations are postulated for this narrow view of health and the consequent lack of consideration of wider health concerns in appraisals of planning proposals.

4.10 Firstly, it is proposed that a genuine lack of understanding of what health is among those who are commissioning and conducting appraisals leads to a narrow focus following a medical or physical environment model rather than a wider public health approach that addresses broader concerns and issues such as health inequalities (Noble and Bronson, 2006; PAS, 2008b). It also leads to a focus only on negative health impacts of a development rather than maximising the positive health impacts (Bekker et al, 2005).

4.11 Secondly, health professionals are seen as having a lack of understanding of the planning system, including the statutory assessment processes of which they could make a valuable contribution to (Burns and Bond, 2008). This prevents health professionals from engaging effectively in planning processes, and results in a lack of engagement with planning colleagues.

4.12 The lack of understanding on both sides is seen to be an outcome of the rigid boundaries that have existed thoroughout decades around the development of knowledge in the fields of health and planning (Bhatia and Wernham, 2008).

Facilitators

4.13 A number of facilitators are identified to address the issues regarding deficiencies in knowledge and conceptual understanding. Several studies recommend using the World Health Organisation's formal definition of health as a means of ensuring that health is seen from its broader environmental, social and cultural perspectives when assessing the impact of proposed developments (Glasgow Centre for Population Health, 2007; Kemm et al,

2004; Noble and Bronson, 2005). The WHO definition, with its emphasis on physical, social and mental well-being, is seen to help to avoid a focus purely on negative physical environmental impacts (Noble and Bronson, 2005). It could help environmental planners to "understand and adopt a new social orientation to environmental health" (Corburn and Bhatia, 2007). As part of this process, health professionals should also use data on broader determinants to build up the evidence base and make the case for this broader focus on wider health concerns (Bhatia and Wernham, 2008; Taylor and Quigley, 2002). This can provide the evidence of the health problems in localities, and explore causal pathways connecting health outcomes to wider determinants (PAS, 2008b; Taylor and Quigley, 2002).

4.14 Closer working between health, environment and planning professionals is recommended to reinforce planners' role in the health impacts of development, and to ensure that health is not an afterthought (PAS, 2008b). For example, joint assessment between planners and health professionals is noted as enabling a focus on wider health issues, especially relating to health inequalities (Hay and Kitcher, 2004). Such joint working would also help health professionals to understand better the planning system and how they can best contribute.

4.15 Finally, the process of developing and undertaking HIA is viewed by some as a way of addressing gaps in knowledge and conceptual understanding. Further development of HIA is seen as a solution to the lack of health considerations and the need to take a broader role beyond statutory obligations (Harris et al, 2009; Kornov, 2009). HIA is also viewed as having transformed the understanding of the role of sptial planning in promoting health and reducing health inequalities (Stevenson et al, 2007).

Evidence Statement 1: barriers and facilitators - Knowledge and Conceptual Understanding

4.16 Twenty-eight studies identified barriers and facilitators for the better integration of health into spatial planning relating to knowledge and

conceptual understanding. Findings were consistent across studies, including those looking at policies and projects, as well across countries. The majority of studies (n=16) were of moderate (+) internal and external quality scores and findings were mostly incidental in the authors' discussions. 26 of the studies recognised that addressing deficiencies in knowledge and conceptual understanding is a key facilitator for the better integration of health into the spatial planning process.

4.17 Evidence suggests that those responsible for decisions on and assessments of planning proposals often view health in narrow terms, focussing on physical environment concerns, rather than taking a broader definition of health that recognises the role of the social environment and seeks to address the wider determinants of health. This narrow focus is seen to be primarily a result of a lack of engagment between health and planning professionals, coupled with the rigid boundaries around the development of knowledge between these two professions. Facilitators include using a broader definition of health, such as that used by WHO, and developing closer working between health professionals and planners to develop a shared understanding of health and spatial planning issues. More specifically there was advocacy for the creation of a database reflecting the wider determinants of health, and for use of HIA as a trigger for developing shared understanding.

Findings on barriers and facilitators – Partnerships

Barriers

4.18 Issues relating to partnerships are highlighted as a key barrier to more effective integration of health into the planning process. Several studies note that the various organisations who should work together in order to integrate health considerations into planning often have very different cultures, and use different languages and terminologies (Fischer et al, 2009; France, 2004; NHS London, 2009; PAS, 2008b; Stevenson et al, 2007). As already mentioned in the knowledge and conceptual understanding section, this causes problems then in terms of interpretation and contextualisation of key terms such as

health. Partnership working is also hindered by the different structures of the organisations, and the day to day and strategic priorities that they have (Neville et al, 2005).

4.19 A number of authors cite the limited time and human resources that are available to dedicate to developing effective partnerships (Mathias, 2009; NHS London, 2009; Noble and Bronson, 2006). This extends to conducting community engagment and participatory stakeholder workshops (Bendel and Owen-Smith, 2005). The often short deadlines for conducting appraisals such as HIA compound this (Bendel and Owen-Smith, 2005).

4.20 The lack of partnership working is seen to contribute to a vicious circle whereby a lack of intersectoral understanding, including lack of knowledge of planning among health professionals and vice versa, leads to unease among partners and a lack of trust (Greig et al, 2004). This then hinders the potential for future partnership working (Ahmad et al, 2008).

Facilitators

4.21 A number of facilitators are identified to enable improved partnership working that contributes to a greater consideration of health in the planning process. Several studies identify the need to break down silos, with close partnership working from an early stage, including the development of a shared vision among partners through coalition and consensus building, formalised arrangements for partnership working, and explicit roles and responsibilities (Ahmad et al, 2008; Bekker et al, 2005; Bond et al, 2001; Corburn and Bhatia, 2007; Hay and Kitcher, 2004; NHS London, 2009; PAS, 2008b; Plant et al, 2007). Joint working in the UK between PCTs and Local Authorities is viewed as having had a positive effect, with potential for more joint posts such as joint chief executives (France, 2004; NHS London, 2009).

4.22 Good communication channels and the use of a common language among partners so that all parties (including community / lay stakeholders) can understand is emphasised as a way of maximising participation across organisations and communities (Fischer et al, 2009). This could also include

experimenting with new participatory approaches (Glasgow Centre for Population Health, 2007; PAS, 2008a). Indeed, as linking community engagement to health is said to provide a hook for planners to engage local people, it could be a way of encouraging planners to embrace health considerations (PAS, 2008b).

4.23 It is suggested that key partners should commit dedicated resources, including resources to sustain effective community participation (Greig et al, 2004; Mathias, 2009). Resources can also be used for the development of multi-agency training courses and masterclasses, which are seen not only as a way of improving knowledge and understanding of health and planning among partners, but also bringing those partners together for shared learning and development of relationships (Dannenberg et al, 2008; Mathias, 2009; Stevenson et al, 2007).

4.24 Institutional support by a dedicated body / broker organisation is highlighted as a way of facilitating partnership working, with the work of NHS London's Healthy Urban Development Unit (HUDU) being seen as a key facilitator in the bringing together of health and planning concerns across London (Fischer et al, 2009; York Health Economics Consortium, 2006). Strategic alliances such as Local Strategic Partnerships and multi-disciplinary task forces are also seen as being helpful in promoting better partnership working (Burns and Bond, 2008; Caussy et al, 2003; Greig et al, 2004).

4.25 HIA itself is highlighted as a useful process for bringing together partners, developing greater understanding, facilitating a change in priorities in planning strategies and highlighting the role that health considerations have in the appraisal process (Neville et al, 2005; Stevenson et al, 2005). HIA should be promoted as a non-threatening process, constructive process (Bendel and Owen-Smith, 2005).

Evidence Statement: Partnerships

4.26 Thirty-seven studies identified barriers and facilitators for the better integration of health into spatial planning relating to partnerships. Findings were consistent across studies, including those looking at policies and projects, as

well across countries. The majority of studies (n=24) were of moderate (+) internal and external quality scores and findings were mostly incidental in the authors' discussions. Ineffective partnership working is identified as an important barrier to more effective consideration of health in the spatial planning process. The problem of different cultures between the various actors, with differing terminologies and languages, priorities and structures, coupled with limited resources, hinders partnership working and leads to a lack of trust which impacts on the potential for developing effective partnerships. Facilitators include joint working from an early stage, developing a jargon-free language style, consensus building and developing a shared vision, with explicit roles and responsibilities for all parties. This joint working may be through formalised arrangements – building on the Local Strategic Partnerships or funding joint health/planning posts - and facilitated through brokering organisations. Committing resources for multi-agency training and time to engage with partners, including the community, is seen as an important facilitator in this process, as it can address issues of trust.

Findings on barriers and facilitators - Management and resources

4.27 The barriers to the integration of health into planning identified in the studies and relating to management and resources include the lack of support and lack of delivery structures, lack of time, lack of funding and gaps in skills. Facilitators in the area of management include clear commitment to HIA at the level of the organisational decision-making structure, ability to make linkages between sectors, building the capacity of all actors and stakeholders and the consideration of rapid HIA that requires less time. Resources facilitating the integration of health into planning include the need for an institution to champion health into planning and strategically guide HIA capacity building and practice, dedicated time and staff to research healthcare trends, needs of local communities to collaborate within local planning authorities and the creation of an HIA support unit.

Barriers

- Lack of support and delivery structures: (Fischer, 2009; Hay, 2004; Bekker, 2005; Wismar, 2007;Utzinger, 2005; Burns, 2008; Elliott, 2005; Davenport, 2006; York Health Economics Consortium, 2006)
    - from the government
    - from hierarchical support within organisation
    - unclear management roles between different organisations involved in assessments leading to delays
    - Small organisational structure for assessment, in particular if seen as an activity on the margin of projects and planning decision-making
    - no mechanisms for delivery, lack of information, data available
    - EIA and SIA have stronger lobbies than HIA to advocate them
- lack of time and concurrent priorities: (Stevenson, 2007; Davenport, 2006; Blau, 2009; Ahmad, 2008)
    - need for organisations (local authorities or health) to prioritise other issues,
    - too heavy workload in other areas of work to promote health
- lack of funding: (Dannenberg, 2008; Wismar, 2007; Davenport, 2006; Steineman, 2000)
    - for HIA
    - for other resources to build up capacity
- gaps in skills leading to missed opportunities: (Kjellstrom, 2003; Wismar, 2007; Burns, 2008; Davenport, 2006; York Health Economics Consortium, 2006; NHS London, 2009; Blau, 2005)
    - skills to understand HIA methodology and to drive HIA
    - institutional skills in general
    - knowledge of: local communities and areas including demographic trends and emerging healthcare needs,
    - topic (health or planning) or awareness of the fields leading to missing opportunities (eg S. 106),
    - decision-making processes
    - underestimation of scientific and consultative resources needed
    - Poor awareness by LPA of tools to integrate health issues into planning
    - Fear and confusion over assessment processes

Facilitators

- Clear commitment to HIA at the level of the organisation (Neville, 2005; Stevenson, 2007; Davenport, 2006; Blau, 2005; Ahmad, 2008).
- Leadership: leading organisation that could strategically guide HIA capacity building and practice (Farhang, 2008; Douglas, 2007; Ahmad, 2008)
- Making linkages: (Fischer, 2009; Glasgow Centre for Population Health, 2007; Plant, 2007; Bendel, 2005; Hay, 2004; Planning Advisory Service, 2008b; Elliott, 2005; Davenport, 2006; York Health Economics Consortium, 2006; NHS London, 2009; Ahmad, 2008)
    - between planning and corporate policy,
    - setting up cross-departmental or multidisciplinary team working to facilitate policy integration,
    - setting up regular meetings between health and planning authorities,
    - building programme management skills, and ability to engage with stakeholders and work intersectorally
    - involve decision-makers in knowledge production, in assessment process
    - involve outside experts or outsourcing
- Building capacity of all actors and stakeholders: (Planning Advisory Service, 2008a; Neville, 2005; Bhatia, 2008; Corburn, 2007; Bond, 2001;Utzinger, 2005; York Health Economics Consortium, 2006; NHS London, 2009; Blau, 2005; Ahmad, 2008; Caussy, 2003)
    - creation of HIA post at strategic level,
    - developing on-going institutional skills (not only individual skills) and consultation mechanisms,
    - skills to carry out assessment,
    - providing support for developers,
    - build capacity both for quantitative and qualitative skills
    - build advocacy skills
- Dedicated time and staff to research healthcare trends, needs of local communities to collaborate with local planning authorities (Douglas, 2001;

France, 2004; Planning Advisory Service, 2008a, Stevenson, 2007; Blau, 2005)

- Consider rapid HIA that requires less time and resources (York Health Economics Consortium, 2006)

Evidence Statement 3: management and resources

4.28 Thirty-one studies identified barriers and/or facilitators in management and resources, of which 16 studies identified barriers and 25 studies identified facilitators. Ten studies identified both.

4.29 The evidence is of moderate quality [+], for the main study design of the 22 studies selected from R1 an R2 reviews, identification of barriers and facilitators in the area of management and resources was incidental and came from the authors' discussion on the level of integration of health into spatial planning. The other 9 studies report case study research of moderate quality [+] and offer commentaries on barriers and facilitators based on research findings.

4.30 In terms of *barriers* the key factors identified were inadequate support and organizational structures, lack of time, lack of funds and lack of skills.

4.31 Nine studies identified lack of support and lack of delivery structures as a barrier, citing weak governmental support and lack of inter and intra-institutional support. Four studies identified competing priorities and heavy workload of both health and local authorities as a barrier. Four studies also identified lack of funding to carry out health assessment or to build capacity at institutional level prevents the consideration of health in the planning system.

4.32 Seven studies identified gaps in skills from both planners and health professionals leading to missed opportunities as a barrier, including skills to carry out HIA, to improve knowledge of the local communities and their needs, of the planning decision-making or of the health sector. Gaps in skills lead to both lack of confidence and low poor awareness of the resources needed to integrate health issues into planning.

4.33 The key *facilitators* identified were health impact assessment, constructing organizational links, building capacity and skills.

4.34 Five studies identified a clear commitment to HIA at the level of the organisation is a key facilitator. Three studies further identified the need to have a dedicated organisation championing HIA at strategic level. The potential value of rapid HIA was highlighted by one study.

4.35 Eleven studies identified the importance of linkages, between policy sectors both at inter and intra-institutional levels, the need to build capacity for actors to make linkages and the need to involve both decision-makers and outside consultants in the assessment processes.

4.36 Eleven studies identified capacity building of all actors and stakeholders through improving the range of skills of all actors (to carry out assessments, to develop consultation mechanisms, to advocate for the integration of health into planning) or through the creation of HIA post at strategic level is of key importance. Five studies also identified dedicated time and staff to research healthcare trends, needs of local communities to collaborate within local planning authorities as a key facilitator.

4.37 Findings were consistent across studies, including those looking at plans and projects, as well across countries.

Findings on barriers and facilitators – Policy process

4.38 Fourty-four studies identified barriers and/or facilitators in the policy process. Barriers to the integration of health into spatial planning include first, the late timing and length of assessment as it limits the ability of the assessment to influence planning decisions, second the lack of a suitable legislative, regulatory and structural support, in particular in view of non statutory nature of HIA, third the gaps in the evidence based used in the policy process (mainly through assessment instruments) to evaluate health impacts of spatial planning, in particular in view of the lack of robustness and relevance

to local context of the evidence used, and fourth the lack of effectiveness and quality of the assessments such as HIA, EIA and SEA.

4.39 The policy process also offers or has the potential to present features which can facilitate the integration of health into spatial planning. First, the legislative, regulatory and structural support at both national and EU level promote the consideration of health in a number of policy documents. Second, assessment instruments such as HIA or SEA are also seen as facilitators and they can raise the awareness of health issues in spatial planning provided they include a number of key principles. Third, the evidence base used in the policy process (mainly when assessment instruments are used) to evaluate health impact can facilitate, according to some of the studies, the integration of health into planning if include a broad range of evidence and consider broad determinants of health. Fourth, broad policy integration of health into planning can be facilitated by various methods including mainstreaming of HIA into planning decision-making, its integration with other forms of assessments or imposing new requirements on health assessment to developers.

Barriers

- Timing and length of assessment: (Fischer, 2009; Mathias, 2009; Bendel, 2005;Bekker, 2005; Noble, 2005; Mwalyosi, 1998; Noble, 2006; Burns, 2008; Bronson, 2006)
    - EIA and HIA carried out too late in planning process to influence plans and projects
    - Little evidence that assessment recommendations are carried over at post decision, monitoring stage and if so not well done
    - Participatory HIA can be difficult to undertake if policy development needed quickly

- Perceived lack of legislative, regulatory and structural support: (Fischer, 2009; Mathias, 2009; Neville, 2009; Planning Advisory Service, 2008b; Bekker, 2005; Bhatia, 2008; Corburn, 2007; Noble, 2006; Burns, 2008; Harris, 2009; Davenport, 2006; NHS London, 2009; Steineman, 2000)

- No statutory nature of HIA, different development of HIA across Europe
- Limited use of HIA at central government level
- Disagreement over whether current EA legislation is sufficient
- Current legal framework:
    - Traditional legalistic planning
    - bureaucratic resistance,
    - lack of coalition building,
    - no changing institutional practices,
    - no new participatory processes,
    - no intersectoral coordination
- Lack of strategic links between organisations and documents, so relationship between environment and health not consistent (see also evidence base below) and health assessment cannot be integrated either into other forms of assessment or into planning decision-making in view of other legal requirements
- Lack of guidance on method for assessment, how to address analytical complexity and implications of legal requirements
- Examples quoted of negative results from lack of support:
    - Social and health infrastructures at periphery of major application referral process and given low priority within evaluation process
    - Only 14% of developers contributions secured for healthcare requirements
    - PCT comment more on S106 than on wider impact of large developments
    - S106 covers capital not revenue funding and S106 does not link to social care

- Gaps in the quality and range of evidence base used in policy process to evaluate health impacts mainly through assessment process: (Wismar, 2007; Neville, 2009; Planning Advisory Service, 2008b; Bekker, 2005; Bhatia, 2008; Corburn, 2007; Dannenberg, 2008;Noble, 2005; Burns, 2008; Bronson, 2006)

- Lack of guidance in literature on prioritising sources of evidence
- Evaluation of health impact through regulatory thresholds but cumulative impacts of multiple pollutants not compulsory to assess; combination of chemical, physical and social hazards overlooked
- Difficulty of constructing models which quantify and predict health impact
- Lack of additional qualitative method in HIA, lack of data on how social forces influence human health
- Causality: difficulty to attribute effect to specific causes
- Evidence must be robust and relevant to the local context and scientific HIA method not robust enough
- Different timescales (planners/long term needs and public health professionals/immediate needs) leading to prioritising different evidence

- Lack or inadequacy of the principles and methodology of the assessment process: (Kørnøv 2007; Bekker, 2005; Wismar, 2007; Harris, 2009; Davenport, 2006; Bronson, 2006; York Health Economics Consortium, 2006; Blau, 2005; NHS London, 2008)
  - Narrow focus of HIA, on negative environmental health impacts, not on impact on social infrastructures
  - Problem to attribute changes in plans to HIA
  - Inadequate methods:
    - Lack of method or ideal process not applied systematically
    - HIA too voluminous for policy makers
    - SEA's environmental reports do not highlight health
    - Lack of scoping

Facilitators

- Timing and length of assessment: (Fischer, 2009; France, 2004; Greig, 2004; Mindell, 2004; Wismar, 2007; Mathias, 2009; plant, 2007; Planning Advisory Service, 2008b; Bekker, 2005; Dannenberg, 2008; Noble, 2005;

Taylor, 2003; Bond, 2001; Kosa, 2007; Burns, 2008; Davenport, 2006; NHS London, 2009; Steineman, 2000)

- Prospective assessment (before decision on preferred aspects made)
- Timing of HIA: same cycle as plan gives opportunities for advice throughout decision-making process
- Timely delivery of HIA

- Strategic partners need to involve public/stakeholders at strategic stage
  - Incorporating health indicators into monitoring of plan's implementation
  - Monitoring health determinants and actual health outcomes to ensure that management and mitigation programmes meet their objectives

- legislative, regulatory, institutional and structural support: (Fischer, 2009; France, 2004; Greig, 2004; Planning Advisory Service, 2008a; Wismar, 2007; Stevenson, 2007; Mathias, 2009; Bendel, 2005; Planning Advisory Service, 2008b; Corburn, 2007; Burns, 2008; Harris, 2009; Davenport, 2006; Kørnøv, 2009; Blau, 2005)
  - Principles:
    - Regulatory guidance, case law and practice will institutionalise health determinant analysis within EIA,
    - Tackling health determinants at right level (local, national)
    - Build equality standards in policies and documents
    - Leadership
  - EU: political agenda promotes integration (SEA legislation)
  - National level: EIA statutory nature offers instrument to address health and well-being
  - Local level:
    - CAA, LAA and JSNA help work together effectively
    - Community infrastructure levy
    - Discretionary planning

        - Post of health physician funded by health and local authority
        - Consistency in assessment through integration of HIA and EIA (considered by some local councils)
        - Involvement of health overview and scrutiny committee

- quality and range of evidence base used in policy process to evaluate health impacts mainly through assessment process: (Douglas, 2007; Fischer, 2009; France, 2004; Greig, 2004; Mindell, 2004; Planning Advisory Service 2008a; Neville, 2009; Bekker, 2005; Bhatia, 2008; Corburn, 2007; Kjellstrom, 2003; Elliott, 2005; Davenport, 2006; Kørnøv, 2009; NHS London, 2008)
    - Consideration of natural, physical, social and behavioural factors; assess capacity of social infrastructure in connections with larger developments
    - Use a wide range of evidence: local evidence, hybrid nature of HIA combines expert and lay knowledge, qualitative and quantitative evidence, multi-disciplinary evidence base
    - Use computer models to assess options
    - Consistency between methods used at different stages of planning
  - Transparency of evidence, weighing, who is involved and how decisions made
  - Health professionals must use data on determinants of health to strengthen the case to consider health in EIA
  - A tool such as ENCHIA (Eastern Neighbourhoods Community HIA) can allow integration of knowledge and expertise from a range of disciplines and life experience

- principles and methodology of assessment process: (Fischer, 2009; France, 2004; Mindell, 2004; Wismar, 2007; Mathias, 2009; Neville, 2005; Plant, 2007; Bendel, 2005; Planning Advisory Service, 2008b; Dannenberg; 2008; Bond, 2001; Utzinger, 2005; Elliott, 2005; Davenport,

2006; Kørnøv, 2009; Bronson, 2006; York Health Economics Consortium, 2006; NHS London, 2009; NHS London 2008)

- HIA is seen as a way to improve involvement of communities and to raise awareness of health in the planning system
- clearly defined stages and standards but blueprint model of HIA must be adapted to local context
- Teamwork approach
- Principles: Use of precautionary principle and social justice frame (to increase health benefits and reduce health inequalities), examine determinants of health rather than just evaluate predicted health impacts (eg transport = primary determinant of health in SEA (Denmark)
- Checklist for planners on key health considerations
- Cost-effectiveness of planning options incorporated in HIA

- Outcome evaluation built into process
- Transparency of process: clear hypotheses, transparency of SEA report, dissemination
  - Coordination between assessment tools
  - Prioritisation of recommendations
  - External consultant
  - Realistic recommendations and tailored presentation of report and recommendations to reflect organisation concerns
  - Intersectoral/interdisciplinary HIA leading to common language
  - Good communication with decision-makers throughout process

- Policy Integration (Douglas, 2001; Fischer, 2009; Planning Advisory Service, 2008a; Plant, 2007; Douglas, 2007; Planning Advisory Service, 2008b; Sutcliffe, 1995; Bhatia, 2008; Corburn, 2007; Dannenberg, 2008; Kwiatkowski, 2003; Noble, 2005; Vinikainen, 2007; Burns, 2008; Elliott, 2005; Kørnøv, 2009; Caussy, 2003)
  - Mainstreaming of HIA into:
    - Integration of health consideration into strategic plans or/and development planning

- Integration of HIA into other assessments, holistic IA, SEA has got legal requirement to consider health, Use of SEA as integrative instrument.

Evidence Statement 4: barriers and facilitators – Policy process

4.40 Fourty-four studies identified policy barriers and/or facilitators of which 24 studies identified barriers, 41 studies identified facilitators and 21 studies identified both.

4.41 The evidence is overall of moderate quality [+], mainly because the identification of barriers and facilitators is incidental to the studies: in the 30 studies selected from R1 an R2 reviews, identification of barriers and facilitators in the area of policy process was incidental and came from the authors' discussion on the level of integration of health into spatial planning. The evidence from the other studies (15) is also of moderate quality [+] because they generally report on case study research and barriers and facilitators are based on authors' commentaries.

Barriers

4.42 First, nine studies identified that timing and length of assessment was a key barrier with assessments undertake too late unable to influence the planning decision-making process and the length of assessment delaying decisions that need to be taken quickly.

4.43 Second, 13 studies identified lack of a suitable legislative, regulatory and structural support as a key barrier, as was the non statutory nature of HIA, and lack of integration of health assessment into the planning system.

4.44 Third, 10 studies identified gap in the evidence base used in the policy process (mainly through assessment processes) to evaluate health impacts of spatial planning, including the lack of guidance both on different types of evidence and on prioritising them, the lack of robustness of quantitative

evidence and uncertainties of modelling to identify impacts and establish causality, the lack of qualitative and local sources of evidence. Planners and health professionals prioritising different health outcomes will tend to prioritise different types of evidence.

4.45 Fourth, nine studies identified barriers linked to the effectiveness and quality of the assessment process itself. An issue raised is the difficulty to fit a non statutory assessment (HIA) into a statutory planning framework. Other barriers include the gaps in the assessment process itself, including narrow focus on environmental health impacts, inadequate reporting (too long, not focussed, lack of details).

Facilitators

4.46 First, 18 studies identified that prospective assessment that linked to the same cycle as the planning decision-making process facilitates the inclusion of health considerations in planning.

4.47 Second, 15 studies identified that an appropriate legislative, regulatory and structural support could be a key facilitator, particularly those that promote the integration of a holistic view of health into planning decision-making and promote collaboration between health and local authorities.

4.48 Third, 15 studies identify that quality and broad range of evidence base used in the policy process (mainly when assessment instruments are used) can facilitate, the integration of health into planning, in particular if it considers natural, physical as well as social and behavioural factors, incorporates local evidence, uses a mix of qualitative and quantitative methods, is multi-disciplinary and transparent.

4.49 Fourth, 19 studies identified that appropriate assessment instruments can facilitate the awareness of health issues in spatial planning, particularly those that offer clearly defined stages, teamwork, use of precautionary and social justice frames, transparency of process, coordination between assessment tools, use of external consultants, prioritisation of recommendations, tailored

reports, interdisciplinarity of assessment, good communication with policy-makers.

4.50 Fifth, 17 studies identified two policy integration mechanisms, including mainstreaming of HIA into planning decision-making, or integration of health, social and environmental considerations into more holistic assessment instruments.

4.51 The evidence is consistent across UK and non UK countries generally, the only notable differences are in countries where issues concerning ethnic and social groups are more pronounced (NZ, Canada and USA) where the studies (Bronson, 2006; Mathias, 2009; Corburn, 2007) have focussed on the integration of knowledge and expertise from different groups in the policy process to reflect health equity.

4.52 Despite some variations in stakeholders and cycles in the policy process at strategic and development levels, the evidence for plans and projects is consistent in terms of legislative and regulatory support, timing of assessment, nature of the evidence base and effectiveness of principles and methods used in assessment.

Appendix A: Analysis of Development Plan Documents

a) Core strategy

1. The analysis begins with the review of the local authority's core strategy; the high level local document to which all other documents in the suite of local development framework (LDF) documents should conform. Planning Policy Statement 12 (PPS12) (DCLG 2008) sets out the key ingredients of local spatial plans and how they should be prepared, together with the Government's requirement that the core strategy should include:

   (1) an overall vision which sets out how the area and the places within it should develop;

   (2) strategic objectives for the area focussing on the key issues to be addressed;

   (3) a delivery strategy for achieving these objectives. This should set out how much development is intended to happen where, when, and by what means it will be delivered. Locations for strategic development should be indicated on a key diagram; and

   (4) clear arrangements for managing and monitoring the delivery of the strategy.

2. Crucially to this Review, PPS12 only mentions 'health' in the context of the value of green infrastructure *"to the health and quality of life in sustainable communities"* (paragraph 2.4) and to the provision of *"health facilities"* (paragraph 2.7). It is thus left to other PPS', together with the Sustainability Appraisal (incorporating Strategic Environmental Assessment), to ensure that DPDs accommodate health into local spatial planning.

3. As all core strategies must include 'strategic objectives' and will also contain policies to ensure the delivery of those objectives, the analysis of the core strategy has been achieved by performing a word search on its strategic objectives and policies. The words were chosen by brainstorming key words

associated with the six health issues identified for the spatial planning and health reviews, namely:

Key Health Issue	Key words
Physical activity	Walking, cycling, sport, recreation, activity, exercise
Mental wellbeing	Well-being, wellbeing, safety, social, socialise, crime
Environmental health	Pollution, noise, air/water quality, particulate, contaminant
Unintentional injury	Safety, accident, injury
Equality	Equality, equity, affordable, fairness, inclusive, accessibility, equal
Other	Health, illness, climate change

4. A data extraction form was devised which allows a visual interpretation of the incorporation of health issues in the core strategy. The Key to the form explains the link (where apparent) between a strategic objective and a policy, or where there is a stand-alone policy that incorporates a key word. The form was developed by trialling it on the Plymouth City Council Core Strategy (Plymouth City Council, 2007a).

b) Area action plan/Site allocations DPD

5. Again this approach was devised by analysing a Plymouth City Council AAP, namely the Devonport Area Action Plan (Plymouth City Council 2007b).

b) Local Transport Plan

6. The third local document to be analysed will be the local transport plan (LTP) or equivalent. This has a different status to the previous two, as it is not a DPD and thus has only a marginal role in the consideration of development proposals. It is in part a spatial planning document which sets out the transport strategy and implementation programme for a local authority area. It is also partly a bidding document which sets out the authority's proposed

capital and revenue spending. It is intended that the LDF supports delivery of a LTP.

7. A LTP's content is largely prescribed by the Department for Transport (DfT). The most recent round of LTPs (Round 2) covering the period 2006-2011, are governed by statutory guidance set out in the Department for Transport's *Full Guidance on Local Transport Plans: Second edition* (DfT 2004)[5]. As well as local priorities, this requires LTP2s to prioritise certain "shared priorities" of:

- Congestion
- Accessibility analysis/strategy
- Safer roads
- Air quality, and
- Other quality of life issues, including:
  - Quality of public spaces and better streetscapes
  - Landscape & biodiversity
  - Community safety, personal security & crime
  - Healthy communities
  - Sustainable prosperous communities
  - Noise
  - Climate change & greenhouse gases.

8. Given the above, the LTPs coming forward from the LTP2 Guidance should be expected to cover all five health issues (see paragraph 2.18) and it is therefore not considered helpful to detail all the health references within an individual LTP. Instead the data extraction will assess how the LTP implements or supports the key elements of the AAP studied. This methodology was trialled using the *Plymouth City Council Local Transport Plan 2, 2006-2011* (Plymouth City Council, 2006).

b) Other Development Plan Documents

9. In the absence of an area action plan or site allocations DPD, it is likely that the next most appropriate document to analyse would be the 'development

[5] Note: LTP3s in preparation will follow more recent DfT Guidance *'Guidance on Local Transport Plans, July 2009'* – England only

management' DPD. This is the document which sets out the policies to be applied to any development proposal or planning application. It should therefore contain policies which reflect the core strategy's health provisions, and should ensure that health issues are considered on a case by case basis.

b) Analysis Conclusions

10. Following the detailed analysis of the individual DPDs, conclusions will be drawn as to the extent to which that local authority has incorporated provisions to address the five key health issues in its plan making.

Appendix B: References of Literature Analysed for Review 3

Review 1 included papers

1. Bekker, M., Putters, K. and van der Grinten, T. (2005). *Evaluating the impact of HIA on urban reconstruction decision-making. Who manages whose risks?* EIA Review. 25; 758-771
2. Bendel, N & Owen-Smith, Vicci. (2005). *A prospective health impact review of the redevelopment of Central Manchester Hospitals*. Environmental Impact Review 25; 783-790.
3. Bhatia, R., Wernham, A. (2008) *Integrating Human health into Environmental Impact Assessment: an unrealised opportunity for environmental health & justice*. Environmental Health Perspectives. 116; 991-1000
4. Bond, R., Curran, J., Kirkpatrick, C., Lee, N., Francis, P. (2001) *Integrated Impact assessment for Sustainable Development: a case study approach*. World Development. 29; [6]; 1011-1024
5. Corburn, J. and Bhatia, R. (2007). *HIA in San Francisco: Incorporating the social determinants of health into environmental planning.* Journal of environmental Planning and Management. 50; [3]; 323-341
6. Dannenberg, A., Bhatia, R., Cole, B., Heaton, S., Feldman, J., Rutt, D. (2008). *Use of Health Impact Assessment in the US, 27 case studies, 1999-2007*. American Journal of Preventative Medicine; 34 [3]
7. Douglas M, Thomson, H, Jepson, R, Hurley, F, Higgins M, Muirie J, Gorman D. eds (2007). *Health Impact Assessment of Transport Initiatives – a Guide*. NHS Health Scotland Edinburgh.
8. Hay, L., Kitcher, C. (2004) *An analysis of the benefits of a cross-sectoral approach to a prospective health impact assessment of a container port development.* Environmental Impact Assessment Review. 24; 199-206
9. Jobin, William. (2003) *Health and equity impacts of a large oil project in Africa*. Bulletin of the World Health Organisation 81; [6]; 420-426
10. Kemm, J., Parry, J., Palmer, S. Eds. (2004). *Health Impact Assessment*. Oxford University Press: Oxford
11. Kosa, K., Molnar, A., McKee, M., & Adany, R. (2007) *Rapid health impact appraisal of eviction versus a housing project in a colony dwelling Roma community.* Journal Epidimiol Community Health. 61; 960-965
12. Kjellstrom, T., Van Kerkhoff, L., Bammer,G. & McMichael, T. (2003). *Comparative assessment of transport risks- how it can contribute to health impact assessment of transport policies*. Bulletin of the World Health Organisation 81; [6].
13. Kwiatkowski, R., Ooi, M. (2003). *Integrated environmental impact assessment: a Canadian example*. Bulletin of the World Health Organisation, 81; [6]; 434-438
14. Lester, C., Temple, M. (2006). *Health Impact Assessment & community involvement in land remediation decisions*. Public Health 120; 915-922.
15. Mwalyosi, R. and Hughes, R. (1998). *The performance of EIA in Tanzania: an assessment.* IRA research paper. 41
16. Noble, B. F. and Bronson, J. E. (2005). *Integrating human health into EIA – Case studies of Canada's northern mining resource sector.* Artic 58; [4]; 395-405

17. Planning Advisory Service (2008b). *Prevention is still better than cure: planning for healthy outcomes*. IDeA
18. Sutcliffe, J. (1995). *Environmental Impact Assessment a Healthy Outcome*. Project Appraisal 10; [2]; 113-124
19. Taylor, N, McClintock, W., Buckenham, B. (2003). *Social Impacts of out-of-centre shopping centres on town centres: A New Zealand case study.* Impact Assessment and Project Appraisal. 21; [2]; 147-153
20. Utzinger, J, Wyss, K, Moto, D.D., Yemadji, N'D., Tanner, M., Singer, B.H. (2005*) Health impacts of the Chad-Cameroon petroleum development and pipeline project: challenges and a way forward*. Environmental Impact Assessment Review. 25; 63-93
21. Viinikainen, T., Kaehoe, T. (2007). *Social Impact Assessment in Finland, Bypass of the City of Hamina*. Routes Roads: 333; 18-23.
22. Wismar, M., Blau, J., Ernst, K., Figeuras, J. eds. (2007). *The Effectiveness of Heath Impact Assessment, Scope & limitations of supporting decision-making in Europe.* WHO, on behalf of European Observatory on Health Systems & Policies

Review 2 only included papers

1. Douglas, M., Conway, L., Gorman, D., Gavin, S., Hanlon, P. (2001) *Achieving better health through health impact assessment.* Health Bulletin 59 (5) September 2001.
2. Farhang, L., Bhatia, R., Comerford Scully, C., Corburn, J., Gaydos, M., Malekafzali, S. (2008) *Creating Tools for Healthy Development: Case Study of San Francisco's Eastern Neighbourhoods Community Health Impact Assessment.* Journal of Public Health management Practice, 2008, 14(3), 255-265.
3. Fischer, T., Matuzzi, M., Nowacki, J. (2009) *The consideration of health in strategic environmental assessment (SEA).* Environmental Impact Assessment Review.
4. France, C. (2004) *Health contribution to local government planning*. Environmental Impact Assessment Review 24 (2004) 189-198.
5. Glasgow Centre for Population Health (2007) *Piloting HIA as a Method of Integrating Health into Planning: a Case Study of the Draft East End Local Development Strategy.* Glasgow Centre for Population Health, June 2007
6. Gow, A., Dubois, L. (?) *Bungendore health impact assessment: urban development in a rural setting.* NSW Public Health Bulletin Vol. 18 (9-10)
7. Greig, S., Parry, N., Rimmington, B. (2004) *Promoting sustainable regeneration: learning from a case study in participatory HIA.* Environmental Impact Assessment Review 24 (2004) 255-267
8. Mathias, K., Harris-Roxas, B. (2009) *Process and impact evaluation of the Greater Christchurch Urban Development Strategy health Impact Assessment*. BMC Public Health 2009, 9;97
9. Mindell, J., Sheridan, L., Joffe, M., Samson-Barry, H., Atkinson, S. (2004) *Health impact assessment as an agent of policy change: improving the health impacts of the mayor of London's draft transport strategy.* Journal of Epidemiol Community Health 2004; 58: 169-174
10. Neville, L., Furber, S., Thackway, S., Gray, E., Mayne, D. (2005) *A health impact assessment of an environmental management plan: the impacts on physical activity and social cohesion.* Health Promotion Journal of Australia 2005: 16 (3)

11. Ng, K., Obbard, J. (2005) *Strategic environmental assessment in Hong Kong.* Environmental International 31 (2005) 483-492
12. Planning Advisory Service (2008a). *Equality and diversity: improving planning outcomes for the whole of the community*. IDeA, September 2008
13. Plant, P., Herriot, N., Atkinson, S. (2007) *Healthy Planning in London.* Toen and Country Palnning, pp. 50-51.
14. Stevenson, A., Banwell, K., Pink, R. (2007) G*reater Christchurch draft Urban Development Strategy 2005.* NSW Public Health Bulletin Vol. 18 (9-10).

Review 1 and 2 "Supplementary Review" papers

1. Bronson, J & Noble, B. (2006). *Health Determinants in Canadian Northern Environmental Impact Assessment*. Polar Record 42 (223): 315-324.
2. Davenport, C., Mathers, J., and Parry, J. (2006) *Use of health impact assessment in incorporating health considerations in decision making.* Journal of Epidemiol Community Health; 60: 196-201.
3. Kørnøv, L. (2009) *Strategic Environmental Assessment as a catalyst of healthier spatial planning: The Danish guidance and practice.* Environmental Impact Assessment Review 29, 60–65.
4. Taylor, L & Quigley, R. (2002). *Health Impact Assessment - A Review of Reviews*. Health Development Agency.
5. York Health Economics Consortium (2006). *Cost Benefit Analysis of Health Impact Assessment*. YHEC, University of York 2006.

Additional papers selected from full text list for Reviews 1 and 2

1. Burns, J. & Bond, A. (2008) *The consideration of health in land use planning: barriers and opportunities*. Environmental Impact Assessment Review; 28: 184-197.
2. Elliott, E. & Francis, S. (2005) Making effective links to decision making: Key challenges for health impact assessment. Environmental Impact Assessment Review; 25: 747-757.
3. Harris, P. et al. (2009) Human health and wellbeing in environmental impact assessment in New South Wales, Australia: Auditing health impacts within environmental assessments of major projects. Environmental Impact Assessment Review; 29: 310-318.
4. Noble, B. & Bronson, J. (2006) Practitioner survey of the state of health integration in environmental assessment: The case of northern Canada. Environmental Impact Assessment Review; 26: 410-424.

Studies selected from NICE Call for Evidence literature

1. NHS London Healthy Urban Development Unit (2009) *PCT Survey. HUDU Planning Application Alerts and PCT Engagement in the Planning Process*, HUDU.
2. NHS London Healthy Urban Development Unit (2008) *Mayor of London's assessment of major applications: development and health.* HUDU.
3. Blau, G. & Malony, M. (2005) *The Positioning of Health Impact Assessment in Local Government in Victoria.* Faculty of Health and Behavioural Sciences, Deakin University.

Papers selected from "Background" Refworks folder

1. Ahmad, B. et al. (2008) Enabling factors and barriers for the use of health impact assessment. Public Health; 122(5): 452-457.
2. Caussy, D., Kumar, P., & Sein, U. (2003) Health impact assessment needs in south-east Asian Countries. Bulletin of the World Health Organization; 81(6): 439-443.
3. Steinemann, A. (2000) Rethinking human health impact assessment. *Environmental Impact Assessment Review*20 (6), 627-645.
4. Wright, J., Parry, J. and Scully, E. (2005) Institutionalizing policy-level health impact assessment in Europe: Is coupling health impact assessment with strategic environmental assessment the next step forward? *Bulletin of the World Health Organization*83 (6), 472-477.

Appendix C: Critical Appraisal Forms (for non R1 and non R2 Studies)

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Ahmad, B. et al. (2008) Enabling factors and barriers for the use of health impact assessment. Public Health; 122(5): 452-457.	
Key research question/aim	To identify key stakeholders' views of factors that may enable or limit the use of health impact assessment (HIA) in the decision-making processes within their organizations.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☐ No ☒ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☐ Yes ☒ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions	☐ Yes	

arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☐ No ☒ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☒ Clearly described ☐ Unclear ☐ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
This reflects the extent to which the findings of the case study are generalisable beyond the confines of the study to the study's source population. Consider the participants, the intervention, the comparison, the outcomes, and any resource or policy implications.

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Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Blau, G. & Malony, M. (2005) *The Positioning of Health Impact Assessment in Local Government in Victoria.* Faculty of Health and Behavioural Sciences, Deakin University.	
Key research question/aim	Explored the potential positioning and application of health impact assessment (HIA) within the local government sector in Victoria.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☐ Yes ☐ No ☒ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified?	☐ Yes ☐ No ☒ Unclear	

Are the conclusions grounded in the data?		
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☐ Unclear ☒ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity

+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Burns, J. & Bond, A. (2008) *The consideration of health in land use planning: barriers and opportunities*. Environmental Impact Assessment Review; 28: 184-197.	
Key research question/aim	To understand the extent of consideration given to health impacts within the development plan process to date.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is this case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☐ Yes ☐ No ☒ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☐ Yes ☐ No ☒ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and	☒ Clearly	

use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	described ☐ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☒ Clearly described ☐ Unclear ☐ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Caussy, D., Kumar, P., & Sein, U. (2003) Health impact assessment needs in south-east Asian Countries. Bulletin of the World Health Organization; 81(6): 439-443.	
Key research question/aim	To assess impediments to health impact assessment (HIA) in the South-East Asia Region of WHO (SEARO).	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		

Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☐ No ☒ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☐ Yes ☒ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☐ Unclear ☒ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the	☐ Clearly	

study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Elliott, E. & Francis, S. (2005) Making effective links to decision making: Key challenges for health impact assessment. Environmental Impact Assessment Review; 25: 747-757.	
Key research question/aim	Provide an insight into the extent and limitations of the effectiveness of health impact assessments.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	

Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☐ Yes ☐ No ☒ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☐ Yes ☐ No ☒ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☐ Yes ☐ No ☒ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the	☐ Clear detail ☒ Partial detail	

potential transferability of the research to other contexts?	☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

-	Few or no checklist criteria have been fulfilled. The conclusions are likely or very likely to alter if this information were available.

External validity
This reflects the extent to which the findings of the case study are generalisable beyond the confines of the study to the study's source population. Consider the participants, the intervention, the comparison, the outcomes, and any resource or policy implications.

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Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Fischer, T. *Reviewing the quality of strategic environmental assessment reports for English spatial plan core strategies*. Environmental Impact Assessment Review; 30: 62-69.	
Key research question/aim	Aims at contributing to fill the empirical knowledge gap by reporting on a project within which a systematic quality review of spatial plan core strategy SEAs in England was conducted.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	

Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☒ Yes ☐ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☐ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the	☒ Clear detail ☐ Partial detail	

potential transferability of the research to other contexts?	☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

++	All or most of the checklist criteria have been fulfilled, where they have not been fulfilled the conclusions are unlikely to alter

External validity

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Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Harris, P. et al. (2009) Human health and wellbeing in environmental impact assessment in New South Wales, Australia: Auditing health impacts within environmental assessments of major projects. Environmental Impact Assessment Review; 29: 310-318.	
Key research question/aim	The aim of the research was to assess how comprehensively health is included in EAs developed for major projects.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions?	☒ Yes ☐ No ☐ Unclear	

What elements of the approach seek to minimise bias?		
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☒ Clearly described ☐ Unclear ☐ Not described	Stratified random sample.
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☒ Clearly described ☐ Unclear ☐ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the	☐ Clear detail ☒ Partial detail ☐ No detail	

research to other contexts?		

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

++	All or most of the checklist criteria have been fulfilled, where they have not been fulfilled the conclusions are unlikely to alter

External validity
++

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	NHS London Healthy Urban Development Unit (2008) *Mayor of London's assessment of major applications: development and health.* HUDU.	
Key research question/aim	To assess how health and social infrastructure was considered as part of the development and planning process.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an	☐ Yes ☐ No ☒ Unclear	

independent researcher not involved in process evaluated?		
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☐ Yes ☒ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☐ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	NHS London Healthy Urban Development Unit (2009) *PCT Survey. HUDU Planning Application Alerts and PCT Engagement in the Planning Process*, HUDU.	
Key research question/aim	To assess the level of engagement (of PCTs in London) in the planning process.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☐ Yes ☐ No ☒ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for	☒ Yes ☐ No ☐ Unclear	

outcomes used? Were validated instruments used to collect outcome information?		
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☒ Unclear ☐ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Noble, B. & Bronson, J. (2006) Practitioner survey of the state of health integration in environmental assessment: The case of northern Canada. Environmental Impact Assessment Review; 26: 410-424.	
Key research question/aim	To further our understanding of the state of health in EA and to identify the barriers to improved health integration.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☐ Yes ☐ No ☒ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		

Q7) Are the criteria used to select the appropriate case and participants clearly described?	☒ Clearly described ☐ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity

+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Steinemann, A. (2000) Rethinking human health impact assessment. *Environmental Impact Assessment Review*20 (6), 627-645.	
Key research question/aim	To investigate how, why, and to what extent EIA addressed human health impacts.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☒ Appropriate ☐ Inappropriate ☐ Unclear	
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☒ Yes ☐ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☒ Yes ☐ No ☐ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and	☐ Clearly	

use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	described ☒ Unclear ☐ Not described	
Way of communicating		
Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
+

Critical appraisal tool for case studies

Checklist

Study identification Author, title, reference, year of publication	Wright, J., Parry, J. and Scully, E. (2005) Institutionalizing policy-level health impact assessment in Europe: Is coupling health impact assessment with strategic environmental assessment the next step forward? *Bulletin of the World Health Organization*83 (6), 472-477.
Key research question/aim	Interested in how and at what level, non-European governments direct decision-

	making through the HIA process.	
Checklist completed by (name)	Paul Pilkington	
Checklist completed on (date)	05.07.10	
Question	**Category**	**Comments**
Way of thinking		
Q1) Is a case study approach appropriate? E.g. Does the author justify using a case study approach? Are the strengths and weaknesses of this approach considered?	☐ Appropriate ☐ Inappropriate ☒ Unclear	Several countries selected with some justification given.
Q2) Is there evidence that any author bias is taken into account when performing the analysis? E.g. Does the author reflect upon how their perspective or stance has influenced the study process or conclusions? What elements of the approach seek to minimise bias?	☐ Yes ☒ No ☐ Unclear	
Way of controlling		
Q3) Has the analysis been confirmed by an independent researcher E.g. has the analysis been undertaken by an independent researcher not involved in process evaluated?	☒ Yes ☐ No ☐ Unclear	
Q4) Have opportunities for triangulation of data been exploited? E.g. Have multiple sources of information been used to reduce bias?	☐ Yes ☒ No ☐ Unclear	
Q5) Are the outcomes reported reliable? E.g. were robust sources of information for outcomes used? Were validated instruments used to collect outcome information?	☒ Yes ☐ No ☐ Unclear	
Q6) Do the results / conclusions arise from the data? E.g. Are the results justified? Are the conclusions grounded in the data?	☐ Yes ☐ No ☒ Unclear	
Way of working		
Q7) Are the criteria used to select the appropriate case and participants clearly described?	☐ Clearly described ☒ Unclear ☐ Not described	
Way of supporting		
Q8) Does the study describe and use a systematic method to analyse the data? E.g. is the method for data analysis replicable from the description given?	☐ Clearly described ☐ Unclear ☒ Not described	
Way of communicating		

Q9) Are the aims and objectives of the study clearly stated?	☒ Clearly stated ☐ Unclear ☐ Not stated	
Q10) Are the limitations of the study acknowledged and described? E.g. are the strengths and weaknesses of the study stated?	☐ Clearly described ☐ Unclear ☒ Not described	
Q11) Is sufficient detail given to allow researchers to evaluate the potential transferability of the research to other contexts?	☐ Clear detail ☒ Partial detail ☐ No detail	

Overall assessment

Internal validity
This reflects how well the study was conducted, and the likelihood that the conclusions reflect the truth and are unbiased.

The study should be graded

+	Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter

External validity
This reflects the extent to which the findings of the case study are generalisable beyond the confines of the study to the study's source population. Consider the participants, the intervention, the comparison, the outcomes, and any resource or policy implications.

+

Appendix D: Literature Review Summary Tables

Please find these on the following pages.

Summary table: barriers and facilitators - Knowledge

Author, Year	Country	Knowledge		Quality score	External validity score	Key characteristics of barriers and facilitators
		Barriers	Facilitators			
Plans – R2						
Douglas (2007)	UK	o	●	++	++	Facilitators: • Make links between transport and broad health/determinants of health (inc. General physical health, physical activities, injury and death, air pollution, noise, mental health and stress, personal safety and perceptions of safety, community severance, and climate change).
Fischer (2009)	UK, Germany NL	●	●	+	++	Barriers: • Physical and natural factors of health considered only in assessment. Facilitators: • Social and behavioural aspects taken into account in assessment.
France (2004)	UK	o	●	+	+	Facilitators: • Understand that Structure Plan can have impacts on public health and health services, heath care planning. • Structure Plan can offer opportunities for public health benefits (i.e. offer both primary and secondary health service facilities) but can also have negative impacts i.e. land use can be appraised against health objectives.

Glasgow Centre for Population Health (2007)	UK	o	●	+	-	Facilitators: • Broad definition of health using the social model of health (1946 constitution of the WHO).
Greig (2004)	UK	●	o	+	+	Facilitators: • HIA can provide a clear focus, in terms of content, on reducing social inequalities and in terms of process on facilitating the participation of local communities in decision-making which affect their quality of life.
Mindell (2004)	UK	●	●	+	+	Barriers: • World of transport planning and health promotion seldom overlap. Facilitators: • Transport affects health in several ways and therefore transport policy initiatives could be regarded as a means to improving health (i.e. policies that benefit deprived communities, focus on active travel, reducing reliance on private cars and re-allocating road space).
Planning Advisory Service (2008a)	UK	o	●	+	+	Facilitators: • Recent shift from traditional land use planning to broader approach recognising key role of spatial planning in promoting sustainable and cohesive communities. • Since 2006 design and access statements are required as part of application submission material for all except very small developments: how developments can create accessible, safe environments, addressing crime and disorder and fear or crime.
Plant (2007)	UK	●	●	+	-	Barriers: • Developers are sceptical about the costs of moving towards healthier developments and whether house-buyers would want to live in health-promoting environment (ie give up their cars). Facilitators: • Understand the spatial planning impact on health and on health equality; housing requirements, access to health services, green spaces, employment opportunities, safe areas for children.

Stevenson (2007)	New Zealand	o	●	+	+	Facilitators: • HIA has transformed the understanding of the role of spatial planning in promoting health and reducing health inequalities by changing the priorities of urban development strategy.
Projects – R1						
Hay (2004)	UK	o	●	+	+	Facilitators: • Joint assessment allowed the assessment of impacts that may not have been otherwise considered in detail, such as the impact on deprivation levels and health inequalities. • Close joint working from an early stage led to reinforcement by planners of their role in the health impacts of the development.
Kemm (2004)	UK	o	●	+	+	Facilitators: • Use of WHO definition of health to ensure that all matters related to well-being are considered. This would also facilitate the consideration of non-statutory WHO guidelines, some of which are more stringent than statutory limits.
Planning Advisory Service, (2008b)	UK	●	●	+	+	Barriers: • The two organisations use the same jargon to describe different things – even the term “health” in the council it can refer to a medical model of health whereas in the PCT they do see it as public health. • Generally planners are aware of health problems in the locality but they don’t have the evidence to back this up. Facilitators: • By working together the big change is that health is not an afterthought among the planning team now. It is very well recognised. • The focus for HIA should be on obtaining results in a form that are “useable” by the developers so that the process adds value by highlighting the positive health impacts and proposing measures to address any negative health impacts of proposed designs.
Sutcliffe (1995)	UK	o	●	+	+	Facilitators: • Other types of ‘environment’ such as the socio-economic environment also influence public health and need to be considered.

Bekker (2005)	NL	●	●	+	++	Barriers: • Focus only on negative environmental health impacts. Facilitators: • Important to agree beforehand the aims of the HIA, the information required and how the findings should be presented to the municipal council and the public.
Bhatia (2008)	USA	●	●	+	++	Barriers: • The rigid boundaries among disciplines of knowledge along with semi-autonomous development of knowledge in each field have been long standing obstacles to interdisciplinary thought and practice necessary for integrating impact assessment. • Neither responsible agencies nor public health officials generally view EIA as an avenue to address health objectives. • EIA is largely accomplished by agency staff or by private consultants who lack health expertise. Facilitators: • Health professionals can make a strong case for the importance of such impacts by citing data on the determinants of health, strengthening the case for fully considering such issues in EIA.
Corburn (2007)	USA	●	●	+	+	Barriers: • City planners reluctant to consider social determinants of health as an environmental impact. Facilitators: • Environmental planners may need to simultaneously understand and adopt a new social orientation to environmental health. • ENCHIA has opened up awareness and understanding of links between spatial planning and health through collaboration leading to new problem definition, and access to new data.
Dannenberg (2008)		o	●	+	+	Facilitators: • Decision-makers must recognise that not all health impacts can be precisely measured. • Recognise the distinction between standards of evidence for research and practice.
Mwalyosi (1998)	Tanzania	o	●	++	+	Facilitators: • Use internationally accepted standards such as WHO health guidelines for air and water quality.

Utzinger (2005).	Chad and Cameroon	o	●	++	++	Facilitators: • The need to consider not only impacts on health per se, but also social wellbeing and equity. • Attention to broader determinants of health and cumulative environmental assessment should be integrated with project implementation.
Noble (2005)	Canada	●	●	+	+	Barriers: • Attention has traditionally focussed on the direct impacts of project development on human health, particularly physical health, due to environmental change caused by project actions. Facilitators: • Adopting a more inclusive definition of health, to include physical, social and other cultural dimensions. Reflecting the WHO definition of health that includes not only disease-related effects but all impacts that might affect the well-being of populations. • Environment should be defined broadly to include social and human dimensions, and care must be taken to give adequate attention to the social realm.
Additional studies selected from full text list for reviews 1 and 2						
Noble (2006)	Northern Canada	●	●	+	+	Barriers: • Health integrated can be prevented because of different expectations of EA and understanding of scope of health • Different cultural understanding of health means that coordination is challenging Facilitators: • Practitioners, regulators and health officials must be aware these differences applied to EA if they want to address HI adequately
Burns (2008)	England	●	●	+	+	Barriers: • Lack of policy making environment knowledge from health practitioners who commission HIA: low understanding of statutory assessment process(EA, SA) Facilitators: • Mechanism to build capacity to consider health issues in land use planning must be established

Supplementary reviews						
Bronson(2006)	Canada	●	●	+	+	Barriers: • Different understanding of nature and role of health determinants in Northern culture. • Problem if consideration of health is limited to physical environment and the physical determinants of health rather than broader social and cultural determinants. Facilitators: • Understanding health from its broader environmental, social and cultural perspectives. • Understanding that determinants of health are not themselves health impacts: they are factors that influence or provide an indication of health and well being (eg income, physical environment, health services and social support networks).
Kørnøv (2009)	Denmark	●	●	+	++	Barriers: • European legislation on EIA legislation does not explicitly require human health to be assessed. • Internationally studies show that health is not sufficiently assessed and documented in EIA practice. Facilitators: • Developing HIA would be a solution to a lack of health considerations in assessment but in EU, HIA is only recommended. • WHO constitution 1946 defines health as physical, mental and social well-being. • Health is interpreted in a broad sense in the Danish SEA practice. • Today major challenge of spatial planning and urban governance is to secure human health.
Taylor (2002)	N/R	●	●	++	++	Barriers: • Interrelationship between different health determinants and their causal pathways. • Not always easy to isolate the influences of particular interventions on complex and dynamic social systems.

						• Existing evidence base for various health determinants and interventions to improve health can be patchy, and therefore the prediction of health impacts tends to be incomplete, and in turn open to an element of subjectivity and political drivers. Facilitators: • Collate and synthesise the best available evidence for a range of common determinants of health, their inter-relationships and mapping of causal pathways. • Collate and synthesise the best available evidence for a range of common health interventions and health impacts, and in turn their causal pathways. • Explore how best to disseminate the available evidence base on a range of common determinants of health and health interventions. • Determine how to critically appraise and weight evidence from a wide range of sources, including balancing quantifiable evidence with qualitative evidence.
Call for evidence						
Blau (2005)	Australia	●	o	+	+	Barriers: • The word “health” has many meanings. • Issue of health inequalities is not on the agenda.
Refworks folder						
Ahmad (2008)	UK	●	●	+	+	Barriers: • Tensions between actors on definition of health: narrow or holistic • Planners and environmental scientists inclined to define health narrowly, i.e. HIA is sole responsibility of NHS Facilitators: • Shared vision stated by key informants in study
Harris (2009)	Australia	o	●	++	++	Facilitators: • HIA is seen as a tool to incorporate the consideration of health, wider determinants of health and health inequity within urban planning decision-making.

Wright (2005)	Europe	●	o	+	+	Barriers: • Unclear as to what level should HIA should be carried out: plan or programme?

Summary table: barriers and facilitators - Partnerships

Author, Year	Country	Partnership		Quality score	External validity score	Key characteristics of barriers and facilitators
		Barriers	Facilitators			
Plans – R2						
Douglas (2001)	UK	●	●	+	+	Barriers: • HIA owned by experts; could lead to costly assessment industry. Facilitators: • Multi-agency joint planning mechanisms (Community planning and Health Improvement Programmes). • Partnerships including social inclusion partnerships. • Develop clear roles for HIA network.

Fischer (2009)	UK, Germany NL	●	●	+	++	Barriers: • Different cultures between actors (planners, SEA and health experts). • Different languages spoken leading to difficulties to communicate. • insufficient consideration of good baseline data in impact assessment. • Limited time for each partner to communicate with partners. Facilitators: • Involvement of health professionals and stakeholders. • Transparency of stakeholders' arguments (including use of assumptions and models). • Use of vocabulary understood by experts as well as lay persons to allow better consultation. • Good baseline data for all aspects of health (physical, natural and social, behavioural). • National guidance and guidelines. • Institutional support by a dedicated body/commission.
France (2004)	UK	●	●	+	+	Barriers: • Different terminologies of health stakeholders and planners as well as different priorities. Facilitators: • DoH 2003 document (tackling Health inequalities programme for action – recognises that there is need for cross organisational links on programmes dealing with housing, education, employment and transport. • Pressures on health care system can actually put pressure on PCT to work closely with planners in LPA. • HI review of structure plan can allow better relationship between health stakeholders and land use planners as health review carried out at early stage of structure plan review. • HI review can offer a toolkit for PCT and LSP to use to influence the development of local plans. • Changes introduced by government are positive, i.e. introduce PCT and joint working between PCT and local government.

Glasgow Centre for Population Health (2007)	UK	o	●	+	-	Facilitators: • Planners participating in the HIA process allowed a fuller understanding of the thinking behind suggestions made by stakeholders than reading a technical report would have allowed. • HIA provided common language for communication between stakeholders and operated as an innovative form of consultation. • New methods of engagement used such as “scrapbook” where people took photographs and documented different daily journeys they made through their neighbourhoods.
Greig (2004)	UK	o	●	+	+	Facilitators: • Effective partnership working across statutory voluntary and community sectors requires the building of trust and respect and will only work if it delivers benefits for all partners. • Introducing of LSP brings more joined up approaches to urban regeneration. • Effective communication which present HIA process and evidence in an accessible and convincing way to both decision-makers and local communitites. • HIA can help inform economic development and also be used as a tool to increase participation of local communities in strategic development decisions. • HIA can make a difference if dedicated resources can sustain effective community participation.

Mindell (2004)	UK	●	●	+	+	Barriers: • Unease amongst stakeholders to be involved in workshops (lack of knowledge). Facilitators: • Stakeholder involvement in HIA: transport groups, statutory agencies, private sector, voluntary organisation (vulnerable groups). • Stakeholders represented the sex and ethnic make up of London population despite no individual Londoners were invited. • Positive and constructive suggestions to further enhance health gains and mitigate problems.
Planning Advisory Service (2008a)	UK	o	●	+	+	Facilitators: • Community participation required as key performance area within the ESLG and at level 2 of the Standard. • Planning and compulsory purchase act 2004 requires statement of community involvement from LPA • Partnership between planning departments and community safety partnerships and the police to design out crime • Involvement of third sector • Innovative methods for community participation, eg intercultural listening and learning circle developed by London Borough of Lewisham can help uncover issues (lack of public seating, jamming spaces for young people, overcrowding, libraries, markets and high street traders).

Plant (2007)	UK	o	●	+	-	Facilitators: • Health sector professionals and planners can create partnership that increases the potential of plan-making to improve levels of health and reduce health inequalities, cross sector learning. • If partnership built on a shared vision, then objectives/priorities will be shared too. ● Healthy Urban Development Unit that was set up staffed by town and country planning professionals - brokering partnership between PCT and LA's planning staff.
Wismar (2007)	UK	●	●	+	++	Barriers: • Those involved only in either AQAP or HIA might have divergent views on whether the HIA can influence the AQAP. • Lack of specific skills/training in facilitation to run workshops to extract available knowledge from participants. Facilitators: • Those involved in both HIA and AQAP view the HIA as beneficial. • Role of external consultant is important to explain the HIA process and benefits. • Provision of a community health profile which present relevant health stats can be an effective way to get people to consider health. • All the stakeholders and communities involved can contribute different and innovative sets of data: eg schoolchildren expressed their views on AQ through a school art competition.

Corburn **(**2007)	USA	●	●	+	++	Barriers: • Entrenched idea that city planning and private developers are highjacking EIA process. Facilitators: • Using models of democratic participatory processes dealing with complex scientific and social justice issues: Merseyside model for HIA, Danish consensus conferences and science shops. • ENCHIA had an influence on professional work and networks, framing problems around public health and accessing new data. • ENCHIA as coalition building to transform institutional practices. • Group visioning, consensus building. • Step by step participatory process including development of group structure, collective vision, problem definition, research and knowledge, synthesis, consensus, reflection, dissemination, publication, evaluation. • Production of policy briefs for publication. • ENCHIA could create a broader consensus than the HIA for both developments as the EHS was then acting alone as expert.
Dannenberg (2008)	USA	o	●	+	++	Facilitators: • HIA practitioners who have ongoing working relationships with their local community leaders may be able to influence decisions more than those who lack such relationships. • Development of training courses, local public health agencies,.networks for advocacy, training, support, access to completed HIA, website.

Farhang (2008)	USA	●	●	+	++	Barriers: • Need for impartiality from those steering the process while they themselves come from public health organisation and see their role as advocacy. • Fear from SF council officials that ENCHIA could highlight failures of city planning and fuel antidevelopment arguments. • Vested interested of developers who do not want ENCHIA to result in new regulation. • HDMT indicators could be used selectively by different groups. • SF feared that antidevelopment groups would use HDMT to oppose developments so SF council acknowledged that HDMT was only voluntary and provided only a health lens to evaluate projects and plans and was only intended to inform and not resolve debates over conflicting priorities. Facilitators: • ENCHIA: many interests represented on the HIA community council. • Center for collaborative policy at California State University provided consultation on the consensus-building aspects of the process. • University-based evaluator conducted a process and outcomes evaluation. • Use of geographical/ illustrative representation of the vision of the Council. • Outcome of ENCHIA process was a healthy development measurement tool.
Gow (2007)	Australia	o	●	+	+	Facilitators: • Greater Southern Area Health service + various local government areas.

Mathias (2009)	New Zealand	●	●	+	+	Barriers: • Lack of clarity about which organisation should have overall responsibility for determinants of health as they are cross-sectoral yet transport, local government and building acts have got public health objectives • Limited resources in time and human resources • Recommendation in HIA re cross sectoral working not included in plan, perhaps as local government felt it would lose control or time and energy would be too great, regulatory restriction on cross-sectoral work, different sectoral or institutional reporting constraints and time lines. Facilitators: • Workshops involving stakeholders and communities. • Key partners to commit resources. • Treaty of Waitangi as background for involvement of Maori. • Endorsement of the process by key Maori community leaders. • Concerns of peak oil and rising petrol prices in 2005 linked to active transport recommendations.

Neville (2005)	Australia	●	●	+	+	Barriers: • Issue to consider is whether developers should be involved in HIA or should HIA be independent from those who developed the proposal/policy (Douglas et al 2001, achieving better health through HIA). • Stakeholders have different values and priorities and subjectivity can influence decision making. • Priorities in terms of health itself can be different, for instance physical activity not directly linked to the core business of local government, which makes partnership challenging. • In that case, need to explore potential health impacts in sufficient depth and in time available meant to focus only on 1 or 2 health outcomes + number of informants interviewed also influence by this. Facilitators: • HIA partnership helped greater understanding between health and local government partners, their values, priorities, culture and language (Douglas et al 2001 and France, 2004) • HIA useful tool to identifying potential impacts of a local government environmental management plan on physical activities and social cohesion. • HIA evaluation recognised the importance of having decision-makers on the steering committee and decision makers involved at all stages of the HIA. HIA more likely will influence decision making (Kemm, 2003). • 5 stages of HIA allow the partnership to build common vision and objectives, critical factor for successful collaboration.

Stevenson (2007)	New Zealand	●	●	+	+	Barriers: • Time constraints that limit the consideration of some determinants of health in seminars (housing and transport here) • Different language: “well being” of local government is the “health” of the health sector Facilitators: • Urban development strategy forum allows participants to interact face to face and develop new language. • Steering committee with reps from city council and public health formed to guide development of HIA. • Screening and scoping seminar attended by different stakeholders from local government, health, private contractors, academics agreed determinants to be examined by HIA. • Parallel work to engage with Maori community • Series of 7 workshops to get informant’s perspectives on various elements of health impacts. • Presentation of results/findings to community to ask for comments. • HIA can facilitate change in priorities of the urban development strategy: from infrastructure planning (eg transport, localisation of developments in view of environmental health issues...) to more quality of life outcomes • HIA can highlight the significance of the statutory and collective responsibilities relating to health and social outcomes within the principal planning legislation • HIA outlines that urban strategy has a role to deliver on health and social outcomes by informing both local and central government about housing, importance of uran form in supporting walking and cycling and social connectedness and close gaps in health inequalities. Guidance for those carrying HIA at central or local level to ensure that health is considered in the development of public policy (eg guide to HIA: a policy tool for NZ) • Subsidising training for staff across different organisations.

Wismar (2007)	NL	●	●	+	++	Barriers: • Those involved only in either AQAP or HIA might have divergent views on whether the HIA can influence the AQAP. • Lack of specific skills/training in facilitation to run workshops to extract available knowledge from participants. Facilitators: • External consultant. • Those involved in both HIA and AQAP view the HIA as beneficial. • Role of external consultant is important to explain the HIA process and benefits. • Provision of a community health profile which present relevant health stats can be an effective way to get people to consider health. • All the stakeholders and communities involved can contribute different and innovative sets of data: eg schoolchildren expressed their views on AQ through a school art competition.
Projects – R1						

Bendel (2005)	UK	●	●	+	+	Barriers: • The short deadline for the health impact review to be completed meant that there was no time to carry out a more detailed review. We were unable to carry out a participatory stakeholder workshop or other form of community engagement in the time available. • In many local authorities Health Overview and Scrutiny are still in the early stages of development and their potential roles with regard to HIA have not yet been fully explored. Facilitators: • It is important to encourage key policy makers to see HIA as a constructive, non-threatening, process rather than as a source of disruptive outside interference. Without this understanding it is much harder to obtain the high level political and managerial supported needed to ensure that the recommendations of the HIA are given due consideration. • Health Overview and Scrutiny Committees can act as initiator, sponsor and propagator in the HIA process; requesting that a HIA be carried out; gives its support to a HIA that is already being carried out; acts as a HIA 'champion', ensuring that recommendations from HIA are given proper consideration by the relevant agencies.

Hay (2004)	UK	o	●	+	+	Facilitators: • Close joint working from an early stage led to reinforcement by planners of their role in the health related impacts of the development. • Joint approach by both organisations added credibility to the assessment. The medical input from public health doctors at the PCT was felt to be particularly useful by the Environmental Services Department during discussions with developers on the potential health impacts of the development. The Environmental Services felt that the reinforcement of suggestions by medical staff carried a great deal more weight in some meetings than the recommendations of the Environmental Services Department alone. • Joint assessment allowed the assessment of impacts that may not have been otherwise considered in detail, such as the impact on deprivation levels and health inequalities of creating new jobs and general economic development of the area.
Lester (2006)	UK	o	●	+	+	Facilitators: • Collaborative HIA ensured that local knowledge and experience contributed to the decision-making process.

Planning Advisory Service, (2008b)	UK	●	●	+	+	Barriers: • In practice, these links often do not occur because of differences in language, structure and priorities. Facilitators: • Level of trust developed between Tower Hamlets PCT and council planners means that the PCT now directs all developer enquiries to the council. • Brighton and Hove organised a masterclass series on health and planning for council officers as well as public health officials from the PCT.The council and PCT then matched public health officials with planners to undertake two days of in-depth training on HIA. • Producing a joint strategic needs assessment (JSNA). • An ongoing capacity building project called Making an Impact is currently funding a health impact assessment officer, based in forward planning in the LA, to work across the PCT, city council and the University of Liverpool. • Tower Hamlets PCT and the London Borough of Tower Hamlets have worked closely together to develop a shared evidence base and a strategic plan for the provision of health facilities. This joint approach has led to the authority now conducting all pre-application and section 106 negotiations on behalf of the PCT. Planners have now secured almost £15m for health services infrastructure. • Planning a new community provides a more obvious opportunity to work strategically from the beginning. Planners for the proposed town of Sherford In South Hams in Devon have exploited this potential and included the PCT in both infrastructure planning and building health into the design of the physical environment. • Ideally, these relationships (between partners) should be built into formalised partnership arrangements, such as health improvement boardsm so that joint working doesn't rely on individual relationships but is built into how organisations work together. • Explcitly linking community involvement to health provides a useful "hook" for planners to engage local people.

Bekker (2005)	NL	o	●	+	++	Facilitators: • Advocacy coalitions should be enhanced with stakeholders.
Bhatia (2008)	USA	●	●	+	++	Barriers: • Regulatory agencies rarely request input from health agencies and there is no established mechanism or expectation for such interaction. • Lack of standing of the HIA team in the EIA process. Facilitators: • Industry proponents should also be viewed as important potential collaborators in integrating HIA/EIA. • Close partnerships with community stakeholders, with explicit roles for analysts, communication and advocacy. • Vigorous public testimony with public health expertise led to the inclusion of health concerns in the EIA process.
Corburn (2007)	USA	o	●	+	+	Facilitators: • Attention to more than just the analytic methods of HIA, but to the political work of coalition building, changing institutional practices and experimenting with new participatory approaches.
Dannenberg (2008)	USA	o	●	+	+	Facilitators: • HIA practitioners who have ongoing working relationships with their local community leaders may be able to influence decisions more than those who lack such relationships.
Kjellstrom (2003)	Australia	o	●	+	+	Facilitators: • Meaningful application of stakeholder involvement in policy and planning processes. • HIA provides a structure that encourages stakeholder participation.

Kwiatkowski (2003)	Canada	o	●	+	++	Facilitators: • How individuals, families and communities are affected by development, and the social consequences of that development, provide critical information for health professionals.
Bond, (2001)	Mali, Senegal & Mauritania	o	●	+	+	Facilitators: • Plan and make explicit from the beginning, the contributions to be made by different disciplines and their relationships to each other. • Plan the process of participation/consultation with stakeholders and its relationship to the technical IA studies being undertaken.
Kosa, (2007)	Hungary	o	●	+	+	Facilitators: • By including the full range of support organisations (statutory and non-statutory) in the HIA, it was possible to incorporate a wealth of information that facilitated specification of the features of the two scenarios and the likely consequences of each of them.
Jobin (2003)	Chad and Cameroon	●	o	+	+	Barriers: • Decisions were based largely on cost and profit considerations, giving only passing attention to environmental and social aspects, and little or no decision-making power to the affected populations.
Utzinger (2005)	Chad and Cameroon	●	o	++	++	Barriers: • Public consultations have not looked into health-related issues of affected communities in sufficient depth.
Supplementary reviews						
Kørnøv (2009)	Denmark	●	o	+	++	Barriers: • Planners/architects in Denmark are not familiar with the determinants of health. • Health professionals rarely consider spatial planning and not have heard of SEA. • Criticisms from literature on traditional government structure not able to promote inter-sectoral and organisational integration. • Also study of institutional barriers to assessment of human

						health in EIA (ie health and environmental professionals not working together. • Corburn looked at professionalism/specialised bureaucracies and connections between planning and public health (Corburn 2007).
York Health Economics Consortium (2006)	UK	●	●	+	++	Barriers: • Lack of awareness by some partners. • Non mandatory status of HIA. • Competition between health and local authorities for funds as part of planning obligation agreements. • Continuous participation of decision makers in HIA process can create a conflict of interest between being part of the development of a programme/strategy/plan and evaluating it. Facilitators: • HUDU to deal with above barriers. • Continuous participation of decision makers in HIA process gives them a sense of ownership and make them aware of health impact as they emerge. • Skilled chairing of HIA steering board is essential to manage conflicts of interest / maintain independence of the HIA process. • Decision maker can decide to distance themselves from HIA recommendations.
Call for evidence						
NHS London HUDU (2009)	UK	●	●	+	+	Barriers: • Based on HUDU survey, level of engagement of PCT in planning varies from one PCT to another. • Different languages/jargon used by PCT and LPA. • Lack of resources impedes good partnership. • Not knowing which questions to ask, information to request and agenda items. Facilitators: • Development and use of the HUDU model 2007 (basis for

						agreement of planning obligations for new residential developments with potential impact on healthcare services) • Alert system from HUDU to PCTs on potential applications with impacts on health provisions • For individual LPA/PCT relationship, LPA forward details of applications to PCT based on an agreed threshold (so can be smaller than the ones forwarded by HUDU): cooperative agreement or supplementary planning document (SPD) • if a set charge per development (tariff) is established by LPA (eg Southwark) and applied by DC officers , then PCT no longer need to comment on specific planning application to seek financial contribution (s106) in particular when there is no legal challenges. • Process must be in place to support PCT engagement in planning. • Role of sectors (eg SW London support services; WLondon health estates and facilitites, SE London support services partnership: role to be clarified, in particular to consider coordination when there are cross-border developments on 2 + boroughs. • Integration through joint chief executive or officer responsible for both health and planning, also joint asset management could be considered • Good communication channels must be set up. • Agree the role and responsibilities of both parties (memo of understanding) • Strategy alignment is a key step towards effective joint working: adjoining spatial planning documents with public health strategies and estates strategies is recommended: helps identify sites for future infrastructures and explore opportunities to use health estates • PCT and LPA joint working arrangements: regularity of meetings, updates from LPA • HUDU training to reiterate the significance of health in the planning process

Blau	Australia	o	●	+	+	Facilitators: • Play on synergies between HIA and goals of government to maximise wellbeing, improve quality of life and provide pleasant and safe working, living and recreational environment for all to develop a state and local government approach to HIA.
Refworks folder						
Ahmad (2008)	UK	●	●	+	+	Barriers: • Lack of intersectoral understanding • Lack of trust hinders partnership working • Health professionals seat inside a box have limited links to wider society Facilitators: • Involvement of public health departments at regional universities in HIA enables use of HIA • Breaking down silos between organisations and learning about the role of other organisations in health and non health sectors in HIA
Caussy (2003)	SE Asia	●	●	+	+	Barriers: • Developments projects outside scope of health ministries and little intersectoral collaboration with other ministries Facilitators: • Clear understanding of role of different sectors and private organisations needed • Multidisciplinarity task force of experts from different sectors licensed to use standard methods could help
Additional studies selected from full text list for reviews 1 and 2						
Fischer (2010)	UK	o	●	++	++	Facilitators: • Scope for considering health risks and address uncertainties faced by SEA in a better way: health organisations can potentially play more important role than they currently do.
Noble (2006)	Northern Canada	●	o	+	+	Barriers: • Limited coordination between parties responsible for health and EA. EA agencies have no capacity to deal with human health issues and health professionals have no direct role in EA • Complexity of HI and availability of supporting EA methods

Burns (2008)	England	o	●	+	+	Facilitators: • The local strategic partnerships and the health block in Local Area Agreements may provide a potential mechanism to engage with the range of bodies including PCTs and the Strategic Health Authority. • Drawing on the capacity and expertise of a wider range of stakeholders through consultative processes. • Opportunities for engagement of stakeholders and the wider community in the consideration of health in environmental assessment must be optimised. • Educating both professionals and the wider community to optimise engagement is critical to secure input and to build capacity.

Summary table: barriers and facilitators - Management and resources

Authors, Year	Country	Management and resources		Quality score	External validity score	Key characteristics of barriers and facilitators
		Barriers	Facilitators			
Plans – R2						
Douglas (2001)	UK	o	●	+	+	Facilitators: • Time • Funding • Knowledge of community/area • Knowledge of topic • Information, sources/data available
Fischer (2009)	UK	●	●	+	++	Barriers: • Competing institutional tasks within an institution Facilitators: • Use of data from other public administrations, e.g. public health departments • Institutional support and national guidance
France (2004)	UK	o	●	+	+	Facilitators: • PCT must dedicate time, resources to research specific demographic trends and emerging healthcare needs in order to collaborate with LPA
Glasgow Centre for Population Health (2007)	UK	o	●	+	-	Facilitators: • Make linkages between planning and corporate policy interested in developing work on HIA

Greig (2004)	UK	o	●	+	+	Facilitators: • DoH 1999 encouraged health and local authorities to act as health champions in non health policies • DETR 2000 new power of wellbeing to local authorities
Planning Advisory Service (2008a)	UK	o	●	+	+	Facilitators: • Equality impact assessment for LPA • Understanding demographics of communities, aspirations and needs • Assess equality of enforcement decisions as some groups have less take up of specialist advice, lower rate of attendance at pre-application meetings • Devise suitable engagement techniques • Develop skills of members and officers • Representation of BMEs in planning profession • Provide support for developers • Set equality objectives and targets • Actively monitor impact of plans through data collection
Plant (2007)	UK	o	●	+	-	Facilitators: • Use and integration of IA into SA/SEA • Willingness of GLA London plan team to work with the health sector
Farhang (2008)	USA	o	●	+	++	Facilitators; • ENCHIA led to greater understanding of HI of development to council members (who use public health arguments and evidence in public policy dialogues on housing, eco and environmental issues.)
Neville (2005)	Australia	o	●	+	+	Facilitators: • Range of qualitative and quantitative skills research skills • Programme management • Advocacy skills • Ability to engage stakeholders and work intersectorally • Commitment of senior management
Stevenson (2007)	New Zealand	●	●	+	+	Barriers: • More urgent issues to deal with Facilitators: • Time, money, professional capacity

						• Commitment from city council to incorporate HIA into standard policy cycle
Projects – R1						
Bendel (2005)	UK	o	●	+	+	Facilitators: • Ownership of HIA by SHAs, PCTs and Las is critical to its success or failure • Involvement of health overview and scrutiny committee may makes it easier to get high level support
Douglas (2007)		o	●	++	++	Facilitators: • HIA team should report to a group with authority to agree terms of references of HIA and to implement recommendations
Hay (2004)	UK	●	●	+	+	Barriers: • Sharing leadership of large assessment requires juggling priorities and workload of 2 organisations leading to delay in progress of the work Facilitators: • Pooling health and planning financial and staff resources to allow a broad consultation exercise with both health profs and residents. • Co-leading by health and LPA gave great sense of ownership of issues, perhaps more than if there had been usual joint working
Planning Advisory Service, (2008b)	UK	o	●	+	+	Facilitators: • Good links between various departments and services of local authority facilitate policy integration • Greenwich borough has adopted supplementary planning document including guidance for planners and developers on planning contributions towards health facilities
Bekker (2005)		●	o	+	++	Barriers: • Medical environment office within Municipal Health Service within MHS small, i.e. low priority • Lack of support in HIA from public health policy and its own organisation MHS • HIA took place on margin of project

Bhatia (2008)	USA	o	●	+	++	Facilitators: • Public health staff need time and some knowledge of EIA and HIA to participate effectively in EIA process • Offer HIA training as core skill set got public health professionals • HIA practitioners must develop analytical tool set
Corburn (2007)	USA	o	●	+	+	Facilitators: • Develop internal research capacity to conduct HIA
Dannenberg (2008)	USA	●	o	+	+	Barriers: • Funding for HIA difficult
Kjellstrom (2003)	Australia	●	o	+	+	Barriers: • Scientific and consultative resources needed to use comparative risk assessment should not be underestimated
Bond (2001)	Mali, Senegal & Mauritania	o	●	+	+	Facilitators: • Assess needs for IA skills and need for multidisciplinary teams: IA guidelines, training courses and institution-strengthening
Wismar (2007)	UK Italy Sweden Germany	●	o	+	++	Barriers: • Lack of government support • Funding • Capacity building • Mechanisms for delivery • New skills and organisations to drive HIA • Skills to understand HIA methodology
Utzinger (2005)	Chad and Cameroon	●	●	++	++	Barriers: • Environment and social impact assessment of programmes and policies are more advanced and have stronger lobbies pushing them than HIA Facilitators: • Local institutional capacity building in health science is important to build up a skilled HIA labour force
Additional studies selected from full text list for reviews 1 and 2						

Burns (2008)	England	●	o	+	+	Barriers: • Poor awareness by LPA of tools to integrate health issues into planning activities • Lack of internal expertise in planning departments to undertake HIA • Engagement with health professionals sporadic • Health practitioners subject to competing resources requirements that limit extent of involvement • Heavy planners' workload in region is a barrier which only legal obligation can be expected to overcome (Cave et al 2005)
Elliott (2005)	Wales	●	●	–	–	Barriers: • Schism between HIA and decision-making: HIA driven by health sector and decision-makers outside health sector Facilitators: • Changing status of decision-makers so that they become producers of knowledge
Supplementary reviews						
Davenport (2006)	N/R	●	●	++	++	Barriers: • Lack of knowledge of those conducting HIA of policy making environment • Time • Resources • Staffing • Limited organisational structure when one off conducted by champions outside decision-making • Lack of health awareness by non health sectors Facilitators: • Role of decision-makers • Involvement of decision-makers and stakeholders in planning and conduct of HIA • Input from profs. Outside of those involved usually in decision-making • Clear commitment to HIA within organisational decision-making structure
York Health economics consortium (2006)	UK	●	●	+	++	Barriers: • Lack of capacity to undertake HIA: staff, financial, • Non statutory nature of HIA (low priority and institutional capacity incentive) • Individual skills a problem when person leaves

						Facilitators: • Rapid assessment HIA requires less time and resources • Building institutional not just individual capacity • Outsourcing, however does not help build partnership
Call for evidence						
NHS London (2009)	UK	●	●	+	+	Barriers: • PCT must assess healthcare capacity to justify S106 claims funding or floor space • Funding going unclaimed • Lack of PCT resources to engage with LPA • PCT can be inactive in engaging with LPA • Little understanding of planning process and opportunities • Little knowledge of LPA in healthcare and wellbeing issues Facilitators: • When PCT aware of planning policy process and next stages of LDF • When PCT respond to consultation/planning applications • When PCT/LPA have regular meetings
Blau (2005)	Australia	●	●	+	+	Barriers: • Fear and confusion over HIA • Day to day operation of local government Facilitators: • Skill base • Individual and organisational capacity • On-going support • Commitment at all levels of government • Understanding of local government's role in health at local level • Willingness to include new initiative by LPA in an overcrowded work agenda
Refworks folder						
Ahmad (2008)	UK	●	●	+	++	Barriers: • Problems arise when HIA work in region relies too much on individual efforts of HIA champions to manage HIA outside their job description

						Facilitators: • Creation of a HIA post at strategic level would build capacity of HIA in region • HIA should be owned and adopted by those who are prime users of HIA and not contracted out • Presence of a leading regional organisation that could strategically guide HIA's capacity building and practice • Integrating HIA in organisational structures, ie. in an organisation's policies and strategies
Caussy (2003)		o	●	+	+	Facilitators: • Countries must strengthen the structure infrastructure (data creation and analysis) in order to facilitate wider use of HIA in development projects • HIA requires critical capacity of trained manpower
Steineman (2000)	USA	●	o	+	+	Barriers: • Analysing health impact can be costly and difficult • Quantification of health risks difficult outside cancer

Summary table: barriers and facilitators - Policy process

Author, Year	Country	Policy Process		Quality score	External validity score	Key characteristics of barriers and facilitators
		Barriers	Facilitators			
Plans – R2						
Douglas (2001)	UK	o	●	+	+	Facilitators: • Making HIA integral to policy making would raise awareness across sectors • Teamwork approach (new knowledge, tools, skills)
Douglas (2007)	UK	o	●	++	++	Facilitators: • Ensure that local evidence is incorporated into HIA and evaluate what determinants of health can be tackled by policy intervention in that local context

Fischer (2009)	UK	●	●	+	++	Barriers: • Ex-post use of HIA • Lack of inter-sectoral coordination • Traditional Legalistic planning limits factors for assessment • Lack of monitoring system or effective implementation Facilitators: • Early application of assessment when no decision on preferred aspects has been made yet • Consideration of physical, natural as well as social and behavioural factors • Focus on factors that are relevant in a specific situation • Use computer model to assess different options • Explain computer model in SEA report • Hypotheses clearly explained • Use mix of quantitative and qualitative assessment • Use of baseline and impact maps for quantitative assessment • Use of SEA as an integrative instrument to achieve consistency of aims, objectives and proposed action of different tiers and sectors • Coordination with other assessment tools to ensure greater consistency • Consistency between methods used to assess impact and base line data used at different levels of planning (eg maps used to assess HI by DPD scoping reports, SEA and core strategies) • Discretionary planning • Distinction between assessment aspects that are likely to be of significance and those who are not significant for anticipated options and impacts

France (2004)	UK	o	●	+	+	Facilitators: • Structure plan should be influenced by need to plan appropriate statutory health services, tackle health inequalities, wider determinants of health • Health authorities and consultants carrying HIA must know structure plan to allow input at early stage when documents and policies emerge • Evaluate emerging policies use matrix of 13 objectives • Acheson report (DH, 1998): all policies with health impact should be evaluated for health inequalities • HI review of structure plan gave opportunity to address inequalities in health through policies supporting regeneration, affordable housing… • HI of structure plan sets foundation for emerging local plan • Ensure that public health and health service objectives are fully integrated into review of structure plan
Greig (2004)	UK	o	●	+	+	Facilitators: • Prospective assessment • Acheson report 1998 all policies with direct/indirect impact on health should be evaluated for health inequalities impact • Hybrid nature of HIA combines expert and lay knowledge, qualitative and quantitative evidence • Effective HIA require: focus on reduce inequalities, active participation, prospective assessment, • multi-disciplinarity of evidence base, • value of local contextual knowledge and expertise
Mindell (2004)	UK	o	●	+	+	Facilitators: • Early stage HIA • Purpose of HIA to increase health benefits and reduce inequalities • Outcome evaluation built into process
Planning Advisory Service (2008a)	UK	o	●	+	+	Facilitators: • Equality standards for Local government (equality framework for local government) • LTP's equality and diversity objectives and targets must be reflected in LDF/core strategy: links must be made between accessibility strategy and LDF vision outcome and included in LTP • LPA must know their communities and develop evidence base • Develop base line of monitoring data • Mainstream equality and diversity

Wismar (2007).	UK	●	●	+	++	Barriers: • AQ strategy: problem to assess effectiveness of HIA process as AQ standards are assessed in terms of annual means so clear trend cannot be quickly assessed • How to attribute effect to specific causes • HIA too voluminous, summary required for policy makers Facilitators: • DoH 2002 investing for health strategy identified HIA as key tool to facilitate cross sectoral action • Presence external consultant • Timely delivery of HIA • HIA can contribute to consultation of AQAP • HIA raises awareness of health
Stevenson (2007)	NZ	o	●	+	+	Facilitators: • Intersectoral HIA • Multidisciplinary HIA leads to common language • Employment of health medicine registrar at City council

Mathias (2009)	NZ	●	●			Barriers: • Limited use of HIA at central government level • Problem to attribute change in plan to HIA • HIA transformed into policy approach but not into action tables • Participatory HIA can increase time when time is of the essence (run-off) and policy development needed quickly Facilitators: • Policy impact on health cd be considered routinely if public engaged with by strategic partners before writing plans • Involve maori • Electronic network • Build capacity and knowledge of HIA in LPA • Involve communities • Good leadership • Post of health physician jointly funded by LPA and health • Thorough documentation and dissemination HIA • Involvement of decision-makers in conduct and planning HIA • Clear organisational commitment to HIA • Subject of HIA not controversial • Tailored presentation of report and recommendations to refect organisational concerns • Realistic recommendations • HIA on same cycle as plan
Neville (2005)	Australia	●	●			Barriers: • Challenging to synthesise and prioritise evidence • Lack of guidance in literature on prioritising different sources of evidence • Evidence must be weighed for its robustness as well as local relevance • Complexity of drawing together multiple sources of evidence • Extensive range of skills and resources required for HIA Facilitators: • Transparency regarding evidence, in the weighing of evidence, who is involved, how decisions are made • 5 stages

Plant (2007)	UK	o	●			Facilitators: • IA led to health being considered at early stage of plan • Incorporating health indicators into monitoring of the plan's implementation • Including policies on climate change, transport and policies that promote plan areas, childcare and access to green space • Use of impact assessment at borough level • Making health improvement and reduce health inequalities key objectives • Development of a tool
Projects						
Bendel (2005)	UK	●	●	+	+	Barriers: • Timing of HIA: too lat if HIA starts when PFI business case is nearing completion, then there is resistance to changes • Facilitators: • Plan HIA so that it follows the lifecycle of project/programme • HIA process must be systematic and transparent even if outcomes of HIA are predictable • Health Overview and Scrutiny committee was instrumental in reviewing recommendations of HIA and asking PFR board to produce regular progress report on implementation of recommendations
Douglas (2007)	UK	o	●	++	++	Facilitators: • Monitoring to feed into future implementation of the proposal and be part of standard monitoring processes
Planning Advisory Service (2008b)	UK	●	●	+	+	Barriers: • Lack of strategic links between organisations and documents, little progress is possible to integrate appraisals into decision-making • Different timescales: planners ask questions to public health profs on long term health needs while PHP are used to answer immediate customer needs Facilitators: • More effective to get health policies into core strategy • HIA done early in planning process, it can influence all stages • Planners should work with health colleagues to help them respond to planning consultation

						• Community infrastructure levy allows planners to better address cumulative impact of small developments and ensure that infrastructure is well planned • LDF which fail to adequately consider heath will not be considered as sound • Better to integrate HIA and EIA to have consistency in assessment • Some councils are experimenting integration health assessment into statutory processes (EIA and SA) • Development of a strategic plan including health considerations has strengthened negotiating position of planners when they secure S106 deals. • Joint processes such as CAA, LAA and JSNA help work together effectively
Sutcliffe (1995)	UK	o	●	+	+	Facilitators: • Full integration in EIA legislation would ensure health impacts are taken into account
Bekker (2005)		●	●	+	++	Barriers: • HIA could not be completed before decision on project was taken because data to input in HIA not available. Data came from environmental services • No agreement on how HIA conclusions would be handled • HIA focussed on negative environmental health impacts • Scientific HIA methods not robust enough • Lack of additional qualitative methods Facilitators: • Timing of HIA: opportunities for advice should be numerous so that timing of HIA report is less critical • Consideration of public opinion should be incorporated • Cost-effectiveness of planning options should be incorporated • Blueprint model of HIA must be adjusted to context
Bhatia (2008)	USA	●	●	+	++	Barriers: • Lack of guidance for scope, standards, methods for analysis health effects Facilitators: • evidence must be rigorous and practical so that public health

						participate effectively in EIA process • health profs. Must use data on determinants of health to strengthen case to consider health in EIA • public health agencies and academia should participate in EIA activities (public testimony…) to get to know system • PH profs should advocate for formal guidance on incorporating health into EIA • Statutory requirement s needed for EIA to consider health and legal mandate for agencies to consider and respond to health input
Corburn (2007)	USA	●	●	+	+	Barriers: • Evaluation of health impact through regulatory thresholds but cumulative impact of multiple pollutants not compulsory to assess • Quantitative risk assessment of environmental hazards but overlooks combination of chemical, physical and social hazards. • Bureaucratic resistance • Lack of detailed data on how social forces influence human health • Lack of statutory authority • Lack of coalition building, changing institutional practices, new participatory processes Facilitators: • Institutionalisation of health determinants analysis within EIA more likely through combination of new practice,, case law and regulatory guidance • Demand for and political support of HIA came from activists (community organisations) • ENCHIA can allow integration of knowledge and expertise from a range of disciplines and life experience
Dannenberg (2008)	USA	●	●	+	+	Barriers: • Difficult to quantify health outcomes Facilitators: • Collaboration through HIA and EIA processes may result in better outcomes • Formulating clear actionable recommendations as a formal step between assessment and reporting steps • Monitoring health outcomes of current decisions can help to

						improve future decisions
Kjellstrom (2003)		o	●	+	+	Facilitators: • Meaningful application of complex scientific data in decision-making
Kwiatkowski (2003)	Canada	o	●	+	++	Facilitators: • Integration of health, social and environmental considerations into a holistic IA would facilitate decision-making consistent with recommendations made in Agenda 21
Noble (2005)	Canada	●	●	+	+	Barriers: • Difficult to construct model that quantify and predict impact of project on health because health and environmental change have got a complex relationship • Little evidence that health, social and quality of life concerns in EIA are carried over at post decision-monitoring and if so, not well done, not as much scientific rigour as monitoring of biophysical impacts. Facilitators: • Having a MOU that requires proponents to follow specific guidelines when preparing its impact statement • Monitoring health determinants and actual health outcomes important to ensure that management and mitigation programmes are meeting their intended objectives
Taylor (2003)	New Zealand	o	●	+	+	Facilitator: • SIA should be applied early and fully in planning process, empowering communities and decision-makers
Viinikainen (2007)	Finland	o	●	+	+	Facilitators: • SIA was integrated in planning process and gave irreplaceable local information to planners at early stage and during all planning process
Bond (2001)	Mali, Senegal & Mauritania	o	●	+	+	Facilitators: • Develop IA method/process that is appropriate for nature of proposed action, and the context. • IA process should extend to implementation stage of action so that eco, soc. And env. Impacts are monitore, evaluated and managed as part of IA

Mwalyosi (1998)	Tanzania	●	o	++	+	Barriers: • EIA often conducted too late in planning stage
Kosa (2007)	Hungary	o	●	+	+	Facilitators: • Timing: importance of mandating HIA before policy decisions are taken • Need to make HIA statutory requirement + provided resources to make it reality
Wismar (2007)		●	o	+	++	Barriers: • Differences in development of HIA across Europe may reflect difficulty to prove its effectiveness to other sectors and to make it a systematic part of the policy making
Utzinger (2005)	Chad and Cameroon	o	●	++	++	Facilitators: • Development of industry-wide HIA standards would facilitate the integration of health issues into the planning of future petro industry
Additional studies selected from full text list for reviews 1 and 2						
Noble (2006)	Northern Canada	●	o	+	+	Barriers: • There are disagreements on sufficient of current EA legislation and its provision for health assessment • HI often included in EA impact prediction, mitigation and preventative programmes abut apparent lack of post-decision follow-up and monitoring
Burns (2008)	England	●	●	+	+	Barriers: • Complexity of health assessment process limit ability to meet legislative requirements • HIA got limited consideration because of lack of methods for assessment, analytical complexity and implications of legal requirements • Difficult to isolate impact of policy on health given complexity of determinants and time delay between implementation and effect Facilitators: • Good practice guidance on HIA • Integrate HIA into wider assessment process but bio-physical impact can take precedence then + broader social model of health upon which HIA is predicated may be lost • Integration of HIA into SEA preferable given legal requirement

						for assessing health impacts • DH has produced draft guidance on incorporating health into SEA • Requirements from SEA directive should be applied from top of development hierarchy in accordance with Kiev Protocol and would ensure that health considerations are intrinsic within the system from policy development to implementation • Monitoring critical to change policies/actions in view of new information and changing env. Conditions.
Elliott (2005)	Wales	o	●			Facilitators: • Integrate decision-makers early in HIA process • Good communication with decision-makers throughout process • Better understanding of decision-making process and role of HIA within it so it can influence decision • Practitioners should map out policy process • HIA would benefit from policy learning and knowledge transfer models developed in social sciences • Mainstreaming/institutionalisation of HIA in decision-making
Harris (2009)	Australia	●	●			Barriers: • Lack of requirement in EIA legislation for assessing health impact means that health agencies are involved late if at all after EIA scope decided • Other processes constraint inclusion of health into EIA (land use planning, public health surveillance, project approval) • Link between environment and health hampered by lack of consistency on their relationship in legislation and EIA documentation Facilitators: • EIA regulatory nature offers a potentially powerful mechanism to address health and well-being
Supplementary reviews						
Davenport (2006)	N/R	●	●	++	++	Barriers: • HIA not statutory • Lack of standard method for conducting HIA • Use of jargon Facilitators: • Policy support for HIA (legislation, promotion of consistency of methods, monitoring and evaluation) • Timing of assessment should fit decision making process

						• Existing statutory frameworks supporting HIA • Realistic HIA recommendations • Use of consistent methodology • Consideration of broad ranges of factors impacting on community health and safety • Inclusion of empirical evidence relating to effect of PPP on health • Quantification of impacts • Conducted by expert assessors • Tailored presentation of info • Use insight into organisational concerns and priorities to shape recommendations
Kørnøv (2009)	Denmark	●	●	+	++	Barriers: • Presentation of environmental reports (SEA): do not emphasise human health (no heading), no assessment on human health presented in report Facilitators: • EU political agenda promotes the integration of health into planning and supports it by legal requirements (SEA + protocol), provides guidance • Use of precautionary principle + social justice frame • Danish SEA guidance emphasises need for cross disciplinary work for SEA to secure assessment of parameters within broad environmental concept • SEA practice in Dk: health included + longer SEA env. Report, more likely human health covered • Both + and – impacts on health covered • 80% qualitative reports • Transport primary determinant of health
Bronson (2006)	Canada	●	●	+	+	Barriers • No follow up of health outcomes and health management programmes • Uncertainty of health outcomes • Close relationship between environment, development and health of Northern culture not fully considered • Health factors must be integrated into EIA but adapt to local contexts • Broad conceptualisation of health Facilitators:

						• Examine determinants of health rather than just evaluate predicted health impacts
York Health economics consortium (2006)	UK	●	●	+	++	Barriers: • Lack of scoping • Ideal process not applied systematically • Lack of staff Facilitators: The 5 stage facilitates effective process
Call for evidence						
NHS London (2009)	UK	●	●	+	+	Barriers: • 14% developers contributions secured for healthcare requirements, rest PCT has got to find within existing PCT budget (communication, need to justify) • PCT submit less frequent comments on wider impacts of proposed development than on S106 (design of urban spaces) • LPA do not necessarily notify S106 funding for healthcare to PCT • S106 only covers capital not revenue funding • Organisational uncertainty within PCT who is responsible to respond to planning applications Facilitators: • PCT need to be involved at pre application stage to negotiate S106 and influence design • Alignment of strategies requires working upstream at policy design stage • Community infrastructure levy as alternative to S106 to secure funding • S106 could link with social care • Sort out role and responsibilities between PCT and LPA
Blau (2005)	Australia	●	●			Barriers: • Many meaning of health • Resistance to HIA because of fear or confusion • Issue of health inequalities not on agenda Facilitators: • Word health • Developing champions, allies and leaders • Legislation on HIA can bring gains and losses

						• Positioning HIA requires careful planning • First HIA at local level determines its ultimate credibility
London (2008)	UK	●	●	+	+	Barriers: • Social infrastructures (including health) at periphery of major application referral process and given low priority within evaluation process despite fact that London has got policies to consider impact of development on these infrastructure Facilitators: • Procedure on how to consider health impacts need to be more explicitly embedded within application alongside affordable housing, transport… • Need to assess capacity of social infrastructure in connection with larger developments • Checklist for planners on key health considerations when evaluating application
Signal (2006)	NZ	o	●			Facilitators: • HIA outcome is to significantly increase stakeholder engagement in planning process
Refworks folder						
Caussy (2003)		o	●	+	+	Facilitators: • HIA is promoted in some cases as part of EIA using the legislation, guidelines and methods of EIA
Steineman (2000)	USA	●	●			Barriers: • NEPA does not mandate HIA clearly and hence lack of incentives to conduct it Facilitators: • Health consideration must enter decision-making process early: more cost effective and can prevent/mitigate better

Appendix E: Literature Review Data Extraction Tables

Data Extraction Tables for each citation analysed in the literature review for Review 3 are presented on following pages (in alphabetical order by first named author).

Literature review data extraction tables

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Bekker, M., Putters, K. and van der Grinten, T. (2005). *Evaluating the impact of HIA on urban reconstruction decision-making. Who manages whose risks?* EIA Review. 25; 758-771 **Plan/project details:** Municiple reconstruction project including hospital, sports facilities, emergency services, shops, offices, houses, parking facilities. **Method of appraisal:** HIA	**Definition of health:** **Barriers:** • Focus only on negative environmental health impacts. **Understanding the role of health assessment of spatial planning programmes and projects:** **Facilitators:** • Important to agree beforehand the aims of the HIA, the information required and	**Partnership working/inclusiveness:** **Facilitators:** • Advocacy coalitions should be enhanced with stakeholders.	**Resources of LPA: (can apply to other key partners)** **Barriers:** • The medical environmental office within the MHS is small and accorded low priority within the MHS. **Institutional commitment of different actors** **Barriers:** • HIA lacked active support from public health policy and its own organisation, the Municipal Health Servicve.	**Stage of integration of appraisal into plan/project decision-making:** **Barriers:** • Data had to be collected in cooperation with the environmental services and this delayed the HIA for several months. As a result the project 'go' decision had been made before the HIA could be completed. • No opportunity to reach prior agreement on how the HIA conclusions would be handled. **Facilitators:** • Should be multiple opportunities for advice so that the timing of the

Critical appraisal/comments on the quality and robustness of methodology: Based on interviews with key stakeholders, plus search of the project archive.	how the findings should be presented to the municipal council and the public.		• HIA taken place on the margins of the project under unfavourable institutional conditions.	report is less critical. **<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Barriers:** • HIA focus on only negative environmental health impacts disappointed users. • Users questioned the scientific robustness of the methods. • Lack of additional (qualitative) methods was unresponsive to the project's needs. **Facilitators:** • Consideration of public opinion should be incorporated if possible. • Cost-effectiveness of planning options should be incorporated if possible.. • Blueprint model for HIA must be adjusted for the context in which it

				is used.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Bendel, N & Owen-Smith, Vicci. (2005). *A prospective health impact review of the redevelopment of Central Manchester Hospitals*. Environmental Impact Review 25; 783-790. **Plan/project details:** Plans for major redevelopment of Central Manchester Hospitals. **Method of appraisal:**		**<u>Partnership working/inclusiveness:</u>** **Barriers:** • The short deadline for the HIR to be completed meant that there was no time to carry out a more detailed HIR...we were unable to carry out a participatory stakeholder workshop or other form of community engagement in the time available. **<u>Trust:</u>** **Facilitators:** • It is important to encourage key policy makers to see	**<u>Institutional commitment of different actors:</u>** **Barriers:** **Facilitators:** • Ownership of the HIA is critical to its success or failure, especially in organisations such as SHAs, PCTs and Local Authorities which have comparatively little experience of HIA. • The involvement of Health Overview and Scrutiny Commitees may make it easier to	**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Barriers:** • The HIR was begun at a time when the PFI Business Case was nearing completion and this led to some understanable resistance to change. **Facilitators:** • Important to plan the HIA in reference to the relevant decision points in the lifecycle of the project or programme being assessed.

Health Impact Review (HIR) **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions based on their experiences of the assessment project.		HIA as a constructive, non-threatening, process rather than as a source of disruptive outside interference. Without this understanding it is much harder to obtain the high level political and managerial supported needed to ensure that the recommendations of the HIA are given due consideration. **<u>Policy drivers (between different actors):</u>** **Barriers:** • In many local authorities Health Overview and Scrutiny are still in the early stages of development and their potential roles with regard to HIA have not yet been fully explored. **Facilitators:** • Health Overview and Scrutiny Committees can act as initiator, sponsor and	obtain high level support.	**<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Facilitators:** • Even if the outcomes of the HIA are predictable, it is important to have a systematic and transparent process of assessment in place. **<u>Policy effectiveness:</u>** **Facilitators:** • The Health Overview and Scrutiny Committee was instrumental in reviewing the recommendations of the HIR and in asking the PFR Project Board to produce regular progress reports on the

		propagator in the HIA process; requesting that a HIA be carried out; gives its support to a HIA that is already being carried out; acts as a HIA 'champion', ensuring that recommendations from HIA are given proper consideration by the relevant agencies.		implementation of the recommendations and to include these as part of their Annual Report.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Bhatia, R., Wernham, A. (2008) *Integrating Human health into Environmental Impact Assessment: an unrealised opportunity for environmental health & justice*. Environmental Health	**<u>Understanding the role of health assessment of spatial planning programmes and projects:</u>** **Barriers:** • The rigid boundaries among	**<u>Partnership working/inclusiveness:</u>** **Barriers:** • Regulatory agencies rarely request input from health agencies and there is no established mechanism or expectation for such interaction. • Lack of standing of the HIA team in the EIA process.	**<u>Resources of LPA: (can apply to other key partners)</u>** **Barriers:** **Facilitators:** • Effective participation in the EIA process will require public	**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Barriers:** **Facilitators:** • Standards of evidence must reflect an appropriate balance of

Perspectives. 116; 991-1000 **Plan/project details:** 1.Urban re-zoning. 2,3,4.Oil and gas developments. **Method of appraisal:** HIA (to influence EIA) **Critical appraisal/comments on the quality and robustness of methodology:** Based on case studies but these are authors own conclusions.	disciplines of knowledge along with semi-autonomous development of knowledge in each field have been long standing obstacles to interdisciplinary thought and practice necessary for integrating impact assessment. • Neither responsible agencies nor public health officials generally view EIA as an avenue to address health objectives. • EIA is largely accomplished by agency staff or by private	**Facilitators:** • Industry proponents should also be viewed as important potential collaborators in integrating HIA/EIA. • Close partnerships with community stakeholders, with explicit roles for analysts, communication and advocacy. • Vigorous public testimony with public health expertise…led to the inclusion of health concerns in the EIA process.	health staff with time and at least a basic familiarity with EIA and HIA. Consider offering HIA training as part of a core skill set for public health professionals. • HIA practitioners must develop an appopriate set of analytical tools (for valid health impact predictions).	rigor and practicality, such that public health can provide beneficial input at the pace required by the EIA process. **<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Barriers:** • Lack of guidance that specifies the appropriate scope, standards or methods for analysing health effects. **Facilitators:** • Health professionals can make a strong case for the importance of such impacts by citing data on the determinants of health, strengthening the case for fully considering

	consultants who lack health expertise. **Facilitators:** • Health professionals can make a strong case for the importance of such impacts by citing data on the determinants of health, strengthening the case for fully considering such issues in EIA.			such issues in EIA. • Public health agencies and academic institutions should familiarise themselves with regional EIA activities and participate where either public testimony or obvious public health concerns indicate a need. • Advocate for formal guidance on incorporating health in EIA. • Statutory requirements specific to health in EIA coupled with the legal mandate for agencies to consider and respond to substantive public health input create a powerful legal platform from which to advocate for health analyis.

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Bond, R., Curran, J., Kirkpatrick, C., Lee, N., Francis, P. (2001) *Integrated Impact assessment for Sustainable Development: a case study approach*. World Development. 29; [6]; 1011-1024 **Plan/project details:** Manantali Energy project: Retrofitting of hydropower facility at existing dam. **Method of appraisal:** EA (EIA)		**<u>Partnership working/inclusiveness:</u>** **Facilitators:** • Plan and make explicit from the beginning, the contributions to be made by different disciplines and their relationships to each other. • Plan the process of participation/consultation with stakeholders and its relationship to the technical IA studies being undertaken.	**<u>Resources of LPA: (can apply to other key partners)</u>** **Facilitators:** • IA skill needs should be carefully assessed at the outset of the appraisal process, as well as the use to be made of multidisciplinary teams within it…through supporting measures for the preparation of IA guidelines, training courses and institution-strengthening.	**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Facilitators:** • Determine the most appropriate overall approach to IA which should be followed, taking into account the nature of the proposed action to be appraised, the stage(s) in the planning process at which it is to be appraised and the context in which it will be appraised. **<u>Policy effectiveness:</u>** **Facilitators:** • Extend the IA process into the

Critical appraisal/comments on the quality and robustness of methodology: Authors own conclusions.				implementation phase of the action, so that the actual economic, social and environmental impacts are monitored, evaluated and managed as part of an IA management system.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Corburn, J and Bhatia, R (2007) Journal of environmental planning and management 50 (3), 323-341. Plan/project details: Rezoning plan for the eastern neighbourhood of SF Method of appraisal: HIA	2. **Defining role of spatial planning on health:** **Barriers:** • EIA practice in the US has not considered human health effects of environmental factors such as residential	**4. Partnership working/inclusiveness:** **Barriers:** **Facilitators:** • Using models of democratic participatory processes dealing with complex scientific and social justice issues: Merseyside model for HIA, Danish consensus conferences and science shops (Sott Samuel et al 1998,		**11. Stage of integration of appraisal into plan/project decision-making:** **Barriers:** **Facilitators:** **12. Comprehensiveness/quality/fairness and consistency of policy process** **Policy comprehensiveness** **Barriers:** • Evaluation of human health impacts through regulatory thresholds (eg AQ) or via quantitative risk assessment, but cumulative impact of multiple pollutants not

Critical appraisal/comments on the quality and robustness of methodology: Analysis by those who have carried out HIA.	crowding, automobile dependence and social segregation (Steinemann, 2000) **Facilitators:** • SP affects the social determinants of health (Duhl and Sanchez 1999, Barton and Tsourou 2000, Corburn 2004, Frumkin 2005) • 1800s: Chadwick and Engles published reports documenting	Wachelder 2003, Fischer et al 2004): models of public engagement with science policy where lay people and experts have got equal rights to frame research questions, offer qualitative and quantitative evidence and collaboratively review and interpret results in order to make policy recommendations. • ENCHIA: 30 non profit and private sector organisations and 4 public agencies+city planning and public health joined community council of ENCHIA **5. Trust:** **Barriers:** entrenched idea that city planning and private developers are highjacking EIA process. **Facilitators:**		compulsory to assess. • Quantitative risk assessment of environmental hazards but overlooks combination of chemical, physical, social hazards (Kuehn 1996) **Facilitators:** **13. Policy effectiveness** **Barriers:** • Bureaucratic resistance • Lack of detailed data on how social forces influence human health • Lack of statutory authority • Might limit what is said below! • Expanding the definition of environment and integrating health into planning methods requires attention to more than just the analytical methods of HIA but also coalition building, changing institutional practices and experimenting with new participatory process

	that gentry and professionals lived longer than labourers and artisans and mortality was distributed according to social and physical composition of different residential districts (Rosen, 1993). So place-based economics and built environment can create inequalities. • Evolution in the US to improve environmenta	• ENCHIA had an influence on professional work and networks, framing problems around public health and accessing new data • ENCHIA as coalition building to transform institutional practices **7. Resources:** **Barriers:** **Facilitators:** • Group visioning, consensus building • Step by step participatory process including development of group structure, collective vision, problem definition, research and knowledge, synthesis, consensus, reflection, dissemination, publication, evaluation. • Production of policy		**Facilitators:** • ENCHIA outside of EIA when structured as an inclusive participatory process, can transform planning by generating new evidence with impacted stakeholders • ENCHIA may also transform practice by integrating knowledge and expertise from a range of discipline and life experiences

	l health (Duffy 1990, Fishman 2000, Fullilove, 2004,) see National environment policy act (1969). **3. Understanding the role of health assessment of spatial planning programmes and projects:** **Barriers:** • USA: practice of HIA new and untested (2007) **Facilitators:** • ENCHIA has opened up awareness and	briefs for publication **8. Political dimension:** **Barriers:** **Facilitators:** • ENCHIA could create a broader consensus than the HIA for both developments as the EHS was then acting alone as expert		

	understanding of links between SP and health through collaboration leading to new problem definition, access to new data			

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Dannenberg, L et al (2008) Use of the HIA in the USA 27 case studies 1999-2007		**4. Partnership working/inclusiveness:** **Barriers:** **Facilitators:** • HIA practitioners who have ongoing working		**13. Policy effectiveness** **Barriers:** **Facilitators:** • Using quantitative estimates of environmental measures such as noise, AQ and access to park, while not = health impact can help

Plan/project details: **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Documentary evidence based on case studies found in grey and academic literature, so might not be able to generalise the findings		relationships with their local community leaders may be able to influence decisions more than those who lack such relationships . • Development of training courses, local public health agencies,..networks for advocacy, training, support, access to completed HIA, website.		investigators make evidence-based inferences about prospective health effects based on empirical research and changes in environmental conditions • Dealing with uncertainties: public health professionals do not need to know how many people will walk on each side walk before advocating for the health and safety benefits of sidewalks. Residents highlighting health benefits of play ground for their children may carry more weight in a political decision than a precise estimate of how many children would use such a playground. • Question about resources: mentioned example of 1 man 9 page rapid desktop report that could accomplish as much as formal HIA.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Douglas, M., Conway, L., Gorman, D., Gavin, S., Hanlon, P. (2001) *Achieving better health through health impact assessment.*		**<u>4. Partnership working/inclusiveness:</u>** **Barriers:** **Facilitators:** • Multi-agency joint planning mechanisms (Community planning and Health	**<u>9. Resources of LPA: (can apply to other key partners)</u>** **Barriers:** **Facilitators:** • Time • Funding	**<u>11. Stage of integration of appraisal into plan/project decision-making:</u>** **Barriers:** **Facilitators:** • Making HIA integral to

Health Bulletin 59 (5) September 2001. **Plan/project details:** City of Edinburgh draft local transport strategy designed to reduce traffic congestion – 3 possible transport scenarios, 3 funding assumptions **Method of appraisal:** HIA **Critical appraisal/comments on quality/robustness of methodology:**Not described		Improvement Programmes) • Partnerships including social inclusion partnerships • **5. Trust:** **Barriers:** • HIA owned by experts; could lead to costly assessment industry **7. Resources:** **Barriers:** **Facilitators:** Develop clear roles for HIA network	• Knowledge of area/community • Knowledge of topic • Information sources/data available	policy-making processes should raise awareness of the health consequences of work in other sectors. **12. Comprehensiveness, quality/fairness and consistency of policy** **Policy effectiveness** **Barriers:** **Facilitators:** HIA is developed as part of inter-sectoral work to promote health
Study details **Plan/project details**	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Douglas M, Thomson, H, Jepson, R, Hurley, F, Higgins M, Muirie J, Gorman D. eds (2007). *Health Impact Assessment of Transport Initiatives – a Guide*. NHS Health Scotland Edinburgh.	**1. Defining role of spatial planning on health:** **Barriers:** **Facilitators:** Make links between transport and broad health/determinants of health (inc. General physical			**12. Comprehensiveness, quality/fairness and consistency of policy process** **Policy comprehensiveness** **Facilitators:** In view of the links between transport and health, the following are

Plan/project details:HIA of transport initiatives (LTP, transport projects) - Focus on transport for access **Method of appraisal: HIA** **Critical appraisal/comments on the quality and robustness of methodology:** Literature review collecting evidence on the health impacts of transport initiatives	health, physical activities, injury and death, air pollution, noise, mental health and stress, personal safety and perceptions of safety, community severance, climate change,			transport interventions aimed at positive impacts on health: New transport infrastructure, interventions to: • reduce road traffic and fuel consumption, • reduce air pollution, noise pollution, • promote modal shift to walking and cycling instead of car use, • improve psychosocial aspects of public transport, • reduce injury and death from crashes **13. Policy effectiveness** **Barriers:** **Facilitators:** Ensuring that local evidence is incorporated into the HIA and evaluate what determinants of health can be tackled by policy intervention in that local context.

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Farhang, L., Bhatia, R., Comerford Scully, C., Corburn, J., Gaydos, M., Malekafzali, S. (2008) *Creating Tools for Healthy Development: Case Study of San Francisco's Eastern Neighbourhoods Community Health Impact Assessment.* Journal of Public Health management Practice, 2008, 14(3), 255-265. **Plan/project details:** Rezoning plan for the eastern neighbourhoods of SF		**4. Partnership working/inclusiveness:** **Barriers:** • Need for impartiality from those steering the process while they themselves come from public health organisation and see their role as advocacy **Facilitators:** • ENCHIA: many interests represented on the HIA community council • Center for collaborative policy at California State University provided consultation on the consensus-building aspects of the process. • University-based evaluator conducted a process and	**10. Institutional commitment of different actors** **Barriers:** **Facilitators:** • ENCHIA leads to greater understanding of health impact of development and some council members started to apply public health arguments and evidence in public policy dialogues on housing, economic and environmental issues.	

Method of appraisal: HIA **Critical appraisal/comments on the quality and robustness of methodology:** Descriptive but includes those who took part in HIA		outcomes evaluation **<u>5. Trust:</u>** **Barriers:** • Fear from SF council officials that ENCHIA could highlight failures of city planning and fuel antidevelopment arguments. **Facilitators:** • Use of geographical/ illustrative representation of the vision of the Council **<u>6. Policy drivers (between different actors)</u>:** **Barriers:** • Vested interested of developers who do not want ENCHIA to result in new regulation • HDMT indicators could be used selectively by different groups. • SF feared that antidevelopment groups		

		would use HDMT to oppose developments so SF council acknowledged that HDMT was only voluntary and provided only a health lens to evaluate projects and plans and was only intended to inform and not resolve debates over conflicting priorities **Facilitators:** • HDMT **<u>7. Resources:</u>** **Barriers:** **Facilitators:** • Outcome of ENCHIA process was a healthy development measurement tool **<u>Political dimension:</u>** **Barriers:** **Facilitators:**		

Study details	**Knowledge and**	**Partnership**	**Management and**	**Policy Process**

Plan/project details	conceptual understanding		resources	
Study details: Fischer, T., Matuzzi, M., Nowacki, J. (2009) *The consideration of health in strategic environmental assessment (SEA).* Environmental Impact Assessment Review. **Plan/project details:** SEA case studies identified from EU and analysed for health considerations **Method of appraisal:** SEA **Critical appraisal/comments on the quality and robustness of methodology:** review of SEA documentation to answer 10 questions, 9 of which	**1.Definition of health:** **Barriers:** • Physical and natural factors of health considered only in assessment **Facilitators:** • social and behavioural aspects taken into account in assessment	**4. Partnership working/inclusiveness:** **Barriers:** • Different cultures between actors (planners, SEA and health experts) • Different languages spoken leading to difficulties to communicate **Facilitators:** • Involvement of health professionals and stakeholders **5. Trust:** **Facilitators:** • Transparency of stakeholders' arguments (including use of assumptions and models) • Use of vocabulary understood by experts as well as lay persons to allow better consultation **7. Resources:** **Barriers:** • insufficient consideration of	**9. Resources of LPA: (can apply to other key partners)** **Facilitators:** • Use of data from other public administrations, e.g. public health departments **10. Institutional commitment of different actors** **Barriers:** • Competing institutional tasks within an institution **Facilitators:** • Institutional support and national guidance	**11. Stage of integration of appraisal into plan/project decision-making:** **Barriers:** • Quasi ex-post use of HIA **Facilitators:** • Early application of assessment at a point when no decision on preferred aspects has been made yet. **12. comprehensiveness, quality/fairness and consistency** **Policy comprehensivenof policy process ess** **Facilitators:** • Consideration of physical and natural factors as well as social and behavioural factors. • Focussing on factors that are relevant in a specific situation **Quality/fairness of**

addressing WHO concerns on actors, definition of health, data collection and policy-making process		good baseline data in impact assessment • Limited time for each partner to communicate with partners **Facilitators:** • Good baseline data for all aspects of health (physical, natural and social, behavioural) • National guidance and guidelines • Institutional support by a dedicated body/commission		**<u>assessment process</u>** **Facilitators:** • Use of computer models to assess different options • Computer models clearly explained in SEA report • Hypotheses/assumptions clearly explained • Use of mix of qualitative and quantitative assessment. • Use of baseline and impact maps for quantitative assessment **<u>Policy consistency:</u>** **Barriers:** Lack of inter-sectoral coordination: i.e. health sector actors not involved in decision-making of sectors that have an impact on health determinants **Facilitators:** • Use of SEA as an integrative instrument aiming to achieve

				consistency of aims, objectives and proposed action of different tiers and sectors • Coordination with other assessment tools if used to ensure greater consistency • Consistency between methods used to assess impact and base line data used at all the various levels of planning (e.g. DPDs scoping reports SEA and core strategy preferred options should both use maps to assess health impacts) **<u>13. Policy effectiveness</u>** **Barriers:** • Legalistic planning tradition that limits the factors for assessment • Lack of monitoring system for effective implementation of the

				measures and recommendations brought forward in health inclusive SEA **Facilitators:** • Discretionary planning • Distinction between assessment aspects that are likely to be of significance for anticipated options and impacts and those that are not.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: France, C. (2004) *Health contribution to local government planning*. Environmental Impact Assessment Review 24 (2004) 189-198.	**<u>2. Defining role of spatial planning on health:</u>** **Facilitators:** • Understand that Structure plan can have impacts on	**<u>4. Partnership working/inclusiveness:</u>** **Facilitators:** • DoH 2003 document (tackling Health inequalities programme for action – recognises that there is need for cross	**<u>9. Resources of LPA: (can apply to other key partners)</u>** **Facilitators:** • PCT in order to collaborate with LPA must dedicate time and resources	**<u>11. Stage of integration of appraisal into plan/project decision-making:</u>** **Facilitators:** • Structure plan is an important strategic land use document which

Plan/project details: Review of adopted Cambridgeshire Structure Plan 1991-2006 and input to emerging revised structure plan **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** No information on evidence sources outside documentary evidence	public health and health services, heath care planning • SP can offer opportunities for public health benefits (i.e. offer both primary and secondary health service facilities) but can also have negative impacts • I.e. land use can be appraised against health objectives	organisational links on programmes dealing with housing, education, employment and transport • Pressures on health care system can actually put pressure on PCT to work closely with planners in LPA. **5. Trust:** **Barriers:** Different terminologies of health stakeholders and planners as well as different priorities. **Facilitators:** • HI review of structure plan can Allow better relationship between health stakeholders and land use planners as health review carried out at early stage of structure plan review. **7. Resources:** **Facilitators:** • HI review can offer a toolkit	to researching specific developments to discover the size, demography and particular healthcare needs of emerging communities.	should be influenced by a need to plan appropriate statutory health services as well as tackle health inequalities and the wider determinants of health • Health authorities and consultants carrying out the HIA read the draft structure plan to allow input at early stage as documents and policies emerge. Emerging policies evaluated using a matrix of 13 objectives to ensure that benefits to health of structure plan are maximised and impacts minimised. **12. Comprehensiveness, quality/fairness, and consistency of the policy process** **Policy comprehensiveness**

		for PCT and LSP to use to influence the development of local plans • Changes introduced by government are positive, i.e. introduce PCT and joint working between PCT and local government		**Barriers:** **Facilitators:** • Acheson report (DoH, 1998) recommended that HIA on all policies to have a direct or indirect impact on health should be evaluated in terms of their impact on health inequalities. • Process of HI review of structure plan gave opportunity to address inequalities in health through policies supporting regeneration in some deprived wads, urban renaissance and affordable housing. **<u>Policy consistency:</u>** **Facilitators:** • If HI review at strategic level in structure plan, then it sets the foundations for the emerging local plans.

				PCT have a framework for which they could work with partner organisations to ensure each policy is appraised against health impacts. **<u>13. Policy effectiveness</u>** **Facilitators:** • Ensure that public health and health service objectives are fully integrated into the review of the structure plan

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Glasgow Centre for Population Health (2007) *Piloting HIA as a Method of Integrating Health into Planning: a Case Study of*	**<u>1. Definition of health:</u>** **Facilitators:** • Broad definition of	**<u>4. Partnership working/inclusiveness:</u>** **Facilitators:** • Literature (Barton and Tsourou, 2003) recommends collaborative approach to planning between agencies or departments responsible for transport, energy,	**<u>9. Resources of LPA: (can apply to other key partners)</u>** **Facilitators:**	

the Draft East End Local Development Strategy. Glasgow Centre for Population Health, June 2007 **Plan/project details:** Glasgow City Council's draft east end local development strategy **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Only description of the case study, no methodological statement.	health using the social model of health (1946 constitution of the WHO).	water, health and other important facilities, services or amenities to create healthy sustainable environment. • CABE recommends that people need to collaborate and cooperate to create sustainable neighbourhoods **5. Trust:** **Facilitators:** • Planners participated in the HIA process allowed a fuller understanding of the thinking behind suggestions made by stakeholders than reading a technical report would have allowed. • HIA provided common language for communication between stakeholders and operated as an innovative form of consultation. • New methods of engagement used such as "scrapbook" where people took photographs and documented different daily journeys they made through their neighbourhoods.	• Make linkages between planning and corporate policy interested in developing work on HIA	

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**

Study details: Gow, A., Dubois, L. (?) *Bungendore health impact assessment: urban development in a rural setting.* NSW Public Health Bulletin Vol. 18 (9-10) **Plan/project details:** two potential residential developments **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** descriptive		**4. Partnership working/inclusiveness:** **Barriers:** **Facilitators:** • Greater Southern Area Health service + various local government areas		13. **Policy effectiveness** **Barriers:** **Facilitators:** • Teamwork approach reinforced the value of cross-discipline planning and brought new knowledge, tools and skills to both organisations

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Greig, S., Parry, N.,	**1. Definition of health:**	**4. Partnership working/inclusiveness:**	**10. Institutional commitment of**	**11. Stage of integration of appraisal into plan/project**

Rimmington, B. (2004) *Promoting sustainable regeneration: learning from a case study in participatory HIA.* Environmental Impact Assessment Review 24 (2004) 255-267 **Plan/project details:** Planning study to inform consultation process on the M1 corridor strategic economic zone **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:**	**Barriers:** ○ If HIA is submitted within IIA, teh broader soical model of health can become lost (Bailey 2003)??? ○ HIA can provide a clear focus, in terms of content, on reducing social inequalities and in terms of process on facilitating the participation of local communities in decision-making which affect their quality of life **Facilitators:**	**Barriers:** **Facilitators:** ○ Effective partnership working across statutory voluntary and community sectors requires the building of trust and respect and will only work if it delivers benefits for all partners ○ Introducing of LSP brings more joined up approaches to urban regeneration: ○ Collaborative impact assessment across policy areas called by guidance for LSPs, i.e.e closing the gap between affluent and deprived areas, + engagement with community (NRU 2002) **5. Trust:** **Barriers:** **Facilitators:** ○ Effective communication which present HIA process and evidence in an	**different actors** **Barriers:** **Facilitators:** • DoH 1999 encouraged health and local authorities to act as health champion using HIA to put health on non health fields of policy. • DETR 2000 new power of wellbeing to local authorities also opportunities to develop multi-sectoral approaches to HIA	**decision-making:** **Barriers:** **Facilitators:** • Prospective assessments can inform and influence decisions before policies are implemented (scott Samuel 1998 and NHS executive 2000) **12. Comprehensiveness, quality/fairness and consistency of policy process** **Policy comprehensiveness** **Barriers:** **Facilitators:** • Acheson report (1998) states that all policies likely to have a direct or indirect effect on health should be evaluated in terms of their impact on health inequalities **13. Policy effectiveness** **Barriers:** **Facilitators:** • Hybrid nature of HIA

	2. Defining role of spatial planning on health: **Barriers:** Land use can impact on health inequalities	accessible and convincing way to both decision-makers an local communitites **7. Resources:** **Barriers:** **Facilitators:** • HIA can help inform economic development and also be used as a tool to increase participation of local communities in strategic development decisions. • HIA can make a difference if dedicated resources can sustain effective community participation • Community participation in HIA process means that local contextual knowledge (Haraway, 1988) brought by communities illuminates the web of causality and interaction by which the policy and health impacts operate (Bryant 2002		methodology, combines expert and lay perspectives, qualitative and quantitative evidence reflects roots in EIA and healthy public policy, so can integrate with different policy areas such as regeneration, CAP. • Policy effectiveness require according to HIA frameworks developed: ○ Focus on reducing inequalities ○ Active participation of those most affected ○ Prospective assessments • Multi-disciplinarity of evidence base • Value local contextual knowledge and expertise (qualitative evidence can illuminate the

		argues that healthy public policy depends on critical knowledge which can only be produced by experts and citizens working together). • Mittelmark 2001: emphasises the value of HIA done by and for local people: highly technical/expert approaches to HIA can be self defeating.		chains/webs of causality through which the policy and health impacts operate.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Hay, L., Kitcher, C. (2004) *An analysis of the benefits of a cross-sectoral approach to a prospective health impact assessment of a container port development.*	**<u>Definition of health</u>** **Facilitators:** • Joint assessment allowed the assessment of impacts that may not have been otherwise	**<u>Partnership working/inclusiveness:</u>** **Facilitators:** • Close joint working from an early stage led to reinforcement by planners of their role in the health related impacts of the development.	**<u>Resources of LPA: (can apply to other key partners)</u>** **Facilitators:** • By pooling resources (both financial and staff) a broad consultation exercise with both local health	

Environmental Impact Assessment Review. 24; 199-206. **Plan/project details:** Proposed construction of container port. **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.	considered in detail, such as the impact on deprivation levels and health inequalities of creating new jobs and general economic development of the area. **<u>Understanding the role of health assessment of spatial planning programmes and projects</u>** **Facilitators:** • Close joint working from an early stage led to reinforcement by planners of their role in the health related	• Joint approach by both organisations added credibility to the assessment. The medical input from public health doctors at the PCT was felt to be particularly useful by the Environmental Services Department during discussions with developers on the potential health impacts of the development. The Environmental Services felt that the reinforcement of suggestions by medical staff carried a great deal more weight in some meetings than the recommendations of the Environmental Services Department alone. • Joint assessment allowed the assessment of impacts that may not have been otherwise considered in detail, such as the impact on deprivation levels and health inequalities of creating new jobs and general economic development of the area.	professionals and residents was possible. **<u>Institutional commitment of different actors:</u>** **Barriers:** • Sharing the leadership of such a large assessment required juggling of the workload and priorities of two organisations, rather than just one. This lead to delays in the progress of the work. **Facilitators:** • By co-leading the assessment, there has been a greater sense of ownership of the issues involved than would perhaps otherwise have been achieved	

	impacts of the development.		by the more usual forms of 'joint working'.	

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Jobin, William. (2003) *Health and equity impacts of a large oil project in Africa*. Bulletin of the World Health Organisation 81; [6]; 420-426 **Plan/project details:** Large oil extraction and pipeline. 300 deep wells in southern Chad. **Method of appraisal:**		**<u>Policy drivers (between different actors):</u>** **Barriers:** • Decisions were based largely on cost and profit considerations, giving only passing attention to environmental and social aspects, and little or no decision-making power to the affected populations.		

Environmental, Health and Social Assessment. **Critical appraisal/comments on the quality and robustness of methodology:**				

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Kemm, J., Parry, J., Palmer, S. Eds. (2004). *Health Impact Assessment*. Oxford University Press: Oxford Aziz et al. The Finningley Airport HIA: a case study	**<u>Definition of health</u>** **Facilitators:** • Use of WHO definition of health. To ensure that all matters related to well-being would be considered.			**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Facilitators:** • The HIA was itself part of the planning process. • Through the S106 planning agreement, the Airport Health Impact Group (AHIG)

Plan/project details: Plan to develop former RAF base into a large commercial aiport in East Midlands, UK **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.	This would also facilitate the consideration of non-statutory WHO guidelines, some of which are more stringent than statutory limits.			would be operational throughout the lifetime of the airport; a unique opportunity to improve and protect health.

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Kjellstrom, T., Van Kerkhoff, L., Bammer,G. & McMichael, T. (2003). *Comparative assessment of transport risks- how it can contribute to health impact assessment of transport policies*. Bulletin of the World Health Organisation 81; [6]. **Plan/project details:** Series of HIAs and Comparative Risk Assessments (CRAs) including Australian motorway scheme.		**<u>Partnership working/inclusiveness:</u>** **Barriers:** **Facilitators:** • Meaningful application of stakeholder involvement in policy and planning processes. • HIA provides a structure that encourages stakeholder participation.	**<u>Resources of LPA: (can apply to other key partners)</u>** **Barriers:** • The scientific and consultative resources needed to use CRA to contribute to HIA should not be underestimated.	**<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Barriers:** **Facilitators:** • Meaninful application of complex scientific data in decision-making.

Method of appraisal: HIA and CRA in conjunction with EIA. **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.				

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Kørnøv, L. (2009) *Strategic Environmental Assessment as a catalyst of healthier spatial planning: The Danish guidance and practice.*	**1. Definition of health:** **Barriers:** • European legislation on EIA legislation does not explicitly require human health to be assessed • Internationally studies show that health is not sufficiently assessed and documented in	**4. Partnership working/inclusiveness:** **Barriers:** • Planners/architects in Denmark not familiar with the determinants of health		**12. Comprehensiveness/quality/fairness and consistency of the policy process** **Policy comprehensiveness** **Barriers:** **Facilitators:** • EU political agenda

Environmental Impact Assessment Review 29, 60–65. **Plan/project details:** Synthesis of 100 environmental reports for SEAs **Method of appraisal:** SEA **Critical appraisal/comments on the quality and robustness of methodology:** Documentary evidence based on systematic analysis of 100 cases Interesting discussion on institutional barriers	EIA practice (Noble and Bronson 2006, Steinemann 2000, Davies and Sadler, 1997) **Facilitators:** • SEA directive includes health as part of the concept of environment and is a strong incitement for inclusion of health impact considerations in planning (et al 1998) • Developing HIA would be a solution to lack of health considerations in assessment but in EU, HIA is only recommended • WHO constitution 1946 defines health as physical, mental and social well-being. • Health is interpreted in a broad sense in the Danish SEA practice **2. Defining role of spatial planning on health:** **Barriers:** **Facilitators:** • Human health is one of the core elements in planning (Corburn	• Health professionals rarely consider SP and not have heard of SEA. • Criticisms from literature on traditional government structure not able to promote inter-sectoral and organisational integration: Harris and Hooper 2004, cowell and Martin 2003, Kidd 2007) • Also study of institutional barriers to assessment of human health in EIA (ie health and environmental profs not working together...): Hilding-Rydevik et al 2007. Corburn		promotes the integration of health into planning (WHO 1997; CEC 2004, EC 1994) and supports it by legal requirements (SEA directive + protocol on SEA – UNECE 2003) + provides guidance (WHO 1988, Barton and Tsourou 2000, UNECE 2007, Aicher 1998 • SEA directive and protocol on SEA deal specifically with human health as component of assessment , but differences between the 2: protocol accents health issues and require consultation with health authoritites which requires capacity building for the SP or environmental authorities (Stoegleehner and Wegerer 2006) **Quality/fairness of assessment process** **Barriers:** **Facilitators:** • Use of precautionary

	2007, Rosen, 1993, Duffy 1990) • Today major challenge of SP and urban governance is to secure human health (see healthy cities movement, and WHO, which link public health and urban governance – WHO regional office for Europe 2007) • Land use and transport strategies affect air quality and noise, industrial waste can affect health through land / water contamination; housing strategies affect access to adequate housing, use of building material influence physical activities, mobility planning affects choice of different modes of transport and access for people with impairment. **3. Understanding the role of health assessment of spatial planning programmes and projects:** **Facilitators:** • Precautionary principle applies to SEA.	looked at professionalism/specialised bureaucracies and connections between planning and public health (Corburn 2007)		principle coupled with social justice frame could guide planning decision making to ensure that there is connections between planning and health (Corburn 2007) **Policy effectiveness** **Barriers:** • Presentation lacking: ie environmental reports rarely present the assessment of human health + often no independent heading **Facilitators:** • Danish SEA guidance recommends that organisation of the SEA work must be cross disciplinary to secure assessment of parameters within the broad environmental concept. • SEA practice fom the report shows that health is included in planning and assessment practice

	• Analysis of the 100 cases: health aspects more covered in municipal plans than at local level assessment (ie municipal covers broader geographical areas and more themes) • Most common health aspects covered are noise, drinking water, air pollution, recreational/outdoor life and traffic safety, i.e. narrower concept of health than WHO • Both negative and positive impacts on human health are covered • 80% of reports offer qualitative assessment on human health (but to modulate)			• There is a link between length of environmental report and number of aspects of health covered • Both negative and positive impacts on health covered • 80% reports are qualitative • Lack of assessment on the distribution of health impact either at geographical/group level • Primary determinant of health is transport

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Kosa, 2007 **Plan/project details:** Assessed the implications of two options for the Roma community – eviction or new housing project. **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.		**Partnership working/inclusiveness:** **Facilitators:** • By including the full range of support organisations (statutory and non-statutory) in the HIA, it was possible to incorporate a wealth of information that facilitated specification of the features of the two scenarios and the likely consequences of each of them.		**Stage of integration of appraisal into plan/project decision-making:** **Facilitators:** • Importance of mandating HIAs before policy decisions are taken. **Comprehensiveness Quality/fairness and consistency of policy process** **Facilitators:** • There is a need to make HIA a statutory requirement, as is the case with environmental impact assessments, and at the same time provide the available resources needed to make it a reality.

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Kwiatkowski, R., Ooi, M. (2003). *Integrated environmental impact assessment: a Canadian example*. Bulletin of the World Health Organisation, 81; [6]; 434-438 **Plan/project details:** 1994 proposal to develop Canada's first diamond mine. **Method of appraisal:** Integrated impact		**Partnership working/inclusiveness:** **Facilitators:** • How individuals, families and communities are affected by development, and the social consequences of that development, provide critical information for health professionals.		**Comprehensiveness Quality/fairness and consistency of policy process** **Facilitators:** • Integration of health, social and environmental considerations into a holistic impact assessment of projects, programmes and policies would facilitate decision-making in an integrated manner fully consisent with the recommendations made in Agenda 21.

assessment within EIA. **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions. Lack of critical discussion and very positive.				

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Lester, C., Temple, M. (2006). *Health Impact Assessment & community involvement in land remediation decisions*. Public Health 120; 915-922. **Plan/project details:** Options appraisal for		**<u>Partnership working/inclusiveness:</u>** **Facilitators:** • Collaborative HIA ensured that local knowledge and experience contributed to the decision-making process.		

site of spoil left after closure of smokeless fuel factory (minimal action or remediation) **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.				

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Mathias, K., Harris-Roxas, B. (2009) *Process and impact evaluation of the*		**4. Partnership working/inclusiveness:** **Barriers:** **Facilitators:**	**9. Resources of LPA: (can apply to other key partners)** **Barriers:**	**11. Stage of integration of appraisal into plan/project decision-making:** **Barriers:** **Facilitators:**

Greater Christchurch Urban Development Strategy health Impact Assessment. BMC Public Health 2009, 9;97 **Plan/project details:** Greater Christchurch urban development HIA **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:**		• Health and local authority organisations to work together **5. Trust:** **Barriers:** **Facilitators:** • Through learning new vocabulary and language, eg local government talks about social development and equity while health people talk about health outcomes and health inequalities **6. Policy drivers (between different actors):** **Barriers:** **Facilitators:** **7. Resources:** **Barriers:** • Lack of clarity about which organisation should have overall	• Lack of new resources, human and financial, which could have helps determine more determinants of health **Facilitators:** • Commitment of resources, but using existing employees and budget lines • Creation of a new public health physician post within local government • Serendipitous factors as a local government manager had been trained in health as well as experience in health sector management • Statutory obligation of the local government act 2002 to promote social, cultural, economic, and environmental well	• Policy impact on Health determinants could be considered routinely if public organisations would engage with strategic partners before writing plans (long term and annual) • Leaders of key partners could share information on strategic vision and planning, cross sectoral secondment **12. Comprehensiveness/quality/fairness and consistency of the policy processPolicy consistency:** **Barriers:** • Limited use of HIA at central government level **13. Policy effectiveness** **Barriers:** • Problem to attribute changes in plan to HIA • HIA recommendations can be directly translated into policy approaches but not necessarily into action tables • Plans limited by the regulatory mechanisms within the NZ's resource management act 1991

		responsibility for determinants of health as they are cross-sectoral yet transport, local government and building acts have got public health objectives • Limited resources in time and human resources **Facilitators:** • Workshops involving stakeholders and communities • Key partners to commit resources **<u>8. Political dimension:</u>** **Barriers:** • Recommendation in HIA re cross sectoral working not included in plan, perhaps as local government felt it would lose control or time and energy would be too great,	being	which limits the influence of local government policy • Using a participatory HIA approach can increase time required for policy formation limiting potential responsiveness and agility for policy development processes in areas such as water runoff... **Facilitators:** • Aims of the HIA: Provide evidence about the inks between urban development and health for decision-making; assess health impacts and make recommendations, strengthen cross sectoral partnership and ensure participation of communities, involve maori in all levels of HIA process, build capacity and knowledge of HIA in Christchurch and NZ. • Electronic network resulted from building relationship • Leadership of the project • Creation of post of health physician jointly funded by health and local authority • Cross sectoral relationships (see Hay 2004): opening up contacts,

		regulatory restriction on cross-sectoral work, different sectoral or institutional reporting constraints and time lines • **Facilitators:** • Treaty of Waitangi as background for involvement of maori • Endorsement of the process by key maori community leaders • Concerns of peak oil and rising petrol prices in 2005 linked to active transport recommendations		shared expertise, opportunities to address broader health determinants , pooled resources, increased credibility with policy makers, link between research and decision making 9(Elliot 2005; Bekker, 2005) • Thorough documentation and dissemination of HIA • Involvement of decision makers in conduct and planning of HIA • Clear organisational commitment to HIA • Subject of HIA not being controversial • Tailored presentation of report and recoomendations to reflect organisational concerns • Provision of realistic recommendations • Include HIA within same time cycle as plan

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Mindell, J., Sheridan, L., Joffe, M., Samson-Barry, H., Atkinson, S. (2004) *Health impact assessment as an agent of policy change: improving the health impacts of the mayor of London's draft transport strategy.* Journal of Epidemiol Community Health 2004; 58: 169-174 **Plan/project details:** Draft transport strategy **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:**	**2. Defining role of spatial planning on health:** **Barriers:** • World of transport planning and health promotion seldom overlap **Facilitators:** • Transport affects health in several ways and therefore transport policy initiatives could be regarded as a means to improving health (ie policies that benefit deprived communities, focus on active travel, reducing	**4. Partnership working/inclusiveness:** **Barriers:** • Unease amongst stakeholders to be involved in workshops (lack of knowledge) **Facilitators:** • Stakeholder involvement in HIA: transport groups, statutory agencies, private sector, voluntary organisation (vulnerable groups). • Stakeholders represented the sex and ethnic make up of London population despite no individual Londoners were invited. **5. Trust:** **Barriers:** **Facilitators:** • Positive and constructive suggestions to further enhance health gains and		**11. Stage of integration of appraisal into plan/project decision-making:** **Barriers:** **Facilitators:** Early stage to have an impact on policy measures but also monitoring outcome is important **13. Policy effectiveness** **Barriers:** **Facilitators:** • Purpose of HIA is to increase health benefits and reduce inequalities • Attribute changes to transport strategy to HIA process • Outcome evaluation built into process, for instance GLA monitoring its own performance through

Report on HIA process by those who run the process, workshops...	reliance on private cars and re-allocating road space)	mitigate problems		indicators it has developed and consulted on. Also London Health commission has proposed health related indicators, others are on the wider determinants of health

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Mwalyosi, R. and Hughes, R. (1998). *The performance of EIA in Tanzania: an assessment.* IRA research paper. 41 **Plan/project details:**	**<u>Definition of health</u>** **Facilitators:** Use internationally accepted standards such as WHO health guidelines for air and water quality.			**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Barriers:** EIA often conducted too late in the planning stage.

Building of Moshi pesticide plant producing 3000 tonnes of fungicide. **Method of appraisal:** EIA **Critical appraisal/comments on the quality and robustness of methodology:** Outcomes of interviews with stakeholder interviews and review of EIA statements.				

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Neville, L., Furber, S., Thackway, S., Gray, E., Mayne, D. (2005) *A health impact assessment of an*		**4. Partnership working/inclusiveness:** **Barriers:** • Issue to consider is whether developers should be involved in	**9. Resources of LPA: (can apply to other key partners)** **Barriers:** **Facilitators:**	**12. Comprehensiveness/quality/fairness and consistency of the policy process** **Quality/fairness of assessment**

environmental management plan: the impacts on physical activity and social cohesion. Health Promotion Journal of Australia 2005: 16 (3) **Plan/project details:** Shellharbour foreshore management plan with some land issues **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Description of IA process by those carrying it		HIA or should HIA be independent from those who developed the proposal/policy?(Douglas et al 2001, achieving better health through HIA) **Facilitators:** **5. Trust:** **Barriers:** **Facilitators:** • HIA partnership helped greater understanding between health and local government partners, their values, priorities, culture and language (Douglas et al 2001 and France, 2004) **6. Policy drivers (between different actors):** **Barriers:** • Stakeholders have different values and	• Range of qualitative, quantitative research skills • Programme management • Advocacy skills • Ability to engage stakeholders and work intersectorally **10. Institutional commitment of different actors** **Barriers:** **Facilitators:** • Commitment from senior management levels to the process is important both from local government and health	**process** **Barriers:** • In case study it was challenging to synthesise and prioritise the evidence • In addition, lack of guidance in the literature on weighing or prioritising of different sources of evidence to assist decision making • But typology of evidence, tool used inc ase study enabled different types of evidence to be matched with questions on use, effectiveness, salience, safety, acceptability, cost effectiveness , appropriateness and satisfaction (Petticrew et al 2003 evidence, hierarchies and typologies) • Evidence also weighed not only for its robustness but its local relevance (Douglas et al 2001, developing principles for HIA) **Facilitators:** • Transparency regarding the evidence, in the weighing of different evidence, criteria to weigh evidence, who is involved and how decisions are made (See Mindell et

		priorities and subjectivity can influence decision making • Priorities in terms of health itself can be different, for instance physical activity not directly linked to the core business of local government, which makes partnership challenging **Facilitators:** • HIA useful tool to identifying potential impacts of a local government environmental management plan on physical activities and social cohesion • Such impacts also of interest to health authorities **<u>7. Resources:</u>** **Barriers:**	sector	al 2004 enhancing the evidence base for HIA) **<u>13. Policy effectiveness</u>** **Barriers:** • Complexity of drawing together multiple sources of evidence • Extensive range of skills and resources required to undertake HIA **Facilitators:** • 5 stages of HIA: screening, scoping, identification and assessment of potential health impacts, negotiation and decision-making, monitoring and evaluation • Screening stage: carried out by local government and health sector to check that HIA would proceed. • Scoping: identification of stakeholders and health outcomes for consideration • Identification and assessment of potential health impacts: including community profile, literature review, policy review, recreational env. Audit, key informant interviews

		• In that case, need to explore potential health impacts in sufficient depth and in time available meant to focus only on 1 or 2 health outcomes + number of informants interviewed also influence by this. **Facilitators:** • HIA evaluation recognised the importance of having decision-makers on the steering committee and decision makers involved at all stages of the HIA. HIA more likely will influence decision making of so. (Kemm, 2003) • 5 stages of HIA allow the partnership to build common vision and objectives, critical factor for successful collaboration		• Negotiation and decision making: • Monitoring and evaluation • Rep. From council reported that HIA process and final HIA report had assisted in the short and long terms planning and implementation phases of the SFM plan. • Potential to use the recommendations of the final HIA report to attract funding for particular initiatives was recognised • Step wise approach recognised as important

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
Study details: Ng, K., Obbard, J. (2005) *Strategic environmental assessment in Hong Kong.* Environmental International 31 (2005) 483-492 **Plan/project details:** 2 strategic planning case studies in Hong Kong territorial development strategic review and third comprehensive transport study **Method of appraisal:** SEA **Critical appraisal/comments on the quality and robustness of methodology:** Documentary analysis but methodology not described				**11.Stage of integration of appraisal into plan/project decision-making:** **Barriers:** SEA conducted once development options had been formulated and sanctioned, so SEA process compromised in its ability to achieve sustainable development. **Facilitators:**

Study details Plan/project details	Knowledge and conceptual understanding	Partnership	Management and resources	Policy Process
	Definition of			**Comprehensiveness**

Study details: Noble, B. F. and Bronson, J. E. (2005). *Integrating human health into EIA – Case studies of Canada's northern mining resource sector.* Artic 58; [4]; 395-405 **Plan/project details:** 3 mining projects in Canada – northern Saskatchewan. **Method of appraisal:** EIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.	**<u>health</u>** **Barriers:** • Attention has traditionally focussed on the direct impacts of project development on human health, particularly physical health, due to environmental change caused by project actions. **Facilitators:** • If the assessment reflects the WHO definition of health, which includes not only disease-related effects, but all impacts			**<u>Quality/fairness and consistency of policy process</u>** **Facilitators:** • Having a MOU that requires the proponent to follow specific guidelines when preparing its impact statement (including those relating to quality of life and health). **<u>Policy effectiveness:</u>** **Barriers:** • The complexity of the relationships between environmental change and health often make it difficult to construct models that successfully quantify and predict, with any degree of accuracy, the impacts of a project on human health. • Little evidence to

	that might affect the well-being of populations. • "Environment" should be defined broadly to include social and human dimensions, and care must be taken to give adequate attention to the social realm. • Adopting a more inclusive definition of health, to include physicalm social and other cultural dimensions. **<u>Understanding the role of health assessment of spatial planning programmes and projects:</u>**			suggest that health concerns, particularly issues associated with social health and quality of life, carry over to the post-decision monitoring stages of the EIA. In those cases where social health issues are monitored, they rarely seem to be monitored well. The monitoring of health and social impacts does not appear to be treated with the same scientific rigor as the monitoring of biophysical impacts. **Facilitators:** • Monitoring health determinants and actual health outcomes to ensure that those management and mitigation programs are meeting their intended objectives.

	Facilitators: • Give attention to the determinants of health and to the desired health outcomes, rather than the most likely ones.			

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Planning Advisory Service (2008). *Equality and diversity: improving planning outcomes for the whole of the community*. IDeA, September 2008 **Plan/project details:** Draft Whitechapel masterplan 2006	**<u>2. Defining role of spatial planning on health:</u>** **Barriers:** **Facilitators:** • Recent shift from traditional land use planning to broader approach recognising key	**<u>4. Partnership working/inclusiveness:</u>** **Barriers:** **Facilitators:** • Community participation required as key performance area within the ESLG and at level 2 of the Standard. • Planning and compulsory purchase act 2004 requires statement of community	**<u>9. Resources of LPA: (can apply to other key partners)</u>** **Barriers:** **Facilitators:** • Equality impact assessment tool for LPA to assess impact of their policies on communities in terms of removing	**<u>11. Stage of integration of appraisal into plan/project decision-making:</u>** **Barriers:** **Facilitators:** • Equality standards for Local Government (replaced by Equality framework for local government) gives planners the tool to

Method of appraisal: Equality impact assessment to inform sustainability appraisal **Critical appraisal/comments on the quality and robustness of methodology:** Advocacy document and use of examples for good practice	role of SP in promoting sustainable and cohesive communities • Since 2006 design and access statements are required as part of application submission material for all except very small developments: how developments can create accessible, safe environments, addressing crime and disorder and fear or crime.	involvement from LPA • Partnership between planning departments and community safety partnerships and the police to design out crime • Involvement of third sector **7. Resources:** **Barriers:** **Facilitators:** • Innovative methods for community participation, eg intercultural listening and learning circle developed by London Borough of Lewisham can help uncover issues (lack of public seating, jamming spaces for young people, overcrowding, libraries, markets and high street traders).	barriers and promoting equality. • Understanding demographics of communities but also aspirations and needs • Assess equality of enforcement decisions as some groups (BME eg) might have lower take up of specialist advice when preparing applications, also lower rates of attendance at pre-application meetings leading to higher rate of refusals. • Devise appropriate involvement techniques for those at risk of exclusion from planning system	develop sustainable communities. **12. Comprehensiveness, quality/fairness and consistency of the policy process** **Policy comprehensiveness** **Barriers:** **Facilitators:** LTP's equality and diversity objectives and targets must be reflected in LDF/core strategy: links must be made between accessibility strategy and LDF vision outcome and included in LTP... **13. Policy effectiveness** **Barriers:** **Facilitators:** • LA must know their communities or equality mapping and developing evidence base • Develop base line of monitoring data

			• Develop skills of officers and members • Increase representation of BMEs in planning profession **<u>10. Institutional commitment of different actors</u>** **Barriers:** **Facilitators:** • Developing inclusive consultation, including hard to reach groups • Use influence to ensure private developers do the same trough setting conditions and procurement eg master plans and developers schmes must contain EqIA in addition or as part	• Mainstreaming equality and diversity, ie.not having a corporate equality scheme or action plan but incorporate equality into plan-making

			of SA (Tower Hamlets) • Provide supports for developers and relevant data at pre-application stage • Set equality objectives and targets • Actively monitor the impact of plans through data collection, engagement and feedback	

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Planning Advisory Service (2008). *Prevention is still better than cure: planning for healthy*	**<u>Definition of health</u>** **Barriers:** • The two organisations use the same	**<u>Partnership working/inclusiveness:</u>** **Barriers:** • In practice, these links often do not occur because	**<u>Institutional commitment of different actors:</u>** **Barriers:** • It is a massive change (for the	**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Barriers:** • Without strategic links

outcomes. IDeA **Plan/project details:** Various **Method of appraisal:** HIA, SA **Critical appraisal/comments on the quality and robustness of methodology:**	jargon to describe different things – even the term "health" in the council it can refer to a medical model of health whereas in the PCT they do see it as public health. • Generally planners are aware of health problems in the locality but they don't have the evidence to back this up. **Facilitators:** • Planners need to collaborate with health expertise to help address the wider determinants of	of differences in language, structure and priorities. **Facilitators:** • Brighton and Hove organised a masterclass series on health and planning for council officers as well as public health officials from the PCT.The council and PCT then matched public health officials with planners to undertake two days of in-depth training on HIA. • Producing a joint strategic needs assessment (JSNA). • An ongoing capacity building project called Making an Impact is currently funding a health impact assessment officer, based in forward planning in the LA, to work across the PCT, city council and the University of Liverpool. • Tower Hamlets PCT and the London Borough of Tower Hamlets have worked closely together to develop a shared evidence	PCT) to have a planner coming along and asking what health services you will need in 20 years when you are used to responding to immediate customer need. **Facilitators:** • The council's (Greenwich) healthy communities team has strong links with planning and is facilitating better integration between planning and other parts of the council. • The borough (Greenwich) has also adopted a supplementary planning document on planning obligations, which includes guideance on planning	between organisations and within documents, little actual progress will be possible. **Facilitators:** • It's more effective to work strategically to get health policies into the core strategy than going in at the sharp end. • If it (HIA) is done early enough it can influence every stage of the planning process if you set it out the right way. • The earlier links are developed, the more they will benefit all stages of the planning process. • Planners should work with health colleagues to help them respond to planning consultations so that their feedback can be incorporated more formally into amended

	health. **<u>Understanding the role of health assessment of spatial planning programmes and projects</u>** **Barriers:** • Issues of what planning can and can't deliver – ie. Difficult for a S106 to stipulate that a development should hold a carnival. **Facilitators:** • By working together...the big change is that health is not an afterthought among the	base and a strategic plan for the provision of health facilities. This joint approach has led to the authority now conducting all pre-application and section 106 negotiations on behalf of the PCT...planners have now secured almost £15m for health services infrastructure. • Planning a new community provides a more obvious opportunity to work strategically from the beginning. Planners for the proposed town of Sherford In South Hams in Devon have exploited this potential and included the PCT in both infrastructure planning and building health into the design of the physical environment. • Ideally, these relationships (between partners) should be built into formalised partnership arrangements, such as health improvement boardsm so that joint working doesn't rely on individual	contributions towards health facilities – a "Healthy Urban Planning Framework", for use by planners and developers to help promote and enhance public health within the planning process.	policies and plans. **<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Facilitators:** • The community infrastructure levy is designed to allow planners to better address the cumulative impact of small developments and ensure that infrastructure – including for health – is well planned across an area. • Local Development Frameworks (LDFs) which fail to adequately consider health will not be considered sound. • A completely separate (health) assessment can have inconsistencies – far

	planning team now...it is very well recognised. • The focus for HIA should be on obtaining results in a form that are "useable" by the developers so that the process adds value by highlighting the positive health impacts and proposing measures to address any negative health impacts of proposed designs.	relationships but is built into how organisations work together. • Explcitly linking community involvement to health provides a useful "hook" for planners to engage local people. **<u>Trust:</u>** **Facilitators:** • Level of trust developed between Tower Hamlets PCT and council planners means that the PCT now directs all developer enquiries to the council.		better to combine HIA with EIA. This is being done through the "human health" element of an EIA. • Other councils are experimenting with integrating the assessment of health benefits and costs into statutory processes such as environmental impact assessment (EIA) and sustainability appraisal (SA). • Developing a strategic plan has provided the trust (Tower Hamlets PCT) with a clear sense of direction which has strengthened the negotiating position of planners when they secure S106 deals. • Use joint processes such as the CAA, LAA and the JSNA as a basis to work together effectively.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Plant, P., Herriot, N. And Atkinson, S. Healthy planning in London, in Town and Country Planning February 2007, p. 50-51. **Plan/project details:** First draft further alterations to the London Plan **Method of appraisal:** IIA to input into SA/SEA **Critical appraisal/comments on the quality and robustness of**	**2. Defining role of spatial planning on health:** **Barriers:** ○ Developers are sceptical about the costs of moving towards healthier developments and whether house-buyers wd want to live in health-promoting environment (ie give up their cars) **Facilitators:** ○ Understand the SP impact on health and on health equality; housing	**4. Partnership working/inclusiveness:** **Barriers:** **Facilitators:** • Health sector professionals and planners can create partnership that increases the potential of plan-making to improve levels of health and reduce health inequalities, cross sector learning: ○ National legislation: statutory responsibility of LA to promote health of Londoners, promoting sustainability and equality. ○ Regional director of Public health is	**9. Resources of LPA: (can apply to other key partners)** **Barriers:** **Facilitators:** ○ Use and integration of the IA into SA/SEA **10. Institutional commitment of different actors** **Barriers:** **Facilitators:** • Willingness of the GLA London Plan team to work with the health sector to address its requirements in the field of urban development •	**11. Stage of integration of appraisal into plan/project decision-making:** **Barriers:** **Facilitators:** ○ IA has led to health considered at early stage of plan, IA brings iterative process that can influence plan as it develops. • Incorporating health indicators into the monitoring of the plan's implementation **12. Comprehensiveness, quality/fairness and consistency of the policy process** **Policy comprehensiveness**

methodology:	requirements, access to health services, green spaces, employment opportunities, safe areas for children **<u>3. Understanding the role of health assessment of spatial planning programmes and projects:</u>** **Barriers:** **Facilitators:** ○ IA leads to learning shared across the health and sustainability sectors, hence fuller understanding of areas of mutual interests. ○ Understanding	health advisor to the Mayor and GLA ○ Role of London Health commission (partnership between health, LA, voluntary, academia...) **<u>6. Policy drivers (between different actors)</u>:** **Barriers:** **Facilitators:** ○ If partnership built on a shared vision, then objectives/priorities will be shared too **<u>7. Resources:</u>** **Barriers:** **Facilitators:** ○ Healthy Urban Development Unit was set up staffed by town and country planning professionals funded by regional public health group, London, the 5 strategic health authorities		**Barriers:** **Facilitators:** • Including important policies on climate change, implications of which would have impact on health if there were no plans to mitigate or adapt to its consequences • Including transport policies reducing car use • Including policies to capture positive legacy of the 2012 Olympics • Including policies that promote plan areas, childcare and access to green space • **<u>Policy consistency:</u>** **Barriers:** **Facilitators:** • Use of impact assessment at borough plan level

	the interplay between population growth, urban development and how London plan can offer an open process to understand this and impact on health and health services	that covered London until 2006 and London Development agency ○ HUDU brokering partnership between PCT and LA's planning staff		**13. Policy effectiveness** **Barriers:** **Facilitators:** • Making health improvement and tackling health inequalities key objectives driving SP • Development of a tool: integrating health considerations into statutory SA/SEA by London health commission and London Sustainability development commission (includes partnership, public health evidence base, assessment of process impact and broad determinants of health key expert findings tested on stakeholders, report published) IA saves time and money as evidence gathering and consideration of

				impacts is common to traditional SA/SEA

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Stevenson, A., Banwell, K., Pink, R. (2007) G*reater Christchurch draft Urban Development Strategy 2005.* NSW Public Health Bulletin Vol. 18 (9-10). **Plan/project details:** Greater Christchurch development strategy 2005 **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** Description of HIA process by those carrying it	3. **Understanding the role of health assessment of spatial planning programmes and projects:** **Barriers:** • **Facilitators:** • HIA has transformed the understanding of the role of SP in promoting health and reducing health inequalities by changing the priorities of urban development	**4. Partnership working/inclusiveness:** **Barriers:** • Time constraints that limit the consideration of some determinants of health in seminars (housing and transport here) • Different language: "well being" of local government is the "health" of the health sector **Facilitators:** • Forum: urban development strategy forum allows participants to interact face to face and develop new language • Steering committee with reps from city council and public health formed to guide development of HIA • Screening and scoping seminar	**9. Resources of LPA: (can apply to other key partners)** **Barriers:** • When staff diverted to other more urgent issues (Legionnaires' disease) **Facilitators:** • Time, money, professional capacity **10. Institutional commitment of different actors** **Barriers:** **Facilitators:** • Commitment of city council to	13. **Policy effectiveness** **Barriers:** **Facilitators:** • Intersectoral • Multidisciplinarity of HIA process leading to common language • Employment of a health medicine registrar at city council to bring HIA perspective to council's policy making process

	strategy.	attended by different stakeholders from local government, health, private contractors, academics agreed determinants to be examined by HIA • Parallel work to engage with maori community • Series of 7 workshops to get informant's perspectives on various elements of health impacts. **<u>5. Trust:</u>** **Barriers:** **Facilitators:** • Different seminars from maori • Presentation of results/findings to community to ask for comments **<u>Policy drivers (between different actors)</u>:** **Barriers:** **Facilitators:** • HIA can facilitate change in priorities of the urban development strategy: from infrastructure planning (eg	incorporate HIA into its standard policy cycle	

		transport, localisation of developments in view of environmental health issues...) to more quality of life outcomes • HIA can highlight the significance of the statutory and collective responsibilities relating to health and social outcomes within the principal planning legislation • HIA outlines that urban strategy has a role to deliver on health and social outcomes by informing both local and central government about housing, importance of uran form in supporting walking and cycling and social connectedness and close gaps in health inequalities. **<u>Resources:</u>** **Barriers:** **Facilitators:** • Guidance for those carrying HIA at central or local level to ensure that health is considered in the development of public		

		policy (eg guide to HIA: a policy tool for NZ) • Subsidising training for staff across different organisations		

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Sutcliffe, J. (1995). *Environmental Impact Assessment a Healthy Outcome*. Project Appraisal 10; [2]; 113-124 **Plan/project details:** Brief review of 10 Environmental Impact Statements (EISs). **Method of appraisal:**	**<u>Definition of health</u>** **Barriers:** **Facilitators:** • Other types of 'environment' such as socio-economic, also influence public health and need to be considered.	**<u>Partnership working/inclusiveness:</u>** **Barriers:** • The omission of those who specialise in health is to the deteriment of the overall assessment.		**<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Facilitators:** • The full integration of the EIA legislation to ensure health impacts are taken into account would be one piece of the jigsaw.

Cross sectional study of EISs statements, reviewed to determine health effects considered, and omissions in the assessment of health. **Critical appraisal/comments on the quality and robustness of methodology:**				

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Taylor, N, McClintock, W., Buckenham, B. (2003). *Social Impacts of out-of-*				**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Facilitators:** • SIA should be applied

centre shopping centres on town centres: A New Zealand case study. Impact Assessment and Project Appraisal. 21; [2]; 147-153 **Plan/project details:** Out of town retail centre. **Method of appraisal:** SIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' own conclusions.				early and fully in the planning process, empowering communities and decision makers.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Utzinger, J, Wyss, K, Moto, D.D., Yemadji, N'D., Tanner, M., Singer, B.H. (2005*) Health impacts of the Chad-Cameroon petroleum development and pipeline project: challenges and a way forward*. Environmental Impact Assessment Review. 25; 63-93 **Plan/project details:** Oil extraction pipeline in sub-Saharan Africa. **Method of appraisal:**	**<u>Definition of health</u>** **Facilitators:** • The need to consider not only impacts on health per se, but also social wellbeing and equity should be highlighted. **<u>Understanding the role of health assessment of spatial planning programmes and projects:</u>** **Facilitators:** • For future development projects, attention to broader	**<u>Partnership working/inclusiveness:</u>** **Barriers:** • Public consultations have not looked into health-related issues of affected communities in sufficient depth.	**<u>Resources of LPA: (can apply to other key partners)</u>** **Facilitators:** • Local institutional capacity building in the health sciences is of pivotal importance to build up a core of assessors who can assist and carry out HIA. **<u>Institutional commitment of different actors:</u>** **Barriers:** • Environmental and social impact assessment of projects, programmes and policies are more advanced and have	**<u>Comprehensiveness Quality/fairness and consistency of policy process</u>** **Facilitators:** • The development of industry-wide HIA standards through IPIECA would represent an important step forward towards integrating health issues into the planning of future petroleum industry projects.

Environmental Assessment and accompanying Environmental Management Plans (EMP) **Critical appraisal/comments on the quality and robustness of methodology:** From authors' own conclusions.	determinants of health and cumulative EA should be integrated with project implementation.		stronger lobbies pushing for them than HIA.	

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details: Viinikainen, T., Kaehoe, T. (2007). *Social Impact Assessment in Finland, Bypass of the City of Hamina*. Routes Roads: 333;				**<u>Stage of integration of appraisal into plan/project decision-making:</u>** **Facilitators:** • SIA was well integrated into the planning

18-23. **Plan/project details:** Bypass to enable upgrade of existing european route to St Petersburg. **Method of appraisal:** SIA to accompany EIA **Critical appraisal/comments on the quality and robustness of methodology:** Authors' comments in conclusion section.				process and it gave irreplaceable local information to the planners at an early stage and during the whole planning process.

Study details Plan/project details	**Knowledge and conceptual understanding**	**Partnership**	**Management and resources**	**Policy Process**
Study details:		**5. Trust:**	**9. Resources of LPA:**	

Wismar, M., Blau, J., Ernst, K., Figeuras, J. eds. (2007). *The Effectiveness of Heath Impact Assessment, Scope & limitations of supporting decision-making in Europe.* WHO, on behalf of European Observatory on Health Systems & Policies (case study 5 A city council's air quality action plan: building capacity for HIA in Northern Ireland, Lavin, T. and Metcalfe, O.) **Plan/project details:** City council's air quality action plan **Method of appraisal:** HIA **Critical appraisal/comments on the quality and robustness of methodology:** 6		**Barriers:** **Facilitators:** • External consultant **<u>6. Policy drivers (between different actors)</u>:** **Barriers:** • Those involved only in either AQAP or HIA might have divergent views on whether the HIA can influence the AQAP. **Facilitators:** • Those involved in both HIA and AQAP view the HIA as beneficial • Role of external consultant is important to explain the HIA process and benefits **<u>7. Resources:</u>** **Barriers:** • Lack of specific skills/training in facilitation to run workshops to extract available knowledge from participants. **Facilitators:** • Provision of a community	**<u>(can apply to other key partners)</u>** **Barriers:** **Facilitators:** • With HIA being a new concept, it needs new skills and organisations which were main drivers for the HIA indicated that an underlying objective for their involvement was to develop expertise in the use of the HIA methodology (city council...) **<u>10. Institutional commitment of different actors</u>** **Barriers:** **Facilitators:**	**<u>12. Comprehensiveness, quality/fairness and consistency of the policy process</u>** **<u>Policy comprehensiveness</u>** **Barriers:** **Facilitators:** • DoH 2002 Investing for health strategy identifies HIA as a key tool to facilitate cross-sectoral action and a means of promoting health and reducing health inequalities **<u>Quality/fairness of assessment process</u>** **Barriers:** • In air quality policy, problem to assess the effectiveness of the HIA process in terms of outcome (ie AQ improvement beyond the AQAP itself) because AQ standards

interviews of individuals involved in the HIA		health profile which present relevant health stats can be an effective way to get people to consider health • All the stakeholders and communities involved can contribute different and innovative sets of data: eg schoolchildren expressed their views on AQ through a school art competition		are assessed in terms of annual means and it will take some time to establish clear trends. • Challenge is therefore to attribute effect to specific causes within the complexity of AQ standards **<u>13. Policy effectiveness</u>** **Barriers:** • Too voluminous HIA delivered to policy makers can be a problem, summary required **Facilitators:** • HIA can bring a health focus to the action plan and brings a greater understanding of the links between the wider determinants of health and air quality • HIA can raise awareness and profile of health even when an

				assessment of effectiveness is premature as the process has not reached its conclusion • Presence of an external consultant helped to guide the HIA process, explains how it differs from a simple consultation process • HIA can contribute to both the consultation element of the AQAP but if its technical and scientific significance also make is a separate document to the AQAP. • Timely delivery of HIA is necessary

APPENDIX F:

CASE STUDY ANALYSIS TABLES

Please find set out on the following pages by local authority in alphabetical order.

ANALYSIS OF GLASGOW CITY PLAN 2, ADOPTED 2009

Key

Key words* contained in principles, strategic development policies, delivering the vision.	
Policy containing key words*	CSxx: *xxxx*

Guiding principles/ strategic development policies/ delivering the vision & development policies	**Physical activity**	**Mental wellbeing**	**Environmental health issues**	**Unintentional injury**	**Equality**	**Other**
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability, fairness, inclusive, accessibility, equal**	***Key words: health, illness, climate change**
Guiding Principle Promoting Social Renewal and Equality of Opportunity						
Guiding Principle Delivering Sustainable Development						
Guiding Principle Improving the Health of the City and its Residents.						
STRATEGIC DEVELOPMENT POLICIES						
Strategic Development Policy 1 – Design & Sustainable development						
Strategic Development Policy 2 – Spatial priorities						

Strategic Development Policy 3 – Delivery						
DELIVERING THE VISION						
Delivering the Vision: People						
Delivering the Vision: Jobs						
Delivering the Vision: Environment						
Delivering the Vision: Infrastructure						
Delivering the Vision: Key regeneration areas						
Delivering the Vision: Rest of the City						
DEVELOPMENT POLICIES & DESIGN GUIDANCE						
Section 1 - Development Policy Principles	Dev 1 - Transport Infrastructure Dev 2 - Residential & Supporting Uses Dev 10 - Stadium	Dev 2 - Residential & Supporting Uses			Dev 2 - Residential & Supporting Uses	Dev 2 - Residential & Supporting Uses
Section 2 - Design	Des 1 - Development Design Principles Des 5 - Development & Design Guidance for The River Clyde & Forth & Clyde Canal	Des 1 - Development Design Principles Des 5 - Development & Design Guidance for The River Clyde & Forth & Clyde Canal	Des 1 - Development Design Principles Des 2 - Sustainable Design & Construction Des 4 - Protecting And	Des 5 - Development & Design Guidance for The River Clyde & Forth & Clyde Canal Corridors Des 6 - Public Realm &	Des 1 - Development Design Principles Des 5 - Development & Design Guidance for The River Clyde & Forth & Clyde Canal	Des 2 - Sustainable Design & Construction

	Corridors Des 6 - Public Realm & Lighting Des 7 - Developments Affecting City Centre Lanes, Wynds & Courtyards Des 11 - Tall Buildings	Corridors Des 6 - Public Realm & Lighting Des 7 - Developments Affecting City Centre Lanes, Wynds & Courtyards	Enhancing The City's Natural Environment Des 6 - Public Realm & Lighting	Lighting Des 7 - Developments Affecting City Centre Lanes, Wynds & Courtyards Des 8 - Signs & Advertising	Corridors Des 6 - Public Realm & Lighting	
Section 3 – Residential	Res 2 - Residential Layouts Res 3 - Residential Development in The City Centre Res 5 - Conversion & Subdivision To Residential Use Res 6 - Residential Development in Lanes And Gardens Res 7 - Car Free Housing Res 13 - Day Care Nurseries	Res 4 - Barrier Free Homes Res 11 - Commercial Uses in Residential Property Res 16 - Alterations to Dwellings And Gardens	Res 2 - Residential Layouts (Noise) Res 3 - Residential Development in The City Centre (Noise, Air Quality Res 6 - Residential Development in Lanes And Gardens (Noise, Air Quality Res 8 - Short-Stay Serviced Apartments (Noise Res 11 - Commercial Uses in Residential Property (Noise) Res 12 - Non Residential Development Within Residential Areas (Noise) Res 13 - Day Care Nurseries (Noise) Res 15 - Guest Houses (Noise)	Res 13 - Day Care Nurseries Res 16 - Alterations to Dwellings & Gardens	Res 4 - Barrier Free Homes Res 13 - Day Care Nurseries Res 14 - Care in The Community Developments	
Section 4 - Industrial & Business	Ib 4 - Office & Business Class Development		Ib 10 - Minerals, Land Fill & Land Raise (Noise, Water Quality, Pollution)	Ib 8 – Telecommunications	Ib 4 - Office & Business Class Development	
Section 5 - Retail &	Sc 3 - The Sequential	Sc 2 - Policy Objectives for	Sc 11 - Food, Drink And	Sc 11 - Food, Drink And	Sc 1 - The City's Network of	Sc 2 - Policy Objectives

Commercial Leisure	Approach for Retail & Commercial Leisure Developments (N.B. refers to additional requirements only) Sc 4 - Large Scale Retail or Commercial Leisure Development Sc 11 - Food, Drink & Entertainment Uses	Tier 1 & 2 Town Centres (Easterhouse) Sc 7 - Protection And Promotion of Local Shopping Centres And Local Shops Sc 8 - Sales Of Goods in Large Retail Stores Outwith Town Centres	Entertainment Uses (Noise, Odour) (Specifically Re Central Station Bridge - Noise)	Entertainment Uses	Centres Sc 2 - Policy Objectives for Tier 1 & 2 Town Centres Sc 3 - The Sequential Approach for Retail And Commercial Leisure Developments Sc 8 - Sales Of Goods in Large Retail Stores Outwith Town Centres Sc 10 - Non-Retail Uses in Tier 1, 2 And 3 Town Centres	for Tier 1 & 2 Town Centres (Re Health Centre Site At Parkhead Town Centre)
Section 6 - Transport & Parking	Trans 1 - Transport Route Reservations Trans 2 - Development Locational Requirements Trans 3 - Traffic Management & Traffic Calming Trans 4 - Vehicle Parking Standards Trans 5 - Providing For Pedestrians & Cycling in New Development Trans 6 - Cycle Parking Standards Trans 8 - Developer Contributions - Transport Infrastructure	Trans 10 - Provision of Taxi/Private Hire Vehicle Stances in Retail & Commercial Leisure Developments	Trans 9 - Air Quality	Trans 3 - Traffic Management & Traffic Calming	Trans 3 - Traffic Management & Traffic Calming Trans 5 - Providing For Pedestrians & Cycling in New Development Trans 6 - Cycle Parking Standards Trans 10 - Provision of Taxi/Private Hire Vehicle Stances in Retail & Commercial Leisure Developments	Trans 5 - Providing For Pedestrians & Cycling in New Development
Section 7 – Environment	Env 1 - Open Space Protection	Env 2 - Open Space & Public Realm Provision	Env 3 - Development in the Green Belt	Env 5 - Flood Prevention And Land Drainage	Env 2 - Open Space & Public Realm Provision	Env 1 - Open Space Protection

	Env 2 - Open Space & Public Realm Provision Env 3 - Development in the Green Belt Env 8 - Trees, Woodlands & Hedgerows Env 9 – Allotments Env 10 - Access Routes & Core Path Network	Env 6 – Biodiversity Env 7 - National, Regional & Local Environmental Designations Env 9 – Allotments Env 10 - Access Routes & Core Path Network	Env 4 - Sustainable Drainage Systems (Suds) Env 11 - Treatment Of Waste & Recycling Materials Env 12 - Development of Brownfield Land & Contaminated Sites Env 17 - Protecting the Water Environment		Env 3 - Development in the Green Belt Env 9 – Allotments Env 10 - Access Routes & Core Path Network	Env 2 - Open Space & Public Realm Provision Env 5 - Flood Prevention & Land Drainage Env 6 – Biodiversity Env 9 – Allotments Env 10 - Access Routes & Core Path Network Env 15 - Energy

ANALYSIS OF CITY & COUNTY OF SWANSEA UNITARY DEVELOPMENT PLAN, ADOPTED 2008

Key

Key words* contained in vision or objective	
Policy containing key words* but <u>not</u> linked to vision or objective	Policy CSxx: *xxxx*

Vision, Objective & strategic policy	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Vision						
Objectives						
1.a To upgrade the visual environment and image of the area						
1.b To promote locally distinct, innovative design, sensitive to the location and setting						
1.c To protect the countryside from development that would cause material harm, particularly where the undeveloped coastline or other areas of high landscape quality are concerned						
1.d To prevent coalescence of						

settlements and protect the interplay of town and country						
1.e To protect and enhance valued natural heritage and species						
1.f To protect and enhance a system of urban greenspace						
1.g To conserve and enhance the historic and cultural environment						
1.h To bring forward proposals for the remediation of dereliction and pollution						
1.i To avoid any developments in the vicinity of existing hazards						
1.j To avoid significant adverse environmental impacts from new development						
1k. To ensure the public realm and new development is accessible for all						
1.l To protect undeveloped and functional floodplains						
1.m To promote						

resource efficient buildings and layouts in all new development						
2.a To ensure the availability of a high quality and diverse portfolio of sites and premises to meet the needs of economic growth sectors						
2.b To develop Swansea as a major Waterfront City capitalising on the opportunities provided by SA1						
2.c To improve and revitalise existing industrial and commercial areas						
2.d To reinforce and improve the City Centre as a vibrant regional focus for business and administration, shopping, culture and leisure						
2.e To improve the range, choice and quality of shopping opportunities accessible for all sections of the community and visitors to the area						
2.f To resist further out of centre/town retail						

development						
2.g To provide sustainable employment opportunities for rural communities						
2.h To improve, expand and diversify tourism infrastructure						
2.i To develop sustainable tourism initiatives and improve the quality and range of the accommodation base						
2.j To improve the quality of caravan and camping sites and reduce their intrusiveness in the landscape						
3.a To retain wherever possible, improve and make effective use of the existing housing stock						
3.b To allocate sufficient and appropriate new housing land to meet projected housing needs over the plan period						
3.c To contribute to the revitalisation and						

regeneration of poor quality residential neighbourhoods						
3.d To direct new housing to economically developable sites close to supporting employment, retail, leisure, education and other community facilities						
3.e To ensure sites and premises are available to meet future community, education and health facility needs						
3.f To accommodate a wide choice and equitable distribution of accessible sport and community recreation developments						
3.g To promote commercial leisure development and cultural activities at identified and other appropriate locations						
3.h To extend and improve appropriate access to and enjoyment of the countryside and urban greenspace						
3.i To promote inclusive design in all new						

developments						
4.a To encourage the provision of state of the art utility and telecommunications infrastructure whilst minimising adverse effects on the environment, communities and health						
4.b To secure an acceptable balance between mineral production and protection of the environment						
4.c To safeguard and improve the quality and quantity of controlled waters						
4.d To ensure the availability of sites and premises for the treatment and recycling and, where necessary, disposal of waste						
4.e To support renewable energy projects which would make a positive environmental contribution						
4.f To promote high standards of restoration and beneficial after-use of mineral workings						

4.g To promote prudent use of minerals and the re-use and recycling of suitable materials						
5.a To support development at accessible and safe locations						
5.b To reduce the need to travel and reduce reliance on the private car						
5.c To improve safety and reduce the adverse environmental impacts of transport						
5.d To make the most efficient use of existing transport infrastructure						
5.e To ensure that Swansea's transportation system can support the City's continuing role as the regional centre for South West Wales						
5.f To promote improvements to the transportation system which will meet the existing and future access needs of businesses, residents and investors						

5.g To promote cycling and walking and the provision of high quality public transport						
STRATEGIC POLICY						
Policy SP1 Creating a quality environment Sustainable development will be pursued as an integral principle of the planning and development process. Development proposals designed to a high quality and standard, which enhance townscape, landscape, sense of place, and strengthen Swansea's waterfront identity, will be favoured.	Policy Ev1: Design Policy Ev2: Siting and Location	Policy Ev4: Public Realm	Policy Ev2: Siting and Location Policy Ev40: Air, Noise And Light Pollution	Policy Ev14: Advertisements Policy Ev15: Hoardings and Illuminated Display Panels Policy Ev39: Land Instability Policy Ev41: Hazardous Installations / Consultation Zones	Policy Env1: Design	Policy Ev38: Contaminated Land Policy Ev39: Land Instability Policy Ev40: Air, Noise and Light Pollution Policy Ev41: Hazardous Installations / Consultation Zones
Policy SP2 Creating a quality environment the countryside will be protected and conserved, with green wedges shaping the urban form and safeguarding the distinctive interplay of town and country. Village character will be protected.	Policy Ev16: Small Villages Policy Ev21: Rural Development Policy Ev22: Countryside General Policy Policy Ev23: Green Wedges Policy Ev29: Common Land Policy Ev30:	Policy Ev21: Rural Development	Policy Ev34: Protection of Controlled Waters Policy Ev38: Contaminated Land	Policy Ev16: Small Villages	Policy Ev17: Large Villages Policy Ev18: Local Needs Affordable Housing Policy Ev23: Green Wedges	

	Trees, Woodland and Hedgerow Protection Policy Ev31: Protection of the Undeveloped Coastline Policy Ev32: Environmental Enhancement					
Policy SP3 (missing from copy)						
Policy SP4 Developing the economy. Proposals to develop or improve the variety and quality of tourism facilities will be supported where they contribute to the growth of the local economy, and where they do not have a significant impact on natural heritage and the historic environment or the amenity of local communities.			Policy Ec11: Rural Business Development	Policy Ec10: Markets and Car Boot Sales		
Policy SP5 Developing the economy. Developments that will serve to re-orientate the economy towards more sustainable, high quality, skilled and knowledge based sectors will be encouraged.					Policy Ec12: Conversion of Existing Rural Buildings	
Policy SP6 Developing the economy.	Policy Ec2: Swansea Waterfront				Policy Ec4: New Retail Development	

The primary focus for new retail, cultural, and business will be the city centre	Policy Ec4: New Retail Development Policy Ec16: Swansea Bay Recreational and Tourism Facilities Policy Ec17: Rural Tourism					
Policy SP7 Providing homes and community facilities. Land will be made available for the development of 14668 new homes over the period from 2001 to 2016 to support a population of 233,000	Policy Hc8: Over the Shop Housing	Policy Hc9: Gypsy and Traveller Caravan Sites	Policy Hc5: Houses in Multiple Occupation Policy Hc6: Flat Conversions Policy Hc9: Gypsy and Traveller Caravan Sites	Policy Hc2: Urban Infill Housing Policy Hc5: Houses In Multiple Occupation Policy Hc6: Flat Conversions	Policy Hc3: Affordable Housing	Policy Hc9: Gypsy and Traveller Caravan Sites
Policy SP8 Providing homes and community facilities. The range of sports and leisure facilities and the tourism portfolio will be improved by establishing a network of urban destinations, enhancing sustainable countryside recreation opportunities and further developing a hierarchy of sports facilities.	Policy Hc18: Leisure Facilities and Areas Policy Hc19 Tawe Riverside Park Policy Hc21: Loughor Foreshore Policy Hc22: Clyne Valley Country Park Policy Hc23: Community Recreation Land Policy Hc25: Lliw / Llan Valley					Policy Hc32: Royal Fern Golf Resort Project

	Policy Hc26: Informal Recreation Policy Hc27: Use of Land for Horses For Recreational Purposes Policy Hc28: Sports Facilities Policy Hc31: Water Based Recreation					
Policy SP9 Providing homes and community facilities. Improved and more accessible community, education and health facilities to meet the needs of new development schemes and to overcome existing deficiencies will be favoured.	Policy Hc11: Higher Education Campus Development	Policy Hc11: Higher Education Campus Development Policy Hc15: Community and Health Facilities Policy Hc17: Planning Obligations	Policy Hc15: Community and Health Facilities	Policy Hc15: Community and Health Facilities	Policy Hc15: Community and Health Facilities	Policy Hc14: Cefn Coed Hospital Policy Hc15: Community and Health Facilities
Policy SP10 The efficient use of resources mineral resources will be conserved as far as possible.		Policy R8: Borrow Pits Policy R12: Waste Management	Policy R1: Development of Mineral Resources Policy R4: Sand / Aggregates Policy R5: Crushed Rock Policy R8: Borrow Pits Policy R12: Waste Management	Policy R12: Waste Management		
Policy SP11 The efficient use of resources. The						

upgrading of infrastructure provision and the generation of energy from renewable resources to meet the needs of existing and new development will be favoured, provided that environmental impact is kept to a minimum.						
Policy SP12 The efficient use of resources. Development that makes efficient use of resources and energy will be encouraged.	Policy R11: Renewable Energy	Policy R13: Landfill Sites Policy R14: Special / Hazardous Waste	Policy R6: Secondary/Recycled Aggregates Policy R13: Landfill Sites Policy R15: Civic Amenity Sites and Local Facilities	Policy R13: Landfill Sites Policy R14: Special / Hazardous Waste		Policy R9: Public Utilities Policy R10: Telecommunications Policy R14: Special / Hazardous Waste
Policy SP13 Improving accessibility. Increased emphasis will be placed on proposals that deliver improvements to the public transport system, including enhanced interchange facilities, bus priority measures and expanding park and ride provision. the role of cycling and walking as primary components of a sustainable transport system will be enhanced				Policy As7: Bus Services Policy As10: Traffic Management and Highway Safety		
Policy SP14 Improving accessibility. New development will be	Policy As1: New Development Proposals				Policy As1: New Development Proposals	

favoured in areas that are highly accessible by public transport, walking and cycling, and where they will minimise dependency on the private car. proposals that are sympathetically designed to facilitate sustainable travel choices and promote accessibility by a range of transport modes will be encouraged.	Policy As5: Walking and Cycling Policy As6: Parking				Policy Ev3: Accessibility	
Policy SP15 Improving accessibility. Measures designed to safeguard, improve and extend rail passenger and freight services will be supported. Proposals for the enhancement of the docks and airport will also be favourably considered, subject to environmental considerations.	Policy As13: Swansea Airport					
City Centre Action Area	Policy Cc6: Delivering Improvements in City Centre Accessibility		Policy Cc1: City Centre Mixed Use Development			

ANALYSIS OF HORSHAM CORE STRATEGY, ADOPTED 2007

Key

Key words* contained in spatial vision or spatial objective	
Policy containing key words* and linked to spatial vision or spatial objective	Policy CSxx: *xxxx*
Policy containing key words* but <u>not</u> linked to spatial vision or spatial objective	Policy CSxx: *xxxx*

Spatial Vision/Spatial Objectives	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Spatial Vision						
1.To protect and enhance the diverse character and local distinctiveness of the District - this will be addressed through the application of policies which will ensure that both the quality and key characteristics of the District's biodiversity and landscape character areas, including the distinct and separate character of settlements, are retained and, where possible, enhanced.						

2. To integrate the need for protection of the natural, built and historic environment (including the natural resources) of the District with the need to allow the continued evolution of both the countryside and the character and environment of settlements - this will be achieved through the high quality management of the environment and the application of appropriate policies and careful control over new development as the countryside and the settlements change and adapt to economic and social			**POLICY CP2:** Environmental quality			
3.To ensure that new development in the District is of high quality - it is intended to ensure a better form and inclusive design of new development which optimises the potential of land that has to be developed, is accessible to all sections of the community, complements the character and heritage of the District and contributes to the sense of place.		**POLICY CP3:** Improving the Quality of New Development			**POLICY CP3:** Improving the Quality of New Development	

4.**To enable the provision of a sufficient number of dwellings to meet the requirements of regional planning policy to 2018, including that specified by the West Sussex Structure Plan 2001-2016 -** this will include ensuring that there is an appropriate mix of types, sizes and tenures, particularly to address affordable housing needs. Provision will be based on the application of the sequential approach to development, with the priority towards redevelopment of previously-developed land and major development in strategic locations, with the programmed release of land for development as necessary.	**Policy CP6:** Strategic Location – West of Crawley **Policy CP7:** Strategic Allocation – West of Horsham	**Policy CP6:** Strategic Location – West of Crawley **POLICY CP8:** Small scale 'greenfield' sites	**Policy CP6:** Strategic Location – West of Crawley		**POLICY CP5:** Built up areas & previously developed land **Policy CP6:** Strategic Location – West of Crawley **POLICY CP8:** Small scale 'greenfield' sites **POLICY CP12:** Meeting housing needs	
5.To provide for business and employment development needs, particularly for existing local businesses - this will include provision for the development of sufficient employment floorspace to meet the requirements for the						

period to 2018, including that identified in the West Sussex Structure Plan 2001-2016, and to enable a range of sizes and types of employment sites and premises to meet modern business needs.						
6. **To meet the diverse needs of the communities and businesses of the District -** it is necessary to ensure that there is provision for appropriate new development, particularly for existing local businesses and affordable housing for local people, which is supported by the necessary infrastructure, facilities and services; and that existing local facilities or services are protected or enhanced wherever possible.		**POLICY CP15:** Rural Strategy **POLICY CP16:** Inclusive communities	**POLICY CP15:** Rural Strategy		**POLICY CP12:** Meeting housing needs **POLICY CP16:** Inclusive communities	
7. **To promote and enhance community leisure and recreation facilities, and to assist the development of appropriate tourism and cultural facilities -** appropriate protection of existing facilities and new or enhanced provision will be secured through the application	**POLICY CP14:** Protection & enhancement of community facilities & services **POLICY CP15:** Rural Strategy **POLICY CP18:** Tourism & cultural facilities				**POLICY CP14:** Protection & enhancement of community facilities & services	**POLICY CP16:** Inclusive communities

of relevant planning policies derived from the analysis of needs within communities and generally within the District.						
8. **To enhance the vitality and viability of Horsham town centre and the centres of the smaller towns and villages in the District -** it is intended to enable their continued evolution and increased diversity through the application of appropriate policies for retail or related development, including in terms of the evening economy where applicable.						
9. **To reduce the expected growth in car based travel by seeking to provide choice in modes of transport wherever possible -** this will be addressed in land use terms by regulating the location of new development relative to transport modes and by setting a hierarchy for new development which gives preference to people and sustainable modes of transport, rather than the car.	**POLICY CP19:** Managing Travel Demand & Widening Choice of Transport	**POLICY CP19:** Managing Travel Demand & Widening Choice of Transport		**POLICY CP19:** Managing Travel Demand & Widening Choice of Transport	**POLICY CP19:** Managing Travel Demand & Widening Choice of Transport	

ANALYSIS OF HORSHAM 'WEST OF BEWBUSH JOINT AREA ACTION PLAN', ADOPTED 2009

This Joint AAP sets out the detail for the implementation of part of the South East Plan's focus of development (a 'regional hub) at Crawley/Gatwick. The Horsham Core Strategy expresses this requirement in 'Policy CP6 Strategic Location – West of Crawley'. Local Transport Plan 2 was prepared too early to cover the requirements of the AAP and so has not been analysed. In any event the AAP details the responsibility for delivery of the transportation/highways requirements to the developer.

Primary Objective/Objectives	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
Primary Objective Must be built on the Neighbourhood Principle: • Neighbourhood centre /local self sufficiency • Green neighbourhoods • Heart of community/ neighbourhood identity • Sustainability	• Provision of green infrastructure/green corridors • Good access to countryside incorporating rights of way • Public transport & other good access to town	• Community self sufficient on day-to-day basis • All western neighbourhoods have community & medical facilities & places of worship • Neighbourhood centres • Unique character & identity • Local employment opportunities			• All western neighbourhoods have community & medical facilities & places of worship	• All western neighbourhoods have community & medical facilities & places of worship
Policy WB 1 **Neighbourhood West of Bewbush**						
Policy WB 2 **Comprehensive Development**						
Policy WB 3 **Neighbourhood Principle**	• The provision of green corridors throughout the neighbourhood and into adjacent neighbourhoods • legible layout, that facilitates access by all modes of transport to the Neighbourhood Centre and open spaces • pedestrian and cycle linkages throughout	• neighbourhood centre to act as the focus for services, facilities, community activity and integration • concentrated number of formal and informal open spaces • Clearly defined edges and character for the area making it distinguishable			• Practical and convenient sustainable transport linkages	

	(permeability and surveillance) • Practical and convenient sustainable transport linkages	from the adjacent neighbourhoods; • Distinctiveness achieved through contextual and unique architecture urban and landscape design.				
Policy WB 4 **Design**	• Highest densities near transport nodes & neighbourhood centre	• The design and layout of the neighbourhood should reflect the neighbourhood principle		• should achieve a high quality, inclusive, mixed use, safe and integrated neighbourhood;	• should achieve a high quality, inclusive, mixed use, safe and integrated neighbourhood;	
Policy WB 5 **Community Centre**		• should include a multi-use community centre				
Policy WB 6 **Healthcare**		• should include a Primary Care Centre of sufficient size to accommodate a four doctor surgery of approximately 700m2, plus additional space for dental services, voluntary and social services and a pharmacy.				• should include a Primary Care Centre of sufficient size to accommodate a four doctor surgery of approximately 700m2, plus additional space for dental services, voluntary and social services and a pharmacy.
Policy WB 7 **Library**		• 150m2 of library floorspace should be provided within the Neighbourhood Centre, preferably in conjunction with the development of the community centre				
Policy WB 8 **Joint Provision of Community Facilities**		• Consideration should be given to the provision of community facilities within a single building or a complex of buildings located within or adjacent to the Neighbourhood Centre.				

Policy WB 9 **Retail**					• There should be a mix of dwelling sizes and types within each core phase of the development. For each Core Phase it should be demonstrated how a mix of dwelling size and type is to be delivered.	
Policy WB 10 **Dwelling Mix**					• Target of 40% affordable housing overall, including: • Tenure split of 70% social rented and 30% intermediate • 2% to wheelchair standard • 20% to Lifetime homes standard	
Policy WB 11 **Affordable Housing**						
Policy WB 12 **Structural and Informal Landscaping**						
Policy WB 13 **Biodiversity**						
Policy WB 14 **Green Linkages**	• For cycling & walking					
Policy WB 15 **Noise**			• No residential or other noise sensitive development should be located in areas where they would be exposed to noise levels of 60dBA or more.			
Policy WB 16 **Flood Risk / Management**						

Policy WB 17 Household Waste Recycling Facilities						
Policy WB 18 Recreation and Open Space	• Approximately 15.4 hectares of open space across the neighbourhood • roughly even split between formal and informal open space				• structured distribution of open space throughout the neighbourhood, to make it easily accessible by the community • Design and layout of the open space should make it suitable for a wide range of activities for all ages and interests.	
Policy WB 19 Education						
Policy WB 20 Employment						
Policy WB 21 Sustainability / Sustainable Construction						• community approaches to renewable and/or low-carbon energy generation will be implemented to meet and preferably exceed (where feasible and viable) the national timetable for carbon emissions reductions in new homes. The energy strategy will be encouraged to show how at least 10% of the development's annual (non-transport) energy needs could be met through decentralised

						renewable and low-carbon generation • should be designed and constructed to incorporate the principle of adaptation to climate change
Policy WB 22 **Former Inert Landfill Remediation**			• approval and implementation of the remediation strategy;			
Policy WB 23 **Western Relief Road**						
Policy WB 24 **Railway Station**	• Land required to deliver a railway station and associated uses, including railway station parking within the neighbourhood is safeguarded in accordance with the Conceptual Masterplan pending a definitive decision by Network Rail regarding the provision of a railway station.					
Policy WB 25 **Transport**	• Pedestrian, cycle and equestrian access into: Ifield West; Bewbush & rural areas to the north and south across the A264 to the AONB • Two crossings of railway for pedestrians, cyclists & horseriders • Bus and Fastway access at Sullivan Drive, Bewbush (bus gate) • Bus access at: Woodcroft Road, Ifield West (bus gate) and the					

	primary A264 junction • Measures to secure and maintain suitable bus and Fastway services to the neighbourhood during construction and for the first 3 years					
Policy WB 26 **Utility Infrastructure Provision**						
Policy WB 27 **Longer Term Approach**						
Policy WB 28 **Area of Study outside the allocated land of Policy WB 1**						

ANALYSIS OF 'LANCASTER CITY COUNCIL CORE STRATEGY', ADOPTED 2008

Key

Key words* contained in strategic objective or vision	
Policy containing key words* and linked to strategic objective or vision	Policy CSxx: *xxxx*
Policy containing key words* but <u>not</u> linked to strategic objective or vision	Policy CSxx: *xxxx*

Strategic Objective/Vision	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Spatial Vision						
Spatial Objectives						
Sustainable Communities	Policy SC 1 Sustainable Development Policy SC 2 Urban Concentration Policy SC 3: Rural Communities Policy SC 6 Crime And Community Safety Policy SC 8 Recreation And Open Space Policy MR 1 Planning Obligations	Policy SC 6 Crime And Community Safety	Policy SC 1 Sustainable Development Policy SC 2 Urban Concentration Policy SC 3 Rural Communities	Policy SC 6 Crime And Community Safety	Policy SC 3 Rural Communities Policy SC 4 Meeting The District's Housing Requirements Policy MR 1 Planning Obligations	Policy SC 1 Sustainable Development

Regenerate the Local Economy	Policy ER 1 Higher And Further Education Policy ER 2 Regeneration Priority Areas Policy ER 6 Developing Tourism				Policy ER 3 Employment Land Allocations	
Regenerate the Local Environment	Policy E 2 Transportation Measures		Policy E 1 Environmental Capital Policy E 2 Transportation Measures			
Accessible Services					Policy SC 1 Sustainable Development Policy SC 8 Recreation And Open Space Policy ER 2 Regeneration Priority Areas Policy CS 1 Improving Customer Services	
Joint Local Transport Plan2	• Personalised Travel Planning in Preston and Lancaster will encourage the use of the existing infrastructure for walking and cycling, as well as public transport. • Cycling Demonstration Town Project and Personalised Travel Planning will promote modal shift to from the car to walking, cycling • One specific area will be the University and its Travel Plan. We will work together to		• The completion of the Heysham-M6 Link, a Major Scheme within the Regional Funding Allocation Programme, will reduce journey times to the port as well as to Morecambe and the employment areas north of the Lune. It will take through traffic out of urban areas, improving safety and reducing congestion. • Lancaster City Centre	• The completion of the Heysham-M6 Link, a Major Scheme within the Regional Funding Allocation Programme, will reduce journey times to the port as well as to Morecambe and the employment areas north of the Lune. It will take through traffic out of urban areas, improving safety and reducing congestion.	• Quality Bus services on the Heysham-Morecambe-Lancaster University corridor. They will increase accessibility from areas of deprivation to the employment sites within the Economic Development Zone. • Lancaster Local Strategic Partnership will be working with us at a very detailed level to assess accessibility	

	increase the number of students who cycle to the campus. • Quality Bus services on the Heysham-Morecambe-Lancaster University corridor. They will increase accessibility from areas of deprivation to the employment sites within the Economic Development Zone. • The completion of the Heysham-M6 Link, a Major SCheme within the Regional Funding Allocation Programme, will reduce journey times to the port as well as to Morecambe and the employment areas north of the Lune. It will take through traffic out of urban areas, improving safety and reducing congestion. • Cycling is also promoted in TravelWise campaigns and as a leisure activity • We will maintain our support for sustainable transport to employment in the Economic Development Zone and for the award-winning cycle hire Scheme Budgie Bikes • In the longer term bring forward Park & Ride for Lancaster. Sites are being investigated to determine their impact on the network with all associated costs.		suffers from traffic congestion and poor air quality – Air quality Action Zone designated • Focus particularly on Lancaster where we have a major Scheme bid to deal with the problems of congestion.		needs in the Harbour area of Morecambe.	

ANALYSIS OF LONDON BOROUGH OF REDBRIDGE CORE STRATEGY, ADOPTED 2008

Key

Key words* contained in spatial vision or strategic objective	
Policy containing key words* and linked to spatial vision or strategic objective	Policy CSxx: *xxxx*
Policy containing key words* but not linked to spatial vision or strategic objective	Policy CSxx: *xxxx*

Spatial Vision/ Strategic Objective	**Physical activity**	**Mental wellbeing**	**Environmental health issues**	**Unintentional injury**	**Equality**	**Other**
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Spatial Vision						
1: Managed Change		Strategic Policy 1: Overall Growth Strategic Policy 12: Planning Obligations				Strategic Policy 1: Overall Growth
2: Green Environment						Strategic Policy 2: Green Environment
3: High Quality Design			Strategic Policy 3: Built Environment	Strategic Policy 3: Built Environment	Strategic Policy 3: Built Environment	Strategic Policy 3: Built Environment
4: Safe and Healthy Places			Strategic Policy 7: Housing	Strategic Policy 3: Built Environment		
5: Jobs and Prosperity						
6: Ease of Access	Strategic Policy 6: Movement and Transport		Strategic Policy 6: Movement and Transport	Strategic Policy 6: Movement and Transport		Strategic Policy 6: Movement and Transport

7: Housing for All					Strategic Policy 8: Affordable Housing	
8: A Vibrant Culture	Strategic Policy 9: Culture and Recreation				Strategic Policy 9: Culture and Recreation	
9: A Supportive Community		Strategic Policy 10: Community Facilities				Strategic Policy 10: Community Facilities

ANALYSIS OF REDBRIDGE 'GANTS HILL DISTRICT CENTRE AREA ACTION PLAN', ADOPTED 2009

Gants Hill is an underperforming district centre which has been in long-term commercial decline, but it is well-connected and at a busy roundabout junction of major roads and has very good public transport (bus and Underground Central Line station).

Area Action Plan challenges:

- dominated by motorised transport
- inhospitable street environment
- poor connections to local green space
- limited retail offer – needs major supermarket
- decline in take up of office & industrial premises

	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
Spatial Vision						
Policy GH1: Calming Traffic	• Signalised crossings on all arms of roundabout • Investigate possibility for new entrance to underground at street level on roundabout			• Signalised crossings on all arms of roundabout		
Policy GH2: Sustainable Transport	• Peak only bus lane • Improvements to bus stops • Improvements to cycle network • Removal of unnecessary obstacles, barriers & street clutter • Comprehensive lighting scheme on street & in subway • Signage to improve orientation & access to Valentines Park	• Comprehensive lighting scheme on street & in subway • Enhance place identity, safety & security within underground station		• Removal of unnecessary obstacles, barriers & street clutter • Comprehensive lighting scheme on street & in subway	• Removal of unnecessary obstacles, barriers & street clutter	
Policy GH3:	• Promote improved pedestrian & bicycle					

Place Identity	movement along Cranbrook Road (primary shopping road)					
Policy GH4: Building Heights						
Policy GH5: Land Use						
Policy GH6: Expanded Retailing			• Expand the 'evening economy' without impact on residents		• Expand retail offer (especially major supermarket)	
Policy GH7: Housing		• Encourage regeneration by allocating more housing in centre				
PolicyGH8: Use of Employment Land		• Encourage regeneration by allowing change of use to housing/ mixed use in centre				
Policy GH9: Amenity Provision, Community Uses and Social Infrastructure		• Regeneration will encourage provision of amenities & community uses & social infrastructure			• Regeneration will encourage provision of amenities & community uses & social infrastructure	
The London Boroughs prepare a statutory **Local Implementation Plan**, which sets out how the borough proposes to implement locally the Mayor of London's Transport Strategy (in Redbridge's case until the year 2010/2011).	• Redbridge is committed to working with TfL on the promotion and implementation of whole route bus priority measures. The Council supports proposals for TfL's '3G Route' 179 which is a whole route,				• accessibility improvements	

	cross borough bus priority measure planned to run through Redbridge via Ilford, Gants Hill and South Woodford. • improve the urban environment through the 'Progressive Ilford Programme', which is linked to major new developments and infrastructure improvements. Action Plans have already been developed for Ilford, Gants Hill and Barkingside eg repaving, relighting, new street furniture and removal of street clutter • Season ticketed cycle lockers are planned to be located at Gants Hill library • Accessibility improvements • Parking standard reduction					

ANALYSIS OF NORTH NORTHAMPTONSHIRE CORE SPATIAL STRATEGY, ADOPTED 2008

North Northamptonshire Joint Planning Unit

Key

Key words* contained in Vision or objective	
Policy containing key words* and linked to Vision or objective	Policy CSxx: *xxxx*
Policy containing key words* but <u>not</u> linked to Vision or objective	Policy CSxx: *xxxx*

Vision/Objective	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Vision						
Objective One– Green Living	Policy 5: Green Infrastructure Policy 13: General Sustainable Development Principles Policy 16: Sustainable Urban Extensions		Policy 5: Green Infrastructure			Policy 5: Green Infrastructure
Objective Two– Environment			Policy 13: General Sustainable Development Principles Policy 14: Energy Efficiency and Sustainable Construction			
Objective Three– Network of settlements						

Objective Four – Town Centre focus						
Objective Five– Connectivity and modal shift	Policy 3: Connecting the Urban Core Policy 4: Enhancing Local Connections					
Objective Six – Infrastructure and services						
Objective Seven– Economy			Policy 14: Energy Efficiency and Sustainable Construction			
Objective Eight– Quality of life		Policy 13: General Sustainable Development Principles		Policy 13: General Sustainable Development Principles	Policy 15: Sustainable housing provision	Policy 13: General Sustainable Development Principles
Objective Nine– Regeneration					Policy 15: Sustainable housing provision	
Objective Ten– Housing Needs	Policy 15: Sustainable housing provision Policy 16: Sustainable Urban Extensions	Policy 16: Sustainable Urban Extensions	Policy 14: Energy Efficiency and Sustainable Construction		Policy 15: Sustainable housing provision Policy 16: Sustainable Urban Extensions	Policy 16: SustainableUrbanExtensions

ANALYSIS OF NORTH NORTHANTS 'WELLINGBOROUGH TOWN CENTRE AREA ACTION PLAN', ADOPTED 2009

Borough Council of Wellingborough

Wellingborough is one of three towns designated as 'sub-regional centres' in the Core Spatial Strategy, meaning that it is a focus for new retail development. This AAP deals with the regeneration of the town centre & transportation measures that are needed to cope with the population from 12,800 new homes being provided up to 2021, with further significant growth beyond 2021. Wellingborough is required by the RSS to provide a diverse range of quality comparison shopping that meets the needs of both the town & wider rural hinterland. Without this regeneration and retail/employment growth, retail spending would 'leak' to adjacent centres which would harm Wellingborough town centre's character, mean new development is unsustainable and cause unsustainable travel patterns.

Vision & Objectives	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
Vision						
Objective 1: To redevelop the Market Square area so that its status is reinforced as the heart of the town		• Possible provision of Discovery centre (combined library, IT, arts & community space)			• Changing Places toilet facility (for those with profound & multiple learning disabilities)	
Objective 2: To seek a major increase in retail provision, bringing enhanced quality and choice, whilst keeping the centre compact						
Objective 3: To promote mixed-use development that will help drive a broadly-based, dynamic local economy and vibrant community that combines retail, leisure, cultural and commercial facilities and attractions		• Include meeting halls, health & indoor leisure facilities into 'commercial fringe areas' (Policy WTC8)				• Include health facilities in 'commercial fringe areas' (Policy WTC8)
Objective 4. To conserve and enhance the centre's heritage, respecting historic buildings, links						

and views						
Objective 5. To enhance town centre living with new housing opportunities and improved community and recreational facilities within a stimulating, healthy, clean and safe Environment	• providing safe, high quality pedestrian and bus routes to the Isebrook Hospital, GP surgeries, the Waendel Leisure Centre and local primary schools;	• improve public lavatories in Market Square • further enhancing arts, culture and entertainment related activities related to the Cultural Quarter centred on the Castle Theatre and the Wellingborough Museum;			850 new homes, including: • Mix of tenures & sizes • Balance of flats with family houses • 30% affordable housing • 15% low cost market housing • 5% wheelchair accessible. Aim for enhanced community facilities for growing multi-ethnic groups	
Objective 6. To encourage the best in architecture, urban design and public spaces with energy and resource efficient development that minimises carbon dioxide emissions	• High quality, well connected public realm • improve the environment of key roads and crossings; • create attractive 'gateway improvements'	• High quality, well connected public realm				
Objective 7. To develop skills and educational attainment, particularly through improvements to tertiary education						
Objective 8. To strengthen the green open space network and Swanspool Brook in terms of their biodiversity and recreational value, whilst reducing the risk of flooding		• Balance between nature conservation & recreation				
Objective 9. To ensure that the town centre is a convenient, safe and	• Improved signage for motorised & non-motorised transport					

accessible place that is easy to get to and get around	• Improvements to bus network • Improvements to cycle & pedestrian networks • Improvements to secure cycle parking (public & private)					
Objective 10. To sustain a high quality regime of town centre management and ensure that new development and other partner agencies contribute to delivery proposals, including the provision of infrastructure						
Opportunity Sites						
1. PO sorting depot	High quality pedestrian link to Aldi/matalan					
2. High St/Jackson's Lane	Pedestrian/cycle network & play area				Mixed tenures of housing & Small business units	
3. Oxford House		Includes community uses			Family housing	
4. West End DIY						
5. Alma Street		Retention of Working men's Club garden			Small scale work places	
6. Cannon Street/York Road						
7. Vauxhall dealership	New public open space	Potential for some community uses			Mixed tenures of housing	
8. Queen Street/St John's Street	New pedestrian & cycle route	Potential for some community uses			Mixed tenures of housing	
9. Cultural Quarter site	Enhanced pedestrian connections Pedestrian bridge				Pedestrian bridge	
Northamptonshire Local Transport Plan2 (2006-2011) The Sub-regional strategy requires that new development should be	• Improved public transport interchange (bus-rail) & pedestrian links • Improvements to bus stop infrastructure • Improved bus services linking west of town with				• Introduction of new or refurbished low-floor buses by operators and improved frequency timetables. • The Greenway path/cyclepath scheme	

planned to take account of the transport investment proposals shown in the strategy, so as to create a significant modal shift towards public transport use, particularly in relation to urban extensions. Wellingborough bus patronage has increased by 41% since 2005, equating to 180,000 extra trips. The best progress on road improvement has been made in Wellingborough. Design and planning work is underway during 2008/09 on improvement works in both the town centre and on roads which will serve the east of Wellingborough (WEast) development with the intention that work will start on site in 2009/10.	rail station • Define key cycle corridors within town, including safe on- and off-road cycle routes, catering for the different levels of ability and competence amongst cyclists and linked to desired routes and destinations • Introduction of new or refurbished low-floor vehicles by operators and improved frequency timetables.				would run from Raunds to Wellingborough and take advantage of existing routes and add new linkages. The project would add value by: improving surfaces to allow for bicycle/wheelchair access, making the most of attractions along the route, developing art, historical and environmental trails, providing an infrastructure for the development of linked, circular routes & improving 'safer routes to schools'.	

ANALYSIS OF PLYMOUTH CORE STRATEGY, ADOPTED APRIL 2007

Key

Key words* contained in strategic objective or area vision	
Policy containing key words* and linked to strategic objective or area vision	Policy CSxx: *xxxx*
Policy containing key words* but <u>not</u> linked to strategic objective or area vision	Policy CSxx: *xxxx*

Strategic Objective/Vision	**Physical activity**	**Mental wellbeing**	**Environmental health issues**	**Unintentional injury**	**Equality**	**Other**
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Strategic Objective 1 Delivering Plymouth's Strategic Role						
Strategic Objective 2 Delivering the City Vision						
Strategic Objective 3 Delivering Sustainable Linked Communities	Policy CS01: Development of Sustainable Linked Communities Policy CS02: Design				Policy CS01: Development of Sustainable Linked Communities	
Strategic Objective 4 Delivering the Quality City						
Strategic Objective 5 Delivering Regeneration						
Area Vision 1 - Devonport						
Area Vision 2 – Millbay & Stonehouse						
Area Vision 3 –						

Plymouth City Centre						
Area Vision 4 – The Hoe						
Area Vision 5 – Sutton Harbour						
Area Vision 6 - East End						
Area Vision 7 – Central Park						
Area Vision 8 – North Plymstock & Minerals						
Area Vision 9 – Derriford & Seaton						
Area Vision 10 – Plymouth Sound & Estuaries						
Strategic Objective 6 Delivering the Economic Strategy						
Strategic Objective 7 Delivering Adequate Shopping Provision					Policy CS06: City Centre Policy CS07: Plymouth Retail Hierarchy Policy CS08: Retail Development Considerations Policy CS09: Marsh Mills Retail Parks	
Strategic Objective 8 Delivering Cultural / Leisure Facilities and the evening /night-time economy			Policy CS13: Evening / Night-time Economy Uses		Policy CS13: Evening / Night-time Economy Uses	
Strategic Objective 9 Delivering Educational Improvements						
Strategic Objective 10 Delivering Adequate Housing Supply					Policy CS15: Overall Housing Provision	
Strategic Objective 11						Policy CS21: Flood Risk

Delivering a Sustainable Environment			Policy CS22: Pollution			Policy CS34: Planning Application Considerations
Strategic Objective 12 Delivering Future Mineral Resources	Policy CS24: Mineral Development					
Strategic Objective 13 Delivering Sustainable Waste Management						
Strategic Objective 14: Delivering Sustainable Transport	Policy CS28: Local Transport Considerations		Policy CS27: Supporting Strategic Infrastructure Proposals	Policy CS28: Local Transport Considerations	Policy CS28: Local Transport Considerations	
Strategic Objective 15: Delivering Community Well-being	Policy CS30: Sport, Recreation and children's Play Facilities Policy CS32: Designing Out Crime	Policy CS32: Designing Out Crime	Policy CS30: Sport, Recreation and children's Play Facilities			Policy CS31: Health Care Provision
Policies not linked to Strategic Objective or Area Vision	Policy CS33: Community Benefits / Planning Obligations	Policy CS34: Planning Application Considerations	Policy CS34: Planning Application Considerations	Policy CS34: Planning Application Considerations	Policy CS34: Planning Application Considerations	Policy CS33: Community Benefits / Planning Obligations

ANALYSIS OF DEVONPORT AREA ACTION PLAN 2006-2021, ADOPTED 2007

Area Vision 1 Objectives	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
1. A new centre for Devonport: To recreate the heart of the community through comprehensive and coordinated redevelopment of the former MoD South Yard Enclave **Proposal DP01** **This 7.2ha was taken over by the MoD after the WW2, effectively removing the heart from Devonport and dividing the remaining community in two.** **Opportunities:** • **Reunite community (street patterns);** • **Address current imbalance between private & social rented housing;** • **Increase lack of local food shopping;** • **Address high local unemployment;** • **Improve quality of environment/desirability;** • **Act as catalyst to stimulate more physical & community initiatives.**	• Provision of transport interchange, including cycle storage; • Improvements to Chapel Street including cycle lane; • Sustainable patterns of movement by prioritising walking, cycling & public transport ahead of other forms; • Enhancements to Granby Green; • Recreate traditional street patterns; • Preparation of design codes: "will form a key element.. to cover high quality public realm, open spaces..".	• Re-instituting the 'heart' of Devonport & reconnecting the community; • Provision of local shops; • Recreate traditional street patterns; • Improvements to junction of Chapel Street & Fore Street, important to townscape & historically an active & vital part of the town; • Celebration of town's historic associations; • the provision of community facilities; • The Market Hall offers potential for the development of creative and cultural sector industries, establishing it as a community hub	• Environmental improvements and traffic management along the site's frontage with Chapel Street; • Detailed contaminated land assessment and appropriate remediation measures.	• A safe, convenient and sustainable movement and transport network; • Environmental improvements and traffic management along the site's frontage with Chapel Street;	• high density residential development as an integral part of the new district centre: in the region of 460 dwellings of which in the region of 270 will be houses, at least 170 are to be affordable and 90 built to Lifetime Homes standard; • a minimum of 2,500 sq m. of B1 employment use, to include creative and cultural industries; • a minimum of 1,000 sq m. of B2 employment use.	
2. To improve the range, quality, and choice of housing: • **redevelopment of poor quality Council homes;** • **increase number of houses (not flats);** • **increase private market**		• Improve Council housing stock: better quality, more houses, fewer flats; • Increase number of affordable housing; • Improve social mix of housing.			• Improve Council housing stock: better quality, more houses, fewer flats; • Increase number of affordable houses; • Improve social mix of housing (private & social)	• Relocate displaced residents within area prior to demolition.

houses; **• increase affordable housing;** **• relocate displaced residents within area prior to demolition.** **Post-WW2 replacement of bomb damaged homes was mainly by Council as flats, giving community imbalances. Jobs lost by cutbacks in defence spending/ priority changes. Recent improvements from New deal for Communities' regeneration.** **<u>Opportunities</u>** **Redevelopment of 2 x MoD sites and Council owned housing & other sites (see Proposals DP01 – DP08 giving 870 dwellings of which 370 will be affordable & 200 Lifetime homes standard)**						
<u>3. To provide local employment opportunities:</u> by protecting existing employment facilities, particularly marine industry, and provide additional employment development. **A need to reduce high local unemployment rates and to retain traditional & marine based jobs.** **<u>Opportunities:</u>** **• Provide additional employment facilities within AAP mixed use development proposals;** **• Protect existing employment (particularly**	• Protect Rights of Way	• Reduce high local unemployment rates • Retain traditional & marine based jobs • Develop initiatives to help residents into employment, and to support the growth of local businesses and employment; • Local training and employment opportunities from the demolition and construction of new developments.			• Work to ensure local people have access to new jobs; • Develop initiatives to help residents into employment, and to support the growth of local businesses and employment; • Local training and employment opportunities from the demolition and construction of new developments.	

marine); • **Work to ensure local people have access to new jobs;** • **Potential to develop niche in creative or cultural industries.**						
4. To provide for a better range of local services and facilities. **It is recognised that Devonport is starved of the essentials to become a successful & thriving community. It is deficient in modern flexible spaces for the community, including young people. It is deficient in health & education facilities & offices for community groups.** **Opportunities** • **A new primary school (Proposal DP11)** • **Community use of the Old market hall & the Guildhall (Proposal DP10)** • **Some community uses developed as part of Mount Wise redevelopment(DP06)** • **New GP Surgery & dental training school at Brickfields (DP12)**	• New school must ensure improved cycle and pedestrian links *NOTE: the SA raised the issue that the new school would impact on people's travel patterns & would require the relocation of recreation facilities from brickfields*	• New community focus at former Guildhall building • High quality public space around the building • Integrate new school with existing healthcare facilities & Children's Centre				• New dental training school (developed jointly by Exeter & Plymouth Universities) • New GP Surgery
5. To improve connectivity throughout the community with pedestrian routes, cycle ways, and high quality public transport. **Opportunities:** **Improving connectivity with pedestrian, cycle routes & high quality public transport – Proposal DP14**	• Increase pedestrian connectivity; • Use of home zone layouts to encourage play; • Safeguard rights of way; • Increase footpaths & cycle ways into Green Arc & to adjacent neighbourhoods • Safeguard access to National Cycle Route 2 & encourage creation of new	•		• Traffic management along Chapel Street • Improved public transport provision, particularly to key destinations		

	cycle links to this; • Provision of cycle parking & storage.					
6. To protect natural and historic assets. **Key elements of the historic dockyards exist together with open spaces originally used as defences.** **Opportunities:** **Heritage sites, archaeology, recognition of a 'Green Arc' (DP15) incorporating improvements to Devonport Park (DP16) & Brickfields.**	• Improved accessibility to facilities • Ensure design of public spaces contributes to safety & thus encourages activity; • Enable people with disability & carers with young children can move around safely & easily, & thus encourages activity; • Recognition of a Green Arc of green space & accessibility requirements; • Improvements to Devonport park • New & improved sports facilities at Mount Wise • New & improved walk & cycle ways through green spaces & along waterfront *NOTE: the SA raised the issue that the new school would impact on people's travel patterns & would require the relocation of recreation facilities from brickfields*	• Safeguarding of heritage sites & buildings; • Design streets to reduce potential for actual or perceived threat of crime; • Reestablishment of Devonport Park as community event focus & for heritage conservation	• Improved safety at Devonport Park; • Develop a management mechanism for community involvement in the park's management	• Ensure design of public spaces contributes to safety; • Enable people with disability & carers with young children can move around safely & easily	• Improved accessibility to facilities; • Ensure people with disability & carers with young children can move around safely & easily	
7. To require all new development to be of a high quality, safe and appropriate in the context of Devonport's heritage.		All new development to be of a high quality, safe and appropriate in the context of Devonport's heritage	All new development to be of a high quality, safe and appropriate in the context of Devonport's heritage			

ANALYSIS OF 'SOUTH CAMBRIDGESHIRE DISTRICT CORE STRATEGY', ADOPTED 2007

Key

Key words* contained in strategic vision or objectives	
Policy containing key words* and linked to strategic vision or objectives	Policy CSxx: *xxxx*
Policy containing key words* but <u>not</u> linked to strategic vision or objectives	Policy CSxx: *xxxx*

Strategic Vision/Objective	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	*Key words: walking, cycling, sport, recreation, activity, exercise	*Key words: well-being, safety, social (networks), socialise, crime	*Key words: pollution, noise, air/water quality, particulate, contaminant	*Key words: safety, accident, injury	*Key words: equality, equity, affordability fairness, inclusive accessibility, equal	*Key words: health, illness, climate change
Strategic Vision						
ST/a To provide an adequate and continuous supply of land for housing and employment, to meet strategic requirements, in sustainable locations					Policy ST/2 Housing Provision	
ST/b To locate development where access to day-to-day needs for employment, shopping, education, recreation, and other services is available by public transport, walking and cycling thus reducing the need to travel, particularly by private car						

ST/c To create new and distinctive sustainable communities on the edge of Cambridge connected to the rest of the city by high quality public transport and other non-motorised modes of transport which will enhance the special character of the city and its setting						
ST/d To create a sustainable small new town close to but separate from the villages of Longstanton and Oakington connected to Cambridge by a high quality rapid transit system along the route of the disused St Ives railway. The new town will make best use of previously developed land						
ST/e To protect the varied character of the villages of South Cambridgeshire by ensuring that the scale and location of development in each village is in keeping with its size, character and function and that the buildings and open spaces which create their character are						

maintained and Enhanced						
ST/f To provide and enable provision of enhanced infrastructure to meet the needs of the expanded population						
ST/g To ensure development addresses sustainability issues, including climate change mitigation and adaptation issues, maximising recycling and reuse of resources, and reduce waste and pollution						
ST/h To support the Cambridge area's position as a world leader in research and technology based industries, higher education and research, particularly through the development and expansion of clusters						
ST/i To ensure that any new development results in appropriate provision for the protection and enhancement of native biodiversity in order to contribute towards						

biodiversity gain, whilst having regard to the site's current biodiversity value. Opportunities for increased access to the countryside and enjoyment of biodiversity should be viewed as integral aspects of new development						
ST/j To ensure that the district's built and natural heritage is protected and that new development protects and enhances cherished townscape assets of local urban design, cultural, and conservation importance, and character of the landscape						
ST/k To locate development where it will ensure maximum use of previously developed land and minimise loss of countryside and the best and most versatile agricultural land.						

ANALYSIS OF 'CAMBRIDGE EAST AREA ACTION PLAN', ADOPTED 2008

The Core Strategy Development Plan Document sets out the broad location for future development in South Cambs. It states that the most preferable location for new development is on the edge of Cambridge. The Cambridge East AAP is one of three Area Action Plans which will provide detailed planning policy guidance for specific sites on the urban fringe of the City. The development at Cambridge East will be a major new urban quarter to Cambridge of between 10,000 and 12,000 homes, based largely on Cambridge Airport, which is proposing to relocate. Development will take place in both Cambridge City and South Cambridgeshire, so the AAP is being prepared jointly with Cambridge City Council.

Local Transport Plan2 only runs to 2011 and so does not cover the development period for Cambridge East. LTP3 is in preparation, but without sufficient detail to add to this analysis. In any event, it is likely that much of the transport infrastructure required will be facilitated by developers.

Policies	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
CE/1 The Vision for Cambridge East Cambridge						
CE/2 Development Principles	• a compact and sustainable urban quarter with a low car dependency, which is highly accessible and permeable to all its residents by foot, cycle and High Quality Public Transport, and which has good links to the city centre and to existing major employment centres • establish a cycle culture throughout the development	• a distinctive urban character and a well developed sense of community spirit, with landmarks and other points of interest, particularly in the district and local centres, including public art, to create a legible sense of place		• a balanced, viable and socially inclusive community where people can live a healthy lifestyle, in a safe environment and where most learning needs are met	• a distinctive urban character which reflects innovative urban design and which engenders an inclusive, vibrant and diverse community with a strong sense of local identity • inclusive new community which addresses the current lack of housing close to Cambridge • a compact and sustainable urban quarter with a low car dependency, which is highly accessible and permeable	• a balanced, viable and socially inclusive community where people can live a healthy lifestyle • District centre uses could include health facilities • able to accommodate the impacts of climate change
CE/3 The Site for Cambridge East						
CE/4 The Setting of Cambridge East	• Provision of a green corridor which will have a			• Road, public transport, footpath, cycleway and		

	high degree of public access by footpaths and cycleways • Provide opportunities for outdoor recreation and public access to the open countryside adjoining • Will have landscaping and biodiversity value and also perform a recreational function for both informal recreation and children's play			bridleway crossings across the green corridor will be well designed to limit any safety implications		
CE/5 The District Centre	• Parking provision for cars and cycles will be included • secure cycle parking to encourage a high level of • cycle use and help achieve the modal split sought for Cambridge East • its design should maximise access by foot, cycle and public transport.				• Locate close to the geographical centre of the urban quarter where it will be most accessible to the population as a whole • ensure that its shops, services and facilities are as accessible as possible to the maximum number of its residents	
CE/6 Local Centres	• At local centres include cycle parking • A footpath and cycleway network, extending out for the city	• The local centre will also need to have good pedestrian and cycle links through to the adjacent housing in the Fison Road estate, to ensure that it can serve that area, and to assist with social integration.			• The local centres will be located at stops on a dedicated local bus way through Cambridge East, which will generate trade for the centres, be safe places to wait for a bus and be accessible for the greatest number of people.	• Local centres could contain facilities such as some elements of health care
CE/7 Cambridge East Housing					• provide an agreed mix of affordable housing as defined in PPS3, to meet local needs (at least	

					40%) ● to ensure sustainable communities, affordable housing will be distributed through the development in small groups or clusters ● In addition to the affordable housing requirements, including for Key Workers, the development should provide a proportion of new homes to help meet the needs of other specific groups in accordance with PPS3	
CE/8 Cambridge East Employment						
CE/9 Community Services, Facilities, Leisure, Arts and Culture	● A major public sports facility to be provided	● provide those services and facilities which are to be delivered by the community or voluntary sector and which are essential to successfully establish sustainable community ● provision of quality visual arts and crafts as part of new developments can bring social, cultural, environmental, educational and economic benefits, both to the new development and to the community at large.			● innovative means of provision, including opportunities for joint provision and co-location to provide services which best meet people's needs, are accessible to all and which are cost efficient to service and facility providers.	● Provide health facilities, perhaps by some sort of shared facility provision
CE/10 Road Infrastructure			● mitigate traffic impact	● mitigate traffic impact		
CE/11 Alternative Modes and Parking	● All development will be within 400m easy walking	● design out crime			● network of highly accessible, dedicated,	

	distance of a bus stop • separate public transport only access could also provide for pedestrians & cyclists linking to a dedicated public transport route through development • There will be a dedicated network of highly accessible, segregated, high quality, safe, direct, connected and convenient rights of way, including cycle, pedestrian and horse riding routes, both within Cambridge East and connecting with the rest of Cambridge, surrounding villages, and the wider rights of way network • cycle parking should be provided in accordance with the standards • provision of secure cycle storage lockers and parking as well as covered walkways and cycleways to connect to the public transport system. • External rights of way routes will be provided to key locations & cycle paths/tracks • innovative cycle parking facility. This could reflect provision in the city, in an underground cycle park, with associated uses				segregated, high quality, direct, connected and convenient bus, rights of way, including cycle, pedestrian and horse riding routes	

	such as a cycle repair service					
CE/12 Transport for North of Newmarket Road						
CE/13 Landscape Principles						
CE/14 Landscaping within Cambridge East	• Public access to 'green fingers' will include provision for walking, cycling and horse riding.			• Road and bus crossings through the green fingers will be designed to limit any adverse safety implications		
CE/15 Linking Cambridge East to its Surroundings						
CE/16 Biodiversity						
CE/17 Existing Biodiversity Features						
CE/18 Archaeology						
CE/19 Built Heritage						
CE/20 Public Open Space and Sports Provision	• Water features at Cambridge East will provide opportunities for non-motorised water-based recreation • In a high density urban quarter with many apartments and where garden sizes are likely to be smaller than those provided in the past, it is important that allotments are provided for outdoor recreation, and healthy food production • sport, leisure and recreational needs are to be met locally so that					• it is important that allotments are provided for outdoor recreation, and healthy food production.

	residents can lead a healthy lifestyle.					
CE/21 Countryside Recreation						
CE/22 Land Drainage, Water Conservation, Foul Drainage and Sewage Disposal			• features will be designed to enhance biodiversity by providing wetland habitats and reed beds which will also help to improve the water quality from surface water run-off.			
CE/23 Telecommunications Infrastructure						
CE/24 Energy						• Climate proofing to ensure buildings and associated infrastructure are capable of enduring the future impacts of climate change
CE/25 Sustainable Building Methods and Materials						
CE/26 Noise 116						
CE/27 Air Quality						
CE/28 An Exemplar in Sustainability						
CE/29 Construction Strategy						
CE/30 Early Delivery of Strategic Landscaping						
CE/31 Management of Services, Facilities,						

Landscape and Infrastructure						
CE/32 Cambridge Airport Safety Zones				• development should be restricted in order to minimise the number of people on the ground at risk of death or injury in the event of an aircraft crash on take-off or landing		
CE/33 Infrastructure Provision	• Public open space, sport and recreation facilities	• Other community facilities (e.g. community centres, youth facilities, library services, social care and the provision of emergency services			• Affordable housing, including for Key Workers	• Health care
CE/34 Timing / Order of Service Provision						
CE/35 Phasing North of Cherry Hinton			• Have particular regard to the issues of health impact, noise and air quality as key issues to be resolved ahead of any decision on timing of development of this area.			• Develop proposals must be subject to an HIA to assess the effect of the ongoing airport operations on the new community

ANALYSIS OF SOUTH HAMS CORE STRATEGY, ADOPTED 2006

Key

Key words* contained in vision or strategic objective	
Policy containing key words* and linked to vision or strategic objective	Policy SOxx: *xxxx*
Policy containing key words* but <u>not</u> linked to vision or strategic objective	Policy SOxx: *xxxx*

Vision/ Strategic Objective	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	***Key words: walking, cycling, sport, recreation, activity, exercise**	***Key words: well-being, safety, social (networks), socialise, crime**	***Key words: pollution, noise, air/water quality, particulate, contaminant**	***Key words: safety, accident, injury**	***Key words: equality, equity, affordability fairness, inclusive accessibility, equal**	***Key words: health, illness, climate change**
Vision						
SO1: Ensure that current & future housing needs of the local community are met	Policy CS4: Sherford New Community	Policy CS4: Sherford New Community				
SO2: Provide affordable housing to meet local needs					Policy CS4: Sherford New Community Policy CS6: Affordable Housing	
SO3: Secure high quality, locally distinctive, sustainable housing developments		Policy CS 7: Design		Policy CS4: Sherford New Community Policy CS 7: Design		
SO4: Promote mixed use, mixed type, mixed tenure schemes						

SO5: Provide for housing at the highest densities suitable for the site						
SO6: Develop a high quality, sustainable new community at Sherford, including the provision of 4,000 dwellings	Policy CS4: Sherford New Community	Policy CS4: Sherford New Community	Policy CS4: Sherford New Community			
SO7: Regenerate the district's towns, villages and their hinterlands, using previously developed land and existing buildings where appropriate						
SO8: Provide for business growth and development, supporting indigenous growth, growth sectors, and providing year round sustainable, well-paid employment						
SO9: Secure high quality, locally distinctive, sustainable economic development including tourism						
SO10: Improve the district's economic infrastructure						
SO11: Maintain and develop a prosperous						

countryside, encouraging sustainable development including rural regeneration and diversification						
SO12: Support the economic and urban regeneration of the Plymouth Principal Urban Area through sustainable development, including strategic employment development adjoining the urban area						
SO13: Develop an integrated transport system which minimises the need to travel, optimises the choices between travel modes and reduces the impact of travel on the environment						
SO14: Development that generates a high number of trips must be located where it is accessible to sustainable transport					Policy CS4: Sherford New Community	
SO15: Reduce rural isolation						
SO16: Support the role of market towns, especially the town centres, and other						

local centres						
SO17: Retain existing and promote new local services, facilities and amenities						
SO18: Conserve and enhance the quality of the district's countryside and coastal landscapes						
SO19: Conserve and enhance the district's geological resource and the diversity and abundance of wildlife habitats and species						
SO20: Conserve and enhance the historic, architectural and archaeological character and features of the district						
SO21: Provide for recreational use and enjoyment of the district's towns, villages, countryside and coast	Policy CS4: Sherford New Community					
SO22: Achieve development which is of a high quality, respects its location and is compatible with the sustainable management of land, soil, air and water						

SO23: Promote development which will help to reduce the consumption of fossil fuels and the emission of greenhouse gases			Policy CS11: Climate Change			Policy CS11: Climate Change

ANALYSIS OF SOUTH HAMS 'SHERFORD NEW COMMUNITYAREA ACTION PLAN', ADOPTED 2007

Sherford is an urban extension to the City of Plymouth, yet it is in large part within South Hams District. It is intended to deliver at least 4000 by 2016, although this figure is likely to be increased beyond that time. The Area Action Plan was subject to an HIA (Ben Cave Associates Ltd December 2007) commissioned and funded by South Hams and Devon County Councils, and in kind by Devon Primary Care Trust.

Vision/Objectives	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
Vision						
Policy SNC1 – Strategic Requirements **Aim**: To deliver the vision for Sherford and the strategic requirement of the Devon Structure Plan, and its successor the Regional Spatial Strategy, for a new community phased in tandem with all necessary associated community infrastructure.	• Provide a town centre and three neighbourhood centres to create a clearly structured development. These centres are located to maximise access to a centre for all Sherford's residents, with at least 80% of all dwellings to be within a 5 minute walk of a centre • Mix of uses to avoid unsustainable modes of movement • Have good sustainable transport links	• Create and sustain a high quality of community life • not undermining the quality of community life in neighbouring communities • Deliver an appropriate body to manage the community assets for the benefit of the community, promote sustainable living and support social networks within Sherford and with its neighbours and demonstrate that sufficient sustainable sources of funding are available or can be generated to ensure the long term management and development of the community and its assets.			• a town centre and three neighbourhood centres located to maximise access to a centre for all Sherford's residents, with at least 80% of all dwellings to be within a 5 minute walk of a centre	
Policy SNC2 – Sustainable Development **Aim:** To achieve, at the planning, development and operational stages, a new			• minimisation of waste and pollution			• minimisation of non-renewable resource usage • promote energy conservation;

community which exhibits current best practice in sustainable development (social, economic and environmental) and sustainable construction techniques whilst significantly reducing impact on climate change and responding to the design issues raised by predicted future changes in local climate.						
Policy SNC3 – Design **Aim:** To create an exemplar urban extension that meets the needs of a sustainable 21st century community, which is architecturally distinctive, informed by current best architectural and urban design practice and draws upon local distinctiveness and local identity, being set within and responsive to a rural setting and becomes a town which is cherished, prosperous, and vibrant with a strong sense of place.						
Policy SNC4 - Community Facilities **Aim:** To provide associated physical and community infrastructure to support the needs of a newly establishing and diverse population, with opportunities for growth and changes as the community	• Early provision of local services and facilities will be required in phase with development and at locations accessible by sustainable transport initiatives and based upon a 'walkable	• A community theatre/cinema as a shared facility within the Secondary School • A town hall incorporating meeting spaces, facilities and offices for community development, governance & management and also			• Early provision of local services and facilities will be required in phase with development and at locations accessible by sustainable transport initiatives and based upon a 'walkable community' • South Hams and West Devon PCT has indicated its intention	• A health and social care centre (of up to 7,000sq m) (including provision of GP and dental practices, primary care services and a range of in-patient, outpatient, diagnostic and therapy

develops.	community' • Allotments (4ha) to be distributed proportionally within the mixed use neighbourhoods • A club house/ changing rooms associated with sports pitches	for community activities and voluntary services • A police station in a shop front unit • A cemetery / memorial garden; • A number of public houses (at least one in each town/neighbourhood centre).			to develop General Practitioner and Primary Care Services, such as Health Visiting and District Nursing	services and a base for social services and mental health teams), incorporating a children's centre (additional 830 sq m) with associated ambulance service facilities
Policy SNC5 - Infrastructure and Utilities **Aim:** To deliver a phased and appropriate set of Infrastructure and Utilities to support the needs of residents and users of Sherford both now and in the future and to enhance the potential for a sustainable economy and lifestyles within the community.					• High bandwidth telecommunications infrastructure into every building	• Integrated Energy Strategy identifying how development at Sherford will minimise energy demand and maximise energy usage from renewable sources
Policy SNC6 - Housing Proposals **Aim:** To create a balanced and sustainable community in which people will choose to live and work that provides high quality market and affordable housing.		• Creation of a mixed type, size and tenure of housing in mixed use areas throughout the development. Affordable housing is to be widely distributed and well integrated into the overall development and is 'tenure blind' in design and character			• Delivery of a balanced and sustainable community, housing all sectors and socio-economic groupings of society, including families, single person households, older persons and vulnerable groups • a target of 50% affordable housing is sought including about 15% as social rented and about 35% as intermediate affordable. 15% of intermediate housing is to be reserved for key workers • Creation of a mixed type, size and tenure of housing in mixed use areas throughout the	

					development. Affordable housing is to be widely distributed and well integrated into the overall development and is 'tenure blind' in design and character • Delivery of flexible housing designs to accommodate lifetime housing requirements including adaptability and meeting the needs of people with disabilities • Delivery of a wide range of housing market opportunities at every stage of development, including social rented, market rented, part rent/part buy, self build and open market	
Policy SNC7 – Movement and Transport **Aim**: To create a community which is an exemplar of sustainable travel, making walking, cycling and public transport use easier and more attractive and car travel less necessary.	• supporting sustainable patterns of movement and favouring (in priority order) the pedestrian, cyclist and public transport • Deliver a phased provision of local bus services serving the community neighbourhoods, which stop frequently to pick up passengers • Deliver the appropriate distribution of neighbourhood centres, facilities and public transport stops to achieve convenient access on foot, cycle and public transport • Provision of good cycle route connections to existing cycle routes	• establishment of a community car club		• Achieve a significant shift to more sustainable forms of movement through design and active measures including design speeds for vehicles of a maximum 20mph throughout the community	• Design features of the development to ensure convenient and safe access for all including people with impaired mobility	

	and in particular to National Cycle Network routes 2 and 27 together with local footpaths and bridleways linking to the wider network of paths and bridleways in the area • Create a network of streets designed to be suitable for cycling and walking and, where appropriate, additional measures to assist cycling and walking to be a safe and attractive means of transport to all parts of the town					
Policy SNC8 – Economy **Aim:** To create economically vital and viable town and neighbourhood centres within a competitive and environmentally friendly environment, whilst maximising self sufficiency within the new community and the surrounding area, and to provide for a wide range of quality local job opportunities.					• create an inclusive sustainable local economy • maximising the opportunities for local economic multipliers (i.e. spending money locally) • Life-long learning and training opportunities within the development process • Maximise training and local employment opportunities in community services, parks, public spaces and farmed land	
Policy SNC9 – Public Space, Sport and Recreation **Aim:** To provide a healthy environment for people, giving access to open spaces, with informal and formal sport and recreation opportunities.	• Provision for 5,500 dwellings based on the National Playing Fields Association Standards • Provision of outdoor courts & pitches & Sports centre • Contributions to swimming pool	• Delivery of an attractive and clean environment with safe public spaces, places and routes		• Delivery of an attractive and clean environment with safe public spaces, places and routes	• Accessible semi-natural greenspace, nominally within 300m of every house linked by a network of pedestrian and cycle ways accessible to mobility impaired users	

	• A variety of public spaces including civic spaces & 5ha urban parks; a major park incorporating cycle routes, footpaths, bridleways, trim trails, informal and formal play provision • accessible semi-natural greenspace, nominally within 300m of every house linked by a network of pedestrian and cycle ways accessible to mobility impaired users • network of local areas for play (within 100m of each dwelling); Locally Equipped Areas of Play (within 400m); Neighbourhood Equipped Areas of Play (within 1000m, incorporating Multi Use Games Areas; and a skatepark • Creation of network of greenways through the community based on existing ecological features to promote pedestrian and cycle movement					
Policy SNC10 – Landscape, Biodiversity and Cultural Heritage **Aim:** Integration of the built form of the new community into the landscape, whilst respecting visual impact,						

landform, existing landscape features and features of cultural heritage. Provide a healthy environment for wildlife, creating an overall net increase in biodiversity.						
Policy SNC11 – Town Centre Neighbourhood **Aim:** To ensure an appropriate distribution of uses within the new community and in particular to deliver centres which are accessible and contain a mix of functions which service the needs of their neighbourhoods and the town as a whole.		• A range of local community facilities and community buildings including: primary school (joint education & social services, &including community use agreements) , town hall, library, health & social care centre, police station, at least one pub & one place of worship & housing (50-60dph)			• provide sufficient retail and service floorspace to meet the needs of those residents of each phase of the development	
Policy SNC12 – Western Neighbourhood Centre **Aim:** To ensure an appropriate distribution of uses within the new community and in particular to deliver centres which are accessible and contain a mix of functions which service the needs of their neighbourhoods and the town as a whole.		• Mixed use to include retail, employment, pub, secondary school, cinema/theatre shared with school, primary school, youth centre & housing (45-55dph)				
Policy SNC13 – Southern Neighbourhood Centre **Aim:** To ensure an appropriate distribution of uses within the new community and in particular to deliver centres which are accessible and contain a mix		• Mixed use to include retail, employment & residential (40-50dph)				

of functions which service the needs of their neighbourhoods and the town as a whole.						
Policy SNC14 – Eastern Neighbourhood Centre **Aim:** To ensure an appropriate distribution of uses within the new community and in particular to deliver centres which are accessible and contain a mix of functions which service the needs of their neighbourhoods and the town as a whole.		• Mixed use to include retail, employment, pub, primary school & residential (45-55dph)				
Policy SNC15 – Buffer Zones				• Noise buffer zones to protect against traffic noise from A38 & Hazeldene Quarry		
Policy SNC16 – Phasing **Aim:** To ensure that development is appropriately sited and phased to occur in a sustainable manner with facilities provided to serve the community and its population in line with the construction and occupation of the new community.		• Early provision of key elements of community infrastructure including public transport, health facilities, town centre primary school, community park			• Early provision of key elements of community infrastructure including public transport, health facilities, town centre primary school, community park	
Policy SNC17 – Delivery						
Local Transport Plan	• The authorities of Plymouth City Council, Highways Agency and Devon County Council					• We have worked in partnership with the Devon Primary Care Trust to produce

	have decided to pursue in partnership a joint major scheme bid to deliver the first phase of this transport infrastructure in conjunction with the Developers • Ensuring the establishment of car clubs is included as part of the planning obligations for the new community at Sherford • Develop and implement appropriate bus transit /rail systems to link the new community at Sherford to Plymouth in partnership with Plymouth CC					health impact assessments for the new housing and community developments at Sherford

ANALYSIS OF SOUTH TYNESIDE CORE STRATEGY, ADOPTED JUNE 2007

South Tyneside Council

Key

Key words* contained in spatial vision or spatial objective	
Policy containing key words* and linked to spatial objective	Policy xx: *xxxx*
Policy containing key words* but <u>not</u> linked to spatial objective	Policy xx: *xxxx*

Spatial Vision/Objective	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
	*Key words: walking, cycling, sport, recreation, activity, exercise	*Key words: well-being, safety, social (networks), socialise, crime	*Key words: pollution, noise, air/water quality, particulate, contaminant	*Key words: safety, accident, injury	*Key words: equality, equity, affordability fairness, inclusive accessibility, equal	*Key words: health, illness, climate change
Spatial Vision						
Spatial Objectives						
1 To create and retain wealth						
2 To help businesses start up, grow and develop						
3 To ensure high and stable levels of employment so everyone can share and contribute to greater prosperity						

4 To establish and retain a flexible and highly skilled workforce through training and Education						
5 To prevent deterioration and where possible improve local air quality levels for all			Policy EA5 Environmental Protection			
6 To protect and enhance the quality of the Borough's land and groundwater, rivers and seawaters						
8 To protect and enhance the Borough's coastline and water frontage	Policy EA2: The Coastal Zone					
9 To reduce the causes and the impacts of climate change			Policy EA5 Environmental Protection			
10 To protect and enhance the Borough's bio-diversity and geology	Policy EA1: Local Character and Distinctiveness					
11 To protect and enhance the Borough's diversity of cultural heritage						

12 To ensure good accessibility for all to jobs, facilities, goods and services in the Borough	Policy SC2: Reviving our Town Centres and other Shopping Centres Policy SC6: Providing for Recreational Open Space, Sport and Leisure				Policy SC6: Providing for Recreational Open Space, Sport and Leisure Policy A1: Improving Accessibility	
13 To minimise the amount of waste produced and promote sustainable waste management						
14 To make prudent use of natural resources						
15 To promote sustainable design and enhance the natural and built environment	Policy A1: Improving Accessibility	Policy ST2: Sustainable Urban Living				
16 To protect and enhance the quality and distinctiveness of the Borough's land and landscapes						
17 To maximise the opportunity to redevelop previously developed land						
18 To ensure everyone has the opportunity of living in a decent and		Policy SC5 : Providing for Gypsy and Traveller Caravan Sites			Policy SC4: Housing Needs, Mix and Affordability	

affordable home and tenure of choice						
19 To reduce crime and anti-social behaviour and the fear of crime and anti-social behaviour				Policy SC5: Providing for Gypsy and Traveller Caravan Sites		
20 To improve the health and well being and reduce inequalities in health care and access to it for all						
21 To promote equality and diversity and protect and strengthen community cohesion						
22. To increase public involvement in decision making and civic activity						

Policies	Physical activity	Mental wellbeing	Environmental health issues	Unintentional injury	Equality	Other
SS1 **Strategic Vision for South Shields Town Centre and Waterfront** **Issues:** • a key location • needs to reinvent itself as a modern market town & take better advantage of its riverside and seaside location • respect historic local distinctiveness and character • compete as a location for shopping, leisure and business, & as a visitor destination • be an attractive place to live with housing that meets people's needs and aspirations. **Overall approach:** • creating a town centre that expresses local identity, is vibrant, with a diverse range of retail, leisure and cultural facilities that are accessible to all; • promoting the regeneration of the riverside, providing opportunities for high						

quality mixed-use office, commercial, leisure, public services and residential development, expanding the town centre community; and • promoting and enhancing the foreshore as a key focus for leisure & recreation.						
SS2 **Mixed-Use Development Opportunities in South Shields** • 15 key sites identified for redevelopment for mixed use						
SS3 **Improving the Accessibility of South Shields Town Centre and Waterfront**	• Improve pedestrian connections. • creating and improving pedestrian/cycle routes to and alongside the river to facilitate a continuous riverside walkway/cycleway, linking with the town centre and foreshore.			• improving traffic movement, circulation and management, including the focusing of road traffic for the town centre and riverside towards main gateways.		
SS4 **Economic Development Opportunities in South Shields**						
SS5 **Tourism and Culture in South Shields**	• enabling redevelopment of south foreshore for a mix of tourism & recreational sports.	• new public library. • expansion of Customs House theatre & arts centre.				
SS6 **Tourism and Visitor**						

Accommodation in South Shields						
SS7 Retailing Opportunities in South Shields Town Centre						
SS8 Evening and Night-time Economy in South Shields			• control nuisance from noise, air quality, odour & delivery problems.			
SS9 Entertainment, Leisure and Community Facilities Opportunities in South Shields	• new swimming pool & sports/leisure centre.				• new pool/leisure centre more accessible than existing.	
SS10 Recreational Opportunities in South Shields	• continuous riverfront walkway/cycleway. • protect and enhance recreational open spaces and playing fields in the foreshore area. • support proposals for the restoration and enhancement of the designated historic parks. • encourage proposals that maintain and enhance the recreational viability of the seafront beaches. • create/enhance sheltered watersports area at Littlehaven. • support proposals for outdoor sport,					

	recreation and leisure uses in the River Tyne and coastal area.					
SS11 **Living in South Shields** • 10 housing sites allocated					• an element of affordable housing to be provided in all housing or mixed use developments.	
SS12 **Protecting the Built Environment Assets of South Shields**						
SS13 **Protecting the Natural Environment Assets of South Shields**	• protect coastal parks & open spaces.					
SS14 **Protecting South Shields from Coastal and River Flooding**					• reinforce & maintain tarmac access path to water's edge.	• improve infrastructure to help protect property from flooding.
Local Transport plan	• Provide pedestrian and cycle links to leisure /civic/business sector at Harton Staithes, and from new town centre housing sites. • Walking routes to the Arbeia Roman Fort are to be improved and promoted. • There are several strategic cycling routes;the number of connections to these will be increased, and secure cycle parking will be enhanced.					

APPENDIX G:

CASE STUDY SUMMARIES (BY LOCAL AUTHORITY)

CITY OF GLASGOW

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. Only one document was analysed (Glasgow City Plan 2) as this is the single planning policy document for the City. As the City Plan does not contain detailed policies for particular site/area, the analysis instead covered all the development management policies. The document contained explicit and implicit recognition of health issues within guiding principles, strategic development policies, 'delivering the vision' and development policies. There was evidence of a 'cascade' of this influence through the hierarchy, from 'guiding principles' to 'development policies', demonstrating a consistency of approach in setting policies for health outcomes.

City Plan 2: Guiding Principles and Strategic Development Policies

2. All three of the guiding principles relate to health issues, with the headings for the first and third specifically relating to key health themes (social renewal and equality, and improving health). The three strategic development policies recognise the key role of design in addressing the guiding principles, but in terms of explicit recognition of the key health issues, only Strategic Development Policy 1 delivers, by triggering the key words.

City Plan 2: Delivering the Vision

3. In 'delivering the vision', the City Plan identifies six issues of importance (including the four main themes of people, jobs, environment and infrastructure). These comprise statements of intent to ensure the delivery of the vision. All trigger recognition of a 'key word', signalling that health issues (amongst others) were a consideration in framing the intentions.

City Plan 2: Development Policies and Design Guidance

4. This section of the City Plan gives the detailed policy and design requirements for any development proposed in the City; there are 89 in total, with some seeking to ensure several health outcomes. All of the health issues are covered, with **Physical activity** most frequently considered in

policies (in 31 policies) and also in the specific implementation measures set out for each. Physical activity particularly features in policies for transportation (pedestrian/cycle links/networks, accessibility of facilities, traffic management to ensure cycling /walking are attractive options), policies for the environment (creating open space, green areas & allotments) and for residential development (design to encourage walking/cycling, car free development, & accessibility).

5. Equality and Environmental Heath are the next most frequently considered issues. **Equality** is covered most frequently (in 21 policies) in the retail and commercial leisure policies (provision of, and accessibility to, shops/services for communities), policies for transport (traffic management, ensuring availability of non-car mode opportunities) and also policies for the environment (accessible and safe open space/recreation areas, and provision of allotments). **Environmental health** is considered (in 20 policies) most frequently in relation to housing policies (mainly in relation to noise disturbance, but also to air quality in City Centre housing areas) and environment polivies(water quality and contamination).

6. **Mental wellbeing** is considered (in 17 policies) most frequently in the environment policies (life-enhancing open space and public realm improvements, sustainable environments and access to them) and also in relation to well designed residential environments.

7. **Unintentional injury** is the least considered health issue (in 11 policies). It is mainly covered in the design polices related to the public realm.

8. **Other** health issues considered include accessible health infrastructure provision, flood prevention and health promotion through healthy lifestyles (for example in allotment provision).

Glasgow and Clyde Valley Joint Structure Plan 2006

9. The Glasgow and Clyde Valley Joint Structure Plan sets the strategic policies for the Glasgow City Plan 2. The Structure Plan was informed by a

‘Health Action Plan’ which sought to address key health issues and inequalities. Structure Plan Strategic Policy 6 ‘Quality of life and health of local communities’ identifies the following types of action required to ensure that the needs of all communities are met and that the quality of life is improved:

- improved access to local jobs and services: to provide a more equitable distribution of access to local employment, shopping, social and cultural facilities;
- improved housing provision: to secure sufficient housing and sufficient variety of house types and affordability to meet future housing requirements; and
- enhanced environmental quality: to promote a healthier physical environment, including improved access to sports and recreation facilities and improving air quality.

10. The Structure Plan notes Glasgow’s status as a WHO Healthy City and that as such, the City is following the objectives for Healthy City designation.

CITY OF SWANSEA

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. Two documents were analysed: the Unitary Development Plan (UDP) and the Regional Transport Plan (RTP). As a unitary authority the City & County of Swansea is both the strategic and the local planning authority; Wales does not have a regional level of planning policy other than a national policy statement. Additionally, the UDP contains all the policies to guide development, unlike England which separates out levels of policy within its LDF documents, and hence with 45 objectives, 15 strategic policies and 132 detailed policies, it is long and detailed.

2. Both documents contained explicit and implicit recognition of health issues within objectives and policies. There was some limited evidence of a 'cascade' of this influence from objectives to policies in the UDP, however whilst the RTP is a later document, it demonstrates measures of support for achieving the health outcomes that are sought.

Unitary Development Plan

3. All the targeted health issues examined in this review are addressed explicitly by 11 of the 45 objectives in the 2008 City and County of Swansea UDP. Issues of **Equality** predominate in the objectives in terms of equitable distribution of sport and recreation facilities, accessibility and inclusive design.

4. Of the15 strategic polices, only six trigger recognition of a 'key word', signalling that health issues (amongst others) were a consideration in framing the policies. Of the remaining nine strategic policies, it may be deduced that health outcomes could benefit from at least two others (SP1 and SP2, both relating to creating quality environments).

5. Only three health issues were covered by the strategic policies, with '**Equality**' being considered most frequently in relation to accessibility to

waterfront areas, community/health facilities and generally by bus, bicycle and walking, and in the provision of affordable housing.

6. **Physical activity** was only considered by three strategic policies, particularly in terms of provision of sport and recreation facilities, and in improving accessibility by walking and cycling in both existing and new developments.

7. **Environmental health** issues were only addressed in one strategic policy related to remediating polluted land for economic development purposes.

8. Only one **other** health issue was considered by a strategic policy, that of provision of health facilities that are accessible to new development.

9. Mental wellbeing and unintentional injury were not addressed in any of the 15 strategic policies.

Detailed development management policies

10. A significant number of the detailed policies triggered the key words, although in many of the cases the heath issue was not the main thrust of the policy (for example Policy Ev16 triggers the words ‘recreation’ and ‘safety’, yet the policy is about allowing small scale development in small villages.

11. **Physical activity** benefits most from 32 of the detailed policies. These mainly relate to providing quality through design and in rural areas, specifically in encouraging walking and cycling, and provision of sports and recreation facilities.

12. **Environmental health** issues feature in 18 policies, requiring control over noise and air/water quality in the built environment and in minerals and waste operations particularly.

13. **Unintentional injury** is considered by controls to ensure safe developments in 15 policies. **Other** issues are considered in just 11 policies. These relate

to ensuring that health is safeguarded in development operations and that health infrastructure is provided by new residential development.

14. **Mental wellbeing** and **equality** are the least well considered in the detailed policies. Mental wellbeing is considered in terms of creating social and safe environments, with equality in terms of affordable housing and community facility provision.

Regional transport Plan

15. The RTP for South West Wales covers the period to 2025, but sets out specific programmes of projects for 5 year periods. As well as overarching objectives, most of which have health benefits, the RTP has specific policies developed for the Swansea urban area, many targeted to improve health and help overcome inequalities:

- High quality seamless public transport services, including Bus Rapid Transit routes, with integrated ticketing and interchange facilities, will be developed
- Provide links to and through the city centre thereby linking other key destinations and corridors
- A comprehensive network of pedestrian and cycle routes and a pedestrian and cycle friendly city centre will be developed.
- The highway network will be managed by a combination of improved alternatives to single car occupancy, traffic management to minimise congestion, improved air quality and enhanced road safety
- A parking strategy which supports city centre vitality and viability, but discourages commuting by car
- New development sites and corridors, such as the Fabian Way will be planned so that they can be effectively served by public transport and walking and cycling facilities.

HORSHAM DISTRICT

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. The two documents analysed contained some, but limited recognition of health issues within the vision, objectives and policies/proposals. There was some evidence of that recognition from the core strategy into area action plan demonstrating that health issues flowed through the policy hierarchy. There was some evidence of a consistency of approach.

Core Strategy

2. The Horsham Core Strategy contains nine Spatial Objectives. Of these, six trigger recognition of a health 'key word', signalling that health issues (amongst others) were considered in the framing of the objective. Health outcomes would not benefit from the remaining three objectives.

3. All the health issues were covered by the Spatial Objectives, with '**Equality'** being considered most frequently in relation to ensuring that facilities are accessible (inclusive design), and that there is adequate affordable and local needs housing provision. It also considers the needs of an ageing population and those with disabilities, particularly related to housing and health.

4. **Mental wellbeing** is also addressed, and considered in design policy (safety), new development (social infrastructure provision and social benefits) and protecting and enhancing facilities and services in existing communities.

5. **Environmental health** is addressed in environmental protection policies.

6. **Physical activity** was considered in terms of sustainable transport and design of development and of course in recreation and leisure facility provision.

7. **Unintentional injury** is the least considered health issue, where it is only considered in terms of road improvements.

8. **Other** health issues considered was limited to the health requirements of an aging population.

West of Bewbush Joint Area Action Plan

9. This Joint AAP sets out the detail for the implementation of part of the South East Plan's focus of development (a 'regional hub') at Crawley/Gatwick. The Horsham Core Strategy expresses this requirement in 'Policy CP6 Strategic Location – West of Crawley' as one of two major urban extensions to the urban area. The site is allocated for 2,500 new homes and associated employment provision to be completed by 2018.

10. The vision for the West of Bewbush development is set out in the AAP as:

"A sustainably built and located development, based on the neighbourhood principle, where residents can become involved in their community and share the benefits of a high quality of life. A wide range of local services will be accessible to local residents and there will be strong and sustainable links, with Crawley. The neighbourhood will be served by excellent public transport opportunities, which will give access to a wide range of services and facilities, Crawley town centre and employment opportunities. There will be high quality open spaces and informal leisure facilities but there will also be links into the surrounding countryside, the character of which will be respected."

11. Much of this vision will facilitate health outcomes across the board, but from the analysis of the AAP, **Physical activity** and **mental wellbeing** are the two issues of health that benefit most from its provisions, with **equality** also faring well.

Local transport Plan

12. Local Transport Plan 2 was prepared too early to cover the requirements of the AAP and so has not been analysed. In any event the AAP details the responsibility for delivery of the transportation/highways requirements to the developer.

Regional Spatial Strategy

13. Even before the South East Plan (RSS for the South East) had identified the Crawley Gatwick area as the focus for growth in this part of the Region, the 2001 West Sussex Structure Plan had identified the land to the west and north - west of Crawley as a strategic location for development of 2,500 new homes.

14. The Crawley Gatwick area is also a focus for infrastructure, including health, education, social and green infrastructure, and public services all of which should contribute to health outcomes. General policies in the RSS address a variety health issues. Policy SP4 aims to tackle health inequalities through regeneration and other initiatives, Policy CC5 aims to tackle health inequalities in the ageing population and CC8 requires local authorities to plan, provide and manage connected and substantial networks of accessible multi-functional green space.

15. Policy S1 aims to support healthy communities by ensuring access to open space, culture and recreation opportunities, mixed communities and healthier transport options. Policy S2 supports sustainable health services, Policy S5 encourages cultural and sporting activity and Policy S6 requires well-planned community infrastructure.

LANCASTER CITY

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. Only the Core Strategy and local transport plan (LTP) were available for analysis. The LTP supports the health initiatives in the core strategy, particularly in relation to travel management, accessibility and air quality, therefore showing a consistency of approach.

Core Strategy

2. The Lancaster City Core Strategy contains four spatial objectives and 19. Policies. Three spatial objectives trigger recognition of a key word, signalling that health issues (amongst others) were a consideration in framing the objective. For the remaining objective, it may be deduced that health outcomes could benefit (Regenerate the Local Environment).

3. **Equality** was considered most frequently in relation to building sustainable communities, reducing inequality by regenerating the economy and improving accessibility.

4. **Physical activity** and **mental wellbeing** were considered once each: physical activity in providing for sport and recreation, and mental wellbeing reducing crime and the fear of crime, and ensuring balanced communities.

5. The policies in the core strategy were more direct in considering health issues with **Physical activity** considered in ten policies covering health-related sustainability issues, including walking, cycling and open space, and developer contributions. **Equality** was considered in eight policies related to accessibility of facilities, jobs and services, and affordable housing. **Environmental health** is considered in just five policies related to airborne and water pollution, and contamination. **Mental wellbeing** and **unintentional injury are** the only other health issues covered; both in the same policy relating to reducing crime and community safety.

6. One '**other'** health issue is considered in a single policy. This is climate change.

Local transport Plan

7. The Joint Local Transport Plan contains specific measures to support the core strategy, including those for accessibility, walking, cycling and air quality.

Regional Spatial Strategy

8. The 2008 North West Regional Spatial Strategy identifies Lancaster (including Morecombe and Heysham) as the first priority for growth and development in Lancaster District. Many of the RSS's policies incorporate measures to deal with specific health issues including health improvement, reducing inequality, managing travel demand and promoting environmental quality.

LONDON BOROUGH OF REDBRIDGE

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. Only the Core Strategy contains explicit but limited recognition of health issues within objectives and policies. There was only limited evidence of that recognition filtering into the Area Action Plan. The Local Implementation Plan (of the London Mayor's Transport Strategy) does not cover the same period of the core strategy, however it does support a number of its policies.

Core Strategy

2. The Redbridge Core Strategy contains nine Strategic Objectives, with an overarching Spatial Vision.

3. Of the nine Strategic Objectives, six trigger recognition of a 'key word', signalling that health issues (amongst others) were a consideration in framing the objective. Of the remaining three objectives, it may be deduced that healthy outcomes could benefit from them.

4. All the health issues were covered by the Strategic Objectives and policy, with **Equality** being considered most frequently. It was considered in relation to ensuring there are well designed places which give access to opportunities for walking, cycling and public transport, growing numbers of jobs, affordable housing provision and a range of leisure opportunities.

5. **Unintentional injury** features frequently in terms of designing high quality places which are safe and healthy.

6. **Physical activity** only featured in terms of effective use of public transport, cycling and walking, particularly to assist business and investment so as to reduce congestion and commuting times, but also to improve access to services, facilities and jobs (including access to the park).

7. **Mental wellbeing** was considered in policies for overall growth and planning obligations, but only in terms of providing social meeting places and community support services.

8. **Environmental health** issues are related to design (noise from high density living and water quality in relation to sustainable urban drainage/runoff) and the transport network (improving air quality by the reduction of traffic congestion).

9. **Other** health issues were considered in several policies requiring health infrastructure and action on climate change.

Gants Hill District Centre Area action Plan

10. The Spatial Vision for this area is for it to be a *"unique and well-designed thriving district centre, which ..... has a strong local economy, a healthy safe, quality environment, where people want to live, work and build a future".* Whilst seeming to put in place many policies which could achieve much of the vision, the AAP does not convince that it will assist in overcoming current or future impacts to health, or improving health or health inequalities. There is no common thread in considering health in its widest sense. The impression is given that health is considered only where it is obvious to do so. Often, there are no firm proposals which will benefit health (other than highway improvement-related), but rather just "encouragement" to provide the development or generate actions that would see firm health outcomes.

11. Regeneration is seen as key to achieving the Spatial Vision. The regeneration is founded on improving pedestrian accessibility across the five roads forming the roundabout in the centre, improving the physical built environment, on allowing existing employment sites to be redeveloped for mixed use and on improving the retail offer, mainly by attracting a major supermarket.

12. **Physical activity** and **mental wellbeing** are the two areas of health that benefit most from the Area Action Plan's provisions. Physical activity will

benefit from numerous improvements which facilitate access, benefit cycling and walking, and encourage public transport use. Mental wellbeing benefits from improvements in street safety, making the centre more vibrant by introducing a mix of uses, including housing, and in encouraging more amenity and social infrastructure. **Unintentional injury** considerations will benefit from highway and accessibility improvements.

13. There are some benefits to **equality** by improving accessibility, the retail offer and social infrastructure.

Local Implementation Plan

14. The Local Implementation Plan contains some specific measures to support the Area Action Plan, but as the LIP was a much earlier document than the AAP, these measures should have been implemented by 2010/11.

NORTH NORTHANTS JOINT PLANNING UNIT

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. The two documents analysed contained minimal recognition of health issues within objectives, policies and proposals. The Core Strategy, whilst including some provisions that would address health issues, only occasionally makes the explicit link to health within the 10 objectives. The Area Action Plan (AAP) is not explicit on linking its sometimes obvious health benefits to health outcomes.

2. The general lack of health issues raised in both documents may in part be due to the fact that they are both the result of the detailed requirements of the RSS and the Sub-Regional Strategy: there is therefore little need for justification or explanation for policies. The Local Transport Plan (LTP) supports the provisions of the AAP.

Core Strategy

3. The North Northamptonshire Core Spatial Strategy is a document prepared by a joint planning unit made up of Corby, Kettering, Wellingborough and East Northamptonshire Councils, together with Northamptonshire County Council. As part of the 'Milton Keynes and South Midlands Sub-Regional Strategy', North Northamptonshire is required to deliver 52,100 new homes and 43,800 new jobs over the period 2001-2021. It should also take account of the prospect of a further 28,000 homes needing to be provided in the following decade. This growth is to be focused on the 'Growth Towns' of Corby, Kettering and Wellingborough; the joint core strategy provides the development framework to implement that growth.

4. The Core Spatial Strategy contains 10 objectives, linked to an overall Vision that North Northamptonshire will be a better place, with benefits realised from the massive growth planned.

5. Of the10 objectives, four trigger recognition of a 'key word', signalling that health issues (amongst others) were considered in the framing of the

objective. Of the remaining six objectives, it may be deduced that health outcomes could benefit from at least four of them (Objectives 5 – Connectivity & Modal Shift, 6 – Infrastructure & Services, 7 – Economy and 9 - Regeneration).

6. Only three of the key health issues were covered by the objectives, with **Mental wellbeing** and **Unintentional injury** were considered twice each, both in relation to community safety and promoting wellbeing. '**Other'** health issues had more references relating to healthy lifestyles and sustainable development, to combat climate change.

7. Turning to the policies, **Physical activity** was not surprisingly one focus of Policy 5: Green Infrastructure, by providing for recreation. It also features in the prevention of loss of open space or recreation facilities and provision and connectivity for non-motorised travel and public transport.

8. **Mental wellbeing** is referred to in quality of life policies for sustainable development and community safety.

9. **Environmental health** issues are related to water management and neighbourhood amenity (noise, vibration, smell etc).

10. **Unintentional injury** is the least considered health issue in individual policies, where it is covered only related to highway safety.

11. **Equality** is referred to in policies for meeting local housing needs, provision of affordable and lifetime homes, and promoting accessibility and public transport.

12. '**Other'** health issues considered include mitigation of climate change, promoting healthier lifestyles and provision of appropriate health facilities.

Wellingborough Town Centre Area Action Plan

13. Wellingborough is one of three towns designated as ‘sub-regional centres’ in the Core Spatial Strategy, meaning that it is a focus for new retail development. This AAP deals with the regeneration of the town centre & transportation measures that are needed to cope with the population from 12,800 new homes being provided up to 2021, with further significant growth beyond 2021. Wellingborough is required by the Regional Spatial Strategy to provide a diverse range of quality comparison shopping that meets the needs of both the town & wider rural hinterland. Without this regeneration and retail/employment growth, retail spending would ‘leak’ to adjacent centres which would harm Wellingborough town centre’s character, and lead to unsustainable new development and travel patterns

14. **Physical activity**, **Mental wellbeing** and **Equality** are the three areas of health that benefit most from the Area Action Plan’s provisions.

Local Transport Plan

15. The Northamptonshire Local Transport Plan contains some specific measures to support the Wellingborough Town Centre Area Action Plan, but also many general county-wide measures that will benefit the area. Specifically, the document provides the public transport and highways’ infrastructure that will assist in ensuring a well connected town centre to the two new urban extensions.

Regional Spatial Strategy

16. The East Midlands Regional Spatial Strategy (RSS) to 2031 includes the Government’s Sustainable Communities Plan ‘growth area’ provisions for Milton Keynes South Midlands. North Northamptonshire is a key component of this growth area, resulting in a population growth for the sub-area of some 85,000 people and 43,800 new jobs in the years to 2021.

17. Corby, Kettering and Wellingborough are identified as ‘growth towns’ and together form the ‘urban core’ of the sub-area.

18. The RSS' regional vision contains strong messages that health is important. It says that the Region will be recognised as:

"a Region with a high quality of life and strong healthy sustainable communities that thrives because of its vibrant economy, rich cultural
and environmental diversity and the way it creatively addresses social inequalities, manages its resources and contributes to a safer, more inclusive society."

19. Two of the RSS' core objectives are to reduce social exclusion and improve health, physical and spriritual wellbeing of residents.

20. The RSS requires an urban renaissance & recycling of land for the required new development before use of greenfield land, all based on improved infrastructure and reducing the need to travel.

PLYMOUTH CITY

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. All the three documents analysed contained explicit and implicit recognition of health issues within objectives, policies and proposals. There was evidence of a 'cascade' of this influence from core strategy to area action plan, and from local transport plan to core strategy, demonstrating that health was certainly a consideration in framing objectives and policy, and that there is a consistency of approach.

Core Strategy

2. The Plymouth Core Strategy contains 15 Strategic Objectives and a set of Area Visions. The latter form the basis for ten Area Action Plan areas consisting mainly of regeneration areas linked to Strategic Objective 5.

3. Of the15 Strategic Objectives, 11 trigger recognition of a 'key word', signalling that health issues (amongst others) were a consideration in framing the objective. Of the remaining four objectives, it may be deduced that health outcomes could benefit from at least one of them (Objective 5: Delivering Regeneration).

4. All the health issues were covered by the Strategic Objectives, with '**Equality**' being considered most frequently in relation to ensuring there are successful communities (existing and new), providing adequate and accessible retail provision, ensuring enough employment opportunities, housing and affordable housing, and ensuring that there is physical access for all, by a variety of transport modes to facilities and jobs.

5. **Physical activity** was also frequently considered, particularly in terms of linking communities, design of development and of course in transport and open space policy areas.

6. **Mental wellbeing** is the only health issue to have a strategic objective devoted to it (Objective15: Delivering Community Well-being). It is

considered in design policy (both in terms of the aesthetics of design and 'designing out crime'), sustaining the environment and transport.

7. **Environmental health** issues are as may be expected related to pollution and strategic infrastructure (pollution and noise from roads in particular), but also in design issues such as locating noise sources (play areas) away from sensitive areas.

8. **Unintentional injury** is the least considered health issue, where it is covered in transport considerations and community well being (in terms of safety).

9. **Other** health issues considered include flooding and health care provision. Significantly, but surprisingly tucked away in a policy requiring provision of "enhanced health care facilities" (Policy CS31), is the requirement for all major development proposals to be subject to HIA.

10. The ten Area Visions also consider health issues. **Physical Activity** is most prevalent, with **mental wellbeing** and **equality** also attributed. The Area Visions are articulated in the Area Action Plan DPDs, of which the Devonport Area Action Plan is one example.

Devonport Area action Plan

11. The Area Vision objectives set out to re-create the area as a distinct, self-sustaining community of quality, variety and interest. It should engender pride from its residents, be attractive to visitors and be a model of C21st living, working and playing. Many of these objectives have roots in overcoming or improving health issues.

12. Re-creating the physical 'heart' and therefore the community of the place, impacts on several health issues including mental wellbeing, equality and physical activity. This redevelopment, together with other housing redevelopment sites allows the re-balancing of the community by introducing

more private housing and family housing, and by improving basic food shopping and increasing employment and sport/cultural opportunities.

13. **Physical activity** and **mental wellbeing** are the two areas of health that benefit most from the Area Action Plan's provisions, with **equality** also faring well.

Local transport Plan

14. The Local Transport Plan contains specific measures to support the Devonport Area Action Plan, but also many general City-wide measures that will also benefit the area. Specifically, **physical activity** (pedestrian and cycling measures and routes, and improved public realm), and **equality** (improved bus accessibility to key facilities and services - hospital, employment, education, training and job centre) are the main health beneficiaries from the Local Transport Plan.

Regional Spatial Strategy

15. The emerging South West Regional Spatial Strategy 2006-2026 (SWRA 2006) and the Government's Proposed Changes to it (DCLG 2008), designate Plymouth as one of a number of 'Strategically Significant Cities and Towns'(SSCTs), identified as places which currently play a critical strategic role regionally or sub-regionally. The Regional Spatial Strategy's (RSS's) vision for the SSCTs is that they will be:

> *"those places which offer the greatest opportunities for employment, and the greatest levels of accessibility by means other than car to cultural, transport, health, education and other services."*
>
> (Development Policy A)

16. With specific reference to Plymouth, the draft RSS states that,

> "*Plymouth will be transformed into one of Europe's finest, most vibrant waterfront cities, providing the highest order of educational, cultural, and health and leisure services within this part of the region.*

Stimulating economic development will offer the opportunity to transform the city into a place where people want to live, work and relax, making real progress in reducing deprivation in the City and its hinterland."

17. Whilst the above are very high level aspirations, Plymouth City Council's Core Strategy and the associated documents that have been analysed, appear to show implementation of the vision for the City within the local level objectives and policies. Additionally, the general policies of the draft RSS include policies related to sustainable communities (Policy SD4: Creating healthy, safe and secure places to live), affordable housing (Policy H1), walking, cycling, etc which have the potential to positively impact on health, there is an over-emphasis on health as it related to health *facilities.*

18. On a positive note, draft RSS Policy HE3 requires an HIA of all major development proposals.

SOUTH CAMBRIDGESHIRE

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. Only the two development plan documents were analysed, as the local transport plan was not sufficiently advanced to be able to judge whether it supported the health provisions of the area action plan.

2. There was an overall disappointment in how the two documents addressed health. The Core Strategy, whilst including many provisions that would address health issues, failed to make the explicit link within the 11 objectives. The Area Action Plan is very detailed in its approach, but again is largely silent on linking its obvious health benefits to health. This may be merely due to the plan's focus on 'sustainability', which can be taken as a proxy for health.

3. It is impossible to see a 'flow' of health-related policy from the Core Strategy to Area Action Plan, but that being said, the latter plan does incorporate a significant number of policies which are likely to have positive health outcomes particularly in relation to physical activity. The rationale for this disparity can possibly be explained by the style of expression in using sustainability terminology rather than that equated with health issues.

Core Strategy

4. The South Cambridgeshire Core Strategy contains Objectives, rather than 'strategic objectives', all linked to sustainability rather than health criteria.

5. Of the 11 objectives, only three trigger recognition of a 'key word', signalling that health issues (amongst others) were a consideration in framing the objective. Of the remaining seven objectives, it is easy to deduce that positive health outcomes could benefit from at least five of them.

6. Only three health issues were covered by the objectives, with **Equality** being considered most frequently in relation to ensuring that new housing includes affordable housing, and that development is located accessible to services,

jobs, shopping and recreation opportunities by public transport, walking and cycling.

7. **Physical activity** was considered only once in terms of ensuring that walking, cycling and public transport opportunities are provided by new development.

8. **Environmental health** issues are only considered in relation to the reduction of pollution from development.

9. Only one '**Other'** health issue is addressed in an Objective, that of climate change.

10. **Mental wellbeing** and **Unintentional injury** are not addressed.

Cambridge East Area Action Plan

11. The Vision for this new urban extension to Cambridge sets out its characteristics as *"modern, high quality, vibrant and distinctive ... complement and enhance the character of the city"* (Policy CE/1). The policy goes on to seek protection and enhancement of the environmental qualities of the surrounding area. The AAP sets out 89 objectives categorised into the major issues (for example housing, transport, telecommunications); these are all single issue objectives, which are implemented by 35 policies.

12. **Physical activity** is the health issue addressed frequently within the AAP, mainly by the constant references to provision of walking, cycling and public transport opportunities. This is linked in some policies to access within the "green fingers" and public rights of way network. Less emphasis is put onto sport, although there is a requirement for a major public sports facility and the opportunity to non-motorised water-based recreation.

13. **Equality** comes through in the development principles which seek to engender an inclusive and diverse community, with all services and

amenities highly accessible to all, but without a car dependency. An affordable housing requirement is set at 40% of the total provided.

14. **Mental wellbeing** is considered infrequently and largely to do with design and how this can assist in developing a sense of 'community spirit' and social integration', but also in terms of the provision of services and facilities that are delivered by the community or voluntary sector, and in minimising crime.

Local transport Plan

15. The Local Transport Plan was not analysed as this did not cover the development period for this urban extension.

Regional Spatial Strategy

16. The core strategy and AAP were prepared under the provisions of the 2000 Regional Planning Guidance (RPG) for East Anglia to 2016 and the Cambridgeshire and Peterborough Structure Plan 2003. Both the RPG and structure plan are of their time and focus on 'sustainable development'.

17. The RPG guidance (the forerunner to Regional Spatial Strategies) was not prepared in such a way as to take full account of social impacts nor of the important issue of the health impacts of its development strategy. The Structure Plan, although complying with the RPG, makes more reference to health issues, albeit mainly in terms of health facilities. The overall strategy for the Structure Plan is for enabling sustainable development.

18. The 2008 East of England Regional Spatial Strategy (the 'East of England Plan') covers the period 2001-2021[6].

[6] A High Court hearing in May 2009, found in favour of the legal challenge brought by Hertfordshire County Council and St Albans District Council against the Government on aspects of the Plan relating to development in the Green Belt around the towns of Hemel Hempstead, Welwyn Garden City and Hatfield. The successful legal challenge only related to a small part of the Plan and does not affect South Cambridgeshire.

19. The vision of the RSS is an amalgam of health/ health equality, with environmental sustainability:

> "By 2021 the East of England will be realising its economic potential and providing a *high quality of life* for its people, including by meeting their *housing needs* in sustainable *inclusive* communities. At the same time it will reduce its impact on climate change and the environment, including through savings in energy and water use and by strengthening its stock of environmental assets."

20. One of five RSS objectives is to improve the quality of life for the people of the region.

21. Whilst recognising issues relating to health, the RSS appears to be guided mainly by the overarching objective of 'sustainability' (for example encouraging walking and cycling, sustainable mixed use development, energy efficient developments), with health objectives less explicitly and less frequently mentioned. The focus on sustainability may detract from the potential health outcomes, as health issues appear to lose their identity within the document.

SOUTH HAMS

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. Of the three documents analysed, only the Area Action Plan (AAP) contained explicit and detailed recognition of health issues within its policies. The Core Strategy had little recognition of health issues. As the AAP is for a new community (in the form of an urban extension) the Local Transport Plan assumes that the provision of most of the transport requirements will be borne by the developer. There is little connection between the Core Strategy policies and those in the AAP.

Core Strategy

2. The South Hams Core Strategy contains 23 Strategic Objectives of which only four trigger recognition of a 'key word', signalling that health issues (amongst others) were considered in the framing of the objective. Of the remaining 19 objectives, it may be deduced that health outcomes could benefit from at least 12 of them.

3. Only three of the specified health issues were covered by the Strategic Objectives, with **'Equality'** being considered twice in relation to providing affordable housing to meet local needs and providing facilities in accessible sustainable transport. Policy CS4, the policy which allocates the Sherford urban extension (the subject of the AAP analysis) defines these requirements.

4. **Physical activity** was considered only once in relation to ensuring that local housing needs are met. Policy CS4 is explicit in the requirement to provide sustainable transport systems and networks, including those for pedestrians and cyclists.

5. **Environmental health** issues were also considered only once. This was in relation to sustainable management of soil, air and water.

6. No key words are triggered for '**Other'** health issues, although Policy CS11 deals with promoting development which assists in mitigating climate change.

Sherford New Community Area Action Plan

7. Core strategy Policy CS4 requires the design of the new community to be of a high standard, locally distinctive and environmentally sustainable. It will be developed in such a way so as to avoid pollution, minimise the use of resources, minimise waste and conserve energy and water resources, both on and off site. The proposal will require the provision of significant elements of key strategic infrastructure including a wide range of community facilities, sustainable transport systems and the full spectrum of physical infrastructure. The AAP is used to detail the requirements needed from the development to ensure this sustainability.

8. **Physical activity, mental wellbeing** and **equality** are the three areas of health that benefit most from the Area Action Plan's provisions, with detailed requirements and standards which will ensure health outcomes from the new community.

Local transport Plan

9. The Local Transport Plan contains some specific measures to support the Sherford Area Action Plan, including the major infrastructure needed to provide the junction access to the site from the A38 and to enhance public transport provision early in the development's life.

Regional Spatial Strategy

10. The requirement for South Hams to accommodate much of a new community comes from the inability of the Plymouth City Council being unable to provide the needed number of homes to satisfy projected needs. Plymouth's eastern edge provides the most sustainable location for a new community, as was recognised by the 2004 Devon County Structure Plan.

The emerging South West Regional Spatial Strategy 2006-2026 and the then Government's Proposed Changes to it designate Plymouth as one of a number of 'Strategically Significant Cities and Towns'(SSCTs), identified as places which currently play a critical strategic role regionally or sub-regionally. The Regional Spatial Strategy's (RSS's) vision for the SSCTs is

> *"those places which offer the greatest opportunities for employment, and the greatest levels of accessibility by means other than car to cultural, transport, health, education and other services."*
>
> (Development Policy A)

11. Draft RSS Policy HE3 requires an HIA of all major development proposals.

SOUTH TYNESIDE

COMMENTARY ON SPATIAL PLANNING POLICY FOR HEALTH

1. None of the three analysed documents contained explicit recognition of health issues within objectives or policies.

Core Strategy

2. The South Tyneside Care Strategy lists 22 Spatial Objectives which are drawn from *"a wide range of strategic policy documents including the Regional Spatial Strategy, our Community Strategy and Regeneration Strategy"* (paragraph 1.20). These Objectives flow from the Spatial Vision, and are also used in the LDF's Sustainability Appraisal.

3. Of the 22 Strategic Objectives, only eight trigger recognition of a 'key word', signalling that health issues (amongst others) were considered in the framing of the objective. Of the remaining 14 objectives, it is possible to deduce that health outcomes could benefit from at least three of them (Objective 4: educate the workforce; Objective 11 protect and enhance cultural heritage; and Objective 22: increase public involvement in decision making).

4. The over-arching Spatial Vision only includes a single 'key word' reference.

5. Only three the health issues were covered by the Strategic Objectives, with **Equality** being considered most frequently in relation to ensuring accessibility to all jobs, facilities, goods and services. Also considered are the opportunity for everyone to have a decent, affordable home, in reducing inequality in healthcare, and in promoting equality and diversity.

6. **Environmental Health** was the next most frequently considered health issue (just twice) relating to air quality and quality of groundwater, rivers and the sea. **Other** health issues were also considered twice, relating to climate change and access to health care.

7. **Mental Wellbeing** was only considered once, relating to reducing crime.

8. Neither **Physical Activity** nor **Unintentional Injury** triggered a key word.

9. A number of policies pick up on the key words, where the Strategic Objectives do not, however these are not plentiful. **Physical activity** benefits most with five policies including consideration of health issues, including improving accessibility through design and through facility/service provision and providing for sport and recreation. **Equality** benefits from the same policies, together with provision of affordable housing.

South Shields Town Centre & Waterfront Area Action Plan

10. This Area Action Plan is predominantly a regeneration plan for this part of South Shields. It is a diverse area including the town centre, coastline, part of the eastern bank of the River Tyne and part of a World Heritage Site (Hadrian's Wall). The regeneration strategy builds on the tourism opportunities granted by these unique elements, which in turn will provide redevelopment (by a mix of uses), improved waterfronts and townscape, cultural and tourist facilities.

11. The tourism focus means that policies do not focus on local residents, although clearly all the improvements do have the potential for equal benefit to them as well as visitors.

12. **Physical activity** benefits most from the regeneration policies, with improved pedestrian and cycle ways, and new or enhanced sport and recreation facilities. **Equality** is enhanced with a new pool and leisure centre being relocated closer to the town centre and therefore being more accessible to residents. Additionally, the new housing coming forward as part of the regeneration, will incorporate a range of house types and an element of affordable housing.

13. **Mental wellbeing** will benefit from new cultural facilities, including a new library, and **unintentional injury** is considered with traffic management measures.

Local transport Plan

14. The Local Transport Plan contains specific measures to support the Area Action Plan. The main health beneficiary is **physical activity** (pedestrian and cycling routes, improving connectivity and improved public realm).

Regional Spatial Strategy

15. The North East of England Plan is the Regional Spatial Strategy to 2021. It includes South Tyneside as lying within the Tyne & Wear City-Region and, with one other City-Region is required to accept most of the development for the Region as a whole. Hebburn, Jarrow and South Shields are three of several towns in the City-Region to be given a priority for regeneration.

16. Additional to the area-specific policies, the RSS includes policies for sustainable development (Policy 2 to *"improve health and well-being while reducing inequalities in health"),* delivering sustainable communities *(Policy 24),* improving inclusivity and affordability *(Policy 30)* and has an economic objective to *"improve the health of the Region to produce a healthier workforce".*