University of the West of England
BRISTOL

Review 5/6
Spatial Planning & Health
Integrating health into the planning process

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Produced by: Spatial Planning for Health Collaborating Centre
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List of abbreviations

Abbreviation	Meaning
AAP	Area action plan
AMR	Annual monitoring report
COI	Core output indicator
CI	Contextual indicator
DPD	Development plan document
EU	European Union
HAZ	Health Action Zone
LDF	Local development framework
LOI	Local output indicator
LPA	Local planning authority
LTP	Local transport plan
NI	National indicator
RTP	Regional transport plan
SA	Sustainability appraisal
SEA	Strategic environmental assessment
SEI	Significant effects indicator

Glossary of terms

Term	Definition
Annual Monitoring Report	A statutory requirement (Section 35, Planning & Compulsory Purchase Act 2004) for every local authority. It is considered the main mechanism for assessing the performance of the local development framework.
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.
Development Process	Generates actual change to the human environment, and it involves investors, funders, land owners and operators as well as regulatory authorities such as planning. The main link between the development process and planning is the development management (or control) process.
Environmental health issues	As considered in appraisal processes (EIA, SEA etc) including for example, air and water quality, noise, odour or contamination.
Health	A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
Health Action Zone	A designation established as part of the Labour Government's public sector reforms agenda. The HAZ initiative was area based to tackle high levels of social and economic deprivation.
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.
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)

SUMMARY AND OVERALL CONCLUSIONS

Introduction

The purpose of Reviews 5 and 6 is to draw together all the work done so far, plus new evidence from English case studies and countries overseas, in order to reach conclusions about the best way, or ways, of integrating health into the spatial planning process. The original brief for Review 5 concerned project and plan appraisal, while Review 6 was about spatial planning as a whole. The reason for amalgamating them into one report is that the appraisal processes need to be seen simply as parts of the spatial planning process, not separate from it.

The four questions that the research addresses are therefore:

- How should we integrate health into the planning process?
- As part of that, how should we integrate health into the plan and project appraisal processes?
- More broadly, how should we ensure that health is integrated into the development process? (See discussion below)
- What and the limitations and gaps in the evidence?

Limitations to the research

It is important to note two limits to this review. First, that the whole of this research programme as set up by NICE has focussed on the planning system. It has not been primarily concerned with the degree to which, or the ways in which, the built environment impacts on health and well-being – though an understanding of this emerging field has of course been vital. A separate paper prepared by Hugh Barton for the Government Office for Science Foresight review, entitled *Land use planning and health and well-being* deals succinctly with this huge issue. It was published in *Land Use Policy* last year, and is appended to this report.

The other limitation concerns the degree to which the planning system is the driver of land use and built environment change. The statutory processes intervene in the on-going market process of land development, and may often have much less influence

than the land owners, developers, investors, operators and users who are the other players in the development process game. The plans themselves, in the UK context, can guide but not dictate, and have to operate within what the market, in the broadest sense, can deliver. The key junction of planning system and development is the planning application process ('development control' or 'management'). The research has not delved deep into this, except in relation to project appraisal. The other reports (from Buchanan and Strategic Solutions) are similarly circumscribed.

There is therefore a major research gap: the degree to which healthy policies, incorporated in plans, are actually translated into action on the ground, without compromise. In this report we have recognised the limitation by setting appraisal and the planning system in the wider context of the development process, even though we have limited evidence on that front.

The evidence base and research methods

The report draws on the previous evidence statements, material from the 'call for evidence', the related report to NICE from *Strategic Solutions,* and a limited number of new case studies in Britain and overseas. Note that we have not been able to access either the DoH/CLG study of the planning system and guidance (Buchanan and Partners) or the HUDU report on health inequalities. Given the transition currently occurring to government policy, we have included a brief review of key changes so far to the planning system and to the governance of public health.

The aim of the case studies is to examine good practice in the UK and from elsewhere that would be relevant to the British experience. We looked for examples that are innovative, successful, transferable and sustainable. The selection was made from case studies in the previous reports and from our own knowledge. This involved sifting and scoping of possible cases, and narrowing them down for both principled and pragmatic (inadequate evidence) reasons. The chosen ones and the main reasons for selection are:

- *Bristol City Council*: close collaboration between public health and planning, with new appointments expressly bridging the divide

- *Greater London Assembly*: the Mayor has statutory duties to promote health and the reduction of health inequalities
- *Healthy Urban Development Unit* (HUDU): a special unit set up to facilitate PCT engagement in the spatial planning decision-making
- *Manchester Airport HIA*: The HIA of the second runway was effective at achieving health benefits through the project decision process
- *Plymouth City Council*: the most impressive explicit integration of health and well-being in plans to emerge from R3 case studies
- *Victoria, Australia:* broad involvement of government, health and planning stakeholders in the development of policy and techniques to integrate health, including HIA
- *New Zealand:* strong focus on HIA, and evidence that the integration of health in planning goes beyond appraisal
- *Netherlands:* a radical approach to the integration of policy areas and impressive achievement of coherent spatial planning *(to be completed)*
- *Freiburg, Germany:* health not explicitly integrated with planning, yet the focus on sustainability and quality of life, and effective community management of the development process, has resulted in a healthy city
- *San Francisco:* good practice in HIAs and developing tools for assisting integration of health in planning decisions

The changing planning and public health systems

Without straying into the realms of pure speculation, it is obvious that the changes already announced by the Coalition Government, and those previewed in the Conservative Party Green Paper on 'Open Source Planning', will impact on the way that planning and health interrelate.

The transfer of public health responsibilities from PCTs to local authorities, coupled with a signalled political commitment to promote action to improve population-wide health and reduce health inequalities, could help institutionalise and ease the connections between health and planning and other related professionals in local authorities. A health white paper in December 2010 will give more detail about the proposed changes, and might allow firmer judgement of likely impacts.

In the planning field uncertainty is rife. The biggest uncertainty surrounds the principle of localism. The intention is to give local authorities, and within their remit 'neighbourhoods', much greater say of what happens in their locality. It will not be clear how that will happen until the Government produces its 'localism' bill in the New Year. The degree of control of the spatial plans over development certainly looks set to reduce as communities and market interests are freed of certain constraints and given delegated decision-making powers in certain situations. While the desirability of greater local determination is supported by some planning commentators, the cost of achieving good (healthy) collaborative neighbourhood planning is likely to be high, and threaten effectiveness[1].

One important change to the planning system has already occurred: the abolition of the Regional Spatial Strategies (RSS) as determinants of local policy. This has immediate consequences for the provision of new homes with some local authorities stalling preparation of LDFs and signalling downward review of planned housing numbers. The National Housing Federation has calculated that plans for 100,000 new dwellings have been shelved (See discussion in Appendix 2). Housing availability – location, tenure, quality etc – is a key determinant of health. But what is not at all clear, is the effect of other measures yet to be introduced, which could incentivise provision, so it is premature to reach any evidence-based conclusions for the medium term.

The same applies to infrastructure provision. The abolition of the RSSs, which attempt to co-ordinate the location of housing, employment, transport and services across sub-regions, thus assisting integrated, healthy settlement planning, has an immediate impact. But the effectiveness of the replacement systems – particularly the Local Enterprise Partnerships (LEPs) – could more than compensate. At this point the only certain thing is short-term hiatus.

Overall, then, there is a clear opportunity for better co-ordination and co-operation between the public health and planning agencies. The short-term impact of new

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[1] See contributions in the September issue of *Town and Country Planning,* especially the article by Jeff Bishop, an expert in local collaborative processes.

planning and decentralisation policies is to paralyse decision-making in some (but not all) local authorities. The medium- to long-term impacts are not yet clear, partly because detailed policies are still being framed. In this situation it is timely for NICE to seek to ensure that health and well-being are properly recognised in the new system.

Good practice findings: national policy

There are many well-evidenced findings coming forward from the diverse sources that we have examined. The report lists all of these, with a crude level of significance given by the number of different sources which underpin the finding. It is striking that there is very little competing or contradictory evidence, rather a strong general reinforcement from the different sources. The summary here picks up points which have been to some extent validated by triangulation. It also combines national and international findings. Where text is in italics, this is a comment from the UWE team.

1. *A planning policy statement (PPS) on health:* Review 4 (R4) and the Strategic Solutions (SS) report underpin the potential value of explicit health and well-being planning guidance from government that would make health unequivocally a 'material consideration' in planning decisions. *In the context of the government's intention to simplify the PPSs, health and well-being should be integrated into the new equivalent of PPS1, highlighting the centrality of health in purpose of the planning system*

2. *A health/planning support agency in each region:* R3, SS and HUDU case study all evidence the current or potential value of an equivalent to HUDU in each part of the country, advising local authorities and health agencies on both the planning of health facilities and the creation of healthy environments. International evidence – particularly the experience of VicHealth in Victoria, backs the idea that regional support, shared evidence data-bases, design guidelines and expertise, enhancing local capacity, can be very fruitful. Such an agency acts as a champion for health. *This could enable the effective sharing of best practice and reduce the need for dedicated staff in each local authority. In the context of 'localism' it could also support neighbourhoods in*

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planning their own environment. Active discussions are being pursued in South West England at present. If appropriate 'regions' could be replaced with LEPs, or clusters of LEPs.

3. ***The Sustainable Community Strategy and LDFs:*** the SCS is a valuable tool in co-ordinating different agencies which have a bearing on health, including the Joint Strategic Needs Assessment (JSNA) and the LDF. Its role in addressing health and health inequalities influenced by the LDF could be more explicit, especially in relation to urban extensions and regeneration

4. ***Responsibilities of health agencies:*** the HUDU case study and SS point to the need to change the remit of health agencies so that they consider the impact of locational and design decisions on healthy urban and rural environments (through the LDF and their own investments) as well as on health service provision.

5. ***International evidence on statutory systems:*** Australian, NZ and German (Freiburg) evidence suggests that the balance between regulation, guidance and flexibility needs careful consideration from regulators so that local planning authorities have an incentive to buy-in to healthy planning, but there is also ample opportunity for local initiative and leadership. The municipal public health plans in Victoria are held up as a useful model to learn from.

6. ***National intersectoral working:*** the Australian and NZ cases show that intersectoral partnerships at central government level are important to build good evidence bases and support the integration of health into plans. In other words it is important for government to speak with one voice on the issue. Note however, that the Freiburg example shows how individual cities can take very effective action independently of government, so long as they have sufficient autonomy. *In the English context it is not simply the DoH and the CLG that need to collaborate (as indeed they are doing in some fields), but the Departments for Transport, Trade and Industry, Environment, Food and Rural affairs, Energy and Climate Change, and the Treasury.*

Findings: the planning system in practice

1. *The education of planners:* R3 and SS both point to the need to extend the education of the planners operating the system beyond sustainability and into health. R3 and the Bristol case suggest the practical use of rapid HIA to engage and educate planners. The examples of Australia and California illustrate the benefits of health sector funding and the importance of support from the professional bodies. *A Department of Health study undertaken by UWE supports this and has created a network of Planning Schools dedicated to the task for both current students and mid-career professionals. The RTPI and the UKPHA are supportive.*

2. *Engagement of health agencies:* Evidence from HUDU and Plymouth suggests that there are real benefits if the health authorities are engaged in the process of plan-making at an early stage, so as to influence the core agenda of the plan. According to the Manchester, Bristol as well as Plymouth case studies, this should also apply to major developments: the public health authority can influence the nature of the initial advice given to applicants. *Ensuring the appropriate objectives at the start is vital: detailed involvement in the realisation of those objectives is onerous and often inappropriate.*

3. *Building health/planning collaboration:* R3, GLA, HUDU, Plymouth and Bristol evidence suggest many ways in which collaboration can be made effective. These include
    a. the preparation of best practice guidelines,
    b. joint strategy preparation, joint appraisal exercises,
    c. the development of health action zones which involve housing , transport and economic units as well as health and planning;
    d. the establishment of a WHO Healthy Cities project
    e. embedding of public health expertise in planning units and of planning expertise in public health units (see 5 below)

4. *Policy into action:* evidence from HUDU, Bristol and GLA case studies highlights the need for local authorities (and public health agencies as long-

stops) to ensure that policies in the LDF that address health and health inequalities are actually used when determining planning applications. Manchester, Plymouth and Bristol case studies underline the value of pre-application negotiations with applicants of major schemes. A pre-application HIA , with the health and planning authorities helping with scoping, can enable key issues to be addressed in advance and mitigation incorporated at the outset when it is likely to be much more effective

5. ***Joint appointments:*** Bristol and Plymouth case studies and SS stress the value of joint appointments between health authority and local authority. This has been found to break down silo barriers and greatly assist the integration of health into planning policy and decisions. It can take the form of a joint director of public health, and a dedicated officer with explicit health and planning responsibilities. *In a situation where the local authority takes over the public health remit this should in theory at least be easier to implement.*

6. ***Monitoring health and well-being:*** R4, SS and HUDU lead to the conclusion that the current set of commonly-used indicators has little utility in monitoring health. Authorities should consider devising more effective ways of assessing progress towards health and health equity.

Findings: plan and project appraisal

1. ***Knowledge of planning and health professionals:*** R1 and 2 highlight the limited shared knowledge of planners and health professionals in relation to appraisal. R3, SS, HUDU, Plymouth and Manchester point to the importance of guidance and shared experience which would help both professions understand the issues and processes involved in incorporating health into appraisal of plans and projects: so that planners grasp the health significance of land use development decisions, and health professionals understand the intricacies of the planning system. Shared team work can help break down the language and cultural barriers and build mutual confidence.

2. ***HIA as a trigger for mutual learning:*** SS and the San Francisco and Christchurch cases highlight the potential of HIA as a means of developing shared understanding between professionals; rapid (or mini) HIAs can also be used to address the planners' concern that health assessment will add to costs without compensating benefits.

3. ***Mainstreaming health in appraisal:*** R1, R2 and R3 show that there is no conclusive evidence on whether it is best to integrate health into other forms of assessment or to have separate health assessment. Both approaches can be successful in achieving health benefits, and there are excellent international examples of both. However, experience of HIA (outside statutory processes) is overall mixed, while integrated appraisal is good, so the evidence perhaps favours the latter. But the key to positive impact for either IA or HIA is involvement through the whole plan, policy or project process, so that health objectives are integrated into the thinking from the outset. Assessments should utilise both quantitative and qualitative approaches, and take an holistic view of health.

4. ***Integrated appraisal:*** R3 leads to the conclusion that integrating health, social and environmental considerations into one statutory, holistic, integrated assessment process could ensure that health is properly considered in plan and project appraisal. *This implies legislative change, at least at the project level, because the scope of EIA is limited. At the plan level Sustainability Appraisal (SA) is already supposed to be holistic and revised official guidelines could be sufficient.*

5. ***The value of the HIA approach:*** evidence from R3, San Francisco and Christchurch shows the value of drawing on diverse sources of knowledge, including local knowledge, especially where there are ethnic and cultural divides. Three groups of actors are needed in order to build strong outcomes: the community, the experts (including built environment professionals, public health and perhaps academics) and the policy-makers. The HIA approach contrasts with the much more technical EIA process and the tick-box approach of many SA/SEA studies. *The inclusive HIA approach is helpful to set the agenda ab initio (scoping) as well as in later stages of evaluation.*

Neither EIA of projects nor SA/SEA of plans currently involves stakeholders as a matter of course in this way.

6. *Monitoring effectiveness:* R2, R3 and SS all suggest the value of on-going monitoring and review of health outcomes and policy impacts, and more particularly the effectiveness of appraisal processes changing policy and securing health benefits

7. *Organisational commitment and resources:* evidence from R3 and case studies show that clear commitment from a high level in the organisations, together with resource allocation and capacity building, was important to achieve effective health assessment

Findings: the development process

We made a particular study of Freiburg (held up as an exemplar in planning literature, and known to us through study tours funded by Health SW) in order to illuminate the wider development process. Evidence still to come from the Netherlands will be knitted into this section. Note that Freiburg does not monitor health outcomes or stress health per se, but plans for sustainability and well-being/quality of life. The result is a city with healthy lifestyles, excellent social capital and apparently good health:

1. *City influence on the development process:* the evidence from Freiburg highlights the value of the local authority having considerable influence and authority over land ownership, infrastructure provision and the detailed pattern of development (in contrast to British local authorities). Central to this is the ability to buy up development land.

2. *Leadership and expertise:* the evident benefits also depend on strong political and technical leadership, together with an effectively integrated joined–up management of transport, housing, employment, greenspace and facility provision with land use planning (i.e. what in this country is called 'spatial planning'). This applies not only in new urban extensions but across the city.

3. ***Community engagement:*** active community participation throughout the process of development and subsequent occupation of new and redeveloped areas, facilitated by the planning authority, leads in Freiburg to a diversified and very humane environment. The planning authority adopts a 'learning while you plan' attitude.

4. ***Diverse investors:*** unlike the British situation, where a limited number of major developers dominate the development process, Freiburg achieves a diversity of private, community, market and social housing development in every area, increasing access to housing for all, building social capital and empowering the population (all important determinants of health). *There are clearly issues about the transferability of this approach. It relies on city ownership of development land. The UK in principle has the mechanisms available, but not the policy context to support it.*

Gaps in the evidence (limited to UK)

- The degree to which healthy policies in plans, and recommendations in appraisals, are realised through the development management system and in reality on the ground See page 1 of the Summary)

- The health effectiveness of sustainability appraisal, social impact appraisal, equality impact or integrated assessment of projects (R1)

- The health effectiveness of SE/SEA of plans and of attempts to incorporate health in plan appraisal in an integrated process (R2)

- Primary research identifying barriers and facilitators to the inclusion of health in the spatial planning process (R3, but of course see SS)

- The degree to which different approaches to the development process by local authorities and master developers can result in different health and well-being outcomes (R5/6)

Conclusions

The planning system was originally devised to improve the health and well-being of citizens. Over the last century that perspective has often been overlooked and other priorities given precedence. There is every reason why it should, as a matter of course, become central again, and as we have seen, some places are seeking to achieve this. The co-incidence of interest between health and sustainable development (as exemplified by Brundtland's anthropocentric definition of sustainable development) mean that in principle the centrality of health and well-being should not be controversial. In some instances (e.g. Freiburg) the focus on sustainable development has led to a very healthy environment. However, in most places a renewed focus on the health and well-being of people would be one way to strengthen the political desire to achieve more sustainable development. Healthy communities result from effectively combining economic, social and environmental objectives, not trade-offs between them. It is apparent that a pre-condition for integrating economic, social (equity) and environmental objectives at the local level is effective collaboration between state (national and local), market and community interests, together with coherent inter-agency working – particularly planning with transport with housing, regeneration, parks and economic development. This is the ideal of spatial planning, often not realised.

There is also strong evidence in Britain that when the public health authority links closely with the planning authority, that health can be effectively incorporated in planning processes. The reverse is not always true. Health can be prioritised without intervention by the health authority – as a consequence of the growing awareness of the planners themselves.

Critical to success is the political and professional starting point. Is there political commitment to health and well-being? Are the planning and other departments prioritising health when defining the purpose and scope of plans and projects? The appraisal processes, in this regard, should be seen as integral to the whole decision-making process and ensure health objectives help shape the options that are considered.

1. Introduction

1.1   This is a combined fifth and sixth in 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 looked specifically at plan appraisal. Report 3 looked at the UK planning
system and assessed the degree to which health and well-being are part of
planning processes and as such assessed how well they influenced policy
and implementation. In that context the aim was to identify barriers and
opportunities to the full integration of health into planning. Review 4 examined
design guidance and indicators as devices which can assist rational and
effective spatial planning for health.

1.2   The purpose of this review (Review 5 and 6) is to draw together all the work
done so far, together with new evidence from countries overseas, in order to
reach conclusions about the best way, or ways, of integrating health into the
spatial planning process. The original brief for Review 5 concerned project
and plan appraisal, while Review 6 was about spatial planning as a whole.
The reasons for amalgamating them into one report are that the appraisal
processes need to be seen simply as parts of the spatial planning process,
not separate from it.

1.3   The overarching research questions are therefore four-fold:

- How should we integrate health into the planning process?

    o What approaches or techniques should be used to assess ways of
       promoting health and reducing health inequalities when making
       spatial planning decisions? How and when should these

approaches or techniques be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities? (Key Question 5)

- How can local authority planners and PCTs collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process? (Key Question 6)

- What lessons can be learnt about how to ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)? Where relevant, to what extent can these lessons be applied in England? (Key Question 3)

- As part of that, how should we integrate health into the plan appraisal and project appraisal processes?

  - What lessons can be learnt about the effectiveness and cost-effectiveness of appraisal approaches? (Key Question 2)

- More broadly, how should we ensure that health is integrated into the development process?

- What are the limitations and gaps in the evidence?

1.4   The conceptual framework is that of nesting circles: the appraisal processes sit within the overall planning process, which itself is just a part of the development process. It is the latter which generates actual change to the human environment, and it involves investors, funders, land owners and operators as well as regulatory authorities such as planning. The main link between the development process and planning is the development management (or control) process. We have not been asked to research the development process as such, but clearly need to recognise that this is an important factor in the degree to which plans are implemented. We are looking

for best practice that could be applied in England under the Coalition Government's new planning agenda, and will itempt to identify evidence that will help to determine what approaches will be most relevant and effective.

2. Methods

2.1 R5/6 comprises a summary of the current context of the changing planning and public health systems, followed by an examination of good practice from international case studies identified during the conduction of the previous four reviews. The findings from the case studies will be combined with findings from the previous reviews, to generate evidence statements in response to the questions identified in Section 1. The specific methods are outlined below.

Context of the changing planning and public health systems

2.2 The first element sought to outline the changing planning and public health systems in England, through a review of key documents.

2.3 Since the commencement of the NICE Spatial Planning for Health Collaborating Centre work programme, a change in Government has signalled and begun changes to both the planning and public health systems in England. The change in context needs to be recognised and addressed.

2.4 Key policy and analysis documents were gathered to inform the review, although it was recognised that the policy situation was still in a state of flux.

Case studies of good practice

2.5 Good practice case studies were identifies from a range of diverse sources of evidence considered during the course of reviews 1-4. These were generally put forward as good practice by other organisations, individuals or researchers working in the fields of public health and spatial planning.

2.6 The following definition of good practice was used:

A technique, method, process or activity within the fields of spatial planning and/or health, which is effective at delivering a particular outcome when applied to a particular condition or circumstance.

2.7 The following inclusion criteria were used to select case studies:

- I*nnovative* – as a means of delivering health outcomes or reducing health inequalities; or
- *Successful* – is proven to have delivered, or is delivering health outcomes or reduced health inequalities; and
- *Potential to be transferred* to other areas; and
- *Sustainable* – likely to be affordable and value for money, and capable of being continued, or replicated when needed
- Likely to be generalisable to the UK; i.e. based on high income countries with broadly similar systems of local and national government.

2.8   Case studies were identified from the following sources. Discussion within the research team was used to clarify which case studies met the inclusion criteria where there was ambiguity::

- Evidence sourced for NICE Reviews 1-4

- Evidence submitted via the NICE 'Call for Evidence'

- The NICE Strategic Solutions report.

   NOTE: Although planned to review the DH/CLG Buchanan Report and the HUDU report on health inequalities, these were not received by the research team in time for inclusion in this report.

2.9   Information relevant to the aims of this report were extracted from identified UK and international case study good practice documents using a standardised data extraction form (see Appendix A).

2.10   Quality was assessed during data extraction. Where possible, quality assessment scores for individual papers used in the case studies are reported. Overall quality was also assessed for case study evidence, including a qualitative assessment of the quality of evidence.

3. Context: the Changing Planning and Public Health Systems

3.1   The Coalition Government, elected in May 2010, set out its plans for the planning and health systems in 'The Coalition: our programme for government'[2], although it is emphasised that:

   "The deficit reduction programme takes precedence over any of the other measures in this agreement, and the speed of implementation of any measures that have a cost to public finances will depend on decisions to be made in the Comprehensive Spending Review".

Planning: de-regulation and decentralism

3.2   The plans for spatial planning are based in large part on the Conservative Party's Green Paper[3]. These documents, together with subsequent announcements signal immediate and longer term changes to the planning system. The areas of change are listed below. Some relate directly to spatial planning, with others more indirectly:

- Promote the radical devolution of power and greater financial autonomy to local government and community groups. This will include a review of local government finance.
- Abolish Regional Spatial Strategies and return decision-making powers on housing and planning to local councils, including giving councils new powers to stop 'garden grabbing'.
- In the longer term, radically reform the planning system to give neighbourhoods far more ability to determine the shape of the places in which their inhabitants live, based on the principles set out in the Conservative Party publication *Open Source Planning*.
- Abolish the unelected Infrastructure Planning Commission and replace it with an efficient and democratically accountable system that provides a fast-track process for major infrastructure projects.

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[2] HM Government (May 2010) 'The Coalition: our programme for government'
[3] Conservative Party (February 2010) 'Policy Green Paper No. 14, Open Source Planning'

- Publish and present to Parliament a simple and consolidated national planning framework covering all forms of development and setting out national economic, environmental and social priorities.

- Maintain the Green Belt, Sites of Special Scientific Interest (SSSIs) and other environmental protections, and create a new designation – similar to SSSIs – to protect green areas of particular importance to local communities.

- Create a presumption in favour of sustainable development in the planning system.

- Abolish the Government Office for London and the remaining Government Offices.

- Promote 'Home on the Farm' schemes that encourage farmers to convert existing buildings into affordable housing.

- Create new trusts that will make it simpler for communities to provide homes for local people.

- Create directly elected mayors in the 12 largest English cities, subject to confirmatory referendums and full scrutiny by elected councillors.

- Introduce new powers to help communities save local facilities and services threatened with closure, and give communities the right to bid to take over local state-run services.

- Cut local government inspection and abolish the Comprehensive Area Assessment.

- Provide incentives for local authorities to deliver sustainable development, including for new homes and businesses.

- Support sustainable travel initiatives, including the promotion of cycling and walking, and will encourage joint working between bus operators and local authorities.

3.3 A discussion on the above changes and how these may affect health issues or offer opportunities, is provided in Appendix B

The changing public health system in England

3.4   In July 2010, the new Coalition Government published the NHS White Paper, *Equity and excellence: Liberating the NHS*[4]. The document announced wide-ranging changes to the structure of the NHS in England, and the public health function within in. The changes to public health are likely to have important implications for how health is integrated into the spatial planning system in England. Here we outline the broad changes to public health contained in the NHS White Paper.

3.5   Primary Care Trusts (PCTs) and Strategic Health Authorities (SHAs), currently responsible for commissioning health services and other health related activities (including some public health functions), will be abolished. Commissioning responsibilities will be transferred to newly created GP Commissioning Consortia. A new National Public Health Service will be created, to integrate and streamline existing health improvement and protection bodies and functions, including an increased emphasis on research, analysis and evaluation.

3.6   PCT responsibilities for local health improvement will transfer to local authorities, who will employ the Director of Public Health jointly appointed with the Public Health Service. The public health budget will be ring-fenced, with local Directors of Public Health being responsible for health improvement funds allocated according to relative population health need. The allocation formula for those funds will include a new "health premium" designed to promote action to improve population-wide health and reduce health inequalities.

3.7   The Health Secretary, Andrew Lansley, in a speech to the Faculty of Public Health, announced the creation of a Cabinet Sub-Committee on Public Health[5].

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[4] Department of Health (2010) Equity and excellence: liberating the NHS. London: The Stationery Office
[5] http://www.dh.gov.uk/en/MediaCentre/Speeches/DH_117280

3.8   At the time of writing, the future organisation of public health in England remains uncertain, therefore it is difficult to speculate on the likely impacts on health and spatial planning. However, the move of public health to local government has the potential to improve greatly the links between health and spatial planning, as public health and planning professionals are likely to be based in the same organisation.

3.9   A separate public health white paper in December 2010 will outline in detail the changes to the public health system.

4.   Results of Case Studies

4.1   In all, nine case studies were completed, based on identified UK and non-UK best practice. These have been identified from various sources, including Reviews 1-4, the Call for Evidence submissions and other areas of good practice known to UWE:

Case Study	Source
UK	
Bristol	UWE
Greater London Assembly	Reviews 1 and 2
Manchester Airport Second Runway HIA	PDG Member & Review 1
NHS London Healthy Urban Development Unit (HUDU)	Call for Evidence
Plymouth	Review 3
Non-UK	
Australia	Call for Evidence
Freiburg	UWE
New Zealand	Review 2
San Francisco	Reviews 1 and 2

4.2   Each of the case studies has one or more specific features which meets our criteria for 'good practice' (see paragraph 2.6-2.7):

Bristol

Bristol City Council has instituted a number of measures to address health and health inequalities. In particular the Director of Public Health (a joint appointment between the NHS and City Council) has funded health professionals who are embedded within the Council's departments and the PCT is in the process of setting up structures to input to planning policy and development management. Although too early in the initiative to see demonstrable changes in LDF policy, key benefits are emerging in collaboration, knowledge transfer and relationship building.

GLA

Exceptionally, the Mayor of London has the statutory duties to promote the health of Londoners and also to promote a reduction of health inequalities in the Capital. This is potentially a model which could be used in all UK cities with an elected Mayor (see HM Government (2010) *The Coalition: our programme for Government* which sets out the intention to institute elected mayors into 12 UK cities*).*

Manchester Airport Second runway HIA

This relatively early HIA of a major infrastructure proposal demonstrates that HIA can be an effective device to use in negotiating mitigation measures.

NHS London Healthy Urban Development Unit (HUDU)

Collaboration between the London PCTs supports HUDU, an organisation which in turn facilitates PCT engagement in the local spatial planning system (both policy making and development management) in order to improve health outcomes and health inequalities. The HUDU (Section 106) Model has been very successful in generating funds for additional health infrastrucure.

Plymouth

This case study was included primarily because health references are explicitly threaded within planning policy documents, but it also stands out because of the collaboration developed by the experience had by way of its former HAZ status and New Deal for Communities initiative, and the fact that the PCT see benefits to inputting to the planning system early in the preparation of plans and proposals.

Australia

The case study examines the approaches taken in Victoria, Australia to incorporate health into the planning process. The case study was chosen as a good practice example that had already emerged out of R2 and R3 in terms of the practice of HIA and debate on whether HIA should be integrated into EIA. The debate is not exclusive to Victoria as the state of South Australia chose to develop policy HIA as a way to ensure that health is built in into spatial planning and other sectoral policies at all levels of government. This

approach, endorsed by the National government will eventually apply to Victoria. However, further research on the broader context of health integration into spatial planning in Australia pointed us convincingly towards Victoria, showing that government actors and health and planning stakeholders in the state of Victoria have developed a number of techniques in the area of policy, institution building, cross-sectoral working and good urban design to fully incorporate health into the planning process. These techniques are interrelated and complement each other. In addition, local government in Victoria has emerged as a key player since its responsibilities have broadened beyond the realm of 'hard' infrastructure provision to include spending on social services such as health, welfare, safety and community amenities.

New Zealand

Examination of evidence from Reviews 2 and 3 led to the case of HIA of Greater Christchurch Urban Development Strategy, a community-based collaborative project to manage the impact of urban development and population growth within the Greater Christchurch area. This demonstrated a strong focus on HIA as a tool to support the integration of health considerations into planning, a stron focus on community engagement, and contributed to the evidence identifying a number of key the issues that must be considered when considering the mechanisms of HIA. New Zealand was chosen as a case study to examine further. Additional research unearthed further evidence that integration of health into planning in New Zealand goes beyond appraisal mechanisms and that other approaches are being develop to address the broader issues of integration within the spatial planning system.

Freiburg

Freiburg is an interesting good practice example that has focused on sustainability rather than health, yet provides a number of key approaches to integrating health into planning, in particular both in terms of the spatial planning system and the development planning process. While energy efficiency in buildings and their ecological design are a key feature of

Freiburg's innovative approach to sustainable planning, some of the other sustainable features of the spatial and transport planning offer some key health outcomes in areas including physical activity, wellbeing, environmental health, unintentional injury and equity. The interest in this case is that the approaches are not only rhetorical but can be witnessed on the ground across the city and in particular in the two recent neighbourhoods of Vauban and Risenfeld. The Regional Director of Public Health in SWSHA recently suggested that his visit to Freiburg in 2010and in particular Vauban has *shifted attitude and approaches* regarding *what we can and should be doing with regards to the built environment*.

San Francisco

With the exception of EIA regulations, health is not well or evenly integrated into the planning process in the U.S, but evidence from R1, R2 and R3 demonstrated that San Francisco presents some good practice in the use of appraisals (HIAs) to ensure the integration of health into planning. In particular is the focus on community participation and development of good working relationships between the department of public health and city planners. The result is that the public health department has created a tool using indicators to ease integration (i.e. the healthy development monitoring tool) that has been used in a number of projects across the Bay area of California and that the city of Galveston in Texas is planning to use the tool to rebuild the city devastated by a hurricane in 2008.

REVIEW OF EVIDENCE

4.3   Completed data extraction forms for each of the case studies, plus evidence statements are found in Appendix C. Evidence statements as they relate to individual Review Questions, are reproduced below. Integrated results from the case studies and from the Strategic Solutions research can be found in Section 5.

Review 5/6 Case Study Evidence Statements

How should we integrate health into the planning process?

Australia 1: The case study provides moderate evidence that the Victorian legislative and statutory framework supports the integration of health into the planning system. The evidence suggests this integration has been enhanced as the responsibilities of local government have broadened beyond the realm of 'hard' infrastructure provision to include spending on social services such as health, welfare, safety and community amenities (Victorian Planning and environment Act 1978; Municipal Public Health planning, 1988; The Victorian Local Government Act 1989).

Australia 2: It provides strong evidence that capacity building through institutional adaptation/development (Vichealth; Planning Institute of Australia- Victoria Division; Preventative Health task force at national level) and intersectoral partnerships between public health and planning bodies and authorities(Primary Care Partnerships, Vichealth and PIA) can facilitate integration. Effective strategies include targeted preventative action at national level in response to chronic conditions, building the evidence base on the links between planning and health (e.g. Planning for Health), developing guidance on design criteria for healthy planning (e.g. Healthy by design), and educating planners through funding of postgraduate courses or CPD.

Bristol 1: The case study provides strong (moderate) evidence that capacity building through institutional adaptation/development (embedded health professionals who provide input into planning in the field of healthy living/health improvement, transport, climate change and peak oil and physical activity, dedicated health and planning officer, HIA of regeneration plans, policy) and intersectoral partnerships between public health and planning bodies and authorities can facilitate integration through the development of intersectoral strategies and policies.

GLA 1: There is strong evidence from this case study that the establishment of a statutory duty upon a planning authority to promote health and to reduce health inequalities results in the explicit consideration of health issues and development of policies relating to health within the planning process.

HUDU 2: There is moderate evidence that dedicated expert and advice and support to health bodies can facilitate enhanced inputs from developers to support health within the planning process, notably in terms of "Section 106".

NZ 1: The case study provides moderate evidence that a statutory and regulatory framework for planning that encompasses a broad range of responsibilities for local authorities' across the social, economic, environment and cultural wellbeing of communities (Local Government Act 2002), supports the integration of health into the planning system.

NZ 2: It provides strong evidence that capacity building through institutional adaptation/development (local Public Health Advisory Committee) and intersectoral partnerships between public health and planning bodies and authorities (e.g. Christchurch UDS Forum) can facilitate integration through the development of intersectoral strategies and policies.

NZ 3: There is weak evidence that development of the evidence and knowledge base and guidance for planners by key stakeholders (on urban design and links between health and planning) can also assist capacity building facilitating integration of health considerations into the planning system.

NZ 4: The case study provides strong evidence that institutionalising the rights of minority groups (Maori in this case study) to participate in all aspects of policy making (i.e. at early stage of the development plan or project) is a method to ensure that health equity concerns are highlighted.

What approaches or techniques should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions? How and when should these approaches or techniques be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities? (Key Question 5)

(No evidence found)

How can local authority planners and PCTs collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process? (Key Question 6)

HUDU 1: This case study provides strong evidence that capacity building through institutional adaptation/development (in this case, support and training to PCTs from a expert dedicated resource, HUDU), can promote intersectoral partnerships between public health and planning bodies and authorities and can facilitate integration through the development of intersectoral strategies and policies.

Plymouth 1: It provides strong evidence that capacity building through institutional adaptation/development (jointly appointed Director of Public Health, a dedicated HIA specialist within the public health team, jointly owned plans) can promote intersectoral partnerships between public health and planning bodies and authorities and facilitate integration of health and planning.

What lessons can be learnt about how to ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)? Where relevant, to what extent can these lessons be applied in England? (Key Question 3)

(No evidence found)

As part of that, how should we integrate health into the plan appraisal and project appraisal processes?

Australia 3: There is weak evidence from the case study (as evidence is based on one case study of HIA evaluation and references to policy level HIA at national level) that HIA is an effective tool to incorporate the consideration of health, wider determinants of health and health inequity within urban planning decision-making. However, there is evidence that capacity building for local authorities to understand the health impacts of their decisions (short courses developed at a university and increase in course uptake), and the development of good partnerships between HIA practitioner, local authorities and local people raise awareness of health in planning.

Australia 4: There is evidence that national government recommendation to use policy HIA has increased the extent to which health is built in into spatial planning and other sectoral policies at all levels of government.

NZ 5: The case study further provided strong evidence that HIA is an effective tool to support the integration of health considerations into planning. Features that contributed to integration included the explicit statement of the duty of local government to promote the social, cultural, economic and environmental well being of their communities, the establishment of a HIA champion (PHAC), the constitutional protection of rights of Maori which secures their participation in HIA, and a comprehensive, transparent HIA process starting at an early stage of the decision-making process.

SF 1: Strong evidence from San Francisco shows that HIA methodologies are most effective in influencing planning when they employ a broad definition of health that includes social, economic, cultural elements and incorporate broad and different sources of knowledge, including local knowledge from diverse ethnic and cultural groups.

SF 2: The case study also provides moderate evidence that the participatory approach used to develop the HIA led to an effective partnership between the community, experts (including public health and academics) and policy-makers. This partnership was effective because it ran through the whole development process, had a strong structure, developed a collective vision and consensus, which was supported by research and knowledge, and could disseminate its findings appropriately. This led to the development of a measuring tool used by other local authorities in the USA.

SF 3: There is moderate evidence from the case study a key facilitator was the clear commitment to HIA at the senior level of the key organisations and the allocation of resources for building capacity.

SF 4: Moderate evidence also shows that appropriate assessment instruments can facilitate the awareness of health issues in spatial planning (e.g. the HDMT).

SF 5: The case study provides moderate evidence that HIA will be more effective if undertaken at an early stage of the decision making process in ensuring that the impact of the plans and projects on the broad determinants of health can be assessed and remedied.

What lessons can be learnt about the effectiveness and cost-effectiveness of appraisal approaches? (Key Question 2)

GLA 2: There is moderate evidence from this case study that the statutory inclusion of health in the planning process was associated with broadly neutral trends on most social, health and education outcome indicators and positive trends in transport outcome indicators in the short to medium term (2008-09 London Plan Annual Monitoring Report.)

Manchester 1: There is strong evidence from this study that HIA can be used to identify health impacts and potential mitigation measures and in

negotiating with developers and local planning authorities to ensure health benefits.

__Manchester 2:__ The evidence from this case study suggests that early input by health bodies into the development management process is likely to increase impact.

More broadly, how should we ensure that health is integrated into the development process?

__Freiburg 1:__ The case study provides moderate evidence that a governance, policy and regulatory system that supports cities to develop neighbourhoods to suit local needs can facilitate the integration of health into spatial planning. It also provides strong evidence that political and executive leadership from the local authority on master planning can help avoid developer- led master planning and promote a multiplicity of developers.

__Freiburg 2:__ It provides strong evidence that community involvement and engagement in planning facilitates the integration of local knowledge into the development decision making and promotes sustainable planning. Evidence shows that such community engagement (in Vauban) occurred from the inception of project development to inform all the aspects of the development and carried on after the project was completed as support for managing the neighbourhood, encouraging social engagement. This community engagement can help communities to see the development from a developers' perspective.

__Freiburg 3:__ The case study provides strong evidence that sustainable planning is facilitated through the integration of transport planning with spatial planning and thought through from the inception of project and can lead to behavioural changes and promote active living. It also weak

evidence that social mix can be brought in though good urban design (Vauban).

Freiburg 4: The case study provides moderate evidence that some key innovative principles in development (e.g.reduction in land use, promotion of green belt, urban green parks, connectivity between built environment and open spaces combined with high density and a rethink of building designs) can help create compact communities which offer suitable open spaces encouraging physical activity as well as greater social and age mix.

GLA 3: There is moderate evidence that despite the inclusion of health issues in the planning process, major planning decisions that are not consistent with the stated health policies continue to secure approval.

What are the limitations and gaps in the evidence?

The following limitations and gaps in the evidence base, outlined below, have been identified during the conduction of Reviews 1-4:

- There is very little evidence in relation to HIA and integrated appraisal of projects in low/middle income countries (R1).
- In some studies of EIA, the scope of health concern is not fully reported (R1).
- There are no UK based studies of sustainability appraisal of projects or of social impact appraisal, equity impact or integrated assessment (R1).
- There is a lack of detail of implementation or subsequent monitoring of the impacts of health appraisal recommendations on plans and projects (R1, R2).
- The evidence on appraisal types other than HIA and SEA outside the UK is limited (R2).
- There is a conspicuous lack of evidence of evaluations of SA/SEA of plans in the UK (R2).

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- The evidence of health appraisal as part of integrated assessment of strategic level spatial development plans is limited (R2).

- There is a lack of evidence of whether mental well-being is included in appraisals (R2).

- There is a lack of primary research that seeks to identify barriers and facilitators to the better integration of health into the spatial planning appraisal process (R3).

Future research:

- In terms of future research and given the lack of evidence in the effectiveness of appraisal processes on the ground, it would be useful to consider how best to protect and develop the role of communities in promoting the integration of health considerations into planning. Will a statutory HIA instruments ensure that communities' knowledge claims on health impact of planning decisions will actually be considered (which is doubtful if local planning authorities operate a tick the box proess) or should HIA develop primarily as a capacity building tool and process for communities to assess health impact of projects and proposals, irrespective of its status?

- Another debate unresolved through the reviews and that would emerge if a recommendation is to institutionalise HIA in the UK, is whether EIA (and to some extent SEA) should incorporate HIA if HIA should develop as a self standing assessment method. The emergence of HIA as a powerful instrument cannot be totally isolated from its political, cultural and social contexts in which it has evolved, so straight policy transfer from abroad is probably not a necessary realistic option.

5. Integrated Results

5.1 Lists of actions (or good practice) have been drawn from the case studies and from the Strategic Solutions' research. These are grouped below under each of the three main Reviews 5/6 questions and categorised into topic headings. UK and non-UK conclusions are presented separately as they do not naturally fall under the same category headings.

5.2 Sources are identified in brackets and, whilst it may be a crude indication, it may be possible to deduce the weight that can be applied to each from the number of souces that cite it.

Based on the case study analysis a number of actions could strengthen how health could be integrated into the planning process

UK evidence

5.3   **National Policy**

- A planning policy statement on 'spatial planning and health' would raise the status of health in spatial planning as it would then be raised to the level of being a 'material consideration' in the scope of LDF preparation and in determining planning applications (Review 4 (R4), Strategic Solutions Evidence Statement 3 (SS3), Strategic Solutions Evidence Statement 24 (SS24))

- A version of HUDU could operate in each region or grouping of sub-regions, in order to catalyse/facilitate PCT's intervention in the spatial planning system and to educate LPAs and developers in health issues (for example to embrace a broad definition of health, create a database of the social determiants of health, good practice guidance, checklists, application alerts) (HUDU, R3, SS16, SS17, SS22)

- Consider giving the local authority the specific duty to address health issues and reduce health inequalities (GLA, SS21)

- Consider advising that the JSNA methodology needs to be developed in order that JSNAs are prepared which are robust enough to stand up to scrutiny at DPD examinations and clear enough for planners to use to in preparing LDF policies (SS23)

5.4 **Sustainable Community Strategy**

- Consider updating advice on the preparation of SCSs to ensure the SCS addresses more than just health issues per se, but additionally addresses the health and health inequality impacts of any increased growth anticipated in the LDF and signposted in the Joint Strategic Needs Assessment (HUDU, Plymouth)

5.5 **LDF Policy**

- Consider whether there should be more focussed integration between the SCS and LDF as regards health (Plymouth, HUDU)

- Consider the potential to emphasise the link between the SCS and LDF to ensure the health priorities in the SCS are carried though into spatial planning policies (SS14)

- Consider whether there is merit in advice that relevant health objectives should be included as the basis of the development plan and ensure policies address health and health inequality issues (GLA, Plymouth)

- It was found that there is a need to educate planners that policies addressing 'sustainability' issues do not necessarily cover the range of health and health equality issues (SS11, R3)

- It was found that PCTs need to involve themselves early in the process of LDF preparation and major development pre-application advice to developers and LPA (HUDU)

- In engaging in LDF preparation, it was suggested that PCTs should not merely focus on provision of health infrastructure, but should widen

their remit to pressing for policies that address health and health inequality issues (HUDU, SS9)

- Evidence was found that supplementary planning documents that enlarge on how policies are to be implemented, can usefully be prepared to address the specific spatial needs of target 'health' groups (GLA, SS27)

5.6   **Development Management**

- Evidence demonstrates that PCTs should be prepared to become actively involved in reviewing development proposals in order that health issues are considered (Manchester, Plymouth, Bristol, HUDU)

- Consider the use of the JSNA and HIA to inform PCT negotiations with developers regarding impact mitigation measures and contributions to health infrastructure and revenue costs (Manchester, HUDU)

- Evidence demonstrates that LPAs and PCTs should ensure that the LDF policies that address health and health inequalities are actually used when determining planning applications (that is, the policies should be implemented) (HUDU, GLA, Bristol)

- The evidence suggests that LPAs and PCTs should encourage developers to use pre-application HIA to determine health impacts of development proposals before these are submitted as planning applications. Equally, the developer should liaise with the health authority on the scope of the HIA (Manchester, Plymouth, Bristol)

5.7   **Monitoring**

- Consider a more effective way of monitoring LDF policies which are aimed at addressing health and health inequality issues. This should monitor the implementation of these and other 'non-health' policies and track the effects on health. Indicators used were generally found to have little utility in monitoring affects on health (R4, SS28, HUDU)

5.8 **Management Structures**

- The appointment of a joint director of public health between the NHS and the local authority was found to break down barriers, encourage joint working and effect complementary strategies (for example a JSNA prepared by the Council and the local NHS) (Plymouth, Bristol, R3, SS17, SS19)

- The appointment of dedicated officer/s from the PCT or local public health development unit with the responsibility to address health and health inequality in spatial planning issues, was key in some authorities in order to maximise input to the LDF process and respond to major planning applications (Plymouth, Bristol, SS15, SS17)

Non UK evidence

5.9 The evidence collected from the Australian and NZ case studies show that a number of ingredients are necessary to fully incorporate health into the planning process. These ingredients are interrelated and complement each other and are relevant to the UK even if straight policy transfer might not be possible.

5.10 **Statutory and regulatory framework for planning**

- It is important to create incentives for local planning authorities and to support planners buy-in into healthy planning. However, a minimal or flexible regulatory framework can also allow local authorities to take a lead in developing healthy planning tools and the balance between regulation and guidance should be carefully considered by legislators.

- Given the increasing importance of the role of local government in public health issues, suitable methods for promoting high quality services including healthy planning at the local level through municipal public health plans on the example of Victoria could be considered.

5.11 **Good support and institutional framework for integrated planning**

- a support mechanism and resource development for spatial planning needs to be set up and funded to ensure that regulatory framework, policies and strategies towards healthy planning can be effectively implemented by local government at various various stages of the planning process (strategic or development). Resources can include an evidence base on the link between urban environment and health, design guidelines, training for planners or strategic officers at local government level to build up the capacity of local authority to integrate health into their land use strategies.

- It is useful to consider the institutional structure to build capacity at the local level. For instance, capacity building can be overseen by healthy planning champions (on the example of VicHealth and PHAC) who can help organise the evidence base and support activities. Champions can also help build the evidence base necessary to ensure buy-in by different stakeholders with different and maybe divergent priorities and help better cross-sectoral understanding and partnerships.

- A preventative health task force could justify the development of strong cross sector links (for instance planning contributing to tackling obesity) based on a robust evidence base (on urban design and obesity and also demonstrating the cost savings) justifying investments.

5.12 **Intersector partnership working**

- The Australian and NZ cases show that intersectoral partnership at national level is important to build the evidence base, to support the integration of health into local plans.

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5.13   **Develop HIA**

- HIA is seen by all the cases studies as a way to integrate health into spatial planning plans and projects. This approach is developed in the next section.

5.14   **Educate and train planners**

- This is a corollary to the need for a good support framework but is a category in itself as evidence from Australia showed the importance of funding from the health sector and support from the professional bodies to develop postgraduate and CPD provisions into healthy planning. This is also demonstrated in the US case, albeit in the case of HIA.

Based on the case study analysis a number of actions could help local authority planners and PCTs collaborate

UK evidence

5.15   There are no separate categories related to this question:

- Consider the benefits of LPAs and PCTs entering into an 'engagement agreement' to forge statutory and non-statutory relationships (HUDU)

- Consider how the benefits of better working relationships could be forged between LPAs and PCTs (Bristol, Plymouth, HUDU, SS16)

- Consider promoting use of HIA to engage and educate planners in health impacts (R3, Bristol)

- Evidence suggests that it would be beneficial for PCTs to develop links with planning departments and ask for alerts for when major planning application are to be submitted (Manchester, Bristol, HUDU)

- Evidence suggests that it would be beneficial for LPAs and PCTs to collaborate to issue best practice on how planners and health professionals should work together effectively (HUDU, GLA, Bristol)

- Evidence suggests that it would be beneficial for LPAs and PCTs to prepare joint strategies to address health issues and reduce health inequalities (GLA, R3)

- Evidence suggests that much can be learned from the positive principle of area-based partnerships from the health action zone initiative to forge collaboration between all local and sub-regional government departments that have a role in delivering healthy environments (for example, transport, highways, economic development etc) (R3, Plymouth, Bristol)

Based on the case study analysis a number of actions could help integrate health into the plan appraisal and project appraisal processes

UK evidence

5.16   **Knowledge**
- Spatial planners have a limited understanding of health and its spatial and social determinants, resulting in a narrow view of health in project and plan appraisal, often focussed on physical environmental issues such as air quality, water and noise (R3, SS12).
- The preparation of good practice guidance for planners can facilitate the consideration of health in plan and project appraisal processes, and there is evidence that spatial planners would welcome formal national policy guidance on how to address health outcomes (R3, SS3, SS24, HUDU).
- Health professionals often have only limited knowledge and understanding of the spatial planning system. Health professionals engaged with spatial planning need to understand the appraisal

system, appraisal processes and how to input to both. Good understanding of spatial planning by health professionals lead to better working relationships between health and planning (R3, SS16, Manchester).

- Developing closer working relationships between health professionals and planners can develop shared understanding of health and spatial planning issues. This can be achieved by embedding key health staff into local authorities, to facilitate health appraisal (R3, Bristol).

5.17 **Partnership**

- Major barriers to partnership working include the different cultures, languages, priorities and structures between actors. PCTs do not normally view engagement in spatial planning as core business (R3, SS15, SS19).

- When health professionals and planners work together, barriers relating to language and culture are broken down. Consensus can be built and shared visions developed, while dialogue can ensure confidence and demonstrate that input from health professionals makes a difference (R3, SS19, Plymouth).

- Closer joint working can be facilitated through the development of statutory and non-statutory relationships between health and planning professionals. This can include formalised arrangements such as Local Strategic Partnerships, funding joint health/planning posts, and using brokering organisations such as HUDU (R3, Bristol, HUDU).

- Early notice of proposals to ensure that health impact is appraised formally (Bristol, Manchester, HUDU).

5.18 **Management and Resources**

- The creation and embedding of public health staff in local authorities can address issues of capacity to provide the skills to carry out assessments, and advocate for the better inclusion of health in appraisal processes (R3, Bristol).

- Having specialists in the PCT to deal with spatial planning (including joint health/planning posts) can also build capacity and develop linkages between policy sectors at both inter- and intra-institutional levels (R3, Bristol, Plymouth).

- The use of "mini-HIAs", being a simpler process of health assessment, and therefore less resource intensive, may address the perception that the costs of undertaking a HIA outweigh the benefits (SS26).

- Health professionals need to collaborate with planners to prepare a health and spatial planning evidence base (HUDU).

5.19   **Policy Process**

- Health considerations are often not integrated effectively into the spatial planning policy process. HIA is not a statutory requirement in the UK and although there is a requirement to address health in SEA/SA and EIA, the scope of health assessment in these statutory processes is limited. For instance, EIA can be deficient in appraising human health impacts (R1, R2, R3, Manchester).

- Mainstreaming HIA into the planning decsion making process, ensuring that it is part of an iterative process through plan and project preparation, could lead to better integration of health into appraisal processes. This may require appropriate legislative and regulatory support (R2, R3).

- Integrating health, social and environmental considerations into a statutory, holistic integrated assessment instrument could ensure that health is considered adequately in plan and project appraisal (R3).

- Any such health assessment (either HIA or integrated assessment) should use a broad and high quality range of evidence, utilising both quantitative and qualitative approaches, and taking a holistic definition of health (R3).

- Evidence as to whether and how appraisal of health impacts are carried through to the implementation of policies or plans should be monitored, including the impact of such appraisals on health outcomes. (R2, R3, SS28).

- Spatial planning policies aimed at health outcomes should also be monitored, which will help to link spatial planning policy decsions to health outcomes (SS28).

Non UK evidence

5.20   From R1 and R2 evidence on high income countries, R3 and the case study evidence in San Francisco and Christchurch in R5-6, we can draw a number of lessons that can apply in the UK context.

5.21   **Knowledge**

- Moderate evidence from R3 and the case studies suggested that those responsible for decisions on and assessments of planning proposals often view health in narrow terms focussing on physical and environmental concerns and authors suggested that using broader definition of health and developing closer working relationships between health professionals and planners would help develop shared understanding. HIA could be used as a trigger for developing shared understanding and authors advocated the creation of a database reflecting the wider determinants of health.

- Evidence from San Francisco and Christchurch shows that HIA methodologies must consider including broad and different sources of knowledge, including local knowledge. These two case studies are set in contexts where there are strong ethnic mix which can apply to the UK urban context. The HIA logic models used to incorporate evidence collected and justify statements on impacts are then questioned by different ethnic communities as they approach developments/plans or plans from different cultural perspectives.

5.22   **Partnership**

- Moderate evidence from R3 and from the case studies show that ineffective partnership working is an important barrier to more effective consideration of health in the appraisal process. Solutions for building

effective partnerships include joint working at early stage, use of jargon-free language, consensus building and development of shared vision.

- It is helpful if the process of partnership building is supported by strong resources from academic sources, development of training courses for community and good communication/visioning tools between the stakeholders. This is demonstrated in the context of San Francisco which has led to the development of a measuring tool now used by other local authorities in the USA. Links between universities and local authorities should therefore be considered in the UK context, in particular when they are set within the same region.

- The San Francisco example demonstrates that in order to be successful and effective in terms of health outcomes, an HIA partnership must run through the whole development process, needs a strong structure and collective vision and build consensus, to be supported by research and knowledge, and can disseminate its findings and debates within and outside its structure synthesis.

- In terms of actors of the partnership, from the case studies, three groups seem to be necessary to build strong partnerships: the community, the experts (including public health and academics) and the policy-makers. They all contribute their knowledge and power to ensure an effective HIA.

5.23   **Resources/ management**

- Moderate evidence from R3 and the case studies showed that inadequate support and organisational support, lack of time and funding and skills were barriers to effectively integrate health into assessment processes and in both R3 and the case studies of San Francisco and Christchurch, clear commitment to HIA at the level of the organisations were a key facilitator and resources allocated for building capacity. This is a lesson to remember in the UK context.

- Moderate evidence from R3 and from San Francisco also shows that appropriate assessment instruments can facilitate the awareness of health issues in spatial planning (e.g. the HDMT in San Francisco).

5.24   **Policy process**

There are few lessons we can draw on the role of HIA to assist the integration of health into spatial planning from the case studies examined. These lessons come from a number of key considerations:

5.25   **Policy vs project HIA**

- The Christchurch, New Zealand and San Franciscio cases demonstrate that there is a debate about the role of HIA within spatial planning on whether HIA should contribute to the integration of health at policy or at project level. In the Australian case study policy HIA is a way to ensure that health is built in into spatial planning and other sectoral policies at all levels of government. This approach developed by the State of South Australia is also endorsed at national level. The approach taken in San Francisco is very different as the community HIA is used when land is being redeveloped to ensure their healthy development, i.e. at a level where the community can probably relate more directly as it will affect it directly. This debate could be considered by European and national legislators.

5.26   **Stage of integration of HIA into policy process**
- Moderate evidence from R2 and R3 showed that a key barrier for integrating heath into decision making was if the impact assessment had been carried out too late in process and was unable to influence planning decision-making. A lesson to remember is that prospective assessment that links to the same cycle as the planning decision-making process facilitates the inclusion of health considerations in planning. In particular there is a definite consensus across the cases that HIA needs to happen at the early stage of the decision making process so that the impact of the plans and projects on the broad determinants of health can be assessed and remedied.

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5.27   **EIA and SEA vs HIA**

- Weak to moderate evidence from the case studies shows that it is useful for HIA to be integrated in EIA because it offers a legal/statutory framework to HIA (but it can also be reductionist as EIA analysis focuses on narrow definition of health and determinants of health). In addition, there was further evidence from R3 that the non statutory nature of HIA was a barrier to integration and that an appropriate legislative, regulatory and structural support for assessment could facilitate the integration of health into planning decision-making.

- This must be considered also in parallel with weak evidence in R1 (based on a single citation) that health was being incorporated in compulsory project EIA in Canada and also with strong evidence from R2 that health is being considered in SEA at plan level. We found also evidence in R1 that the health agenda is addressed and health recommendations incorporated in the proposals in the case of combination between EIA and HIA and also EIA and SIA, the impact ranging from simply monitoring possible effects to withdrawing the application.

- Evidence from R1 and the case studies shows that HIA uses a broad definition of health that includes social, economic, cultural impact assessment. This seemed to be particularly important in the case of San Francisco and Christchurch where there are a mix of ethnic groups for whom the definition of health as got some cultural, social and economic resonance. The HIA could capture the understanding and knowledge base held by communities on the meaning of determinants of health and that would inform the planning decision making process. Communities through HIA could question the problem definition, the hierarchy of factors assessing the threshold of significance of the impact of the project on the quality of the human environment.

- Weak to moderate evidence from R1 (compulsory EIA conducted on projects in remote areas of Canada) showed that health was being

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incorporated into EIA in Canada and we also found weak to moderate evidence that health recommendations were taken into account in the proposal ad weak evidence that these proposals were implemented. In R1, we also found evidence of the HIA to identify health issues in project appraisal, but there were limited evidence that planning processes were influenced by the health recommendations made. In R2, we found moderate evidence that HIA generally influenced the plan, but the degree of this influenced was varied (more awareness raising than as a direct result of the assessment). There were no evidence however of post-adoption and implementation evaluation for HIA, SEA.

- There was however reasonably consistent evidence in R1and R2 from 15 case studies that health recommendations were incorporated into the proposals or the plan in the case of integrated appraisals (EIA/HIA and EIA/SIA). However, an interesting fact to remember is that the involvement of community interests was often influential in terms of the health issues addressed. However, there was no evidence in R2 of any post plan evaluation on the effectiveness of integrated appraisals.

- So, the lessons for the UK is that the evidence above points out to the fact that HIA could well be a means to ensure integration of health into spatial planning, but there is little evidence so far to demonstrate the effectivess of HIA on the ground (research gap) and it is also not clear whether HIA should be integrated into other statutory impact assessments to be effective. UK legislators and health /planning stakeholders should definitely consider the role of HIA, its effectiveness and integration into existing statutory assessment instruments but within the broad UK governance and policy contexts as these two variables will strongly inform the development of the UK impact assessment practice. Good practice abroad can inform the issues to consider but cannot be transferred necessarily to the UK.

Based on the case study analysis a number of actions could help ensure that health is integrated into the development process

5.28 Freiburg offers an innovative and sustainable approach to the development process. Energy efficiency in buildings and their ecological design is a key ambition for the city but with other relevant features that more directly promote health outcomes (including physical activity, mental health, environmental health, unintentional injuries and equity). While some of the literature examined to identify the characteristics of the Freiburg model provided weak evidence as it was mainly based on publications written by the stakeholders, Freiburg has also served as good practice case study by the Scottish Government, CABE and has been the subject of articles in the planning press in the UK. We also used comments made by public health and planning professionals who participated in a study tour to Freiburg to complement the body of evidence. We can draw some lessons for England from the integration of sustainable principles that "potentially" contribute to healthy outcomes in the development process in Freiburg. We use "potentially" to reflect the lack of evaluation on health outcomes.

5.29 **Focus on good governance and adaptive development planning**

- The government could explore how national policy could contribute to give freedom to cities and neighbourhoods to develop and innovate to suit local needs
- Political leadership is required and strong lead from the local authority on master planning should be considered to avoid large developer-led master plans as small development within a large development plan can reduce financial risks
- Involvement of the community through cooperative planning could be explored to ensure a dual role for the community, i.e. to shape their neighbourhoods as a "community" and also shape their own development as "developers" themselves.
- Local authorities may also wish to consider planning decision making as an iterative process "learning while you plan"

5.30 **Integration of integrated transport planning into the spatial planning process**

- Can lead to behavioural change and promote active living and the Freiburg evidence shows that while integration should be considered between spatial and transport planning, there are implications for development planning
- Better integration of transport planning within the development planning process could be considered through careful design (walking, cycling routes and parking spaces within a development scheme)

5.31 **Key urban design principles to shape sustainable communities that will promote health outcomes**

- Reduction in land use could be realistically envisaged in the UK if compact development is designed by developers. The Freiburg case study shows strong evidence that density higher than in the UK could answer needs for housing that would promote social integration without damaging the size of open spaces.
- Evidence from Freiburg also shows that reconsidering both density and size of dwellings could lead to a better social mix (but as a response to community engagement and decision in the first place).
- Active living and other aspects of health associated to park and green spaces could be considered by ensuring the connectivity between built environment and open spaces.

5.32 **Dual role for the community as participant and developer**

Freiburg is seen as an ecological model which started in the 1970s following protests against a planned nuclear plant. Residents remained politicised and started to campaign for environmental solutions to the city's energy needs. The evidence showed that:

- To be effective all through the development process, community engagement must occur from the inception of project development to inform all the aspects of the development and carry on after the project

is completed as support for managing the neighbourhood, encouraging social activities.In Vauban, citizens participating in planning process are also developers of their own plot of land which allow them to see a development from two very different perspectives.

Appendix A: Data Extraction Form

Case study identification		
Checklist completed by (name)		
Checklist completed by (date)		
Question	Category / Response	Details / Comments
Evidence Examined		
Acknowledgements		
Case Study Overview		
Research questions addressed		
Integration of health into the planning process:		

• Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions • How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	
• How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process	
Integration of health into the plan appraisal and project appraisal process:	
Lessons that can be learnt about the effectiveness and cost effectiveness of	**Knowledge**

appraisal approaches (including facilitators identified in Review 3)	**Partnership**
	Management and resources
	Policy process
How to ensure that health is integrated into the development process:	
Lessons that can be learnt about how to ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)	
Where relevant, the extent to which these lessons can be applied in England	
Any additional comments relating to findings from the	

case study		
Quality assessment		
Quality assessment of individual studies / papers:		
	Internal validity: External validity:	
	Internal validity: External validity:	
	Internal validity: External validity:	
	Internal validity: External	-

	validity:	
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☐ ++ ☐ + ☐ -	
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	☐ ++ ☐ + ☐ -	
Reviewer's comments on the evidence available for this case study		

APPENDIX B: COMMENTARY

Planning: de-regulation and decentralism

1. The plans for spatial planning are based in large part on the Conservative Party's Green Paper[6]. These documents, together with subsequent announcements signal immediate and longer term changes to the planning system. A discussion based on published sources follows below:

2. The revocation and abolition of regional spatial strategies has immediate consequences for the provision of new housing, with many local authorities stalling preparation of LDF documents or signalling immediate reviews of the level of houses they will now require. The National Housing Federation calculated that plans for as many 100,000 new homes had been shelved by local authorities since the revocation of the RSS[7]. This has led to an hiatus in confidence in the development sector with many developers and their advisors unable to make decisions, buy land or indeed submit planning applications. Several housebuilding companies have challenged the Secretary of State's abolition of the RSS (partly on the basis that no sustainability appraisal was done) and have been granted a judicial review in the High Court (to be heard on 22 October 2010).

3. The Government's plan to overcome these concerns is to stimulate acceptance of new housing development by giving an up-front grant to local authorities equivalent to six times the value of the annual council tax receipt per new property (the 'new homes bonus'[8]) to spend as they wish - whether for example as council tax discounts for local residents, boosting frontline services like rubbish collection or improving local facilities like playgrounds. There is scepticism in the development industry that affluent or vocal communities will be swayed by this extra funding, but that in reality the unwanted development will likely be located in the poorest communities where the recompense offered means more[9]. The detail is yet to be given, particularly on when the scheme will

[6] Conservative Party (February 2010) 'Policy Green Paper No. 14, Open Source Planning'
[7] Regen.net 'Regeneration in the newspapers: plans for 100,000 new homes 'scrapped''
[8] A consultation paper on the final scheme will be published following the spending review.
[9] Harrison A. 'Partners need to get grip on true nature of localism'. Planning, 24 September 2010.

commence, whether it will be funded from other cuts to local authorites (that it could be financially neutral if funded from a reduction in other grant funding[10]) and also whether whether the bonus would be calculated according to the gross or net overall addition of new homes (it could be many years before a gross contribution of housing would be provided in authorities where reliance is placed on redevelopment or regeneration schemes)[11].

4. Announcing the scheme on 9 August 2010 Housing Minister Grant Shapps explained:

> *"With housebuilding falling to its lowest level since 1924, action is needed now to build the homes the country needs. That's why these new powerful incentives to build will be introduced early in the Spending Review period. And it's why I have confirmed that those councils who go for growth by providing planning permission now will reap the rewards. So I urge councils to seize the moment and open up a debate with their communities now about the new homes they need and how they would use the new Bonus."*

5. Ministers have emphasised that a 5 year supply of housing land is still required of local authorities, however the decision on what constitutes a 5 year supply is to be determined by individual local authorities; this must be based on the housing numbers needed for the area, however it must be rigorous and justified. The Government has abolished the National Housing and Planning Unit whose job it was to advise the previous Government on national housing requirements.

6. Regional Development Agencies are also to be abolished and the role of economic development transferred to 'local enterprise partnerships' (LEPs). These are intended to be partnerships between business and local government and should be practical bodies for promoting enterprise. In all 56 LEPs have been put forwards to Ministers, most following existing local authority boundaries. There is some concern about how LEPs will operate within the

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[10] Response from the Planning & Development Association to the House of Commons Select Committee Inquiry into the revocation of RSSs. September 2010
[11] Carpenter J. 'Raynsford warns over coalition's new homes bonus'. Regeneration & Renewal, 27 September 2010.

localism agenda when determining the level and location of enterprise schemes, and that such locally focussed bodies will be unable to plan for strategic-level infrastructure. There is also uncertainty about how the LEPs will be funded.

7. Proposals for much larger infrastructure projects will of course be determined by the new 'Major Infrastructure Planning Unit' established within the Planning Inspectorate (the Infrastructure Planning Commission having been abolished). Local infrastructure (waste, roads etc) will still be the responsibility of upper tier authorities (county councils or unitary authorities), but now they will be required to compile 'infrastructure plans'.

8. A 'Localism Bill' will be brought forward that is intended to *"radically reform the planning system to give neighbourhoods far more ability to determine the shape of the places in which their inhabitants live, based on the principles set out in the Conservative Party publication 'Open Source Planning."*[12]. The intention is to *"give local people the power to engage in genuine local planning through collaborative democracy – designing a local plan from the bottom up, starting with the aspirations of neighbourhoods;"*[13] There will be a presumption in favour of sustainable development and an assurance that significant local projects have to be designed through a collaborative process that has involved the neighbourbood. Neighbours have a new role: if a significant majority raise no objection, there will be a faster planning application approval system. This is intended to give the strong incentive to developers to design sensitively or to offer recompense to immediate neighbours for the loss of amenity.

9. A new decentralised audit regime will be established to replace the Audit Commission, in order to provide support for local democratic accountability. This new decentralised approach will be applicable to local government, police, and local health bodies.

10. The loss of strategic planning (RSS) must be of concern if the localism agenda and the new homes bonus do not provide the quantum of new market and affordable housing to cope with the pent up need and future requirements. The

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[12] HM Government (May 2010) 'The Coalition: our programme for government'. Page 11
[13] Conservative Party (February 2010) 'Policy Green Paper No. 14, Open Source Planning'. Page 3

LEPs could be more fruitful to communities in bringing forward locally important employment opportunities; the loss of the RDAs, whilst they provided the strategic level planning and employment infrastructure that will be missed, were always criticised for profligate expenditure and lack of accountability. Resourcing of LEPs is still an unknown.

11. Localism could be empowering if neighbours and neighbourhoods use their new found power wisely in enabling well designed developments. Planning and health professionals must use their skill and evidence in informing and guiding these new found voices to ensure that healthy developments and healthy urban environments are created. It could well be that the use of HIA will come to the fore in helping the public appraise new development.

APPENDIX C: CASE STUDY REPORTS

Comprising:
- **Completed Case Study Data Extraction Form; and**
- **Evidence Statements**

(Arranged in alphabetical order per case study)

Case study identification	Australia - Victoria	
Checklist completed by (name)	Laurence Carmichael	
Checklist completed by (date)	24/09/2010	
Question	Category / Response	Details / Comments
Evidence examined	**1. Excluded in R2**	1. Mc Cormick, J. (2007). Lessons in applying HIA to regeneration schemes: the Victorian experience.
	2. Excluded in R2	2. Gagnon, F. and Michaud, M. (2008). HIA and public policy formulation.Groupe d'étude sur les politiques publiques et la santé: Quebec.
	3. Call for evidence	3. Blau, G. and Mahoney, M. (2005). The positioning of HIA in local government in Victoria. Faculty of Health and Behavioural Sciences, Deakin University.
	4. Excluded in R2	4. Harris, P., Harris, E., Thompson, S., Harris-Roxas, B. and Kemp, L. (2009). Human health and wellbeing in EIA in New South Wales, Australia: auditing health impacts within environmental assessments of major projects. EIA review 29, 310-318.
	5. Guide	5. Public Health Advisory Committee (2010). Healthy places, healthy lives: urban environments and wellbeing. Ministry of Health: Wellington. Accessed on http://www.phac.health.govt.nz/ (refers to Australia as international example)
	6. **Report**	6. Preventative Health Taskforce (2009). *Australia:* The healthiest country by 2020. National Preventative Health Strategy. ACT: Commonwealth of Australia.
	7. Guide	7. NSW Department of Health (2009). Healthy Urban Development Checklist - A guide for health services when commenting on development policies, plans and proposals.

		NSW DoH: Sydney.
	8. Guide	8. NSW Premier's Council for Active Living (2010). Development & Active Living: Designing Projects For Active Living - A Development Assessment Resource & Navigational Tool. PCAL: Sydney
	9. Guide	9. ALGA (2006). Age friendly built environment. ALGA: Sydney.
	10. Guide	10. National Heart Foundation (2004). Healthy by design. A planners' guide to environments for active living. NHF:?? http://www.heartfoundation.com.au/downloads/sepavic_healthy_by_design_guide.pdf
	11. Guide	11. West S, Badham M. (2008). Creating Liveable New Communities. Checklist for Liveability Planning. Melbourne: Growth Areas Authority. http://www.gaa.vic.gov.au/Assets/Files/Liveability%20Planning%20Checklist%209%20April%2008.pdf
Acknowledgements		
Case Study Overview	Examination of the approaches taken in Victoria, Australia to incorporate health into the planning process. Background on local government and planning in Victoria: Blau (2005): Local government in Australia: since mid 1990s move away from enacting prescriptive legislation for local government, to providing more enabling frameworks within which councils have some degree of discretion in initiating their own policy directions. Australian local government now has roles in governance, advocacy, service delivery, planning, community development and regulation. There is no longer a standard definition of 'core' local government services such 'roads, rates and rubbish'. Local government now delivers a greater range of services, broadening its focus from 'hard' infrastructure provision to include spending on social services such as health, welfare, safety and community amenities. Australian local governments do not have primary responsibility for services such as health (hospitals), education, policing and public housing. Currently, there are 79 councils in the state of Victoria, comprising one capital	

	city council, 21 metropolitan councils, 25 regional city councils, 10 fringe councils, 21 rural councils and one interim authority (VicUrban) which has local governance responsibility for the newly developed Docklands precinct in Melbourne (Department of Infrastructure, 2005).
Research questions addressed	
Integration of health into the planning process:	
Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	**1. Statutory framework empowering local authorities in health** **1987: The Victorian Planning and Environment Act 1987** is the legislative basis for the planning system in Victoria (Victorian Legislation Parliamentary Documents, 2005b). The State Department of Sustainability and Environment (DSE) manages the regulatory framework for land use planning and land subdivision across the state, and provides advice and information about planning policy, urban design, strategic planning, land development and forecasting. The Act stipulates that each council must develop a Municipal Strategic Statement (MSS) to provide a strategic planning vision, objectives for land use and development in the municipality, and policies and programs to achieve these. The MSS must be integrated with council's other objectives, policies and programs which are not directly associated with land use and development, as identified in its Council Plan (CP). Ultimately, these integrated documents should aim to achieve the objectives of land use planning in Victoria, which are to promote healthy sustainable communities. The use and development of land in Victoria is controlled by the Victorian Planning Provisions (VPP) that comprises seventy-nine different planning schemes, each of which contains: • the State Planning Policy Framework (SPPF) which is the State • Government's over-arching strategic land use plan; • a Local Planning Policy Framework (LPPF), which is a council.s MSS and • other local policies that are not directly associated with land use; and • zone and overlay provisions. **1988: Municipal Public Health planning:** In 1988, addition made to the Victorian Health Act 1958. It introduced a requirement for each Victorian council to develop and implement a Municipal Public Health Plan

(MPHP) at three yearly intervals. The National Public Health Partnership states that the introduction of this planning requirement recognised the increasing importance of local government in public health issues and attempted to provide a method for integrating State Government and local area planning to promote high quality services. In 2001 the DHS released a new municipal public health planning framework, Environments for Health (Department of Human Services 2001), which provided a practical guide to assist in the integration of public health considerations into council's broader planning responsibilities. It clearly described how existing council actions across the built, social, economic and natural environments could potentially have an impact on the public's health. The DHS also provided a small stream of funding, the Good Practice Program, that aimed to facilitate best practice municipal public health planning and to showcase the most successful initiatives across the sector. Since the launch of this framework, there has been a growing commitment to supporting integrated municipal public health planning processes in Victoria, through a range of activities by organisations such as the Victorian Health Promotion Foundation (VicHealth) and the PIA. In 2000, VicHealth, in collaboration with the DHS and the Municipal Association of Victoria, developed a resource package which targeted the Victorian local government sector. Leading the Way aimed to explain the social model of health and to effectively equip councils to respond with practical solutions to their local circumstances (VicHealth 2002). Particular focus was placed on providing strategies designed to simultaneously address the social determinants of health and the objectives of MPHPs and of councils. It was vital that the materials produced would be read by councillors and senior managers with a view to influencing policy development across all work areas of the council. The resource package was designed to complement the Environments for Health framework and was launched to coincide with the release of the framework.

1989: The Victorian Local Government Act 1989 states that the primary goal of a council is to endeavour to achieve the best outcomes for the local community having regard to the long-term and cumulative effects of its decisions. (Victorian Legislation and Parliamentary Documents, 2005a). One of local government's most important responsibilities is, therefore, to develop a vision for its municipality and to plan for the future realisation of this vision in partnership with its community.

2. capacity building through institutional adaptation/development

Vichealth: established in 1987. With research and evidence guiding programs, VicHealth invests in a range of activities in sectors as diverse as sport and active recreation, the arts, education, planning

and built environment, community and local government. **http://www.vichealth.vic.gov.au** .
VicHealth's Strategy and Business Plan 2009-2013 features a particular focus on increasing participation in physical, social and economic environments, and the role they play in priority health issues. A key strategic priority aims to reduce health inequalities.

PIA Victoria division created in 2002.
Key project: During 2002, PIA (Vic) worked with VicHealth and the Department of Human Services organising seminars for planning and health professionals and other interested people in Melbourne and regional areas on the theme "Planning and Health: Building Sustainable Links". In August 2002, a closer working relationship between PIA(Vic) and VicHealth was proposed, so that we might build a clear link between planning and health promotion. API Victoria received a grant of $60,000 for the year 2002-2003, and subsequent grants including funding for 2007-08. The PIA Planning for Health and Wellbeing Project subsequently won the **2005 VicHealth Award** for 'Projects Promoting Other Health Issues - project with a budget of $15,000 to $75,000'.

Heart Foundation (Victorian Division): Healthy by Design: is a resource of the Heart Foundation (Victorian Division) Supportive Environments for Physical Activity (SEPA) project. It includes design considerations, evidence, tools and case studies to support those professionals who have responsibility for the design, development and maintenance of the public realm.

At national level: The Preventative Health Taskforce was established in April 2008 to develop a National Preventative Health Strategy, focussing on the preventable risk factors of obesity, tobacco use and the harmful consumption of alcohol. See below.

3.Intersector partnerships and intersector policies and plans:

2000: Primary Care Partnerships
Since April 2000, over 800 service providers across Victoria have established 32 voluntary alliances or Primary Care Partnerships (PCPs) to address the issue of fragmentation of primary health service delivery). Victorian local governments are leading members of all PCPs, as they provide and fund a range of primary care services, and play an important role in local area public health planning, advocacy and community development. PCP Community Health Plans (CHPs), which encompass locally identified health issues, are

annual plans that report each PCP's strategies and achievements.

PCP Community Health Plans
(CHPs), which encompass locally identified health issues, are annual plans that report each PCP's strategies and achievements. Essentially council's MPHPs and CHPs are complementary plans that both focus health planning on local areas and aim to empower local communities to work together on key health and wellbeing issues (Department of Human Services 2003). MPHPs are intended to be local strategic health plans which are underpinned by an understanding of the many factors in the local built, social, economic and natural environments that could impact on the public's health. In contrast, the CHPs are operational plans that are informed by the MPHPs but which contain specific collaborative strategies to strengthen the primary care service system (e.g. health promotion activity, service coordination, advocacy, community needs and capacity building). In most Victorian councils, the staff member who has been allocated responsibility for developing council's MPHP, is also council's representative on PCP committees and working parties.
3. Targeted preventive action at national level

Victoria will benefit from new initiatives at the national level:
2008: the Australian Federal Government is prioritising stronger links between health and urban planning in response to chronic conditions (Preventative Health Taskforce, 2009). The Preventative Health Taskforce was established in April 2008 to develop a National Preventative Health Strategy, focussing on the preventable risk factors of obesity, tobacco use and the harmful consumption of alcohol. In developing the Strategy, the Taskforce released its discussion paper Australia: the healthiest country by 2020 in October 2008. Key recommendations for Obesity and action plan to fight obesity 2010-2013 include:
➢ A new Prime Minister's Active Living Council (to increase the level of physical activities and reduce levels of sedentary behaviour) to lead reforms to the built environment, transport and sport and active recreation to help restore physical activity to daily living;
➢ Australian and state governments to consider the introduction of health impact assessments in all policy development (for example, urban planning, school education, transport), using partnership models such as the Health in All Policies (HiAP) approach in South Australia
➢ Use planning to embed physical activities in daily life through Establish partnerships with the Australian Local Government Association (ALGA), the National Heart Foundation of Australia and the Planning Institute of Australia to develop programs that support and encourage local councils to adopt Healthy Spaces and Places planning guidelines. This project is funded ($700,000 in 2008–09) through the

Australian Government to develop a national guide for local planners. www.healthyplaces.org.au

In a second phase (1014-2017):
- Implement the National Framework for Active Living, encompassing local government, urban planning, building industry, developers and designers, health, transport, sport and active recreation

The document also set a roadmap for prevention which includes the development of strategic partnership in preventative health including public transport, planning and urban design as they can help shape active, connected and safe neighbourhoods. Also in regard to obesity, tobacco and alcohol, education; local government; social and community services; sport and recreation; justice and policing; urban planning, transport and infrastructure; and agriculture can all have an influence on preventive medicine.

4. Building the evidence base on the links between planning and health and promoting cross-sector partnerships:

2002: Planning for Health Project
In 2002, the Victoria Division of the Planning Institute of Australia received short term funding from VicHealth to undertake a project that would promote this clear link to planners (Planning Institute of Australia 2002).The project has been very successful in achieving the following objectives, and further funding is currently being sought from VicHealth:
- increase the number of planners aware of and advocating for the integration
- of planning and health;
- increase the capacity of planners to influence local urban design so that
- health is "planned in. rather than "planned out";
- gather evidence of good planning for health and well being, including
- literature and case studies, collated and disseminated to planners; and
- identify key planning and design elements that will lead to greater health and
- social benefits for the community.

Aim of Planning for Health project:
planners will assist in delivering:
- A planning system that achieves healthy and liveable communities and ensures the consideration of health and well-being impacts at all decision-making levels;

- Health as a priority in planning. The establishment of the Office of Planning and Urban Design in Department of Sustainability and Environment strengthens the opportunity to take this step;
- Increased integration of planning and health between state government departments and agencies, relevant authorities and local governments so as to coordinate planning efforts and deliver liveable communities;
- The audit of Melbourne 2030 to ensure that the metropolitan strategy delivers good health outcomes;
- Sustainable local food systems through embracing these issues in local decision making.
  5. Develop guidance on design criteria for healthy planning

2002: Planning for Health project

Safer Design Guidelines for Victoria
2005: In July 2005, the State Minister for Planning launched the Safer Design Guidelines for Victoria, which aim to facilitate the planning and design of safer urban environments for all Victorian communities (Department of Sustainability and Environment 2005b). The Guidelines are a response to two key State Government initiatives:
- Melbourne 2030 (a strategic plan, which was developed in 2000, for
- managing the growth of Melbourne over the next 30 years); and
- Safer Streets and Homes 2002-2005 (a crime and violence prevention
- strategy for Victoria).

The objectives of the Safer Design Guidelines are to:
- increase community usage of public places, in the daytime and evening;
- achieve connection and integration of streets and public places;
- reduce opportunities for crime and anti-social behaviour;
- improve the quality of life for the community by improving perceptions of
- public places; and
- create more liveable and sustainable environments

2004: Healthy by Design is a resource for planners in Victoria that has been developed by the Victorian Division of the Heart Foundation in response to local government requests for practical guidance in designing walkable, and ultimately more liveable, communities (Heart Foundation 2004). Many of the design

considerations in *Healthy by Design* build on the Victoria Planning Provisions (VPP). Until healthy planning and
design considerations are further embedded into the VPP, the challenge for local governments is to integrate healthy planning into their core business. The guide facilitates the creation of healthy places in which people can live, work and visit, by encouraging planners to include:

- well planned networks of walking and cycling routes;
- streets with direct, safe and convenient access;
- local destinations within walking distance from homes;
- accessible open spaces for recreation and leisure;
- conveniently located public transport stops; and
- local neighbourhoods fostering community spirit.

The guide also provides a matrix which highlights the fact that health, safety and access in the built environment, can all influenced by the same range of design features. This matrix supports an integrated approach to planning and assists council planners to develop value-added local structure and area plans

Healthy by Design may be used as a tool for:
• preparing plans (such as open space master plans)
• designing proposed developments
• developing design guidelines or checklists
• developing innovative built environment projects
• assessing development proposals
• influencing strategic directions
• embedding health into Municipal Strategic Statements
• influencing planning scheme provisions
• ongoing development and enhancement of open spaces
• sharing public health knowledge with the development or consultation community.

Other projects linking health and planning:

2005: Sustainable Neighbourhoods Project (completed 2005) including walkability/access/energy efficiency/community housing. The resource provides practical guidance for designing walkable, and ultimately more liveable, communities. Optimal design approaches that encourage active living in a range of

	areas are included such as walking and cycling routes, streets, local destinations, open space and public transport. A useful list of healthy planning and design resources are also included in the guide, providing options for further reading on a range of issues.
Integration of health into the plan appraisal and project appraisal process:	**EIA:** Assessment of environmental impacts is driven by several pieces of legislation in Victoria, including the Planning and Environment Act 1987, the Environment Effects Act 1978 and the Environment Protection Act 1970. The State Minister for Planning is responsible for the first two of these Acts while responsibility for the third rests with the State Minister for Environment. The Environment Protection Act requires the DHS to assess the likely impacts on the public's health of applications for industrial works approvals, and new or amended licensing of certain industrial premises. The DHS must provide a written report within 21 days of receipt of an application, clearly stating any objections to the proposed works or licences, and recommending any changes. Although the legislative requirement for DHS input into the EIA processes under this Act appears to allow for some consideration of potential health impacts, the DHS has noted that the response timelines may need to be reconsidered to permit adequate consideration of any potential health impacts and to allow the concerns of affected communities to be properly assessed. Evaluation of health impacts is incorporated in the EIA since 1999 (National Environmental Health Strategy). **Policy HIA has been developed by South Australian government and the national preventive health strategy** is considering the introduction of health impact assessments in all policy development including urban planning on the example of SA government.
Lessons that can be learnt from other countries about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in Review 3)	**Knowledge**
	HIA is seen as a tool to incorporate the consideration of health, wider determinants of health and health inequity within urban planning decision-making HIA successful when the neighbourhood renewal staff could explain the process and value of HIA to residents. In 1999, the first short course that introduced the concept of HIA and taught methods to apply HIA was offered as a postgraduate subject in one Victorian university. Since its inception, the number of participants in this short course has doubled, with many potential participants being refused registration due to lack of spaces. It is particularly noteworthy that the number of representatives from the Victorian local government sector continues to increase.

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	Partnership
	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. Trust and rapport between HIA practitioner, neighbourhood renewal staff and action group members was critical to the successful application of HIA.
	Management and resources
	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 Quality and effectiveness of HIA depends on the skills of the designated HIA practitioner and resources allocated (time, skill level and funding).
	Policy process
	Developing champions, allies and leaders. Legislation on HIA can bring gains and losses . **Integrating health into EIA is constrained by broader processes of project approvals, land-use planning and public health surveillance, lack of consistency on health/environment relationship in legislation and EIA documentation, lack of requirement in EIA legislation for assessment of population health means that health agencies are involved late in the process.**
How to ensure that health is integrated into the development process:	
Lessons that can be learnt about how to	**1. Integrated planning/intersectoral links and partnerships** Intersectoral partnership working (for instance Vichealth/Municipal Association of Victoria and State

ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)	department for human services to support good practice in municipal public health planning; "Planning and Health: Building Sustainable Links" where Vichealth and PIA Victoria collaborate to build the evidence base). ➢ Set up a spatial planning support mechanism/resource development for policies to be implemented by local government. For instance **Safer Design Guidelines for Victoria** (to facilitate the planning and design of safer urban environments for all Victorian communities) are a response to two key State Government initiatives: • Melbourne 2030 (a strategic plan, which was developed in 2000, for managing the growth of Melbourne over the next 30 years); and • Safer Streets and Homes 2002-2005 (a crime and violence prevention strategy for Victoria). Another example is **Healthy by Design** is a resource for planners in Victoria that has been developed by the Victorian Division of the Heart Foundation in response to local government requests for practical guidance in designing walkable, and ultimately more liveable,communities. A third example is need for local government to develop **municipal public health plan**s. In 2001 the DHS released a new municipal public health planning framework, Environments for Health (Department of Human Services 2001), which provided a practical guide to assist in the integration of public health considerations intocouncil's broader planning responsibilities. It clearly described how existing council actions across the built, social, economic and natural environments could potentially have an impact on the public's health. In addition, to facilitate best practice in municipal public health planning and to showcase the most successful initiatives across the sector, the State department of Human Services provided a small stream of funding, the Good Practice Program. ➢ Guidance must be flexible, i.e. apply at various stages of the planning process. For instance the Healthy by design guidelines apply either at plan or project level and at design, development, assessment stages. ➢ Empower local government in public health: in 1988, the increasing importance of local government in public health issues was recognised in Victoria and a method for integrating State Government and

	local area planning to promote high quality services was encouraged through municipal public health plans. **2. Linking good urban design and planning/Building the evidence base:** Ensure that many topics are covered (access, walkability, safety, transport…) and include the consideration of the impact of neighbourhood renewal policies on health. Evidence base built through intersector partnerships. **3. HIA** Policy HIA Weigh up the role of EIA and HIA **4. Planning education** Funding from the health sector into planning courses Support from the professional body Postgraduate and CPD provisions Guidance to support increased planners awareness: on impact of urban environments on health and guide/checklist of key topics that planners should consider
Where relevant, the extent to which these lessons can be applied in England	**FINDINGS OF THE CASE STUDY** The evidence collected on the case study show that a number of ingredients are necessary to fully incorporate health into the planning process. These ingredients are interrelated and complement each other: **1. Good support framework for integrated planning** ➢ **Empower local government in public health** in 1988, the increasing importance of local government in public health issues was recognised in Victoria and a method for integrating State Government and local area planning to promote high quality services was encouraged through municipal public health plans.

> ➤ **Follow through policies and guidance**

From the case of Victoria, the evidence shows that a support mechanism and resource development for spatial planning need to be set up and funded to ensure that policies and strategies towards healthy planning can be effectively implemented by local government.

For instance **Safer Design Guidelines for Victoria** (to facilitate the planning and design of safer urban environments for all Victorian communities) are a response to two key State Government initiatives Melbourne 2030 and Safer Streets and Homes 2002-2005. Another example is **Healthy by Design** is a resource for planners in Victoria that has been developed by the Victorian Division of the Heart Foundation in response to local government requests for practical guidance in designing walkable, and ultimately more liveable communities. A third example is need for local government to develop **municipal public health plan**s. In 2001 the DHS released a new municipal public health planning framework to facilitate best practice in municipal public health planning and to showcase the most successful initiatives across the sector. DHS also provide a small stream of funding to ensure good MPHP making.

> ➤ **Flexibility in guidance: Guidance** i.e. they must apply at various stages of the planning process. For instance the Healthy by design guidelines apply either at plan or project level and at design, development, assessment stages.

2. Intersector partnership working

Intersectoral partnership working is also important as showed by the partnership working between Vichealth and the Municipal Association of Victoria and State department for human services which supported good practice in municipal public health planning. Another example of partnership working is "Planning and Health: Building Sustainable Links" where Vichealth and PIA Victoria collaborate to build the evidence base.

3. Linking good urban design and planning/Building the evidence base:
> ➤ Ensure that many topics are covered (access, walkability, safety, transport…) and include the consideration of the impact of neighbourhood renewal policies on health. Evidence base built through intersector partnerships.

4. Develop HIA
> ➤ Policy HIA and weighing up the role of EIA and HIA (see section on appraisal mechanisms). the

Australian case study suggest that Policy HIA is a way to ensure that health is built in into spatial planning and other sectoral policies at all levels of government. This approach developed by the State of South Australia is endorsed by the National government and would apply to Victoria.

5. Educate and train Planners
➢ Funding from the health sector into planning courses, Support from the professional body and development of Postgraduate and CPD provisions has been a feature of the Australian case study, across several states.

In summary, the lessons for England include the following:
➢ Preventative health task force (from the National level) which can justify the development of strong cross sector links (for instance planning contributing to tackling obesity) based on a robust evidence base (on urban design and obesity and also demonstrating the cost savings) justifying investments.
➢ Empower local government in health sector and require municipal public health plans which link local government policies with broad determinants of health (and not only role of local government in involvement in primary care). The MPHP might be an interesting feature to look at in the current context of coalition government reforms a local level.
➢ Policy HIA and guidance that apply at all stages of the planning process, not at later stages of policy implementation
➢ Funding in planning education to train planners in health issues, either postgraduate courses or CPD.
➢ Another lesson from Victoria is the follow up of resources/guidance which support policy development. It shows commitment in policy implementation and tends to demonstrate that policy statements are not just rhetorical. However, we found no document evaluating the impact of such commitment on the ground and impact of healthy planning on the ground in the Australian/Victorian case study.

➢ Preventative health task force (from the National level) which can justify the development of strong cross sector links (for instance planning contributing to tackling obesity) based on a robust evidence base (on urban design and obesity and also demonstrating the cost savings) justifying investments.
➢ Empower local government in health sector and require municipal public health plans which link local government policies with broad determinants of health (and not only role of local government in involvement in primary care). The MPHP might be an interesting feature to look at in the current

		context of coalition government reforms a local level.
		➢ Policy HIA and guidance that apply at all stages of the planning process, not at later stages of policy implementation
		➢ Funding in planning education to train planners in health issues, either postgraduate courses or CPD.
		Another lesson from Victoria is the follow up of resources/guidance which support policy development. It shows commitment in policy implementation and tends to demonstrate that policy statements are not just rhetorical.
Any additional comments relating to findings from the case study		We found no document evaluating the impact of such commitment (see previous cell) on the ground and impact of healthy planning on the ground in the Australian/Victorian case study.
Quality assessment		
Quality assessment of individual studies / papers:		
Paper 1 reference Public Health Advisory Committee (2010). *Healthy places, healthy lives: urban environments and wellbeing.* Ministry of Health, Wellington.	Internal validity: + External validity:+	Refers to the UWE's health map. Refers to UWE's health map. Report mainly for the NZ context, but with many references, case studies and evidence from overseas, including good practice examples from Australia.
Harris, P., Harris, E., Thompson, S., Harris-Roxas, B. and Kemp, L. (2009). *Human health and*	Internal validity: ++ External validity:	R2

wellbeing in EIA in New South Wales, Australia: auditing health impacts within environmental assessments of major projects. EIA review 29, 310-318.	++	
Mc Cormick, J. (2007). *Lessons in applying HIA to regeneration schemes: the Victorian experience.*	Internal validity: + External validity: +	Evaluation of HIA in a neighbourhood renewal context in Victoria
Blau, G. and Mahoney, M. (2005). *The positioning of HIA in local government in Victoria.* Faculty of Health and Behavioural Sciences, Deakin University.	Internal validity: + External validity:+	Very descriptive of legislation, governance and projects linking health and planning in Victoria up to 2005 with then a a focus on HIA.
Preventative Health Taskforce (2009). *Australia: The healthiest country by*	Internal validity: + External	

2020. National Preventative Health Strategy. ACT: Commonwealth of Australia.	validity: +	
Gagnon, F. and Michaud, M. (2008). *HIA and public policy formulation.*Groupe d'étude sur les politiques publiques et la santé: Quebec.	Internal validity: + External validity: ++	Background information
NSW Department of Health (2009). *Healthy Urban Development Checklist - A guide for health services when commenting on development policies, plans and proposals.* NSW DoH: Sydney.	Internal validity: + External validity: +	Guide developed by the health sector to help health sector professionals participate in spatial planning (policies and strategies and plans and projects) either upstream at policy or plan/project development stage or as feedback on policies, plans/projects. Covers both evidence base on how urban environment influences broad determinants of health and how can the health sector be involved in planning.
NSW Premier's Council for Active Living (2010). *Development &*	Internal validity: + External	Advice for palnenrs on 7 themes: 1.Cities, Towns and Neighbourhoods; 2. Walking and Cycling Routes; 3. Public Transport;

Active Living: Designing Projects For Active Living - A Development Assessment Resource & Navigational Tool. PCAL: Sydney	validity: ++	4. Streets; 5. Open Space; 6. Retail Areas; and 7. Workplaces.
ALGA (2006). *Age friendly built environment.* ALGA: Sydney.	Internal validity: + External validity: +	List of initiatives local councils can use to support age-friendly built environments
National Heart Foundation (2004). *Healthy by design. A planners' guide to environments for active living.* NHF:	Internal validity: + External validity:+	Advice for planners at all stages of planning process, focus on active living, safety although mentions community spirit.
West S, Badham M. (2008). *Creating Liveable New Communities. Checklist for Liveability Planning.* Melbourne: Growth Areas Authority.	Internal validity: - External validity:+	No information on methodology and evidence base to support checklist questions. tool to support Precinct Structure Planning for creating liveable new communities in Melbourne's growth areas. It has been designed for multiple users including developers, local government, State Government agencies, other key providers of infrastructure and services and the Growth Areas Authority.
Overall assessment of quality for the		Documents usually refer to evidence base on the links between urban environment and broad determinants of health.

evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☐ ++ ☒ + ☐ -	Evaluation across the range of evidence which comes from various sources and stakeholders.
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	☐ ++ ☒ + ☐ -	Principles put forward are generalisable since they are usually based on state guidance (from public health, local government, planning sectors and even third sector), hence applicable throughout the local authorities in state. Guidance on design also applicable to UK settings.
Reviewer's comments on the quality of the evidence available for this case study (Did evidence come from peer reviewed		The evidence comes mainly from grey literature, guidance and documents issued by federal government or state government to promote healthy planning, increase awareness of planners and health professionals.

or grey literature, has evidence been assessed for quality as part of review 1 or review 2?)		

VICTORIA, AUSTRALIA: EVIDENCE STATEMENTS

- How should we integrate health into the planning process?

Australia 1: The case study provides moderate evidence that the Victorian legislative and statutory framework supports the integration of health into the planning system. The evidence suggests this integration has been enhanced as the responsibilities of local government have broadened beyond the realm of 'hard' infrastructure provision to include spending on social services such as health, welfare, safety and community amenities (Victorian Planning and environment Act 1978; Municipal Public Health planning, 1988; The Victorian Local Government Act 1989).

Australia 2: It provides strong evidence that capacity building through institutional adaptation/development (Vichealth; Planning Institute of Australia- Victoria Division; Preventative Health task force at national level) and intersectoral partnerships between public health and planning bodies and authorities(Primary Care Partnerships, Vichealth and PIA) can facilitate integration. Effective strategies include targeted preventative action at national level in response to chronic conditions, building the evidence base on the links between planning and health (e.g. Planning for Health), developing guidance on design criteria for healthy planning (e.g. Healthy by design), and educating planners through funding of postgraduate courses or CPD.

- As part of that, how should we integrate health into the plan appraisal and project appraisal processes?

Australia 3: There is weak evidence from the case study (as evidence is based on one case study of HIA evaluation and references to policy level HIA at national level) that HIA is an effective tool to incorporate the consideration of health, wider determinants of health and health inequity

within urban planning decision-making. However, there is evidence that capacity building for local authorities to understand the health impacts of their decisions (short courses developed at a university and increase in course uptake), and the development of good partnerships between HIA practitioner, local authorities and local people raise awareness of health in planning.

Australia 4: There is evidence that national government recommendation to use policy HIA has increased the extent to which health is built in into spatial planning and other sectoral policies at all levels of government.

Case study identification	**Bristol**	
Checklist completed by (name)	Helen Lease	
Checklist completed by (date)	5 October 2010	
Question	Category / Response	Details / Comments
Evidence Examined Sourced from Bristol City Council and Bristol PCT	1. HIA	1. Scott P. (2008) *Health Impact Assessment of the issues & Options Paper 2007 (Bristol Development Framework)* Strategic & Citywide Policy team, Bristol City Council
	2. Strategy (SCS)	2. Bristol Partnership (2009) *The 20:20 Plan – Bristol's Sustainable City Strategy*
	3. Policy (draft)	3. Bristol City Council (2009) *Bristol Development Framework Core Strategy, Publication Version*
	4. Policy (draft)	4. Bristol City Council (2010) *Site Allocations and Development Management Options Document, for consultation*
	5. Programme	5. Bristol Public Health. *Work programme 2010/11 for Bristol City Council's Healthy Urban Team* July 2010 NHS Bristol
	6. Evidence	6. Adrian Davis (2009) *Essential Evidence on a page: No 19 Unintended health impacts of road transport policies and interventions* Bristol City Council
	7. Representation	7. Directors of Public Health for the West of England. *Transport and the Economy: Health Sector for the West of England, evidence submission to the Commons Select Committee.* September 2010
	8. Diagram	8. Bristol Partnership, Bristol City Council, NHS Bristol. (Undated) Bristol Healthy Urban Group Network*s*

9. PowerPoint presentation	*9.*Healthy Urban Group. (undated) *Transport, Planning and Health – a journey begun.*
10. Strategy	*10.* Bristol Food Network. (2009) *A Sustainable Food Strategy for Bristol and Bristol Food Network (updated)*
11. Report	*11.*Hewitt, S., Richards M. (July 2010) *Involving Bristol PCT in Development Management (Draft 2).* Bristol City Council
12. Background Paper	12. Raffle A., Davis A (2010) *Demystifying Travel and Transport and what's it got to do with Health?* Background Paper No 2 for 17 Sept 2010 Health and Transport Workshop run for the four Directors of Public Health for the West of England
13. Representation	13.West of England Directors of Public Health (2010) *Joint Local Transport Plan 3: A Consultation response from the West of England Directors of Public Health*
14. Monitoring (extract)	14.West of England Partnership (2010) *LTP2 (2006-2011) Progress Review: targets for the four authorities*
15. Toolkit	15. Healthy City Group (2010) *Health and Well-being: Rapid Place Check, Avonmouth Walkabout*
16. HIA	16. Bristol PCT(2009) *Health Appraisal of Bristol's Housing Strategy 2010-2015: My home is my springboard for life*
17. Briefing Note	17. Hewitt S. (2010) *Some ideas for positive planning powers for supporting the development of a resilient food system for Bristol*

	18. Note	18. Hewitt S. (2010) *Outcome of HIA Workshop, Knowle West Regeneration (draft – unpublished)*
	19. Workshop record	19. Director of Public Health & Strategic Director of City Development (2010) *Building on 'Building for Health' Think Tank: Summary photo-report* WHO Collaborating Centre for Healthy Cites & Urban Policy
Acknowledgements	Stephen Hewitt Bristol City Council (BCC), Angela Raffle, Bristol PCT (BPCT) & Marcus Grant, Deputy Director, WHO Collaborating Centre for Healthy Cites & Urban Policy at UWE, for identifying key documents and setting them into context.	
Case Study Overview	Documented evidence of how local public health interests are attempting to influence Bristol City's planned growth, stem back to 2007 when Bristol PCT undertook an HIA of the Bristol Development Framework 'Issues and Options Paper' (Document 1) . Following that, Bristol PCT has taken an innovative proactive approach to engaging with the City Council on public health issues in the planning process: • The Director of Public Health, Hugh Annett (joint appointment by City Council and NHS Bristol) has funded a number of people to work within the City Council to get health embedded within Council services: o Planning (Stephen Hewitt, a 'Specialist Professional Planner, Healthy Living/Health Improvement') o Transport Planning (Adrian Davies) o Climate Change and Peak Oil (Angela Raffle) o Active Bristol (Claire Lowman). o A City Council Principal Health Policy Officer (Liz McDougall) completes the team and provides the links with the council's corporate structures and elected members. . • In addition the PCT buys time from Marcus Grant (Deputy Director of the WHO Collaborating Centre for Healthy Cities at University of West of England) so that it benefits from his international experience and learning from the Healthy Cities Networks. Marcus is seconded to	

	the PCT for one day per fortnight to provide expert support and facilitate healthy urban planning
Research questions addressed	
Integration of health into the planning process:	

• Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions
 	
• How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process
	Policy
	• PCT representations to emerging planning policy documents
	• HIAs prepared for Housing Strategy, BDF Issues & Options report, & Knowle West regeneration area proposals
	• Preparation of *Health & Wellbeing: Rapid Place Check* to be used by communities in liaison with the LSP
	• Organising representations on behalf of the West of England Partnership's four Directors of Public Health to the Joint LTP3 and evidence to the House of Commons Select Committee on Transport and the Economy (West of England Partnership = Bristol, Bath & North East Somerset, South Gloucestershire, and North Somerset)
	• Entering into a Memorandum of Understanding between transport & health
	• Established the multiagency 'Active Bristol'; a five year (2008-2013) programme to reverse the decline in the physical activity of Bristol people. It aims to bring about a significant and sustainable increase in the number of Bristol people who are physically active by encouraging individuals to be physically active, and by promoting environmental changes that help make healthy travel choices our first, natural choice.
	• Provide/provided health input to:
	    o Successful bid to Cycling England for Cycling City designation
	    o Cycling & Walking Strategies
	    o Bristol City Council Food Charter, 2010
	    o 20mph pilot zones
	    o Active Bristol programme
	
	• Future work planned:
	    o Preparation of a 'Planning a Healthy Bristol' planning advice note as part of the Bristol LDF
	
	Development management
	• *Involving Bristol PCT in Development Management* (draft) is the first step to formalising PCT input to planning applications (PCTs are not statutory consultees on planning applications), perhaps instituting a form of application 'triage' system to identify where a health response is required, or more informally to hold 'surgeries' when DM officers could discuss development and health issues.

	Currently the document is in draft.
	• Requiring HIA of major development proposals (emerging DM policy)
	
	Collaboration
	• With the LSP, establishing a 'Healthy City Group' – a mechanism for ensuring the health sector engages positively and proactively with planning, economic regeneration, urban design, housing and development management to ensure the HIA approach is integrated at the outset into design, planning and management
	• Planned:
	    o preparation of 'Essential Evidence'/factsheets
	    o continue to hold multi-disciplinary seminars, interactive HIA sessions & study visits

Integration of health into the plan appraisal and project appraisal process:	
Lessons that can be learnt about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in Review 3)	**Knowledge**
	• Embedding key health staff into local authorities facilitates health appraisal (Planner facilitating Knowle West Regeneration HIA process)
	Partnership
	• Knowle West Regeneration HIA is assisted by key health staff in order to inform planners on master planning issues
	Management and resources
	• PCT resources enable the above partnership • PCT has set up an internal Spatial Planning Group to respond to formal LDF consultations
	Policy process
	• HIA undertaken of early 'Options Report' of Core strategy – ensure influence targeted throughout the emergence of development plan documents • PCT has set up an internal Spatial Planning Group to respond to formal LDF consultations
How to ensure that health is integrated into the development process:	
	No evidence
Where relevant, the extent to which these lessons can	No evidence

be applied in England	
Any additional comments relating to findings from the case study	1. The 19 documents listed in the evidence give some flavour of the initiatives to embed health into Bristol's planning processes. 2. The impetus for the initiatives appears to come from both ends of the hierarchy: it is clear that the Director of Public Health (joint appointment between NHS Bristol and the City Council) understands the potential impacts of the urban environment on health (perhaps stimulated by his visit in 2008 to Freiburg) as he has put resources into funding five health specialists to work within the Council as well as more funding to second a healthy urban planning specialist into the PCT on a more limited part time basis. 3. The 'embedded' health professionals have a variety of health specialisms to enable significant coverage of the social determinants of health (planning, healthy living/health improvement, transport, climate change and peak oil and physical activity, with the option of drawing on UWE's knowledge in healthy urban planning when needed. Of particular significance is Stephen Hewitt's appointment as a 'Specialist Professional Planner, Healthy Living/Health Improvement' and line managed by the service manager of Strategic Planning at Bristol City Council, but resourced by the PCT. 4. The above personnel come together in at least two groupings: • Healthy City Group (a sub-group of the LSP Health & Wellbeing Partnership) • Healthy Urban Team (HUT, formerly the Healthy Urban Group) forming the link between the PCT, the City Council and the LSP, aims to drive health, wellbeing and health inequality into the focus of the spatial planners. 5. The work emanating from the groups and also from individuals from HUT tasked with developing initiatives, includes:

- Strategic Policy
  - representations on behalf of the four West of England Directors of Public Health to a House of Commons Select Committee and to the Joint LTP3
  - HIA of Housing Strategy
- Local Policy
  - Representations to emerging LDF documents
  - HIA of regeneration plans
  - Developing a strategy for PCT involvement in development management
- Collaboration
  - The Healthy City Group activities which engages health with planning, economic regeneration, urban design, housing and development management
  - Continuing preparation of 'essential evidence' factsheets
  - Holding multi-disciplinary seminars, interactive HIA sessions and study visits
- Community engagement
  - Knowle West HIA event with community and 'experts'
  - Rapid Place Check exercises.

Effectiveness
6. The effectiveness of the PCT/City Council initiatives are not readily documented, but are beginning to produce results in the form of actions and guidance. It must be assumed that Stephen Hewitt's appointment to drive health through the planning agenda, signals the political will to achieve this. The PCT's agenda is quite clear and the activity demonstrated through the evidence is focussed on making a difference to the health of the City.

The apparent success of this case study is difficult to quantify as the input of PCT resources is relatively recent. The good practice can be summarised as relating to:
- The vision and support of the Directors of Public Health and City Development (ie spatial planning)
- Director of Public Health's funding to embed health professionals within the Council
- Knowledge exchange between health & planning sectors

	• Active involvement of PCT in spatial planning and related departments
Quality assessment	
Quality assessment of individual studies / papers:	**N/A**
Overall assessment of quality for the evidence presented in the case study:	

Is the evidence internally valid (i.e. unbiased)?	☐ ++ ☒ + ☐ -	Potential for bias with some documents relating to achievements. All documents are grey literature.
Are the findings generalisable to the source population (i.e. externally valid)?	☒ ++ ☐ + ☐ -	Most of the initiatives could be taken up by other PCTs or planning authorities
Reviewer's comments on the evidence available for this case study		Negligible evidence of effectiveness, although it is difficult to quantify partnerships, health and learning outcomes this early in the Bristol initiative and the LDF process.

BRISTOL: EVIDENCE STATEMENT

- How should we integrate health into the planning process?

Bristol 1: The case study provides strong (moderate) evidence that capacity building through institutional adaptation/development (embedded health professionals who provide input into planning in the field of healthy living/health improvement, transport, climate change and peak oil and physical activity, dedicated health and planning officer, HIA of regeneration plans, policy) and intersectoral partnerships between public health and planning bodies and authorities can facilitate integration through the development of intersectoral strategies and policies.

Case study identification	Freiburg, Germany	
Checklist completed by (name)	Laurence Carmichael	
Checklist completed by (date)	4/10/2010	
Question	Category / Response	Details / Comments
Evidence examined	1. Press article	1. Mellor, A. (2006). City raises green standards, in Planning, 12 May 2006.
	2. Publicity material	2. City of Freiburg (2008?). Freiburg Green City – Approaches to sustainability, City of Freiburg.
	3. District brochure	3. Vauban District Association (2009). Quartier Vauban – Freiburg. Vauban District Association: Freiburg.
	4. Brochure – project report	4. Forum Vauban (1999). A journey through the model district of Vauban. Life project report. Forum Vauban: Freiburg.
	5. Case study	5. Building for Life (2005). Case study: Vauban, Freiburg. CABE: London.
	6. Press Article	6. Falk, N. (2007). Lessons from Freiburg. Town and Country Planning.
	7. Report	7. European Environment Agency (2009). Ensuring quality of life in Europe's cities and towns. EEA: Copenhagen.
	8. Study visit report	8. Grant, M (2009). News from Freiburg – Summary record with articles from participants. NHS SW, Healthy Cities 21st Century and UWE.
	9. guidance	9. Scottish government (2008). Scottish sustainable communities initiative. Scottish government: Edinburgh.

Acknowledgements		
Case Study Overview	Freiburg is seen as an ecological model which started in the 1970s following protests against a planned nuclear plant. Residents remained politicised and started to campaign for environmental solutions to the city's energy needs. Innovation came from business, research and the city authority. Freiburg as been visited by people from public health and local government. Regional director of public health in SWSHA suggested that visit has *shifted attitude and approaches* regarding *what we can and should be doing with regards to the built environment*.	
Research questions addressed		
Integration of health into the planning process:		
Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	While energy efficiency in buildings and their ecological design are a key feature of Freiburg's innovative approach to sustainable planning, some of the other sustainable features of the spatial and transport planning offer some key health outcomes including physical activities, mental health, environmental health, unintentional injuries and equity. Public transport is extensive and widely used by Freiburg residents. The district of Vauban offers mixed tenures, its development process was inclusive and cross-departmental, its approach to building standards very environmental and its policy towards public space socially orientated. Key dates in spatial planning in Freiburg: 1986: guideline adopted to for future-orientated energy policy. 1992: resolution adopted: only low energy buildings can be built on council land. 1996: resolution to reduce carbon emissions by introduction of public transport, waste and industrial initiatives. Approaches to sustainability include a mixture of policy measures, some with a link with healthy planning including: • Treatment of non recyclable waste in incinerator practising waste disposal safety by maintaining high environmental standards.	

| | Environmental friendly transport system that promotes active living (pedestrianisation since 1973, cycling – 500 km long network; 9000 parking sites linked to public transport network, traffic calming measures, and local public transport). Freiburg has got the lowest motor vehicle density compared with other major Germany cities. This is created through urban planning principles that include: Traffic avoidance: designing a compact city that can be crossed quickly Designing strong neighbourhood centres (inc. schools, kindergarten, youth facilities, civic meeting places, market place, businesses, retail, health care services…) Urban development that takes place along main public transport arteries (including university development; 65% of people live in catchment area of a tram stop) Priority given to centralised development over peripheral growth Two key examples: city districts of Rieselfeld and Vauban Green spaces have been promoted. Green belt covers 500 ha of green spaces, numerous green areas from the periphery to the centre of the city including: parks, landscape conservation reserves, nature reserves, garden plots, playgrounds, cemeteries and grassy bed for trams; development of recreational spaces has increased along the years. Eco-friendly park management Trees planted in streets Soil protection policy: since 1991, city registers suspected undeclared polluted sites within the city boundaries and planners and owners can use the register to prevent exposure to pollution risks. Water protection: flood hazard areas are already delineated in Freiburg in the scope of the land use plan, in advanced of the EU and German legislation that sets 2012 as deadline for preparing flood hazard maps. Buildings can be erected in flood zones only under strict conditions. Principles used in land planning to promote sustainable urban development in Freiburg include: |

- o Reduction in land use by 30ha in the land use plan 2020
- o Extension of human habitation and natural habitat through the Landscape plan 2020
- o Search for interconnecting open spaces within and with the city
- o Urban climate concept: retaining cool air flow areas and urban ventilation lines within and outside the city in the land use plan
- o Early stages of planning process to define the orientation and position of building to maximise energy optimisation: energy-supply variant most compatible with the environment is contractually prescribed – provided it can be realised with the same or a reasonably higher (10%max.) costs.
- o Citizen engagement:
  - ➢ in land use plan 2020 from the vision stage of the plan: as a result of past failure and growing mistrust of citizens in the transparency of the government.
- o Cross departmental project steering group for integrated urban development in mayor's office
- • Learning while planning principles in developing new districts in land owned by the City: eg. Vauban
  - o Vauban: City authorities responsible for planning and development of the site:
    - ➢ City divided land into small plots and allocated it to private builders and co-housing groups, high built density, reclamation of contaminated areas.
    - ➢ Some regulations for the implementation of the plan (building code and associated regulations; decision on the holding of a competition…) and design and layout of homes (no detached homes, no building exceeding 4 storeys + car free and parking free concepts of living), but builders had the freedom to design and develop the homes they aspired to.
    - ➢ Financial support: Land of Badn-Wurttemberg and City of Freiburg contributed €5M financial assistance and start-up financing.
    - ➢ Master plan commissioned by city authority based on car free and low energy principles, but city allowed flexibility in design, changes based on citizen participation
    - ➢ cooperative planning process, supported by EU Life project which brought together key stakeholders (city of Freiburg planning, Freiburg's public utilities, building cooperative Genova, International Council for Local Environmental

Initiatives, Forum Vauban).

- Genova cooperative: common decision-making from the early stages of the development planning: mix of ages supported by barrier-free apartments, common rooms and guest rooms save space in apartments, state subsidised apartments; building collectives allows people from different social backgrounds and purchase their own homes by allowing cost-effective and need-based living spaces through common decision-making on a plot of land, planning of building, hiring of architect: this joint planning mechanisms offers the creation of good neighbourhood. 46 building collectives built in Vauban by 2009.
- Forum Vauban: organised citizen participation forum to support community based building projects which will benefit the sense of social cohesion and neighbourhood

➢ Good facilities and services to build the neighbourhood (5000 inhabitants), social interaction including mix between ages
➢ Community structures created since inception (Forum Vauban) remain in place once building work completed
➢ Farmers market and cooperative food store initiatives
➢ Low cost development within a co-housing than with private developer, allowing people on lower incomes to become home owners
➢ Connectivity: pro pedestrian and cyclist and public transport approach, £10000-140000 cost of a parking space in multi-storey car parks on settlement edge.
➢ Economics facilitates the rate of development: risks reduced as small developments are commissioned by groups of people who will be occupiers not developers who will need to sell to open market: no market risks, low cost of land (20% of housing cost)

Results of a study tour bringing local authorities and public health professionals to Freiburg. The lessons to learn for the UK based on Sir peter Hall's visit to Freiburg in 2008:
- give city more freedom to make their own policies

	- places should make their own rules to create incentives for more sustainable communities - urban extensions rather than new towns need to be looked at + From Janet Askew (planner) visiting Freiburg in 2009: - integration of land use and transport planning - more flexibility for allowing micro-renewables on premises + - Leadership and political will - integrated transport system - community spirit and commitment From Mark Pearson (Design SW at Creating Excellence) - Vauban/German planning looks at size of dwelling, not number of rooms per house: change the attitude of developers who tend to squeeze more rooms even if not practical. - compactness is better for creating sustainable neighbourhoods (public transport, economy, schools…) and more likely to lead to change in behaviour re car ownership: density in Vauban is in excess of 100 dwellings per ha: this was made possible by *carefully constructed but not overly prescriptive design codes and parking has been integrated or banished.* Mark Patterson (Regional manager at DoH SW): - study tour did not reveal whether the design of Vauban (modal shift from car to public transport and walking/cycling) drove positive health outcomes, however person experience, he felt that Vauban gave right environment to raise children.
How to ensure that health is integrated into the development	

process:	

Lessons that can be learnt about how to ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)	**FINDINGS OF THE CASE STUDY**
	
	The case of Freiburg is interesting in that the city and some of its recent neighbourhood developments do not refer to the concept of health, but rather of sustainable planning. Yet, while energy efficiency in buildings and their ecological design are a key feature of Freiburg's innovative approach to sustainable planning, some of the other sustainable features of the spatial and transport planning offer some key features to promote health outcomes including physical activities, mental health, environmental health, unintentional injuries and equity. While some of the literature examined to identify the characteristics of the Freiburg model provided weak evidence as it was mainly based on publications written by the stakeholders, city council for purely descriptive or publicity objectives, Freiburg has also served as good practice case study by the Scottish Government, CABE and has been the subject of articles in the planning press in the UK. We also used comments made by public health and planning professionals who participated in a study tour to Freiburg to complement the body of evidence. The integration of sustainable principles that contribute to healthy outcomes in the planning system in Freiburg includes the following elements:
	
	1. Focus on good governance and adaptative planning policy and development planning
	    • national policy must give freedom to cities and neighbourhoods to develop and innovate to suit local needs
	    • political leadership required and strong lead from the local authority on master planning to avoid developers led master plan; small development within a large development plan can reduce financial risks
	    • grassroot involvement is necessary through cooperative planning: participants are also developers, so can see project from two different perspectives
	    • planning decision making seen as an iterative process "learning while you plan"
	
	2. "Integration of integrated" Transport planning into the spatial planning process
	    ➢ can lead to behavioural change and promote active living
	    ➢ at regional, city and neighbourhood levels
	
	3. Key urban design principles to shape sustainable communities that will promote health

	outcomes
	- e.g. reduction in land use while answering needs for housing, creating compact communities where density is far higher than in the UK, yet offers open spaces - e.g. promotion of green belt, green parks in city and good park management and connectivity between built environment and open spaces - Vauban puts some key principles of urban design into question (density, size of dwellings) - seen as bringing social mix (but as a response to community engagement and decision in the first place) **4. Dual role for the community as participant and developer** Freiburg is seen as an ecological model which started in the 1970s following protests against a planned nuclear plant. Residents remained politicised and started to campaign for environmental solutions to the city's energy needs. Innovation came from business, research and the city authority. - must occur from the inception of project development to inform all the aspects of the development And carry on after the project is completed as support for managing the neighbourhood, encouraging social activities. - In Vauban, citizens participating in planning process are also developers of their own plot of land.
Where relevant, the extent to which these lessons can be applied in England	The Scottish government uses Vauban as a good practice example of sustainable community responding to affordable housing needs while being well connected to the larger urban area.
Any additional comments relating to findings from the case study	There is little if no mention of health in the planning system in the documents examined, but they point out towards sustainable planning that promote healthy living. This was evidenced by the level of interest by the participants in the 2009 study tour reported. Hence the case study is interesting in terms of strategic framing of the concept of health into planning and its links to the broader concept of sustainability.
Quality assessment	
Quality assessment of individual studies / papers:	

	Internal validity: +	
Mellor, A. (2006). City raises green standards, in		evaluative

Planning, 12 May 2006.	External validity: +	
City of Freiburg (2008?). Freiburg Green City – Approaches to sustainability, City of Freiburg.	Internal validity: - External validity: -	Descriptive of the city's poicy
Vauban District Association (2009). Quartier Vauban – Freiburg. Vauban District Association: Freiburg.	Internal validity: - External validity: -	descriptive
Forum Vauban (1999). A journey through the model district of Vauban. Life project report. Forum Vauban: Freiburg.	Internal validity: - External validity:-	Descriptive of the policy process towards building of Vauban
Building for Life (2005). Case study: Vauban, Freiburg. CABE: London.	Internal validity: + External validity:+	Descriptive and analytical and draws some lessons for the UK
Falk, N. (2007). Lessons from Freiburg. Town and Country Planning.	Internal validity: + External validity:+	Descriptive and analytical, draws some lessons for the UK
European Environment Agency (2009). Ensuring	Internal validity: +	Research carried out as part of a research project, draws lessons on quality of life criteria linked to built environment

quality of life in Europe's cities and towns. EEA: Copenhagen.	External validity:+	
Grant, M (2009). News from Freiburg – Summary record with articles from participants. NHS SW, Healthy Cities 21st Century and UWE.	Internal validity: - External validity:+	Compendium of articles and comments on Vauban by public health and planning professionals in the SW. Draws lessons for the UK and SW planning practice.
Scottish government (2008). Scottish sustainable communities initiative. Scottish government: Edinburgh.	Internal validity: - External validity: +	Guidance, uses Vauban as a good practice example of sustainable community.
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☐ ++ ☐ + ☒ -	The main issue is that the case study includes a number of descriptive material published by stakeholders in Freiburg and Vauban, hence it is impossible to check bias. However, the case study has also features in planning press, by professional body and is referred to in Scottish government's strategy. In addition, comments made by participants from both health and planning sector are positive and draw lessons for the UK healthy planning practice.
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which	☒ ++ ☐ + ☐ -	Overall Freiburg and in particular Vauban is used as a good practice example of sustainable community.

the findings of the case study are generalisable beyond the confines of the evidence to the source population.		
Reviewer's comments on the evidence available for this case study		While some of the literature examined to identify the characteristics of the Freiburg model provided weak evidence as it was mainly based on publications written by the stakeholders, city council for purely descriptive or publicity objectives, Freiburg has also served as good practice case study by the Scottish Government, CABE and has been the subject of articles in the planning press in the UK. We also used comments made by public health and planning professionals who participated in a study tour to Freiburg to complement the body of evidence.

FREIBURG, GERMANY: EVIDENCE STATEMENTS

- How should we ensure that health is integrated into the development process?

    Freiburg 1: The case study provides moderate evidence that a governance, policy and regulatory system that supports cities to develop neighbourhoods to suit local needs can facilitate the integration of health into spatial planning. It also provides strong evidence that political and executive leadership from the local authority on master planning can help avoid developer- led master planning and promote a multiplicity of developers.

    Freiburg 2: It provides strong evidence that community involvement and engagement in planning facilitates the integration of local knowledge into the development decision making and promotes sustainable planning. Evidence shows that such community engagement (in Vauban) occurred from the inception of project development to inform all the aspects of the development and carried on after the project was completed as support for managing the neighbourhood, encouraging social engagement. This community engagement can help communities to see the development from a developers' perspective.

    Freiburg 3: The case study provides strong evidence that sustainable planning is facilitated through the integration of transport planning with spatial planning and thought through from the inception of project and can lead to behavioural changes and promote active living. It also weak evidence that social mix can be brought in though good urban design (Vauban).

    Freiburg 4: The case study provides moderate evidence that some key innovative principles in development (e.g.reduction in land use,

promotion of green belt, urban green parks, connectivity between built environment and open spaces combined with high density and a rethink of building designs) can help create compact communities which offer suitable open spaces encouraging physical activity as well as greater social and age mix.

Case study identification	Greater London Authority (GLA)	
Checklist completed by (name)	Helen Lease	
Checklist completed by (date)	20 September 2010	
Question	Category / Response	Details / Comments
Evidence examined All sourced from the GLA website, except document 12 which was identified from the call for evidence (CfE)	1. Policy 2. Policy 3 Guidance 4. Strategy 5. Strategy 6. Strategy 7. Strategy 8. Strategy 9. Strategy 10. Strategy 11. Monitoring 12. Research	1. The London Plan (2008) 2. SPG: Planning for Equality & Diversity in London (2007) 3. Best Practice Guidance: Health Issues in Planning (2007) 4. The Mayor's Equality Framework: Equal Life Chances for All (July 2009) 5. The London Health Inequalities Strategy (April 2010) 6. The London Health Inequalities Strategy, First steps to delivery to 2012 (April 2010) 7. Appreciating our Seniors: The Mayor of London's Action Plan for Older People 2009/2010 (March 2009) 8. The Mayor's Draft Air Quality Strategy (March 2010) 9. Healthy & Sustainable Food Strategy (2005) 10. The Mayor's Transport Strategy (May 2010) 11. London Plan Annual Monitoring Report 6, 2008-2009, (February 2010) 12. Mayor of London's Assessment of Major Applications: Development and Health (2008) (HUDU)
Acknowledgements		
Case Study Overview	The GLA is the strategic authority for London; it supports the work of the Mayor and the London Assembly. Exceptionally, the London Mayor has the statutory duty to promote the health of Londoners, and his responsibilities include: • Promotion of a reduction in health inequalities in London • Preparation of a statutory health inequalities strategy • Appoint a health advisor (advises GLA, the Mayor, Assembly members or any other body in	

	relation to anything that appears to him to be a health issue. Also assists the Mayor in implementing the health inequalities strategy) The Mayor holds the executive power of the GLA & also has the ability to 'call in' decisions on major planning applications from the boroughs. The London Assembly holds the Mayor to account & controls his budget. It also investigates issues of policy development by way of committee system (eg Health & Public Services Committee).
Research questions addressed	
Integration of health into the planning process:	

• Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions • How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	The Mayor's statutory planning policies are set out the spatial development strategy for London (*The London Plan*), with relevant objectives including making the capital a healthier and better place to live in, promoting social inclusion, tackling deprivation, discrimination and climate change. The policies set out how these objectives will be met by the Mayor, and by Boroughs in their LDFs. Whilst many of the policies relate to issues that affect health and health inequality, of particular relevance are: *Policy 2A.1* – take account of capacity of existing & planned infrastructure *Policy 3A.18* – assess the need for social infrastructure and community facilities in their area, and ensure that they are capable of being met wherever possible *Policy 3A.20* – LDFs to have regard to policies for well-being & reduction of health inequalities (including NHS Plan & local delivery plans in partnership with PCTs) *Policy 3A.21* – provision of policies for additional healthcare as identified by PCTs & locations assessed *Policy 3A.23* – recommends that HIAs should be sought for major development proposals. Supplementary planning guidance on *planning for equality & diversity* provides detailed guidance on how policies & proposals should address specific spatial needs of target equality groups. *Various strategies* set out how the Mayor will tackle health issues: air quality, transport, the elderly, healthy & sustainable food and reduce health inequalities. Whilst the first two of these are statutory requirements of every LPA, the latter is only a requirement for the Mayor of London (GLA Act 2007). The Mayor's *London Health Inequalities Strategy* is developing "coordinated action by the GLA group, the NHS, the regional Public Health Group. London Councils, boroughs, the private sector, academia, the Voluntary and Community Sector to evaluate and openly share learning about what is and what is not working in achieving ambitions." It draws together all other mayoral commitments/strategies and focuses on delivery. Its objectives are to: • Empower individuals & communities to improve health & well-being • Improve access to high quality health & social care services, particularly for those with poor health outcomes • Reduce income inequality & negative consequences of relative poverty • Increase opportunities to access benefits of good work & activities • Develop & promote London as a healthy place for all.

	As with all statutory planning policies, the Mayor's policies (together with the Borough's LDF policies) are the prime material considerations in determining planning applications.

How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process	Set out in the London Mayor's *Best Practice Guidance: Health Issues in Planning (2007).* This focuses very much of promoting public health through planning. It sets out best practice showing how health inequalities can be tackled though planning policies and proposals and also by better partnership working between health and planning professionals. The document is very comprehensive, explaining how the planning system works and making links between London Plan policies and the determinants of health and potential health outcomes. It addresses key themes (eg housing, food, open space, transportation), detailing evidence and signposts helpful documents and gives case studies. The section on integrating health & planning perhaps disappoints as it fails to explain the imperative (and how) for health professionals to become involved in the planning system at the local level to ensure health outcomes.
Integration of health into the plan appraisal and project appraisal process:	
Lessons that can be learnt about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in Review 3)	**Knowledge**
	No evidence
	Partnership
	No evidence
	Management and resources
	No evidence
	Policy process

	Policy 3A.23 of the London Plan recommends that HIAs should be sought by the boroughs for major development proposals.
How to ensure that health is integrated into the development process:	
	No evidence
Where relevant, the extent to which these lessons can be applied in England	-
Any additional comments relating to findings from the case study	1. The basis of this case study is the Mayor's unique statutory duties to promote the health of Londoners and to reduce health inequalities: the GLA's part in his duties lie in a supportive role. The London Assembly's role is more important in that it holds the Mayor to account and controls his budget and also investigates issues of policy development by way of a committee system. 2. The London Plan and various strategies all address health, with the Health Inequalities Strategy being required by statute. The latter was only published in 2010 and so it is far too early to have any indication of its effectiveness. 3. The framework for addressing health issues and tackling health inequalities appears to be comprehensive, however HUDU research (2008) assessing the Mayor's application of health objectives and policies from the London Plan when consideration major planning applications (2007-2008 for housing and student accommodation only), found that health impacts were not considered, nor was the need for health infrastructure. 4. The most recent 2008-2009 London Plan AMR states: "most of the social, health and education indicators have shown broadly neutral trends, reflecting the more difficult economic situation in the past year, while the transport indicators have shown positive trends". Specifically, the policy target

		of 50% affordable housing is not being achieved and targets to reduce inequalities in employment are not being met. However we cannot judge the impact the recession has had on the Plan's performance.
		5. The effectiveness of the Mayor's special responsibilities is therefore mixed. It is the Assembly's duty to hold him to account, but no evidence was found that it is doing so in respect of implementing his own London Plan Policies.
Quality assessment		
Quality assessment of individual studies / papers:		
NHS London Healthy Urban Development Unit (2008) *Mayor of London's Assessment of Major Applications: Development and Health*	Internal validity: External validity:	++ Straightforward design of research that is unlikely to allow bias. - Findings not generalisable as the research relates to specific policies in the London Plan. This evidence demonstrates that despite the Mayor's statutory responsibilities to health & health inequalities and the strong health credentials of the London Plan and the Health Inequalities Strategy, he is still granting planning permission to significant numbers of major planning applications which do not comply with policy.
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☒ ++ ☐ + ☐ -	

Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	☒ ++ ☐ + ☐ -	The Mayor's statutory responsibilities towards health are unique in the UK, however they could be applied more widely given the Coalition Government's intentions to hold referendums on the potential to have directly elected mayors in the 12 largest cities.
Reviewer's comments on the evidence available for this case study		Mostly grey literature in the form of policy and strategy documents. The HUDU research, although relatively authoritative, is not peer reviewed, but it calls into question whether the Mayor's special responsibilities to health and health inequality are effective. This is the only evidence available of effectiveness of this national (but locally applied) initiative.

GREATER LONDON AUTHORITY: EVIDENCE STATEMENTS

- How should we integrate health into the planning process?

  GLA 1: There is strong evidence from this case study that the establishment of a statutory duty upon a planning authority to promote health and to reduce health inequalities results in the explicit consideration of health issues and development of policies relating to health within the planning process.

  - What lessons can be learnt about the effectiveness and cost-effectiveness of appraisal approaches? (Key Question 2)

    GLA 2: There is moderate evidence from this case study that the statutory inclusion of health in the planning process was associated with broadly neutral trends on most social, health and education outcome indicators and positive trends in transport outcome indicators in the short to medium term (2008-09 London Plan Annual Monitoring Report.)

- More broadly, how should we ensure that health is integrated into the development process?

  GLA 3: There is moderate evidence that despite the inclusion of health issues in the planning process, major planning decisions that are not consistent with the stated health policies continue to secure approval.

Case study identification	NHS London Healthy Urban Development Unit (HUDU)	
Checklist completed by (name)	Helen Lease	
Checklist completed by (date)	20 September 2010	
Question	Category / Response	Details / Comments
Evidence examined

Sourced from 'Call for Evidence' material (CfE) and HUDU Website (W) | Guidance

Guidance
Guidance

Guidance/ checklist

Toolkit
Toolkit
Legal Opinion

Research

Research

Research

Appraisal | 1. Planning for Health in London: the ultimate manual for primary care trusts and boroughs (2009) **(W)**
2. Delivering Healthier Communities in London (2007) **(W)**
3. Integrating Health into the Core Strategy: A Guide for Primary Care Trusts (2009) **(W)**
4. Watch Out for Health **(2009) (W)**

5. Health and Urban Planning Toolkit (2007) **(CfE)**
6. The HUDU Model (launched in 2005**) (W)**
7. Legal Opinion on the provision of Section 106 payments for health services (2008) **(W)**
8. Mayor of London's Assessment of Major Applications: Development and Health (2008**) (CfE)**
9. PCT Survey: HUDU Planning Application Alerts & PCT Engagement in the Planning Process (2009) **(CfE)**
10. Review of London's Sustainable Community Strategies: consideration of health & spatial planning (2009) **(W)**
11. Clarendon Square at Haringey Heartlands, Outline Planning Application: Watch Out For Health Appraisal (June 2009) **CfE)** |
| Acknowledgements | | |
| **Case Study Overview** | HUDU was set up by London NHS to support PCTs and LPAs in ensuring that health is taken into | |

	consideration in planning policy and developments. It is currently funded by the London PCTs and the LDA.
Research questions addressed	
Integration of health into the planning process:	
• Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions • How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	All the HUDU guidance, checklist & toolkit documents are specifically prepared to provide effective approaches for PCTs to engage positively in the planning processes to ensure, as far as possible, health outcomes. The *Ultimate Manual* sets out concisely the opportunities for health and planning to cooperate to ensure health outcomes. It references all the HUDU aids available. The purpose of *Delivering Healthy Communities in London* is to ensure that health is sufficiently taken into consideration when spatial plans for boroughs are formulated and developed, and assist PCTs getting involved in and influence the spatial plans; it is also of use to LPAs to ensure that LDFs cover health issues. It explains the planning process in detail and makes the links between planning and the determinants of health and potential health outcomes. It addresses key themes (eg housing, food, open space, transportation), detailing available evidence. *Integrating Health into the Core Strategy: A Guide for Primary Care Trusts* demonstrates to PCTs how they can influence spatial plans. Equally it can be used by the boroughs to check whether they are getting the best from the health sector. *Watch Out for Health* provides a structure to assess the likely impacts of developments on health. It helps to ensure that health is properly considered when determining proposals. It allows the opportunity to influence planning proposals to maximise the benefit to human health. It permits development proposals to be justified on the basis of their positive effect on health. The HUDU Model allows the calculation of indicative health contributions arising from development proposals. This can then be used in negotiating Section 106 contributions for capital and revenue

	funding for health infrastructure. The basis for these contributions is confirmed by a Legal Opinion.
	All the documents above urge the early involvement by PCTs in plan and development proposals.
How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process	All the documents above urge partnerships to be forged between PCTs and LPAs, and statutory and non-statutory relationships between health and planning professionals are recommended as vital in order to contribute to planning policy preparation. HUDU recommends that PCTs enter into an 'Engagement Agreement' with the local planning authority. .
Integration of health into the plan appraisal and project appraisal process:	
Lessons that can be learnt about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in Review 3)	**Knowledge**
	The HUDU documents explain the statutory appraisal processes, the types of evidence required and the timing for effective PCT input.
	Partnership
	Statutory and non-statutory relationships between health and planning professionals are recommended as vital in order to contribute to planning policy preparation. HUDU recommends that PCTs enter into an 'Engagement Agreement' with the local planning authority.
	Management and resources

	PCTs are urged to collaborate with planners to prepare or contribute to a health-related evidence base.
	Policy process
	PCT should input to the scoping of the Sustainability Appraisal to ensure wider health issues are considered
How to ensure that health is integrated into the development process:	
	No evidence
If relevant, the extent to which these lessons can be applied in England	-

Any additional comments relating to findings from the case study	The effectiveness of HUDU can be judged thus: Established in 2004, HUDU is funded by the 31 London PCTs with the remit to improve joint working between PCTs and Local Planning Authorities. HUDU received the 2007 National Award for Planning Process from the Royal Town Planning Institute for the 'Health and Urban Planning Toolkit'. The HUDU survey (2009) of the level of engagement of London PCTs in the planning process demonstrates the utility of HUDU in raising awareness and facilitating PCT input to the planning process. It also highlights (amongst others) the need for more training for PCTs, particularly in issues of influencing design and the impact of the urban environment on the wider determinants of health (with reference to both planning applications and development plan documents) and that many PCTs/LPAs are failing to capture capital and revenue funding for health infrastructure through S106 contributions. The web site notes that since the HUDU model has been available (since 2005), £10m has been it allowed the NHS in London to secure over £10 million for additional health facilities and was regularly used in 40% of London Boroughs. Although HUDU's accounts are not available to us, given that the unit only has a maximum of three staff, the cost benefit from just the S106 contributions alone, must be considered as effective. 1. HUDU is very focussed on ensuring that public health is considered within London's spatial planning system. It does this by facilitating the PCTs to make effective interventions to ensure that health and health inequality issues are addressed in the Borough's spatial planning documents and in decisions on planning applications. 2. The HUDU publications are therefore targeted at PCTs, although as is recognised, they are as useful to the Boroughs and developers alike. HUDU recognises that PCTs rarely have formal training in the planning system and also that they have time constraints which may limit their involvement. The aim is therefore to educate PCTs about the planning process, identify when and how PCTs can affect policy and decisions, and also to provide toolkits, checklists and a Section 106 Model (the 'HUDU Model') to guide and simplify PCT's considerations, and has

		also arranged a notification process to PCTs for all major planning applications for residential development. This alert system allows PCTs to negotiate the detail of application to ensure that its design and wider health impacts are mitigated. 3. HUDU also carries out research into the range, frequency and quality of PCT involvement to understand how it can improve its support for them. Additionally, HUDU has undertaken monitoring of the London Mayor's performance in implementing his own London Plan policies for health. 4. It is difficult to measure HUDU's effectiveness other than for its calculation of the amount of developer contributions (£10m is mentioned on its website) and the survey of PCTs carried out in October 2009, which found: • The application alerts were considered useful • The majority used the HUDU Model in 2009, although funding opportunities appears to be being lost, particularly for revenue funding • Limited consideration is given by PCTs to design and wider determinants of health issues • Most have made representations to draft policy documents • Joint working between PCTs and LPAs seems well-established. It must be assumed that without HUDU, much PCT activity in the spatial process in London would not have happened. HUDU's renown is spreading, with the Department of Health commissioning it to report on health inequalities and other regions investigating it as a model for them.
Quality assessment		
Quality assessment of individual studies / papers:		
Cahill J., Leigh K. (2008) *Legal Opinion on the*	Internal validity:	++ Whilst commissioned by HUDU this Opinion is prepared by members of the Bar and as such can be relied upon.

provision of Section 106 payments for health services	External validity:	++ It is relevant to other areas with the same national planning legislation Gives the opinion that there is national policy backing for seeking S106 payments for health funding, but that this must be justified in a sound policy context, which is evidence-based and demonstrated by the incremental change/impact of an individual proposal.
NHS London Healthy Urban Development Unit (2008) *Mayor of London's Assessment of Major Applications: Development and Health*	Internal validity: External validity:	++ Straightforward design of research that is unlikely to allow bias. - Findings not generalisable as the research relates to specific policies in the London Plan. This evidence demonstrates that despite the Mayor's statutory responsibilities to health & health inequalities and the strong health credentials of the London Plan and the Health Inequalities Strategy, he is still granting planning permission to significant numbers of major planning applications which do not comply with policy.
NHS London Healthy Urban Development Unit (2009) *PCT Survey: HUDU Planning Application Alerts & PCT Engagement in the Planning Process*	Internal validity: External validity:	+ Review of survey material (80% response rate) to assess the effectiveness of the HUDU support (written guidance/advice etc). Some potential for bias. - Findings not generalisable as the research relates to specific PCTs/London Boroughs. Factual results of a survey of PCTs which shows a mixed view of how well they are using the HUDU advice; it suggests the reasons for this and makes four key recommendations to PCTs regarding forging links with planners, engaging in the development plan process, be active in facilitating developer contributions, and full reporting of S106 monies/facilities secured and activity in planning issues.
NHS London Healthy Urban Development Unit (2009) *Review of London's Sustainable Community*	Internal validity: External	++ Review of 33 London Borough SCSs'. - Findings not generalisable as the research relates to specific PCTs/London Boroughs

Strikethrough cell		
Strategies: consideration of health & spatial planning	validity:	This shows that there is consistency in addressing health as a theme, but the link between health, planning and the built environment is rarely made. Additionally, SCSs rarely include any analysis on how growth will impact on healthcare provision/infrastructure.
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☐ ++ ☒ + ☐ -	Potential for bias, but unlikely given the nature of the documents.
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	☒ ++ ☐ + ☐ -	The HUDU approach (that is, an organisation working to improve communication and cooperation between spatial planners and health specialists, and to provide specialist knowledge, expertise, advice and support) could be replicated across the UK.
Reviewer's comments on the evidence available for this case study		-

NHS LONDON HEALTHY URBAN DEVELOPMENT UNIT: EVIDENCE STATEMENTS

- How can local authority planners and PCTs collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process? (Key Question 6)

HUDU 1: This case study provides strong evidence that capacity building through institutional adaptation/development (in this case, support and training to PCTs from a expert dedicated resource, HUDU), can promote intersectoral partnerships between public health and planning bodies and authorities and can facilitate integration through the development of intersectoral strategies and policies.

- How should we ensure that health is integrated into the development process?

HUDU 2: **There is moderate evidence that dedicated expert and advice and support to health bodies can facilitate enhanced inputs from developers to support health within the planning process, notably in terms of "Section 106".**

Case study identification	**Manchester Airport Second Runway HIA**	
Checklist completed by (name)	Helen Lease	
Checklist completed by (date)	24 September 2010	
Question	Category / Response	Details / Comments
Evidence examined All sourced from 'Call for Evidence' material	Proof of Evidence Undertaking Grey literature Grey literature	1. Will S., Arden K., Spencely M., Watkins S. (1994) Rule 6 Statement of Stockport Health Commission re Application by Manchester Airport PLC for the development of a second runway (part) and associated facilities; construction of new highway at Manchester Airport. 2. Manchester Airport PLC to Stockport Health Commission: a package of proposed mitigation measures. 3. Will S., Arden K., Spencely M., Watkins S. (undated) *Prospective Health Impact Assessment (draft)* 4. Will S., Arden K., Spencely M., Watkins S. *Plane Truths.* Health Service Journal 19 January 1995.
Acknowledgements	Dr Stephen Watkins, Director of Public Health, Stockport for providing paper copies of the evidence	
Case Study Overview		
Research questions addressed		
Integration of health into the planning process:		

• Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions • How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	Prospective HIA methodology developed (Document 3) and the findings used to support evidence to Manchester Airport 2nd runway Planning Inquiry (Document 1). Registering as an objector was the only way that the health commission could have a voice at the inquiry. Using the evidence of the potential health impact, allowed a negotiating position to agree a mitigation package with the operators (Undertaking at Document 2) related to: • A financial commitment to provide noise insulation & annual review • Setting upper level for noise impact, overseen by monitoring • Controls over night flight impacts • Initiation, promotion & financial contribution to improved public transport • Recruitment policy equal opportunities • Monitor air quality. Public health's pre application involvement in the Manchester Airport proposals are not reported, although Document 4 suggests that Stockport Department of Public Health was leading the way in seeking that the planners used HIA for major planning proposals.
How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process	From the lessons learned from the Airport HIA/Inquiry, Document 4 recommends that Health Authorities should develop links with LPAs to be forewarned of major applications.
Integration of health into the plan appraisal and project appraisal process:	
Lessons that can be learnt	**Knowledge**

about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in Review 3)	Demonstrates the importance of 'understanding the planning appeal system' in order to secure a place in the Inquiry and have a platform to present the findings of the HIA. Whilst the outcome was very good in health terms, an earlier intervention in the development management system (that is at pre-application or consultation stages of the application procedure) would likely to have been less confrontational and cost effective. An example would have been to make representations on the EIA to insist that health impacts were properly addressed by the applicant.
	Partnership
	Suggests that early notice from the planners of major planning applications would have been preferable to avoid the 'fire fighting' and costly (time-wise) exercise of appearing at the Inquiry.
	Management and resources
	There was a new but clear commitment from the Health Commission to respond to the application, but this was somewhat 'late in the day'. Earlier involvement and objection to the proposals could have led to a request from the planning authority that the applicants had an HIA prepared by a competent body or consultancy.
	Policy process
	Whilst the detail of the EIA prepared in support of the application are not revealed in the documents, given that the Health Commission felt the need to prepare its own HIA, there is the implicit charge that this particular EIA was deficient. Another unknown is whether the planning authority had challenged the rigor of the EIA in terms of health issues.
How to ensure that health is integrated into the development process:	
Lessons that can be learnt about how to ensure health issues are fully	No evidence

incorporated within the planning decision-making process (including the spatial planning process)	
Where relevant, the extent to which these lessons can be applied in England	
Any additional comments relating to findings from the case study	1. Although the material from this case study is from the mid-1990s, its relevance to this research does not diminish with time. Fortunately, more advice now exists on methodology for HIA, and the evidence base of health impact is growing, but evidence of the use of HIA to understand health impacts of a particular development and to use as a negotiating tool appears to be scarce. 2. The HIA undertaken by the Stockport Health Commission was groundbreaking in its time and we can only assume it achieved the mitigation of all the health impacts sought. Although it was used to great effect at the inquiry, the case study does suggest even better practice is desirable, given the opportunity to enter into pre-application negotiations, to require that the applicant prepares an HIA (or pays for the health body to commission one), and that draft heads of terms are negotiated before the inquiry (should an inquiry be needed). 3. The case study re-affirms the need for collaboration between planners and health bodies and, as PCTs are not statutory consultees for planning applications, the need for planners to alert health bodies when planning applications with the potential for health impacts are imminent. The issue of education of the planning process for PCTs and how to achieve healthy urban environments for planners must also be a key issue. 4. This case study highlights the need for a collaborative approach to spatial planning in order that health impacts are fully assessed and mitigated.

	5. Continual collaboration is essential to ensure health issues are taken into account in all planning decisions and are held to be as important as environmental issues when appraisal is undertaken.	
	6. EIA does not in itself identify human health impacts and health professionals need to be fully engaged early in the planning process to champion health issues	
	7. Health professionals need to understand and use the planning system and planners need to be educated on what constitutes and causes health impacts, and alerted to the value of HIA	
Quality assessment		
Quality assessment of individual studies / papers:		
Will S., Arden K., Spencely M., Watkins S. (undated) *Prospective Health Impact Assessment (draft)*	Internal validity: External validity:	+ Some potential for bias as authors prepared the HIA, however this is a factual report of the HIA process & how this was prepared. ++ The paper adds to a number of available methodologies; this one is specific to the runway proposal. It was groundbreaking in its day.
Will S., Arden K., Spencely M., Watkins S. *Plane Truths.* Health Service Journal 19 January 1995.	Internal validity: External validity:	+ Some potential for bias as authors prepared the HIA. ++ Whilst specifically about a runway proposal the lessons are applicable to many development proposals.
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)?	☐ ++	Fairly factual in content, with some potential for bias.

How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☒ + ☐ -	
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	☒ ++ ☐ + ☐ -	Whilst specifically about a runway proposal the lessons are applicable to many development proposals.
Reviewer's comments on the evidence available for this case study		All the evidence is grey literature, but it is authoritative in explain the process and outcomes.

MANCHESTER AIRPORT HIA: EVIDENCE STATEMENTS

- What lessons can be learnt about the effectiveness and cost-effectiveness of appraisal approaches? (Key Question 2)

Manchester 1: There is strong evidence from this study that HIA can be used to identify health impacts and potential mitigation measures and in negotiating with developers and local planning authorities to ensure health benefits.

Manchester 2: The evidence from this case study suggests that early input by health bodies into the development management process is likely to increase impact.

Case study identification	National level: New Zealand - Regional/local levels: Christchurch	
Checklist completed by (name)	Laurence Carmichael	
Checklist completed by (date)	21/09/2010	
Question	Category / Response	Details / Comments
Evidence examined	1. **R2 included**	1. Mathias, K. and Harris-Roxas, B. (2009). Process and impact evaluation of the Greater Christchurch Urban Development Strategy HIA. BMC Public Health 9:97.
	2. **Call for evidence**	2. Signal, L., Langford, B., Quigley, R. and Ward, M. (2006). Strengthening health, wellbeing and equity: embedding policy-level HIA in NZ. Social Policy Journal of NZ 29, 17-31.
	3. **Journal article**	
		3. Stevenson, A., Banwell and Pink, R. (2006). Assessing the impact on health of an urban development strategy: a case study of the Greater Christchurch UDS. Social Policy Journal of NZ 29, 146-164.
	4. **Background literature**	
		4. Stevenson, A., Banwell, K. and Pink, R. (2007). Greater Christchurch Draft Urban Development Strategy 2005. NSW Public Health Bulletin 18 (9-10), 182-184.
	5. **Journal article**	
	6. **R2 included**	5. Wright, J., Parry, J. and Scully, E. (2005). Institutionalizing policy level HIA in Europe: is coupling HIA with SEA the next step forward? Bulletin of the WHO 83 (6). (NB: refers to NZ experience of HIA).
	7. **Excluded in R2**	6. Gagnon, F. and Michaud, M. (2008). HIA and public policy formulation.Groupe d'étude sur les politiques publiques et la santé: Quebec.
	8. **Journal article**	

9. Excluded in R2 **10. Journal article** **11. Commissioned research** **12. Guidance** **13. Literature review** **14. Guidance** **15. Guidance** **16. Policy document**	7. Quigley, R. (2005). Review of international policy-level HIA for the PHAC. PHAC: Wellington. 8. Public Health Commission (1995). A guide to health impact assessment: Guidelines for Public Health Services and resource management agencies and consent applicants. 9. PHAC (2nd ed. 2005). A guide to HIA: a policy tool for NZ. PHAC: Wellington *10.* PHAC (2007). An idea whose time has come - New opportunities for Health Impact Assessment in New Zealand public policy and planning. PHAC: Wellington 11. Christchurch City Council (2007). Health promotion and sustainability through environmental design: a guide for planning. Christchurch City Council: Christchurch. accessed on https://outlook.ccc.govt.nz/Environment/HPSTED/ 12. Canterbury District Health Board (2006). HIA Greater Christchurch Urban Development Strategy Options 2006. Canterbury DHB. 13. Canterbury DHB (2010). Wider Health and wellbeing impacts of transport planning – literature review. Canterbury DHB. Accessed on http://www.ecan.govt.nz/our-responsibilities/Regional-Land-Transport/Pages/hia.aspx 14. Beca (2010). Urban planners' knowledge of health and

	17. Literature review	wellbeing issues. Public Health Advisory Committee: Wellington. Accessed on http://www.phac.health.govt.nz/ 15. Public Health Advisory Committee (2010). Healthy places, healthy lives: urban environments and wellbeing. Ministry of Health: Wellington. Accessed on http://www.phac.health.govt.nz/ 16. Public Health Advisory Committee (2008). Re-thinking urban environments and health. Public Health Advisory Committee: Wellington. 17. Mathias, K. (2008). The Impact Evaluation of the Christchurch Urban Development Strategy Health Impact Assessment. Canterbury Department of Public Health.
Acknowledgements		Special thanks to Dr Anna Stevenson Public Health Physician Community and Public Health/Christchurch City Council Canterbury District Health Board For her help with sourcing the key policy documents
Case Study Overview		Examination of evidence from previous reviews and search for further evidence for the approaches used in NZ to integrate health into planning decision-making at the national level and also at local levl in Christchurch. The focus on Christchurch is the Greater Christchurch Urban Development Strategy, a community-based collaborative project to manage the impact of urban development and population growth within the Greater Christchurch area.
Research questions addressed		

Integration of health into the planning process:	
Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions	**1. Statutory and regulatory framework for planning:** Urban planning must comply with various pieces of legislation in NZ, but there is no central government directive. Urban planning required to comply with: statutory duties of Local Government Act 2002 for LA to promote the social, economic, environment and cultural wellbeing of communities **2. Institutional developments for capacity building:** The Public Health Advisory Committee was established as a statutory sub-committee of the National Health Committee in 2001 It provides the New Zealand Minister of Health with independent advice on public health issues (factors influencing the health of people and communities, promotion and monitoring of public health). Themes running through PHAC projects include the wider determinants of health, reducing health inequalities, improving Māori health, and the need for intersectoral collaboration. Hence, it has developed guidance and evidence base on the links between urban environment and health. **3. Developing the evidence and knowledge base and guidance for planners on urban design and links between health and planning** Christchurch City Council guide (2007) is divided into 14 main themes (used as evaluation criteria for sustainability), each theme covers the key points that planners need to consider in the planning process, including for instance active lifestyles, equity, social and community capital, community safety. The five health outcomes are covered. The guide also identifies the legislation, policies, plans and strategies that apply at national, regional and local (Christchurch) levels and for each theme covered and that justify the consideration of health into planning**.** The framework for Christchurch City Council guide (2007) was used by Christchurch Department of Health Board CDHB (2010) to publish a literature review on the wider health and wellbeing impacts of transport planning to develop the evidence base. PHAC (2008) commissioned think pieces to

debate the relationship between cities and health and has worked towards building the evidence base on how the urban environment influences the health of communities and how to create links between health system and other sectors including transport, environmental health, healthy facility infrastructure so that the NZ's health service can best add value in the creation of urban areas that promote people's health. It looks up to the UK and other international examples. PHAC (2010). Research BECA (2010) has assessed the knowledge that planners have got on health and wellbeing issues.

4. Integrated planning:

The Greater Christchurch UDS is a community-based collaborative project to manage the impact of urban development and population growth within the Greater Christchurch area. It involves various stakeholders, local authorities, central government and local business and community leaders who meet regularly as the UDS Forum, including Selwyn and Waimakarity district councils, CCC, environment Canterbury and the former Transit NZ. Christchurch UDS acknowledges the interaction between planning, economic development, environmental sustainability, safety, community cohesion and health. It considers future population demands and constraints on essential resources (oil, water, and land). Another strategy is through the long term council community plan (LTCCP)

5. Engaging with communities
At national level, one of the issues to integrate health considerations into planning in NZ will be the Treaty of Waitangi, i.e ensuring the rights of maori and their engagement in all aspects of policy making in NZ, including planning.UDS early stage of development: consultation document on 4 options for growth and development in Greater Christchurch (concentration, consolidation, dispersal, business as usual): feedback showed majority preferred concentration and respondents shared same concerns over environment, sustainable community character. Stevenson (2006).

	6. HIA HIA is seen as a key way to source information on the impact of planning decisions on health: For instance in the Beca (2010) survey on health knowledge of planners, 37% respondents in the survey identified HIA and Social IA as main source of information on how to assess potential health and wellbeing impacts of proposed planning projects. On the development of HIA in NZ: See section below on Integration of health into the plan appraisal and project appraisal process
How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities	**1. Statutory and regulatory framework for planning:** The lack of central government directive for urban planning in NZ seems to make it difficult for a reform of planning integrating health considerations. The trend seems to be threefold: • a soft approach through building the evidence and knowledge base of planners and the health sector through PHAC seem to have taken a lead in this. • In addition, local authorities such as Christchurch can also take a lead in supporting a more sustainable and health friendly approach to planning • HIA developed as a key instrument to assess health impact of policies, plans and strategies **2. Institutional developments for capacity building:** National level: Establishment of PHAC has developed the evidence base and promotion of integrated planning (intersectoral collaboration and policies). Local level: As above, local authorities such as Christchurch have developed institutional capacity building and inter-sector collaboration between planning and health sectors. The UDS and its HIA is an example. Christchurch City Council has seconded a public health registrar to continue public health

	oversight of council proposals.
	3. Developing the evidence and knowledge base and guidance for planners on urban design and links between health and planning Seems to have developed rapidly in the recent years in view of institutional development (PHAC). At national level, the more for evidence base is led by the health sector while the planning sector leads development at local/regional level (eg Christchurch). **5. Engaging with communities** As early as possible. The communities were consulted before preferred option was chosen, hence the communities were involved at strategic level. As far as maori involvement is concern, this is a higher political priority which is considered as distinct from community engagement in policy making. This is reflected by the Greater Christcurch's UDS: HIA had a specific theme around maori engagement in process. **6. HIA** See sections on HIA below for details.
How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process Note: in the NZ context, we examined the intersectoral collaboration planners/public health professionals	In the NZ context: - building the capacity of planners to understand the link between health and planning seems to have been a priority of PHAC in recent years to develop an endorsement of health and sustainable design and planning principles. - In addition the legislative framework in particular Local Government Act 2002 offers an incentive for local authorities to consider the need for intersectoral policies to deliver the 4 wellbeings. But this approach is limited. In the Beca survey (2010), NZ respondents identified ways to achieve better

	health considerations in planning: ● An interesting feature of the survey is the list of international good practice examples of planning for health and wellbeing citied by respondents. Several other documents analysed from PHAC also refer to overseas experiences and good practice.
Integration of health into the plan appraisal and project appraisal process:	**Background for NZ:** HIA is promoted by public health authorities in NZ but there are no legal requirements on local authorities to carry an HIA. Here are the key dates in the development of HIA as a tool in assessing impact of planning decisions on health. HIA has moved from a minor part of EIA in project appraisal to a strategic instrument . **1991:** Wright (2005)/ Signal (2006) Health impacts were initially part of the EIA process that district council had to carry out on regional plans for management and development as part of their responsibilities under the 1991 Resource management Act. However only environmental health was considered. **1995:** In 1995 the NZ Public Health Commission published its guidance on undertaking project level HIA in the context of the Resource Management Act, promoting the consideration on health impact of developments on health of the communities within the broad framework of EIA, but HIA remains a tool at project level (PHC, 1995). Collaborative approach between health and resource management agencies promoted. **2000:** NZ health strategy makes HIA distinct from EIA, and promotes intersectoral collaboration to address improvement in health and health inequalities: social determinants of health (income, education, employment, housing) are identified and ministry of health suggests that all government policies should assess their impact on these determinants. **2001:** PHAC (2001): The PHAC has been taking a lead on HIA in New Zealand since its establishment as a sub-committee of the NHC in 2001. **2002:** Local government Act 2002: introduces local government's duties to

| | promote social, cultural, economic and environmental well being of their communities. LA therefore keen to get help and support of PHAC and adhere to the values of HIA.
2005: In 2005, the NZ PHAC issued guidance on HIA, integrating the Treaty of Waitangi principles (i.e. on maori rights) is implicit in HIA in NZ. PHAC argues for HIA to become a policy tool for NZ to facilitate policy level HIA in NZ. This guide gives information used by policy makers in all sectors, including planning, transport. The guide was tested on 2 case studies (one was an HIA of a review of transport funding policy) and revised based on feedback from users and people in HIA training (PHAC, 2005).
2006: Health minister's requested a review by PHAC on uptake and use of HIA. Gagnon (2008)/ Signal (2006): HIA is introduced in the government decisional process: any new legislation should be submitted to HIA. Set up of technical support to the HIA within the public health advisory committee.
2007: PHAC (2007) Key message: The settings in which people live, work and play have a significant impact on their health and wellbeing but they are largely outside the influence of the health sector. Factors such as housing, income, access to education and employment, and the urban environment, all affect people's health and wellbeing. That means that improving the health and wellbeing of New Zealanders cannot be achieved by the health services acting alone. Health Impact Assessment (HIA) can be used to harness and co-ordinate government policies in ways that enhance health outcomes.
The guide also illustrates HIA through case studies, including on land use and planning. The UDS for Greater Christchurch is used as a case study.

Local case study: Greater Christchurch UDS and HIA
This was one of the first HIAs in NZ that assessed the link between urban design, health determinants and health outcomes at a high level of strategic planning.

PHAC (2007): The Greater Christchurch UDS is a community-based collaborative project to manage the impact of urban development and population |
|---|---|

	growth within the Greater Christchurch area. It involves four local authorities, central government and local business and community leaders who meet regularly as the UDS Forum. The UDS was subject to an HIA led by the Canterbury District Health Board's Community (region in which Christchurch is located) and Public Health staff. Christchurch City Council also played a key role. The HIA assessed the link between urban design, health determinants and health outcomes at a high level of strategic planning. The HIA focused on five determinants of health agreed by participants – air and water quality, social connectedness, housing and transport. A separate workstream focused on developing an engagement process with local Maori around the UDS focussing on partnership, participation an protection (or inequalities), 3 key principles for the health sector in the Treaty of Waitangi. The HIA facilitated meaningful participation by Maori in the UDS, an outcome that had previously been unsuccessful The HIA report has been accepted by the UDS Forum and has been incorporated as a working document into the strategy planning process. As a result, population health outcomes have become a key focus of the UDS (Stevenson 2006). In addition, the Christchurch City Council has seconded a public health registrar to continue public health oversight of council proposals. 4 agencies in Christchurch have funded a project officer to assist with capacity building around HIAs and the council is working on some large transport HIAs. http://www.greaterchristchurch.org.nz/RelatedInfo/HIARepot.pdf
Lessons that can be learnt from other countries	**Knowledge**

| about the effectiveness and cost effectiveness of appraisal approaches

(including facilitators identified in Review 3) | The Public Health Advisory Committee (PHAC) has laid the groundwork of health and wellbeing impact assessment in New Zealand: PHAC funded HIA seminars and screening workshops at central government level to promote policy level HIA and raise the awareness/understanding of non health agencies on wider determinants of health. PHAC also demonstrated how HIA could help agencies meet their responsibilities, i.e. public health requirements of the NZ Land Transport Act 2003 or LG Act 2002 (wellbeing of communities). PHAC also established an intersectoral external reference group to provide advice about entry points into central and local government agencies and policymaking processes. PHAC made partnerships with academic, policy and technical experts in HIA to develop training and provide support to PHAC and agencies working with PHAC. Evidence-base included a literature review of international experience of policy level HIA (Quigley, 2005).

Intersectoral/Multidisciplinary HIA leads to common language.
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 from infrastructure planning (eg transport, localisation of developments in view of environmental health issues...) to more quality of life, health and social outcomes. This is achieved by by informing both local and central government about housing, importance of urban form in supporting walking and cycling and social connectedness and close gaps in health inequalities.

Furthermore, HIA can highlight the significance of the statutory and collective responsibilities relating to health and social outcomes within the principal planning legislation |
| | **Partnership** |

	HIA became a tool to develop intersectoral collaboration between health sector and urban forum/local authority. Early development: conversation between 2 professionals: public health medicine registrar and one from environmental health from CCC. HIA carried out by CCC and CDHC Careful identification of determinants of health to assess by CCC and health professionals Buy-in: key stakeholders from CCC. Urban development strategy forum allows participants to interact face to face and develop new language. **Workshops** involving stakeholders and communities. Screening and scoping seminar attended by different stakeholders from local government, health, private contractors, academics agreed determinants to be examined by HIA. Series of 7 workshops to get informant‟s perspectives on various elements of health impacts **Key partners to commit resources.** Steering committee with reps from city council and public health formed to guide development of HIA. **Treaty of Waitangi** as background for involvement of Maori. Endorsement of the process by key Maori community leaders. Parallel work to engage with Maori community on screening and scoping. **Policy issues:** Concerns of peak oil and rising petrol prices in 2005 linked to active transport recommendations.
	Management and resources
	Time, money, professional capacity. Subsidising training for staff across different organisations Establishment of the HIA Support Unit in the Ministry of Health Establishment of PHAC. Training to undertake a competent HIA process Political support within and outside own institution Funding and expertise provided by public health sector: Employment of health medicine registrar at City council
	Policy process

	Process: UDS appropriate strategic planning level to assess with HIA as it influences multiple determinants of health Presentation of results/findings to community to ask for comments. HIA started after public consultation informed the choice for concentration. HIA compared with business as usual. Involve maori Electronic network Thorough documentation and dissemination HIA Involvement of decision-makers in conduct and planning HIA Clear organisational commitment to HIA Tailored presentation of report and recommendations to reflect organisational concerns Realistic recommendations HIA on same cycle as plan **Comprehensiveness of HIA:** HIA test impact on social inequalities of UDS HIA test direct and indirect impact on health (access to health services, transport options, housing quality) Subject of HIA not controversial
How to ensure that health is integrated into the development process:	
Lessons that can be learnt about how to ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)	**1. Statutory and regulatory framework for planning:** Important to create incentive for local planning authorities and to support lanners buy-in healthy planning . However, the minimal regulatory framework also allowed local authorities to take a lead in developing healthy planning tools (or at least it shows that leadership and innovation is a way forward to deliver local authorities' statutory duties vis a vis the health of their communities). **2. Institutional developments for capacity building:** PHAC has strongly increased the evidence and knowledge base to demonstrate causal links between planning and health and put healthy planning on the policy

	agenda.
	3. Developing the evidence and knowledge base and guidance for planners on urban design and links between health and planning See above. **5. Engaging with communities** **6. HIA** Needed the lead from local authorities since it is not a regulatory instrument. HIA in Christchurch has helped the understanding of the role of spatial planning in promoting health and helped in changing priorities of planning HIA has helped build intersectoral partnership at strategic level and involvement of maori at that level. HIA required resources including HIA support unit in Ministry of Health and PHAC leading training and evidence base. HIA at policy level is right as that level can have an impact on a broad range of health determinants; this means that community involvement mechanisms work at that level.
Where relevant, the extent to which these lessons can be applied in England	knowledge is key to a greater understanding of the link between planning an health - leadership at local level is important if the regulatory basis is limited - broad duties of local government in health (the 4 wellbeings) can help local authorities understand the broad meaning of health (according to the WHO 1948 definition) and help them make the link between their policies including spatial planning and health. - healthy planning champions have a role to play to develop the evidence base and the capacity building, put health on the spatial planning agenda - HIA is a key tool to put health at the centre of planning Caveat: in the NZ case, it seems that the health sector has taken a lead in the field at national level. It is only at local level that we have seen some evidence of the planning sector taking a lead in changing the priorities of planning towards quality of life and not just infrastructure change.

	It is early days to evaluate whether the evidence base gathered and guidance by champions (PHAC and CCC) has any effect on health and health inequalities on the ground.
Any additional comments relating to findings from the case study	Strong focus on HIA as a tool to support the integration of health considerations into planning. The main issues covered in this case study: Mechanisms: - Statutory duties vs. voluntary – identify plans, policies and legislation in NZ that encourage or require planners to consider health - Integrate health at Policy vs project level (HIA evidence mainly) - Integrated planning: eg land and transport planning , smartgrowth - Maori engagement - Community engagement - Planning education: improve the knowledge base - Planning "Sectors" to influence: Opportunities for walking and cycling, planning education, low income housing solutions, HIA, transport (variety, public, cycling, mixed, costs), equity legislation, cross-sector policies (LDF), air, water and soil quality.
Quality assessment	
Quality assessment of individual studies / papers:	

Paper 1 reference Stevenson, A., Banwell and Pink, R. (2006). Assessing the impact on health of an urban development strategy: a case study of the Greater Christchurch UDS. Social Policy Journal of NZ 29, 146-164.	Internal validity: + External validity: +	Issue: Main author describe a process in which she has been involved from inception.
Paper 2 reference Stevenson, A., Banwell, K. and Pink, R. (2007).	Internal validity: +	

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Greater Christchurch Draft Urban Development Strategy 2005. NSW Public Health Bulletin 18 (9-10), 182-184.	External validity: +	Issue: Main author describe a process in which she has been involved from inception
Paper 3 reference Mathias, K. and Harris-Roxas, B. (2009). Process and impact evaluation of the Greater Christchurch Urban Development Strategy HIA. BMC Public Health 9:97. [	Internal validity: + External validity: +	Independent evaluation although one of the authors works for the body that suggested the HIA in the first place (Community and Public Health)
Paper 4 reference Signal, L., Langford, B., Quigley, R. and Ward, M. (2006). Strengthening health, wellbeing and equity: embedding policy-level HIA in NZ. Social Policy Journal of NZ 29, 17-31.	Internal validity: + External validity:+	
Paper 5 reference Wright, J., Parry, J. and Scully, E. (2005). Institutionalizing policy level HIA in Europe: is coupling HIA with SEA the next step forward? Bulletin of the WHO 83 (6). (NB: refers to NZ experience of HIA).	Internal validity: + External validity: +	
Paper 6 reference Christchurch City Council (2007?). Health promotion and sustainability through	Internal validity: +	Based on evidence from overseas

environmental design: a guide for planning. Christchurch City Council: Christchurch. accessed on https://outlook.ccc.govt.nz/Environment/HPSTED/	External validity: ++	
Paper 7 reference Canterbury District Health Board (2006). HIA Greater Christchurch Urban Development Strategy Options 2006. Canterbury DHB.	Internal validity: + External validity: +	
Paper 8 reference Canterbury DHB (2010). Wider Health and wellbeing impacts of transport planning – literature review. Canterbury DHB	Internal validity: + External validity: ++	No quality appraisal of the original studies Review based on international sources.
Paper 9 reference Beca (2010). Urban planners' knowledge of health and wellbeing issues. Public Health Advisory Committee: Wellington	Internal validity: + External validity: +	Limited as the respondents were all planners from NZ, so we need to be careful to generalise outside NZ boundaries without taking cultural, educational, professional background into consideration. However, issues are in line with results found in barriers and facilitators identified.
Paper 10 reference Public Health Advisory Committee (2010). Healthy places, healthy lives: urban environments and wellbeing. Ministry of Health: Wellington.	Internal validity: + External validity:+	Refers to the UWE health map. Report mainly for the NZ context, but with many references, case studies and evidence from overseas.

Paper 11 reference Public Health Advisory Committee (2008). Re-thinking urban environments and health. Public Health Advisory Committee: Wellington	Internal validity: External validity:	5 think pieces aimed at provoking new debate around cities and health
Paper 12 reference Gagnon, F. and Michaud, M. (2008). HIA and public policy formulation.Groupe d'étude sur les politiques publiques et la santé: Quebec.	Internal validity: + External validity: ++	
Paper 13 reference Public Health Commission (1995). A guide to health impact assessment: Guidelines for Public Health Services and resource management agencies and consent applicants.	Internal validity: External validity	Guide on HIA at project level.
Paper 14 reference PHAC (2007). An idea whose time has come - New opportunities for Health Impact Assessment in New Zealand public policy and planning. PHAC: Wellington	Internal validity: + External validity: +	
Paper 15 reference Quigley, R. (2005). Review of international policy-level HIA for the PHAC. PHAC: Wellington.	Internal validity: + External validity: +	
Mathias, K. (2008). The Impact Evaluation of the Christchurch Urban Development Strategy Health	Internal validity: +	Independent evaluation of UDS's HIA.

Impact Assessment. Canterbury Department of Public Health:	External validity: +	
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☐ ++ ☒ + ☐ -	
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	☐ ++ ☒ + ☐ -	
Reviewer's comments on the quality of the evidence available for this case study (Did evidence come from peer reviewed or grey literature, has evidence been assessed for quality as part of review 1 or review 2?)		The evidence is a mixture of peer reviewed and grey literature with varying degrees of quality. However difficult it is to assess the quality of the grey literature, its breadth in terms of evidence gathered (assessing knowledge of planners, links between urban environment and planning and health, HIA) demonstrate that the integration of health into the planning system is on the policy agenda at national and regional/local level and resources are devoted to develop evidence base and intersectoral knowledge, policies, tools and encourage partnership working amongst the key stakeholders. The evidence base from grey literature often comes from international examples, including the UK. The HIA on Christchurch UDS is often cited as a good practice example.

NEW ZEALAND, INCLUDING CHRISTCHURCH: EVIDENCE STATEMENTS

- How should we integrate health into the planning process?

NZ 1: The case study provides moderate evidence that a statutory and regulatory framework for planning that encompasses a broad range of responsibilities for local authorities' across the social, economic, environment and cultural wellbeing of communities (Local Government Act 2002), supports the integration of health into the planning system.

NZ 2: It provides strong evidence that capacity building through institutional adaptation/development (local Public Health Advisory Committee) and intersectoral partnerships between public health and planning bodies and authorities (e.g. Christchurch UDS Forum) can facilitate integration through the development of intersectoral strategies and policies.

NZ 3: There is weak evidence that development of the evidence and knowledge base and guidance for planners by key stakeholders (on urban design and links between health and planning) can also assist capacity building facilitating integration of health considerations into the planning system.

NZ 4: The case study provides strong evidence that institutionalising the rights of minority groups (Maori in this case study) to participate in all aspects of policy making (i.e. at early stage of the development plan or project) is a method to ensure that health equity concerns are highlighted.

- As part of that, how should we integrate health into the plan appraisal and project appraisal processes?

NZ 5: The case study further provided strong evidence that HIA is an effective tool to support the integration of health considerations into

planning. Features that contributed to integration included the explicit statement of the duty of local government to promote the social, cultural, economic and environmental well being of their communities, the establishment of a HIA champion (PHAC), the constitutional protection of rights of Maori which secures their participation in HIA, and a comprehensive, transparent HIA process starting at an early stage of the decision-making process.

Case study identification	Plymouth	
Checklist completed by (name)	Helen Lease	
Checklist completed by (date)	23 September 2010	
Question	Category / Response	Details / Comments
Evidence examined Sourced from Review 3 (R3), Plymouth 2020 LSP website (LSP) & internet search (Int)	1.Representation to SA 2. Policy 3. Policy 4. Strategy 5. Evidence base 6. Strategy 7. Framework 8. Review 9. Framework 10. Strategy 11. Research	1. Representation from PHDU, Plymouth PCT to Planning Policy team proposing that the Core Strategy SA framework should include a screening question on 'health inequalities' (November 2005) **(R3)** 2. Plymouth Core Strategy (2007) **(R3)** 3. Devonport Area Action Plan (2007) **(R3)** 4. Plymouth's Sustainable Community Strategy 2007-2020 (2010) **(R3)** 5. Plymouth Joint Strategic needs Assessment (2009) **(LSP)** 6. Plymouth's Health, Social care & Well-being Strategy 2008-2020 (undated) **(LSP)** 7. Securing a Sustainable Future, Plymouth 2020's Sustainable Development Framework, (2008) **(LSP)** 8. Director of Public health for Plymouth Annual Report 2008/9 (undated) **(LSP)** 9. Health Impact Assessment, a framework for Plymouth,(2004) Plymouth Public Health Development Unit **(LSP)** 10. Plymouth Food Strategy (2002) **(LSP)** 11. Cole M. (2003) *The Health Action Zone Initiative: Lessons from Plymouth*, Local Government Studies, 29:3, 99-117 **(Int)**
Acknowledgements	Andrew Pratt, Health improvement specialist (part-time), Public Health Development Unit, Plymouth Primary Care Trust for identifying the website for identification of documentation.	
Case Study Overview	The good practice undertaken in Plymouth was signalled by the research done in Review 3 where it was found that planning policy documents were explicit in addressing health issues. This later	

	research identifies at least some of the reasons for the good practice.
Research questions addressed	
Integration of health into the planning process:	
Approaches or techniques that should be used to assess ways of promoting health and reducing health inequalities when making spatial planning decisions	Plymouth learned valuable lessons in joint working between agencies (including planning and health) when it was established as a Health Action Zone in 1998 (Document 11), a seven year Government initiative. The HAZ acted as a catalyst for the partnership approach to public service provision and served as the mechanism to bring together individuals who should have been working in partnership. Plymouth's approach acquired a national reputation and was praised by a government facilitator as 'more sophisticated than in other HAZs'. Secondly those agencies have again been required to work together as partners in the Devonport Regeneration Community Partnership which was awarded £48.73m over 10 years in 2001 as part of the New Deal for Communities initiative.

Planning for health in Plymouth also benefits from a long standing joint appointment of the Director of Public Health between the NHS and local authority and a Public Health Development Unit that actively engages in the spatial planning process (as referenced in Document 6, with the example of engagement in Document 1 above).

The partnership working and interaction between planning and health may be the reason why health features so well in Plymouth's Core Strategy and in its Devonport AAP (see Review 3). |
| How and when these approaches or techniques should be used to ensure health considerations shape spatial plans and projects and thereby improve health and reduce health inequalities | The Sustainable Community Strategy and LDF documents fully integrate health issues into policy. Indeed all the documents appraised link relevant health programmes to spatial planning; they focus on the common aim of promoting health and reducing inequality. Indeed one HAZ programme led to the preparation of Document 10 (Food Strategy), which at the time of publication was groundbreaking for a local authority.

Documents 1(input to the SA process) and 9 (framework for the use of HIA) demonstrate the active and targeted involvement of the PCT in planning. |

How local authority planners and PCTs can collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process	Documents 1 and 4 go some way to understanding the Plymouth approach: it has been found that early intervention of the PCT/LSP in planning decisions was key in influencing health outcomes. The Sustainable Community Strategy (SCS) includes spatial planning objectives and was found to fare well against the assessment criteria set out in a NHS London HUDU review paper[14].
Integration of health into the plan appraisal and project appraisal process:	
Lessons that can be learnt about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in Review 3)	**Knowledge**
	It is clear from the evidence that the PCT fully understands the planning process, and it is also clear that the LPA understand health issues and development's potential health and health inequality impacts.
	Partnership
	Dialogue between the PCT and planning is demonstrated in comments raised to amend the scoping of the SA/SEA for the Plymouth LDF documents, to include a specific objective to "reduce health inequalities".
	Management and resources
	Given the scale of the development and regeneration planned for Plymouth in the next 20 years, the PCT has invested resources in specialist staff to lead the engagement and support with the planning and appraisal processes.
	Policy process

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[14] NHS London HUDU (2009) *Review of London's Sustainable Community Strategies: Consideration of health and Spatial Planning*

	The early intervention (Documents 1- input to the SA/SEA process, and 9 - framework for the use of HIA) demonstrate the active and targeted involvement of the PCT in planning.
How to ensure that health is integrated into the development process:	
Lessons that can be learnt about how to ensure health issues are fully incorporated within the planning decision-making process (including the spatial planning process)	No evidence
Where relevant, the extent to which these lessons can be applied in England	
Any additional comments relating to findings from the case study	1. Plymouth was identified as a case study in Review 3 where it was found that planning policy documents were explicit in addressing health issues. This research identifies the further extent of the collaboration that was suspected as a reason for the good practice in health assimilation into planning policy. 2. As with some other authorities (for example Bristol) Plymouth has Director of Public health jointly appointed between the NHS and LPA; in the case of Plymouth this is a long-standing arrangement. This appears to greatly assist the collaboration between health, planning and other services, improving coherency of strategies and policy implementation. The latest Director of Public Health's Annual Report notes the first joint production by the City Council and NHS

		Plymouth of the JSNA and goes on to explain how the Annual Report complements it by addressing how the expected changes in the population may influence health, social care and well-being needs facing the City in the future. Thus, the Director of Public Health also addresses spatial planning issues. 3. The Sustainable Community Strategy (SCS) is similarly focussed on the impacts of spatial planning and how to address them. The LDF is rightly noted as a key document in achieving the SCS's shared strategic objectives. 4. Plymouth PCT's Public Health Development Unit (PHDU) is well versed in planning issues and it is evident from the documents appraised that it has full understanding of planning processes, from the importance of setting health-related objectives in the Sustainability Appraisal of the LDF documents, through to HIA of development proposals. The PHDU has an HIA specialist within its team who has been fundamental in developing an HIA Framework. 5. From the evidence reviewed, it is clear that: • There is a longstanding collaboration between planners and the PCT • There is a good understanding of health and planning and how these interact by both professions.
Quality assessment		
Quality assessment of individual studies / papers:		
Cole M. (2003) *The Health Action Zone Initiative: Lessons from Plymouth*, Local Government Studies, 29:3, 99-117	Internal validity: External validity:	+ Analysis based on interviews with several key participants from each of the HAZ Programmes, so some potential for bias. + Some potential for learning from this HAZ process in relation to partnership working and policy implementation and development.

Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	⊠ ++ ☐ + ☐ -	
Are the findings generalisable to the source population (i.e. externally valid)? This reflects the extent to which the findings of the case study are generalisable beyond the confines of the evidence to the source population.	⊠ ++ ☐ + ☐ -	
Reviewer's comments on the evidence available for this case study		

PLYMOUTH: EVIDENCE STATEMENTS

- How can local authority planners and PCTs collaborate more effectively to ensure health considerations (including health inequalities) are assessed and integrated within the spatial planning process? (Key Question 6)

  Plymouth 1: It provides strong evidence that capacity building through institutional adaptation/development (jointly appointed Director of Public Health, a dedicated HIA specialist within the public health team, jointly owned plans) can promote intersectoral partnerships between public health and planning bodies and authorities and facilitate integration of health and planning.

Case study identification	San Francisco	
Checklist completed by (name)	Laurence Carmichael	
Checklist completed by (date)	1/10/2010	
Question	Category / Response	Details / Comments
Evidence examined	**Book**	1. Corburn, J. (2009). Toward the Healthy City – people, places and the politics of urban planning. MIT press: London.
	Article	2. Bhatia, R. (2007). *Protecting Health Using an Environmental Impact Assessment: a Case Study of San Francisco Land Use Decisionmaking.* American Journal of Public Health. 97 (3): 406-413
	R2	3. 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.
	R2	4. 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].
	R2	5. 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.
	Excluded R2	6. 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 **Website:** http://www.thehdmt.org/
Acknowledgements	Thanks to Nicole Iroz-Elardo PhD Candidate Nohad A. Toulan School of Urban Studies and Planning Portland State University For her help with identifying this case study
Case Study Overview	With the exception of EIA regulations, Health is not well or evenly integrated into the planning process in the U.S. **San Francisco** While their county and city governments are one, it is probably the best U.S. example of utilising appraisals (HIAs) and carving out a long term place for health at the planning/land use table. The public health departments also created a tool with indicators, etc to ease integration. See http://www.thehdmt.org/.
Research questions addressed	
Integration of health into the plan appraisal and project appraisal process:	**National Environmental Policy Act 1969**: requires federal agencies to identify and analyze potentially adverse environmental effects of public agency-approved policies, programs, plans, and projects but health professionals had not in the past used EIA to assess health impact of land use despite the fact that NEPA and and its related federal guidelines have explicit language that requires the evaluation of both direct and indirect effects on health as well as health effects on low-income and minority populations.

California Environmental Quality Act mandates environmental impact reports whenever "the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

San Francisco's context in which EIA developed: In San Francisco during the 1990s, high housing costs, low-wage jobs, gentrification, contaminated landfills, air pollution, and substandard housing emerged as public health and environmental justice concerns. Residents and community organisations mobilise to demand that City Department of Planning (who implements land use planning, zoning and offers oversight of local public agencies' environment impact reports) prevents gentrification and displacement, promotes affordable housing, preserve light industry, and ensures greater community oversight with respect to real estate development. Health partnership developed and SFDPH routinely started to review environmental impacts but mainly for environmental health impacts only. In 2002, grass root movement Anti-displacement coalition (MAC) prepared a people's plan (on land use change and promotion of affordable housing, preserve industrial sector and stop demolition of existing buildings. which SFDPH decide to help. 2003, SFDPH decided to use evaluate impact on a broader set of health criteria and asked Bhatia to evaluate health impacts of land developments. HIA started as an expert rapid HIA (man over a few weeks : no community consultation nor data collection. First review was Trinity Plaza where displacement was the problem. Health impact identified included mental health and community cohesion, food insecurity, overcrowding.

Trinity Plaza Project: SFDPH worked with MAC, learning that health impact is a requirement of CEQA and demonstrated to city planners that the CEQA conditions were met and that an EI report should consider impact of redevelopment on human health (originally it did not). Planners challenged the ability to collect evidence demonstrating the link between redevelopment and negative health impacts. Developers were faced with too many hurdles (public opposition, negative EI report, well organised anti lobby, and potential adverse policy at city level) negotiated with tenants and changed plans.

Rincon Hill redevelopment: city planners encouraged SFDPH to evaluate health impact of redevelopment to secure investment of developers into public services as elements of environment quality for the scheme (Schools, community centre…) . SFDPH focussed on huge difference between

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	income/housing costs that the new scheme would create as well as leading to further segregation. Social issues were not at first considered by city planners as within the remit of environment quality , i.e. within their remit. Social housing for the site were negotiated. **Parallel Development of community based HIA and participatory planning** 2002: the Mission and the surrounding Eastern Neighbourhoods of SF to be redeveloped. 2004: SFPD suggested that HIA carried out by MAC and SFDPH should be expanded to rezoning plan but not everyone in SFPD agreed that broadening the scope of health assessment was a good idea and that health (narrowly defined) was already considered in the EIA process. However a voluntary HIA was supported by SFPD.SFDPH developed a community-based HIA. ENCHIA emerged and the result was a new analytical process: healthy measurement development tool (HMDT) that encompass: • New problem framing by participants • New working relationships, deliberative process • New evidence base – new data management – use of local knowledge • New analytical process ENCHIA has influenced planning decisions in SF and in the Bay area. Recently, following the impact of Hurricane Ike last year, which damaged or destroyed 70% of Galveston, Texas' residential and commercial buildings, the island is adapting the HDMT to a post-disaster recovery scenario. HDDT is web accessible. Main outcome for planning process: SFPD committed to HMDT use by SFDPH and has been since endorsed by other cities in the Bay area. ENCHIA also led to change in activities, resource and research allocation of California's largest health foundation and the advocacy group PolicyLink.
Lessons that can be learnt from other countries about the effectiveness and cost effectiveness of appraisal approaches (including facilitators identified in	Knowledge
	Transformation/sophistication of the knowledge base 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: • ENCHIA had an influence on professional work and networks, framing problems around public health and accessing new data.

Review 3)	• 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.)
	Partnership
	Partnership building supported by university experts, step by step process, training for community and good communication/visioning tools 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 is a coalition building to transform institutional practices. • 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. • 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. • many interests represented on the HIA community council. • Production of policy briefs for publication. • Development of training courses, local public health agencies' networks for advocacy, training, support, access to completed HIA, website. • Use of geographical/ illustrative representation of the vision of the Council. • 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 =>ENCHIA could create a broader consensus than the HIA for both developments as the EHS was then acting alone as expert.

| | 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.

=> Outcome of ENCHIA process was a healthy development measurement tool. |
	Management and resources
	Partnership supported by strong resources from academic support, development of training courses (see also above section)
	Policy process
	Step by step participatory process including development of group structure, collective vision, problem definition, research and knowledge, synthesis, consensus, reflection, dissemination, publication, evaluation:

- Statutory requirement s needed for EIA to consider health and legal mandate for agencies to consider and respond to health input

Caveat:

- Demand for and political support of HIA came from activists (community organisations)
- NEPA does not mandate HIA clearly and hence lack of incentives to conduct it

=>Institutionalisation of health determinants analysis within EIA more likely through combination of new practice, case law and regulatory guidance .

Use of EIA useful as it is a statutory instrument.

Problem: EIA vs. HIA

Health in theory included in EIA through NEPA and CEQA BUT both acts leave it to agencies (which |

have power to approve projects) to determine the threshold of significance of the impact of the project on the quality of the human environment.

HIA has no statutory authority or legal standing while EIA has through NEPA and CEQA. So HIA integrated into EIA has legal standing.

EIA analysis focuses on narrow definition of health and determinants of health while HIA uses a broad definition that includes social, economic, cultural impact assessment.

EIA tends to occur after project proponents have made key project design decisions and secured political backing. HIA can happen at any stage of the decision making process.

HIA offers a broader range on evidence gathering to assess health impact that involve community engagement.

FINDINGS OF THE CASE STUDY

With the exception of EIA regulations included in the National Environmental Policy Act 1969 (NEPA), health is not well or evenly integrated into the planning process in the U.S. . Reviews 1 and 2, however, brought some evidence on the development of HIA in San Francisco which has led to healthy planning within the Bay Area and is also emulated in Texas. San Francisco as a case study was also recommended by a US PhD candidate as "probably the best U.S. example of utilizing appraisals (HIAs) and carving out a long term place for health at the planning/land use table" and evidenced by the fact that the San Francisco's public health departments has created a tool with indicators, to ease integration (http://www.thehdmt.org/).
EIA is a statutory instrument that requires federal agencies to identify and analyze potentially adverse environmental effects of public agency-approved policies, programs, plans, and projects. NEPA and its related federal guidelines have explicit language that requires the evaluation of both direct and indirect effects on health as well as health effects on low-income and minority populations. In addition the California Environmental Quality Act mandates environmental impact reports whenever "the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly but until the beginning of the 2000s in San Francisco, the planning department

(SFDP)focuses on narrow definition of health and determinants of health for EIA and to assess the impact of project developments on health, rejecting social, economic and cultural factors of health as not relevant to the quality of the environment that EIA is assessing. Furthermore, local communities did not have a say in appraising the significance of impacts.

In the early 2000, the Movement for Anti- displacement coalition developed linked to San Fancisco's Department of Public Health to develop a community led HIA which would assess the impact of a large redevelopment plan for the Eastern Neighbourhoods of San Fancisco on the broad determinants of health. SFDP did not oppose this, but did not want to integrate the HIA or ENCHIA as it was known within the statutory EIA and the two processes were carried on in parallel. The process was very successful. An interesting fact is that ENCHIA organisers drew from UK and European sources (UK Merseyside Model and Danish consensus conference) to develop the ENCHIA process. According to the evidence, the achievements of the ENCHIA in terms of knowledge, partnership working, resources and policy process include:

- Transformation of the knowledge base to include broader sources of knowledge, including local knowledge. The logic models use to incorporate evidence collected and justify statements on impacts are questioned.

- Partnership building created by ENCHIA process is supported by strong resources from academic support, development of training courses for community and good communication/visioning tools between the stakeholders.

- ENCHIA is a step by step participatory process which includes development of group structure, collective vision, problem definition, research and knowledge, synthesis, consensus, reflection, dissemination, publication, evaluation.

From the case study evidence, we can draw a number of lessons that can apply in the UK context where HIA is voluntary and EIA statutory, in particular on the debate whether EIA should incorporate HIA as a way to integrate health into the plan appraisal and project appraisal processes. The caveat is that the emergence of HIA as a powerful instrument cannot be totally isolated from the US political, cultural and social context in which it has evolved, so policy transfer is probably not a realistic option. However, the evidence from the SF case demonstrates that integration require the following ingredients:

	Actors:

	• The community: organised community movement in the case study has probably proved an important political factor in the political acceptance of HIA by policy-makers
	• Experts: Policy champions who have the ability, resources to develop the HIA instrument
	• Policy-makers: have changed their knowledge base and attitude to impact assessment to endorse a broadening up of the statutory requirements
	
	Policy Process:
	
	• Use of EIA to integrate HIA is only useful because it offers a legal/statutory framework to HIA, but it can also be reductionist EIA analysis focuses on narrow definition of health and determinants of health while HIA uses a broad definition that includes social, economic, cultural impact assessment.
	
	• HIA need to happen at the early stage of the decision making process so that the impact of the plans and projects on the broad determinants of health can be assessed and remedied.
	
	• HIA needs to be participative so that the communities can be involved in:
	    o Knowledge creation, in particular local knowledge. HIA offers a broad range on evidence gathering to assess health impact that involve community engagement
	    o Questioning the problem definition, the hierarchy of factors assessing the threshold of significance of the impact of the project on the quality of the human environment

Quality assessment		
Quality assessment of individual studies / papers:		
Paper 1 reference Bhatia, R. (2007). Protecting Health Using an Environmental Impact	Internal validity: - External validity: +	Account of 2 examples of EIA incorporating HIA in SF by the expert involved in carrying these HIA. Although there is no evidence of bias, evidence is weak in view of this.

Assessment: a Case Study of San Francisco Land Use Decisionmaking. American Journal of Public Health. 97 (3): 406-413		Although the 2 cases are in SF, the conclusions could apply to different contexts.
Paper 2 reference 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	Internal validity: + External validity:++	
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	Internal validity: + External validity: ++	

Community Health Impact Assessment. Journal of Public Health management Practice, 2008, 14(3), 255-265.		
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	Internal validity: + External validity:++	
Corburn, J. (2009). Toward the Healthy City – people, places and the politics of urban planning. MIT press: London.	Internal validity: ++ External validity: ++	
Dannenberg, A., Bhatia, R., Cole, B., Heaton, S., Feldman, J., Rutt, D. (2008). Use of Health	Internal validity: + External validity: +	

Impact Assessment in the US, 27 case studies, 1999-2007. American Journal of Preventative Medicine; 34 [3]		
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]	Internal validity: + External validity:++	
Overall assessment of quality for the evidence presented in the case study:		
Is the evidence internally valid (i.e. unbiased)? How well does the evidence minimise sources of bias? Were there significant flaws in the design of the evidence?	☐ ++ ☒ + ☐ -	There is the recurrent issue that there are very limited number of authors who have reported on this case study and Corburn and Bhatia have been at the core of the development of HIA. However there is evidence on the ground that the ENCHIA is seen by local authorities as a case of good practice, so much so that SF city council has developed the HDMT that is also used in Texas.

SAN FRANCISCO: EVIDENCE STATEMENTS

- How should we integrate health into the plan appraisal and project appraisal processes?

  SF 1: Strong evidence from San Francisco shows that HIA methodologies are most effective in influencing planning when they employ a broad definition of health that includes social, economic, cultural elements and incorporate broad and different sources of knowledge, including local knowledge from diverse ethnic and cultural groups.

  SF 2: The case study also provides moderate evidence that the participatory approach used to develop the HIA led to an effective partnership between the community, experts (including public health and academics) and policy-makers. This partnership was effective because it ran through the whole development process, had a strong structure, developed a collective vision and consensus, which was supported by research and knowledge, and could disseminate its findings appropriately. This led to the development of a measuring tool used by other local authorities in the USA.

  SF 3: There is moderate evidence from the case study a key facilitator was the clear commitment to HIA at the senior level of the key organisations and the allocation of resources for building capacity.

  SF 4: Moderate evidence also shows that appropriate assessment instruments can facilitate the awareness of health issues in spatial planning (e.g. the HDMT).

  SF 5: The case study provides moderate evidence that HIA will be more effective if undertaken at an early stage of the decision making

process in ensuring that the impact of the plans and projects on the broad determinants of health can be assessed and remedied.