

Health Impact Assessment Executive Summary

Report of Chris Woodcock, Public Health Strategic Manager and Michelle Robinson, Spatial Policy Team Leader

Purpose of the Report

- 1 To provide public health senior management team with an update on the health impact assessment (HIA) on the County Durham Preferred Options (the Local Plan).

Executive summary

- 2 This brief report makes recommendations for the County Durham Plan (CDP) process which may have a positive impact upon health outcomes in County Durham.
- 3 Assessing the direct health impacts of the Local Plan such as a possible exposure to pollutants such as noise, as well as indirect influence on health such as access to a job market or the accessibility of public space has helped to make recommendations to create healthier public policy.

Recommendations

- 4 PHSMT is recommended to:
 - (a) Note the contents of this report;
 - (b) Support the HIA recommendations.

Background

- 5 In order to ensure that County Durham is a successful place to live, work, invest and visit the Local Plan focusses on supporting and creating vibrant communities by delivering:
 - More and better jobs and sustained economic growth;
 - A wide choice of high quality homes that supports economic growth and meets the needs of all people;
 - A high quality built and enhanced natural environment; and
 - The necessary supporting infrastructure including transport, health and educational needs.
- 6 On the 13th June 2018, Cabinet approved the Preferred Options for a six week consultation between the 22nd June and the 3rd August 2018. The Preferred Options have been informed by integral assessments. These include the Sustainability Appraisal, the Habitats Regulations Assessment, Equalities Impact Assessment

and the Spatial Strategy Justification. The Preferred Options propose an ambitious Vision and Objectives for the future development of County Durham up to 2035 and are informed by a suite of further evidence.

- 7 To ensure that health considerations have been embedded into the Preferred Options, health has been included as a key part of the Sustainability Appraisal process.
- 8 A Health Impact Assessment has been undertaken working with a range of colleagues to inform the next stage of the County Durham Plan process. The HIA has corporate support as the process will consider further opportunities to provide good jobs and places to live, learn and play.

Health Impact Assessment (HIA)

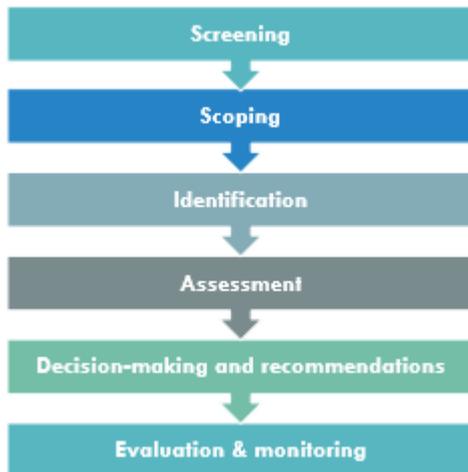
- 9 HIA is a structured, solution-focused and action orientated approach to maximising the positive and minimising the negative impacts of new initiatives. This approach is not about advocating for the removal of a policy but more positively how additions or recommendations to the existing policies could help deliver improved health outcomes to our residents. The selection of a policy for the HIA is not a reflection on its quality, but the opportunities it presents to further enhance the positive impacts upon our community. Importantly it aims to reduce or eliminate health inequities and social inequities occurring as part of the proposal.
- 10 Assessing the health impacts of different policies further enhances the collaborations between health and planning colleagues which subsequently helps to ensure that health considerations are integrated into planning across all departments going forward. Health benefits are more likely to be realised across the broad spectrum of local authority functions through this improved health and planning relationship, rather than remaining as individual strands of good practice.
- 11 Health impacts are the overall effect, direct or indirect, of a policy on the health of population. Direct effects could be exposure to pollutants including noise, which a proposal may release in the air, water or soil. It also considers indirect influence on health such as access to a job market or the accessibility of public space.
- 12 An HIA takes a broad view of health in that health means more than health care provision or clinical care. It is now generally accepted that the built environment is one of the many interrelated factors that influence people's behaviour and the choices that they are able to make. Sir Michael Marmot's report 'Steps to Healthy Planning: Proposals for Action' found evidence that the following 'planning' issues impact on physical and mental health:
 - The location, density and mix of land uses

- Street layout and connectivity
 - Access to public services, employment, local fresh food and other services
 - Safety and security
 - Open and green space
 - Affordable and energy efficient housing
 - Air quality and noise
 - Extreme weather events and a changing climate
 - Community interaction
 - Transport
- 13 Poor health outcomes affect not only the individual's health, but their school attainment, employability and employment status. Good health should be outcome of the plan, but also an underpinning component of the vision to deliver economic growth and sustainable communities.
- 14 An HIA considers the impact directly upon disease and also considers the social determinants of health which impact our residents, unequally, across County Durham. By taking into account these social determinants an HIA can support the development of healthy public policy.
- 15 An HIA is an established approach with a strong evidence base of positive outcomes in policy development. Recent local high profile examples include the HIA for the second Tyne Tunnel which led to a number of recommendations such as creating more direct transport routes and avoiding directing traffic through existing settlements, to further enhance the policy beyond its initial intent.

The Health Impact Assessment Process

- 16 HIA training has taken place with a number of colleagues across Durham County Council (DCC). This was aimed at ensuring that there was a shared skill set and narrative in our approach to a HIA. Feedback from the session was universally positive with many participants highlighting that the approach had enabled further constructive discussion between planners and public health professionals.
- 17 Following the training a steering group has been established to ensure the delivery of the HIA. This group has membership from spatial policy, sustainability, public health, research and public health intelligence and the AAPs. The terms of reference are included in Appendix 2.

18 An HIA process typically follows the diagram below.



Screening

- 19 The first stage of a HIA is a screening exercise. This determines whether an HIA is required so that resources, time and effort are targeted appropriately. The task and finish group have completed a two stage screening exercise.
- 20 As the County Durham Plan contains 61 policies, the first stage was a rapid screen using a screening tool. The 61 policies were allocated across the task and finish group and assessed against possible impacts upon the social determinants of health and impact upon health equity, based on the detail provided in the policy. This produced a longlist of 17 possible policies.
- 21 The second step covered a more detailed screen of the longlisted 17 policies which was conducted, where possible, in partnership with another member of the task and finish group. This screening step allowed for a more detailed screen which covered issues around size and scale of the initiative, overall possible impact, impact upon the community, priority within the organisation, nature of the evidence base and potential to make recommendations associated with the policy. Appendix 3 provides an example of the screening tool.

Screening results

- 22 A shortlist of 11 policies were identified to move forward onto the next stage of the HIA process. Certain policies have been grouped together as whilst their impact maybe geographically specific, the evidence base from which the potential impacts would be identified and the possible recommendations, would be the same.

POLICY NO.	POLICY NAME
Policy 4	Aykley Heads
Policy 5	Housing Allocations
Policy 6	Durham City's Sustainable Urban Extensions
Policy 16	Addressing Housing Need
Policy 17	Durham University Development Purpose Built Student
Policy 23	Delivering Sustainable Transport
Policy 24	Durham City Sustainable Transport
Policy 26	Provision of Transport Infrastructure
Policy 51	Meeting and Need for Primary Aggregates
Policy 53	Surface Mined Coal and Fireclay
Policy 58	Preferred Area for Future Carboniferous Limestone Working

- 23 The HIA process focuses on the identified policies and the steering group will move onto scoping those policies. The scoping process begins to assess the policy in detail, specify the health impact to be assessed, develop the work plan to ensure delivery and identify the possible evidence required to help inform the recommendations.

Health promoting facilities and policies

- 24 Education, early years and health care provision may feature within another policy as supposed to being a standalone policy. If a policy is concerned with a large development and would likely have an impact upon the population size within a specific geography and therefore an impact upon existing services, then the current policy would consider the requirements for additional provision.
- 25 The Hot Food Takeaway (HFT) policy is part of the Local Plan. The policy was developed in conjunction with an evidence review of the impact of HFT on levels of obesity. This policy is a good example of a health promoting policy developed in partnership between planning and public health, and the screening process acknowledged that further policy assessment was not required.

Developing Public Health Policy

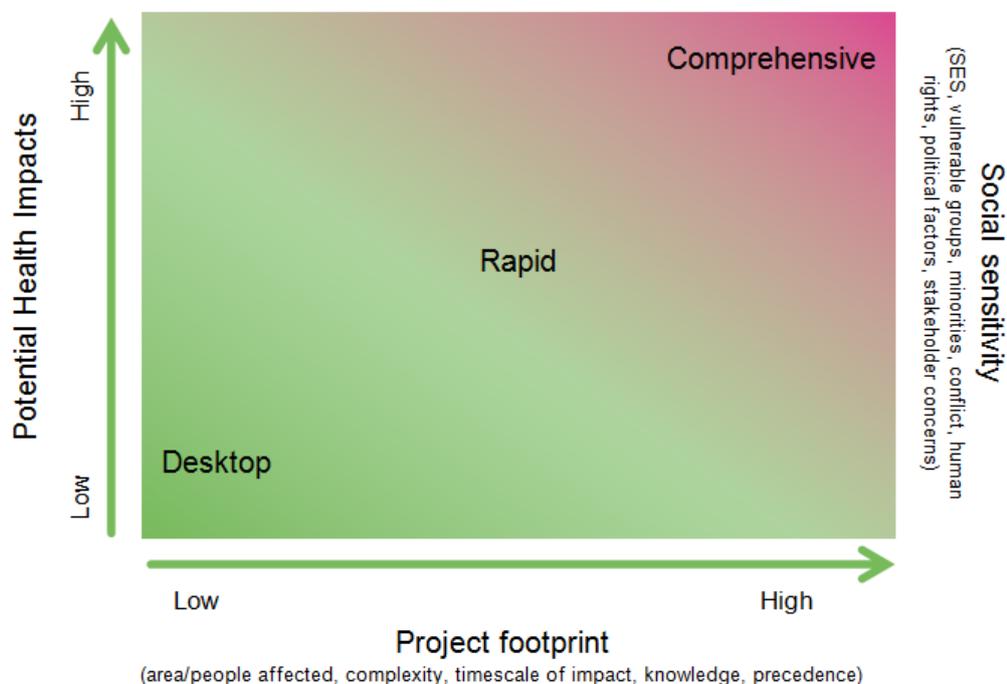
- 26 The screening process has also highlighted polices which may not be suitable for an HIA, but present an opportunity to be strengthened with minimal changes to the policy, or act as a supporting document once the details of a development are clear. This will be explored outside of this specific HIA process. Policies such as Retail Hierarchy and Town Centre Development often indicate that a masterplan for a specific settlement has been development. The masterplan as supposed the overarching policy within the Local Plan, would provide the detail required for an HIA.
- 27 A further consideration for the Local Plan is to reflect the possibility of a future HIA or similar, once a policy is enacted. Many polices provide high level strategic direction, but until a specific development progresses, then assessing health

impacts remains too hypothetical. However, it may be advisable to consider an HIA process, at a later date, once the specific details are identified.

- 28 This collective approach has provided the task and finish group with opportunities to engage colleagues across the authority, share expertise and explore pragmatic approaches to improving health promoting policies within DCC.

Scoping

- 29 Scoping involves planning and designing the HIA, setting out the parameters. This involved process saves times and resources in subsequent steps but nevertheless is an iterative process whereby HIA members agree the health impacts to be assessed against. Given the scale and potential impact of the proposals alongside the time and capacity, a rapid HIA was the agreed approach.



- 30 The scoping process assesses the policy in detail, specifies the health impact to be assessed and the possible evidence required to help inform the recommendations.
- For each policy broad and specific health impacts and potential health outcomes of the proposed action have been identified.
 - For each policy, the task and finish group met regularly to debate the policy implications and health outcomes and these have been prioritised into broad health impacts and causal associations have been mapped across the other identified health determinants and health outcomes for that policy. Given the time constraints, guidance recommends three impacts (Health Impact Assessment a practical guide).

- These outcomes have been mapped in a driver diagram. This allowed the working group and the subsequent HIA assessment workshop participants to establish a plausible pathway from a policy to an impact upon health. It should be noted that at this stage, no judgement is made about whether the impact is positive or negative, only that it is plausible that a change will occur as a result of the policy. An example driver diagram is available in Appendix 4.
 - Following mapping, broad research questions have been identified for each policy. For some policies, research questions were similar to those of other policies supporting the rationale for the grouping exercise previously carried out.
 - The steering group acknowledged that '*change in economy*' would be relevant to most/if not all policies and '*economy*' was not screened or mapped at individual policy level but was acknowledged as an overarching factor for consideration.
- 31 During the scoping exercise it became clear that the overlap between policy 24 policy 25 and policy 26 was so significant that the health impacts and driver diagrams were too similar to warrant individual assessment. Instead the steering group agreed to focus on policy 24 as this was deemed to be the most impactful and amenable policy for HIA purposes.
- 32 For each policy and individual scoping document was developed and agreed. The full list is available in appendix 4.
- 33 The steering group reviewed and refined search criteria/research questions where evidence was unclear. During the course of the literature search the HIA group developed an evidence criteria based on previous work by *Bambra et al* 2010, and adopted by Public Health England.

Identification

- 34 The identification stage develops a profile of the local community which is more likely to be affected by the proposal. This allows the HIA process to collect the necessary information to identify the potential health impacts of the proposal.
- 35 Multiple literature sources have been reviewed by the HIA team. These secondary sources of information have been collated from a range of sources including peer reviewed journal articles, national policy documents and previous other HIA or impact assessments. This has included searching literature reviews, systematic reviews and grey literature. Grey literature sources were identified by the steering group based on their expertise in spatial policy, sustainable development and public health.
- 36 Initially very brief literature reviews were intended for each policy. However due to the overlap within grouped policies (e.g. impact of traffic or green environment), for timeliness an umbrella review was produced. The umbrella review examined the health impacts and the evidence base relating to the policies identified in the local plan.
- 37 Umbrella reviews have emerged in recent years as an attractive strategy for assessing existing review level evidence. Unlike traditional systematic reviews, umbrella reviews involve a 'rapid review' approach to evidence synthesis and aim to

produce an overview of the evidence in a short space of time (Joanna Briggs Institute, 2014; Khangura et al., 2012).

- 38 Umbrella reviews are increasingly used in public health research and practice, bringing together a wide range of evidence to explore what is known about a topic in an attempt to guide the decisions of policy makers (Bambra et al., 2009; Bambra et al., 2010; Horodyska et al., 2015; Theodoratou et al., 2014).
- 39 Traditionally, umbrella reviews focus on existing systematic review level evidence alone (Becker & Oxman, 2008; Ioannidis, 2009). Given the scope of the rapid HIA and that the findings of this review are targeted at public sector colleagues, whose interpretation of evidence may differ according to context, relevant stakeholder organisation documentation has also been included (e.g., non-systematic evidence reviews by professional bodies) [1].

These were:

- Age UK
- BRE - Building research establishment
- DEFRA – Department for Environment Food & Rural Affairs
- Health education England
- Institute for public health in Ireland
- Institute for public policy research
- Joint air quality unit
- Marmot review team
- Mind
- National audit office
- National trust
- NICE – National institute for health care excellence
- NUS – Nation union of students
- Public Health England
- Royal college of physicians
- Royal college of psychiatrists
- Shelter
- The King's Fund
- Universities UK

- 40 A far larger literature review was initially developed covering a wider range of impacts within the driver diagrams for the overarching project see appendix 5, in order to highlight the extent of the evidence search. This allowed the group to judge the overall quality of the evidence in order to create the hybrid version that would be required for the latter stages of the HIA process.
- 41 Any assessment of impact will need to be taken with a consideration on the current health status of a local population. This allows for an appropriate assessment to impact and may be especially important when considering health equity. Any possible policy outcomes which may have a determinants impact upon health, when viewed through an equity lens may lead to slightly different recommendations. This would align to recommendations by Marmot (ref) around proportionate universalism.

- 42 The County Durham health profile was created by the public health intelligence team and covered key information surrounding demographics, health status, lifestyle indicators and some other key health determinants. The full health profile is available in appendix 6.
- 43 As part of the consultation on the County Durham Plan, a significant countywide consultation occurred which generated over 4000 representations to the plan. This provided a huge public response to utilise for the assessment of a health impact. This provides critical input, challenge and support from those most likely to be affected from any proposals.
- 44 The HIA steering group reviewed the public feedback and categorised feedback in relation to the HIA identified policies, and then health impacts as identified in the scoping driver diagrams.
- 45 This qualitative primary feedback allowed for an assessment of the possible health impacts as highlighted by the community themselves. This qualitative information adds depth to the HIA as it represents community experience, knowledge, passion and perceptions of our residents and stakeholders with 'expert' knowledge. This may be especially important when assessing social factors which may be difficult to portray in a traditional health profile. The full list of policy aligned public representations is available in Appendix 6.
- 46 This combination of data sources, from secondary data to create health profiles, the evidence, and the qualitative feedback, can be triangulated to allow for the assessment of the policies.
- 47 During this process the scoping pathway documents were amended. This was to reflect the continual learning from the identification process to ensure that the remaining health impacts were those that resonated with the community, with the available evidence and with the health profile of County Durham. This triangulation process gave the HIA steering group confidence that given the rapid nature of the HIA, the most appropriate and relevant impacts were being assessed.

Stakeholders

- 48 The County Durham Health and Wellbeing board was also consulted within this process during a workshop session in October 2018. The board comprises the key stakeholder organisations in the health and social care sphere in County Durham and provided expert insight and overview into the HIA process and impacts upon the populations that they service and the organisation that they represent. The health and wellbeing board agreed to receive future reports with regards to the HIA.

Assessment

- 49 The assessment allowed the HIA steering group and other participants to synthesise the available information collected to then assess the potential impacts and the consideration of any future next steps.
- 50 As mentioned previously, evidence summaries were created based on the steering group's judgment of whether the evidence was of a higher quality. Appendix 7 provides the overview.

51 An assessment meeting was convened in October 2018. This included the HIA steering group but also representation from individuals who had attended the HIA training in June 2018. This ensured that the assessment session had a wide perspective and a mix of those who were deeply involved in the process and those that presented the views of the community (area action partnerships) or key partner organisation such as clinical commissioning groups.

Assessment meeting

52 The assessment session was led by a Health Impact Assessment expert (Katie Hirono of Society of Practitioners of Health Impact Assessment (SOPHIA) to provide guidance, experience and an independent voice during the process. The workshop participants were all provided with the health profiles (the County Durham Health profile (PHE 2018) was also utilised as this provided a quick reference guide to key health outcomes), the public representations, County Durham Plan policy overviews, the evidence overviews and the full literature review packs.

53 The assessment session reintroduced all participants into the County Durham plan, the determinants of health and the concept of health inequalities so that all participants were in agreement in their purpose.

54 An assessment matrix was developed for use within the session based on the following assessment criteria:

- Policy number – local plan policy
- Health determinants – the policy outcome which may impact upon an individuals health status
- Possible impacts – the consequence of the of the determinant
- Strength of information – a judgement on the literature source and 'quality
- Nature of impact – positive or negative
- Duration of impact – whether it is immediate or a long term impact upon outcomes
- Who is impacted – the population who is likely to be impacted by the policy outcome
- Magnitude of impact – size of impact dependent on the size of and risk to the local population
- Likelihood – judgement on how likely the impact is to occur
- Unfair – consideration of equity and whether the impact affects everyone equally

55 The full assessment matrix development during the assessment session and in subsequent HIA steering group, is shown below.

Policy	Health determinant	Possible impact	Source of information	Nature of impact	Duration of impact	Who is impacted	Magnitude of impact	Likelihood	Unfair
Policy 4	Noise	Impacts on mental wellbeing	Medium	Negative	Continual	Residents Older people and children	Medium	Medium	Unknown
	Access to green space	Impacts on mental/physical wellbeing	Strong	Positive	Continual	Residents, workers, and visitors	Medium/high	Medium	No
	Access to employment	Impacts on mental wellbeing	Medium	Positive	Continual	Employees	Medium	Medium	Unknown
Policy 5	Access to green space	Impacts on mental wellbeing and physical activity	Strong	Positive	Continual	Residents, children (play parks)	High	Possible	Unknown
	Infrastructure	Does a population increase have a negative impact upon health due to	Low evidence/hig	Negative	Continual	Residents	Low	Low	Unknown
Policy 6	Social cohesion	Impact upon wellbeing	weak	negative	continual	Immediate residents	?	?	No
	Noise (building)	Wellebing, respiratory disease	strong	negative	continual	immediate residents, future residents	medium	low	no
	Noise (traffic)	Wellebing, respiratory disease	strong	negative	continual	immediate residents,	medium	unknown	no
Policy 16	Housing quality	impacts frailty	Strong	Positive	Lifetime	adults/young families	medium/high	High	No
	Community cohesion	mixed use - mental wellbeing	Strong	Positive	Lifetime	residents - the community	Medium	Probable	equity of distributio
	Affordable housing	impacts health	Medium	Positive	Long term incremental	Those in need of housing, young/elderly	Medium	Possible	Yes (due equity of distributio
Policy 17	Community cohesion	Impact upon wellbeing	Weak	Negative	Continual	Residents	Low	Low	No
	Healthcare provision	impact upon physical/mental health through lack of access	Medium	Negative	Continual	Students population	Medium (low volume/high	Medium	Yes
Policy 24	green space	Impacts mental wellbeing	Low	Negative	Continual	Local residents	unknown	unknown	Unknown
	Process of removing green space (traffic)	Affects pre-existing respiratory disease	Low	Negative	Continual	Local residents with pre-existing respiratory	Low	unknown	Yes effects those with
Policy 51	Change in traffic	impacts upon injuries and non-communicable diseases	Strong	Negative	Continual	Specific geographies identified in the plan	High	Medium	to specific geographi
	Air quality (dust)	Impacts upon non-communicable diseases	Low	Negative	Continual	Specific geographies identified in the plan	Unknown	Unknown	Yes (due to specific
	Local employment	Impacts upon mental wellbeing	Medium	Positive	Unknow	Unknown	Unknown	Unknown	Unknown
Policy 58	Loss of green space	Impacts mental wellbeing and non-communicable diseases	Medium	Negative	2024-2048	Specific geographies identified in the plan	Medium	high	Yes (due to specific

Recommendations matrix

56 During the assessment session and the subsequent steering group meetings, members began to formulate a set of suggested recommendations. Following this the HIA steering group reviewed them in conjunction with the evidence, to develop recommendations most likely to have a positive impact upon health outcomes and practically be delivered within the plan process. In many instances the recommendations were based around enhancing elements of the current policy in order to deliver further and continued health benefits. The draft recommendation matrix is shown below.

Policy	Health determinant	Possible impact	Recommendations	Recommendations
Policy 4	Noise	Impacts on mental wellbeing	Better health at work - employer pledge, cycle parking, pedestrian access. Consider how active travel is sustained.	
	Access to green space	Impacts on mental/physical wellbeing	Maintaining greenspace on the Aykley Heads site through the Master Planning process and subsequent planning application is key to increasing mental wellbeing of those employed on the site, local residents and visitors.	Consider a walkable environment which can lead to increased levels of physical activity and improved mental wellbeing. Ideally, where Durham County Council are able to retain control of business units encouraged, through contracts as landlord, businesses to sign up to BHAWA and measure sign up
	Access to employment	Impacts on mental wellbeing	Linking with existing further education institutions to ensure that the local education system sustains the workforce	Development provides job opportunities and training for local people.
Policy 5	Access to green space	Impacts on mental wellbeing and physical activity	Green space should be sufficient amount, high quality, designed for various users within appropriate location i.e. accessible and safe, including improvement of existing green space, Rest/benches for elderly, OSNA data kept up to date	Ensure connected streets to allow for increased levels of physical activity. Ensure public realm improvements i.e. street lights, benches, 20mph zones, (see healthy streets toolkit) in order to improve mental wellbeing. Ensure access to high quality playspace. Consider bringing forward the creation of amenities much earlier in the development to allow for immediate use and adoption of healthy behaviours.
	Infrastructure	Does a population increase have a negative impact	Mini HIA when a site is allocated (if over 800 properties and/or significant public interest and section 106 get apportioned according the impacts of the HIA/need, and locality assets	Ensure there is sufficient access to amenities and facilities as this could improve mental health and increase mobility and participation especially amongst older adults.
Policy 6	Social cohesion	Impact upon wellbeing	Endorse proposals for park on site	Prioritise walkable access to amenities to recreational areas and social amenities as this can increase PA at all ages, and increases levels of connectivity.
	Noise (building)	Wellbeing, respiratory disease	Planning applications includes a standard condition regarding operational hours for construction.	
	Noise (traffic)	Wellbeing, respiratory disease	Recommend sustainable roads of transport, links to sniperley park and ride, it's bus routes, safe and attractive cycle/walkways (best practice),	Buffer zones around developments. Noise mitigation. Limit car parking, make sure it doesn't restrict the walking/cycling routes.
Policy 16	Housing quality	impacts frailty	Recommendation: feed into SHMAA process, implications for future policy 10%	Reduced home hazards, reducing likelihood of falls. Walkable neighbourhoods may help to maintain levels of physical activity. Create warm and energy efficient homes, which can improve general health and reduce respiratory conditions.
	Community cohesion	mixed use - mental wellbeing	Explore pooling of affordable housing, shared countywide, use of empty properties, enforcing mixed use developments	Mixed use developments, connected streets, accessible amenities, community facilities are provided early in a development
	Affordable housing	impacts health	Explore pooling of affordable housing, shared countywide, use of empty properties, enforcing mixed use developments	Improved mental wellbeing among adolescents and adults. Increased quality of life.

Policy	Health determinant	Possible impact	Recommendations	Recommendations
Policy 17	Community cohesion	Impact upon wellbeing	Endorse approach to HMOs to avoid concentration. Recommend including in the supporting text the Landlord accreditation scheme	Endorse reference to waste recycling.
	Healthcare provision	impact upon physical/mental health through lack of access	Additional services may be required based on need. Consider additional health care policy.	Buildings have attractive, visible signed stairwells. Buildings include cycle racks, cycle storage, internal design promote physical activity, car parking spaces are minimised, developments include a sustainable travel plan
Policy 24	Process of removing green space	Impacts mental wellbeing	Recommendation - improving the existing green space, work with communities on any recreational routes that may be impacted by scheme and ensure implementation of new routes as part of planning	Consider all opportunities to create walkable environments, consider all opportunities to offer alternative access to the natural environment. Prioritise cycling infrastructure to mitigate the impact of green space loss by providing alternative options to improve physical and mental wellbeing. Recommend adopting the TCPA guidance on a healthy weight environment. Houses are no more than 300 m from nearest area of green space.
	Process of removing green space (traffic)	Affects pre-existing respiratory disease	Include reference that there should be a compensatory scheme proposed as part of any planning applications to ensure that any existing recreational routes / PROW, important areas of green space are mitigated, Public Health to link into the Air Quality work ongoing with Environmental Health and Aecom	Enhance street connectivity through increased walking and cycling infrastructure to improve access to sustainable public transport. Consider reviewing developers planning applications to evaluate whether aspects such as walking and cycling distances meet thresholds for good practice.
Policy 51	Change in traffic	impacts upon injuries and non-communicable diseases	Transport and environmental assessment explore whether part of major development HIA is required on mineral extraction policy?	Update the Technical Advice Notes for noise, dust, light etc.
	Air quality (dust)	Impacts upon non-communicable diseases	Continue the lobbying of the leamside line, alternative and feasibility mechanisms to transport minerals i.e. rail, sea, technical advice notes for minerals	Continue efforts to minimise or remove exposure to air pollutants.
	Local employment	Impacts upon mental wellbeing	Every new application considers employment from local community (pay living wage) Minimise adverse effects on recreation/rural amenity by relocation/mitigation	
Policy 58	Loss of green space	Impacts mental wellbeing and non-communicable diseases	See previous recommendation on green space Recommendation around restoration of minerals DPD, HIA on that development. Consider how current rights of way infrastructure may be improved in order to provide greater connectivity for communities.	

57 Following this the recommendations were drafted into a more concise and where possible, action orientated set of recommendations. These recommendations were shared with those key stakeholder most likely to implement or be impacted by the recommendations. The full list of recommendations are available below.

Assessment overview

58 The assessment process is reported below to highlight how the data sources were combined to inform the recommendations.

Policy 4: Aykley Heads Strategic Employment Site

Summary:

Allocates an employment site known as Aykley Heads within Durham City for B1(a) uses (offices). The policy, supported by the approved masterplan for the Aykley Heads site, aims to provide a high quality employment location to contribute to the delivery of the new and better jobs Durham City and County Durham need. In doing so, it provides an opportunity for the unique landscapes to be used to create an urban park and for bus, pedestrian and cycle routes to be incorporated and to encourage the use of park and ride schemes.

59 Questions:

- Will the provision of green space on the site facilitate physical activity and promote mental wellbeing?
- Will the people employed in the jobs created by the new site experience good mental wellbeing?
- Will the site create good employment opportunities for residents of County Durham (and therefore all the benefits that employment brings)?

Public representation

- 60 Access to green space - Benefits of developing green space with the aim to improve green infrastructure were highlighted in the public consultation, such as including sustainable water drainage systems and biodiversity enhancement plans. Challenges around the environmental impact of this policy on greenbelt land were also raised during the public consultation including; ecological effects, and increased light, noise and air pollution.
- 61 Change in mode of travel - Increased congestion was a challenge raised by local residents. Strengthening cycling and pedestrian infrastructure was raised as an important consideration in this development, alongside other methods for reducing congestion.

Evidence

- 62 Green space - There are many identified health benefits of access to green space. In a recent publication by the king's fund they cited that access to green space impacted on blood pressure control, cholesterol levels, reduced stress and increased people's ability to face problems. (The King's Fund, 2018)
- 63 Based on evidence gathered together by Public Health England, the Institute of Health Equity at University College London has concluded that increases in the use of good-quality green spaces by all social groups is likely to improve health outcomes and reduce health inequalities, and can also bring other benefits such as greater community cohesion and reduced social isolation. (Public Health England, 2014)
- 64 Traffic impacts on health - Each year in the UK, around 40,000 deaths are attributable to exposure to outdoor air pollution, with more linked also to exposure to indoor pollutants. Road transport accounts for 31% of nitrogen oxides (NOx), 19.5% of PM2.5 and 18% of PM10 UK emissions. (Royal College of Physicians, 2016) (NICE and Public Health England, 2017)

Health profile

- 65 Employment - The latest figures (2017/18) estimate that 71.2% of the county's 16 to 64 population are employed. This is slightly higher than the regional level (71.0%) but lower than national levels (75.1%). To achieve national levels of employment an additional 12,700 people of working age in County Durham would need to enter employment. This could be achieved if some of those people currently economically inactive and wanting a job (17,400 people) were to enter employment. The employment rate in County Durham for those with an Equality Act (EA) core or work limiting disability is 44.2%, much lower than the rate for those without a disability (80.6%).

Recommendations

- 66 Recommendation 1
- Consider an active environment which promotes physical activity. Consider the guidance within the Building for Life (BfL) SPD so that facilities are linked in a walkable/cyclable environment.
 - Consider during the master planning process how green space is enhanced where practical to help facilitate benefits to those employed on site, local residents and visitors.
- 67 Recommendation 2
- Consider recommending to all prospective businesses take part in the Better Health at Work Award. The site could consider becoming a healthy business park and each employer recognise the business and social benefits of a healthy environment and workforce.
- 68 Recommendation 3
- Linking with current further education establishments to develop a workforce for tomorrow and promote the opportunities that exist within County Durham.

Policy 5 – Sites allocated to meet housing need

Summary:

Allocates sites to accommodate the new homes needed to ensure that housing need is met over the Plan period. Having had regard to housing need in the county (set out in the Strategic Housing Market Assessment); availability of land for housing in the county (set out in the Strategic Housing Land Availability Assessment); viability in different areas; and to the government's figures for housing needed for County Durham, the policy sets out housing sites by monitoring area. We are expected to demonstrate a rolling five 5 year supply of deliverable sites calculated against Objectively Assessed Need (OAN) set out in Policy 2 with a buffer of 5% or 20% added depending on past delivery.

69 Questions:

- Will changes in access to green space impact upon mental health and wellbeing?
- Will the provision of schools health, care and community facilities be sufficient to meet the health and wellbeing needs of current and future residents?

Public representation

- 70 Access to green space - The public consultation outlined some key points regarding the effect of policy 5 on green space in the proposed areas of development. A negative impact on the mental health, physical health and wellbeing of those living close to development due to a reduction in their access to green space was a concern.
- 71 Changes to infrastructure - Challenges were raised about pressures that might be put on local schools and healthcare services by an increase in population size. Increased traffic and pedestrian safety were also highlighted.
- 72 Changes in housing standards/accessibility and affordability - Building homes on the Sniperley park site was felt to offer an opportunity to deliver an appropriate proportion of housing to meet the needs of Durham. Some responses raised concerns about the effect on house prices of existing properties in the area.

Evidence

- 73 Access to green space – see evidence in policy 4

- 74 Changes in infrastructure - Increasing access to community facilities can improve mobility, physical and mental health and wellbeing. (MOTT Macdonald Limited , 2017)
- 75 Good access to general practice reduces pressure on other parts of the NHS, particularly hospital accident and emergency (A&E) departments. This helps the health system to make the best use of its resources. (National audit office, 2015)

Recommendations

- 76 Overarching recommendation - Consider health outcomes and health inequalities as part of the in house review process that assesses housing development schemes against the Building for Life outcomes.
- 77 Recommendation 4 - Align to the recommendation in the BFL SPD to ensure that facilities are available and accessible within short walks from people's homes. This could consider the needs of the local population so that the development is easy to navigate from a physical and mental perspective reflective of the local health profile.
- 78 Development management could consider facilities and amenities being built sooner in the development process to allow for the immediate use and adoption of healthy behaviours.
- 79 Recommendation 5
- Complete a health impact assessment for sites of over 800 properties and/or significant public interest to explore the health needs and the supporting infrastructure.
 - Utilise the education policy when/if need is identified.
 - Consider the developments of a healthcare policy to support a practical response to any possible additional health care requirements.
 - Ensure that existing or developing community facilities are easy to get to because they are conveniently located near to where people live, are well signposted, and are close to public transport and on walking and cycling networks.

Policy 6: Durham City's Sustainable Urban Extensions

Policy 6 Summary

In order to promote sustainable patterns of development and meet housing need, some land is removed from the Greenbelt and allocated for housing at Sniperley Park and Sherburn Road (1900 houses at Sniperley Park; and 420 houses at Sherburn Road). This will include comprehensive masterplanning and timely provision of infrastructure.

80 Questions:

- Will the provision of schools health, care and community facilities be sufficient to meet the health and wellbeing needs of current and future residents?
- Will an increase in noise created through the building process impact on resident's mental wellbeing?
- Will the developments impact on wellbeing and respiratory disease through the improvement of public transport and active travel?
- Will new roads impact on traffic noise?

Public representation

- 81 Social cohesion - Having existing services and routes in place from first occupation of a development was felt to support sustainable choices being made, increasing the potential for non-car trips and limiting the impacts of air pollution on health.
- 82 Changes in infrastructure - Residents expressed a desire for increased health care services like the provision of extra GP surgeries at sites of large developments.

Evidence

- 83 Changes in infrastructure – evidence in policy 5

Recommendations

- 84 Recommendation 6 - Ensure there is sufficient access to amenities and facilities as this could improve mental health and increase mobility and participation especially amongst older adults. Make it easy for all people to get around the development in line with the BFL guidance.
- 85 Recommendation 7 - Planning applications include a standard condition regarding operational hours for construction.

- 86 Recommendation 8 - Recommend promoting and prioritising sustainable modes of transport as a healthier approach. Provide suitable links to existing infrastructure such as Sniperley park and ride and ensure the scheme has good access to public transport to help reduce car dependency as highlighted in BfL. Consider how the development can maximise the number of homes with a short walk from the nearest public transport route.
- 87 Consider how the development can contribute towards encouraging more sustainable travel choices, i.e. bike racks, electric car charging etc.
- 88 Recommendation 9 - Consider buffer zones such as an earth bund around developments to limit the impact of noise from roads that may run the length of a development.

Policy 16, addressing housing need has the potential to impact on health in County Durham

Policy 16 Summary:

The policy sets out the proportions of new housing that should be affordable and suitable for older persons and those with specialist needs. This is dependent on the viability of the area, with the highest value areas having the largest percentage of housing units. The Strategic Housing Market Assessment (SHMA) update undertook an assessment of the shortfall in affordable housing in the county.

- 89 Questions:
- Will provision of affordable housing have an impact on mental health and wellbeing?
 - Will provision of housing suitable for older persons and those with specialist needs impact health and wellbeing?
 - Will provision of affordable housing affect social cohesion and impact on mental wellbeing?

Public representation

- 90 Housing and Health - At consultation, resident's highlighted challenges about new properties meeting the long term needs of modern family life including older adults with health issues. Also, it was identified that properties should be able to be adapted for when fit and healthy people experience failing health; particularly to allow for care to be provided at home for longer.

Health profile

91 Frailty

- The number of people aged 65 and over has increased nearly 30% over the last couple of decades and now represents one fifth of the county's resident population – this increase is predicted to continue.
- County Durham has an ageing population with over 105,000 people aged 65+ and over 12,000 aged 85 and over.
- There are over 2,000 emergency hospital admissions due to falls in 65 and overs per year
- There are around 600 hip fractures in 65 years + per year
- For the period 2013-16 there were over 1,000 excess winter deaths in County Durham, averaging at 335 deaths per year
- Over 55,000 of our GP registered population are estimated to have a common mental disorder (16-74 years)

92 Social cohesion

- Social cohesion as measured by proxy indicators is predicted to be good in County Durham compared to the national picture
- There is a lower level of population turnover in County Durham than England, 64 per 1,000 resident population compared to 100.7 per 1,000.

Evidence

93 Housing and frailty/health

- Hazards in the home and poor accessibility contribute to falls and accidents. (Age UK, 2014)
- The Building Research Establishment (BRE) estimate that poor housing costs the health service £600 million every year and that the total cost to society could be as high as £1.5 billion in 2012 (Building Research Establishment (BRE), 2010)
- Interventions to reduce hazards in the home can lead to improved social outcomes and reduce fall-related injuries among older adults (Public Health England, 2017)
- There is evidence to suggest that living in a warm and energy efficient property can improve general health outcomes, reduce respiratory conditions, improve mental health and reduce mortality. (Public Health England, 2017)
- Research carried out by the Marmot Review Team (Marmot Review team, 2011) found a significant correlation between cold temperature and cardiovascular and respiratory disease. There are also links with colds, flu and pneumonia, as well as arthritis. (Age UK, 2014)
- Cold can also affect mental health, which is likely to be exacerbated by worries about high energy bills. (Age UK, 2014)

- 94 Tenure and cohesion/mental health
- High quality and stable housing plays a large role in maintaining mental health and aiding recovery if someone has developed mental health problems (Mind, 2017)
 - People with mental health problems are much more likely to live in poor quality accommodation and are dramatically overrepresented amongst people who are homeless. They are also twice as likely as the general population to be unhappy with their housing and four times more likely to say that it makes their health worse. (Mind, 2017)
- 95 Given the strong evidence presented above we conclude that providing new housing of high quality for older persons is highly likely to result in improved mobility and independence (or reduced risks) and therefore likely to positively impact on reducing frailty and associated health outcomes for older people in County Durham.

Recommendations

- 96 Recommendation 10 - Recommend considering health outcomes within the SHMAA process to assist with identifying current and future need.
- 97 Consider the design of homes which reduces possible hazards and minimises the likelihood of falls. Create warm and energy efficient homes, which can improve general health and may reduce the impact of respiratory conditions.
- 98 Create walkable and physically active neighbourhoods in line with BfL recommendations to help promote and maintain levels of physical activity. Ensure amenities are accessible.

Community cohesion

- 99 Recommendation 11 - Develop mixed use development that are reflective of local need as recommended in BfL, taking into consideration the health profiles of the area.
- 100 Ensure connected streets, accessible amenities and consider community facilities being provided early in a development to help maximise the opportunities for healthy behaviour change.

Affordable housing

- 101 Recommendation 12 - Endorse the policy to allocate affordable housing due to its positive impact upon mental wellbeing and improved quality of life.
- 102 Endorse efforts for mixed use developments which could create a sense of community, improve a sense of cohesion and create a physically active neighbourhood.
- 103 Explore the pooling of affordable housing so that it can be allocated on a countywide as supposed to a development basis.

104 Endorse the scheme to bring empty properties back up to 'better homes standard'.

Policy 17: Durham University refurbishment of existing buildings, allocated sites for development and restrictions on HMOs

Summary:

Part one of the policy relates to the Durham University Masterplan. It sets out the criteria by which planning permission for new University facilities and the refurbishment of existing buildings will be permitted. The policy allocates purpose built student accommodation sites too and sets out restrictive criteria towards additional purpose built accommodation. Part 3 of the policy is also restrictive towards houses in multiple occupation (HMOs) in order to maintain mixed and cohesive communities. It uses a threshold of 10% of Class N student exempt council tax properties within 100 metres of the application site.

105 Questions:

- Will restrictions on HMOs and policies for new development improve community cohesion through limiting noise and litter?
- Will the increase in the student population reduce health care provision and impact on sexual health service access and health outcomes?

Public representation

106 Change in community cohesion - Health and safety in residential areas around HMOs, with proper waste management and the hazards caused by this a concern of local residents.

Evidence

107 'Following the expansion of higher education in the 1990s, there have been increasing concerns amongst residents in some areas that the growing number of students living in the private rented sector has resulted in more rubbish and litter, noise, antisocial behaviour, poor housing quality and feelings of a 'loss of community and neighbourhood' (Universities UK/NUS/Distinction and diversity in higher education, 2010).

Recommendations

- 108 Recommendation 13 - Endorse approach to Houses of Multiple Occupancy (HMOs) to avoid over concentration. Recommend promoting the landlord accreditation scheme.
- 109 Endorse the references to waste recycling in order to minimise the impact of litter. Endorse the references to the Car Parking and Accessibility Guidelines. Consider all opportunities to promote and provide opportunities for sustainable travel.
- 110 Recommendation 14 - Work closely with Durham University to address the health needs of the student population.
- 111 Endorse the references to the Car Parking and Accessibility Guidelines. Consider all opportunities to promote and provide opportunities for sustainable travel. In relation to PBSA consider how build may incorporate cycle racks, cycle storage, and attractive visible signed stairwells, in order to support an active lifestyle and promote good health.

Policy 24: Transport measures to relieve the highway network including Northern and Western Relief Roads

Summary:

Sets out the transport measures to relieve existing highway network problems, improve air quality and road safety issues, facilitate growth and improve the historic environment around Durham City, including demand management measures; re-allocation, sharing and creation of highway space; and the provision of a Northern Relief Road and a Western Relief Road.

- 112 Question:
Will removing green space impact on physical and mental wellbeing?

Public representation

- 113 At public consultation residents raised challenges about access to green space and how new roads may compromise this. They cited exercise, as well as mental health and wellbeing as current benefits from the access to green space and expressed concerns that this may be compromised by the proposals set out in policy 24.

Evidence

- 114 Change in green space – see evidence summary in policy 4

Recommendations

- 115 Recommendation 15 - Improve the existing green space and work with communities on any recreational routes that may be impacted by any new schemes. Consider all opportunities to offer alternative access to the natural environment.
- 116 Seek to prioritise cycling/walking infrastructure in order to promote physical and mental wellbeing.
- 117 Recommendation 16 - Seek to prioritise cycling/walking infrastructure in order to promote physical and mental wellbeing and ensure they align to the principles of BfL.
- 118 Support the work of Environmental Health on air quality and efforts to promote sustainable modes of transport.

Policy 51: Meeting the Need for Primary Aggregates

Summary:

Supports making sufficient land available for mineral working to enable the maintenance of a steady and adequate supply of primary aggregates. Identifies further need for Carboniferous Limestone and sets out the locational approach to the working of Magnesian Limestone, Carboniferous Limestone, Dolerite and Sand and Gravel. No new or extended working areas for magnesian limestone will be permitted on the East Durham Limestone Plateau for aggregate, high grade purposes, or for agricultural lime production. The policy prioritises basal Permian sand extraction under existing magnesian limestone quarries, followed by the lateral extension of existing magnesian limestone quarries. For dolerite, proposals for new working will only be permitted provided that proposals do not adversely impact upon the North Pennines AONB, Special Areas of Conservation or Special Protection Areas. No minerals allocations are made by this policy. Government policy requires that we ensure that a large landbank bound up in very few sites should not stifle competition.

119 Questions:

- Will increased traffic impact levels of injury and non-communicable diseases?
- Will changes in air quality impact upon non-communicable disease?

Evidence

- 120 Change in traffic – See evidence summary in policy 4

- 121 Change in employment - In general, good work is beneficial to health and well-being. Employment provides a monetary reward, but also non-financial gains, to the worker. These additional benefits include social identity and status; social contacts, support and involvement; a means of structuring and occupying time; and a sense of personal achievement'. (Royal College of Psychiatrists - Masood Khan and Dr Jed Boardman, 2017)
- 122 'For every 10 per cent increase in older people suffering deprivation, life expectancy falls by six months; for a 10 per cent increase in employment deprivation (those involuntarily unemployed), life expectancy is a year lower.' (The King's Fund, 2015)

Local profile

- 123 Change in employment - The latest figures (2017/18) estimate that 71.2% of the county's 16 to 64 population are employed. This is slightly higher than the regional level (71.0%) but lower than national levels (75.1%). To achieve national levels of employment an additional 12,700 people of working age in County Durham would need to enter employment. This could be achieved if some of those people currently economically inactive and wanting a job (17,400 people) were to enter employment. The employment rate in County Durham for those with an Equality Act (EA) core or work limiting disability is 44.2%, much lower than the rate for those without a disability (80.6%).

Recommendations

- 124 Recommendation 17 - Transport and environmental assessments will explore whether as part of a major development an HIA is required as part of the mineral extraction policy.
- 125 Continue to lobby for the Leamside line as an alternative mode of transport and explore the feasibility mechanisms to transport minerals i.e. rail, sea,
- 126 Update the Technical Advice Notes for noise, dust, light.
- 127 Recommendation 18 - Continue efforts to minimise or remove exposure to air pollutants.

Local employment

- 129 Will local employment opportunities effect mental wellbeing? Recommendation 19 - Every new application considers employment or training opportunities through the Targeted Recruitment and Training policy.

Policy 58: Preferred Area for Future Carboniferous Limestone Extraction

Summary:

In order to assist in the steady and adequate supply of carboniferous limestone and the delivery of Policy 51 (Meeting the Need for Primary Aggregates) a Preferred Area for carboniferous limestone working is allocated as an eastern extension to Hulands Quarry in Teesdale. Subject to planning permission being granted, this allocation would enable this quarry to make a significant contribution to the identified need for further carboniferous limestone working from County Durham over the plan period. In addition the carboniferous limestone produced at this quarry will provide a source of aggregate to produce coated roadstone and ready mixed concrete products.

130 Question:

- Will loss of green space impact upon mental wellbeing and non-communicable disease?

Evidence

131 See green space evidence in policy 4.

Recommendations

132 Recommendation 20 - Consider a restoration of mineral sites SPD. Consider how any impacts Rights of Way can be mitigated by improvements to the current infrastructure which may provide increased connectivity for local communities.

Monitoring

133 Periodic monitoring will allow the steering group to re-group and assess the implementation and impact of the recommendations. The impact upon health outcomes will be monitored primarily through the Public Health England public health outcomes framework.

134 Enhanced partnership working has been acknowledged as a positive impact across the steering group. Using the HIA as a mechanism to raise the profile of the impact of the built and natural environment upon health has been useful to gain greater support for healthier public policy.

Conclusion

135 Assessing the health impacts of different policies and collaborations between health and planning colleagues has helped to ensure that health considerations are integrated into planning across all departments. This will ensure that health benefits are realised across the broad spectrum of local authority functions, rather than remaining as individual strands of good practice.

136 The HIA process has considered further opportunities to provide good jobs and places to live, learn and play in County Durham.

Appendix 2

Terms of Reference

County Durham Plan Preferred Options 2018 – Health Impact Assessment Steering Group

Aim

The group members will be responsible for the delivery of the Health Impact Assessment.

Remit

The group will plan and deliver agreed actions to ensure that the six steps of a Health Impact Assessment are completed comprehensively and on time. The following set of principles will be adopted:

- A holistic definition of health and wellbeing is adopted (physical and mental health)
- Ensure preventing ill-health (primary prevention) and creating conditions for good health is given a priority.
- Aim to develop positive working relationships across service groupings and support the development of HIA skills amongst members
- Aspire to meaningful engagement and participation of our communities
- Promoting HIA as a product to add value to other key policies and plans in the future

Objectives

- Ensure that there a comprehensive consideration of health and wellbeing is embedded in the next stage of the County Durham Plan process
- To enhance opportunities for positive health impacts and reduce negative impacts
- Deliver a set of clear recommendations to the County Durham Board and seek endorsement from the Health and Wellbeing Board.

Membership

Membership of the group will consist of representation within Durham County Council from:

- Public Health
- Research and Intelligence
- Spatial Policy
- Climate Change and Sustainability
- Area Action Partnerships

Where permanent members feel that expertise or topic specific knowledge is required, experts may be invited to sit on group for a limited period.

Members are expected to act as a two way conduit for information and actions.

Working arrangements

- All permanent members will be given protected time from their line managers to deliver against their designated tasks
- Group meetings will be at least fortnightly and weekly when required
- Each meeting will consider an action log against the agreed work plans
- The action log will form the agenda and will be circulated two working days before the meeting
- If members are not able to attend, a fully briefed representative will attend on their behalf
- The group will be chaired by Chris Woodcock, Public Health Strategic Manager and vice chair Katie Dunstan-Smith, Research and Intelligence

Accountability arrangements

- The County Durham Plan HIA steering group will be accountable to the County Durham Plan Board.
- Report will be submitted in a timely manner to the Board to meet the deadlines agreed in the HIA scoping report.

Date agreed: 22 June 2018

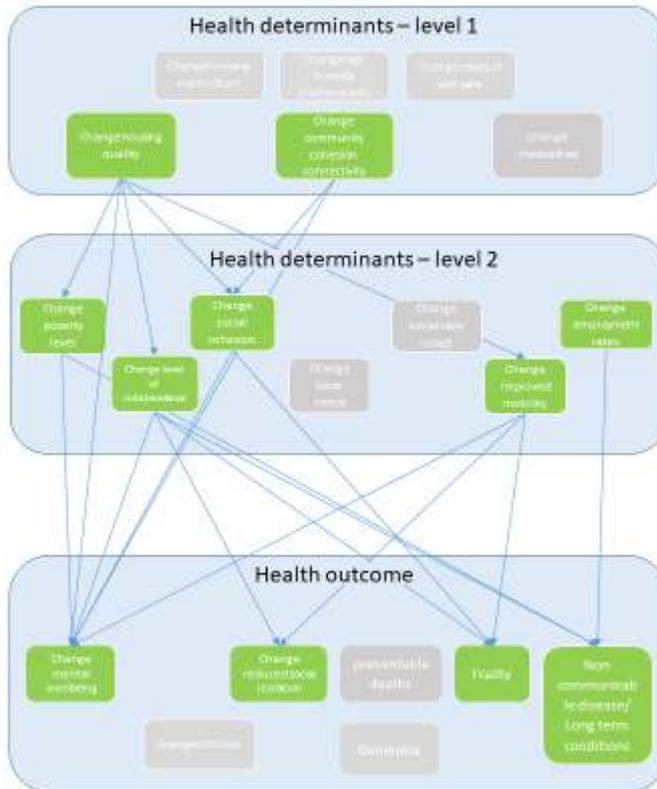
Appendix 3 – Example Second Stage Screening

		1	
		Addressing Housing Need	
		16	
		For HIA	Against HIA
Health Impacts	Does the initiative affect health directly?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> not sure	<input type="checkbox"/> No
	Does the initiative affect health indirectly?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> not sure	<input type="checkbox"/> No
	Are there any potentially serious negative health impacts that you currently know of?	<input type="checkbox"/> Yes <input type="checkbox"/> not sure	<input checked="" type="checkbox"/> No
	Is further investigation necessary because more information is required on the potential health impacts?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> not sure	<input type="checkbox"/> No
	Are the potential health impacts well known and is it straightforward to suggest effective ways in which beneficial effects are maximised and harmful effects minimised?	<input type="checkbox"/> No	<input type="checkbox"/> Yes
	Are the potential health impacts identified judged to be minor?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
Community	Is the population affected by the initiative large?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> not sure	<input type="checkbox"/> No
	Are there any socially excluded, vulnerable, disadvantaged groups likely to be affected?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> not sure	<input type="checkbox"/> No
	Are there any community concerns about any potential health impacts?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> not sure	<input type="checkbox"/> No
Initiative	Is the size of the initiative large?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> not sure	<input type="checkbox"/> No
	Is the cost of the initiative high?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> not sure	<input type="checkbox"/> No
	Is the nature and extent of the disruption to the affected population likely to be major?	<input type="checkbox"/> Yes <input type="checkbox"/> not sure	<input checked="" type="checkbox"/> No
Organisation	Is the initiative a high priority/important for the organisation/partnership?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	Is there potential to change the proposal?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total (count ticks)		11	2

Appendix 3 Scoping driver diagrams

Policy 16: Addressing housing need

Policy Outcome: A percentage of affordable homes and those meeting the needs of older people in new developments. Support for the development for specialist housing



Appendix 4 Evidence summaries

Access to employment opportunities impacts upon health

Mental Health

- In general, good work is beneficial to health and well-being (Waddell & Burton, 2006). Employment provides a monetary reward, but also non-financial gains, to the worker. These additional benefits include social identity and status; social contacts, support and involvement; a means of structuring and occupying time; and a sense of personal achievement. [1]

Inequalities

- For every 10 per cent increase in older people suffering deprivation, life expectancy falls by six months; for a 10 per cent increase in employment deprivation (those involuntarily unemployed) life expectancy is a year lower. [2]

Change in social isolation

- Having fewer local connections disproportionately affected men, who accounted for 63% of the isolated group. Another significant finding was that 50% of unemployed people were socially isolated, though it was uncertain whether this was due to income deprivation or loss of contacts due to unemployment, or both. Key aspects of social networks highlighted by the RSA survey relate to the power to influence one's own individual circumstances (for example with respect to employment or housing). A major benefit of social networks is the empowerment of individuals; conversely, disconnection from networks of influence signals disempowerment. [3]

References

- [1] Royal College of Psychiatrists - Masood Khan and Dr Jed Boardman, "Employment and mental health," 2017. [Online]. Available: <https://www.rcpsych.ac.uk/files/pdfversion/OP101.pdf>. [Accessed 2018].
- [2] The King's Fund, "Inequalities in life expectancy Changes over time and implications for policy," 2015. [Online]. Available: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/inequalities-in-life-expectancy-kings-fund-aug15.pdf. [Accessed 2018].
- [3] Public health England/UCL institute of Health Equity, "Local action on health inequalities Reducing social isolation across the lifecourse," 2015. [Online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/461120/3a_Social_isolation-Full-revised.pdf. [Accessed 2018].

Access to healthcare facilities, schools and community facilities impacts on health

Healthcare facilities

- Good access to general practice reduces pressure on other parts of the NHS, particularly hospital accident and emergency (A&E) departments. This helps the health system to make the best use of its resources. Research has estimated that in 2012-13, 5.8 million patients attended A&E or walk-in centres because they were unable to get an appointment or a convenient appointment in general practice. We estimated that a typical consultation in general practice costs £21, whereas hospitals are paid £124 for a visit to A&E [1]
- Deprived areas tend to have a lower ratio of GPs and nurses to patients, and where the ratio is lower it is harder for patients to get appointments. The distribution of general practice staff across the country does not reflect need. NHS England allocates funding to local areas using weighted populations that reflect factors such as demographics, health needs and local costs. Despite this inequalities remain, with the combined number of GPs and nurses in each local area ranging from 63 to 114 per 100,000 weighted population. Patients living in more deprived areas had, on average, a lower ratio of general practice staff to patients and, unsurprisingly, we found that it was harder to book and access appointments where the ratio of staff to patients was lower. However, the gap between ratios of general practice staff to patients in the most and least deprived areas has narrowed since 2010 [1]
- Coastal and rural Durham has been nationally identified as an area that struggles to recruit GP trainees and is now part of the national targeted enhanced recruitment scheme.
GP training directors identified those areas with consistently low fill rates over the last three years. [2]

Schools

Active travel

- Increase access to facilities and amenities: Long distance trips have been identified as having a potentially negative impact on walking and cycling and social engagement. Mixed land use developments that prioritise access to schools, recreational centres and social amenities may increase physical activity among children, adolescents and older adults. The provision of local amenities may improve mobility and social engagement among older adults. [3]
- Increasing how much someone walks or cycles may increase their overall level of physical activity, leading to associated health benefits. These include: Reducing the risk of coronary heart disease, stroke, cancer, obesity and type 2 diabetes. Keeping the musculoskeletal system healthy. Promoting mental wellbeing. An increase in walking or cycling can also help: Reduce car travel, leading to reductions in air pollution, carbon dioxide emissions and congestion. Reduce road danger and noise. Increase the number of people of all ages who are out on the streets, making public spaces seem more welcoming and providing opportunities for social interaction. Provide an opportunity for everyone, including people with an impairment, to participate in and enjoy the outdoor environment. [4]

Community Facilities

- Improving access is likely to lead to greater mobility of the population, as well as improving health, mental and physical wellbeing. The Institute of Public Policy Research (IPPR) estimates that nationally, almost one in five over 75 year olds say that they 'felt lonely much of the time during the last week'. The report also suggests that more than one million older people feel trapped in their own home. Furthermore, a report by disability charity, Sense, found that over half of disabled people (53%) report of feeling lonely. Common barriers to reducing social isolation were problems with mobility and being able to get to community facilities. [5]

References

- [1] National audit office , "Stocktake of access to general practice in England," 2015. [Online]. Available: <https://www.nao.org.uk/wp-content/uploads/2015/11/Stocktake-of-access-to-general-practice-in-England-Summary.pdf>. [Accessed 2018].
- [2] Health education England, "GP recruitment - targeted enhanced recruitment," 2017. [Online]. Available: <https://gprecruitment.hee.nhs.uk/recruitment/TERS/England>. [Accessed 2018].
- [3] Public Health England, "Spatial Planning for Health An evidence resource for planning and designing healthier places," 2017. [Online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729727/spatial_planning_for_health.pdf. [Accessed 2018].
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- [5] MOTT Macdonald Limited , "South Wales Metro - Rapid Health Impact Assessment," 2017. [Online]. Available: https://tfw.gov.wales/sites/default/files/documents/Rapid%20Health%20Impact%20Assessment_2.pdf. [Accessed 2018].

Affordable housing impacts on inequalities in health, self-care, use of social care and social cohesion

Overview

- Children are more likely to live in overcrowded housing than working-age adults and pensioners (Department for Communities and Local Government 2015). This relates particularly to children living in low income families. Evidence suggests that children living in cold, overcrowded or unsafe housing are more likely to be bullied, to not see friends, to have a longstanding health problem, disability or infirmity and be below average in key academic areas as a direct consequence of living in poor-quality housing. [1]
- If someone has developed a mental health problem, high quality and stable housing is key to maintaining good mental health and is important for recovery (Mental Health Taskforce, 2016). However, people with mental health problems are much more likely to live in poor quality accommodation (Kyle & Dunn, 2008) and are dramatically overrepresented amongst people who are homeless (Rees, 2009). They are also twice as likely as the general population to be unhappy with their housing and four times more likely to say that it makes their health worse (Social Exclusion Unit, 2004) [2]
- Provision of abstinent housing 1 was found to be effective in supporting housing status, substance abuse relapse, engagement with health services, and improved

psychiatric outcomes than non-abstinent housing or no housing. There is evidence from the UK for the positive impact of the provision of dispersed housing 1 for people with intellectual disability on quality of life outcomes, when compared with clustered housing (Mansell & Beadle-Brown, 2009). There is support for an association between the provision of affordable, secure tenancy and improved health outcomes among inadequately housed people living with HIV/AIDS. Positive outcomes include engagement with health services, improved psychiatric outcomes, sustained viral suppression, and reduced engagement in risky sexual behaviours (Aidala et al., 2016; Fitzpatrick-Lewis et al., 2011; Leaver et al., 2007). There is moderate quality evidence reporting that provision of affordable, secure tenancy for the homeless living with severe and persistent mental illness can lead to improved mental health, healthcare utilisation and quality of life outcomes. However, the impact of such interventions for those who are housed but living in a precarious housing situation remains unclear (Kyle & Dunn, 2008; Nelson, Aubry & Lafrance, 2007). [3]

- Provision of mixed-use affordable housing: The provision of mixed land use and affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among individuals from low-income groups. However, the impact of such housing provision on improving health outcomes and reducing health inequalities is unclear. [3]

References

- [1] The King's fund, "Housing and health Opportunities for sustainability and transformation partnerships," 2018. [Online]. Available: https://www.kingsfund.org.uk/sites/default/files/2018-03/Housing_and_health_final.pdf. [Accessed 2018].
- [2] Mind, "Brick by brick A review of mental health and housing," 2017. [Online]. Available: <https://www.mind.org.uk/media/17947884/20171115-brick-by-brick-final-low-res-pdf-plus-links.pdf>. [Accessed 2018].
- [3] Public Health England, "Spatial Planning for Health An evidence resource for planning and designing healthier places," 2017. [Online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729727/spatial_planning_for_health.pdf. [Accessed 2018].

Changes in green space impact the environment

Flooding

- These goods and services are significant – for example the NEA demonstrated that our coastal wetlands can be valued at providing £1.5 billion annually in benefits through buffering the effects of storms and managing flooding. Historically such values have been taken for granted, but this cannot continue. This is why Government is committed to doing more to reflect the true economic value of biodiversity and its constituent ecosystems in our decisions and policies. [1]
- Green spaces can act as a natural floodplain, reducing surface run off after rains through infiltration, absorption and evapotranspiration (the sum of evaporation and plant transpiration). Increasing the quantity and quality of green spaces can reduce risk of surface water and fluvial flooding. Modelling based upon Manchester data estimates that increasing green cover by 10% in urban residential areas reduces run off during heavy rainfall by 4.9%. Increasing tree cover by 10% reduces the run off by 5.7%. [2]

Biodiversity

- Green Belts as places which are rich in biodiversity.... healthy natural environment contributing positively to the ecosystem services required to support life. The UK Biodiversity Action Plan identifies the most important habitats for nature conservation. Of those that are mapped, 13% of the area covered occur within the Green Belt [3]

References

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Exposure to dust/contamination related to opencast mining impacts upon health

Overview

- A study examining the effects of opencast mining on children's health (PlessMulloi 2000) found that children in opencast communities has significantly more GP consultations for respiratory illness within the study period than children in control communities and whilst no significant association was found between living in an opencast community and the rate of consultation for any reason, the odds of respiratory, eye and skin consultations and respiratory consultations were around 40% respectively higher in the majority of opencast communities considered in the study . There was little evidence of an association between living in an opencast community and the cumulative prevalence of wheeze, asthma or bronchitis or the period prevalence of exposure effects asthma attacks and their severity. Children in opencast communities were exposed to a small but significant amount of additional PM10, to which the opencast mines were a measureable contributor and small but significant associations were found between daily respiratory symptoms and daily concentrations of PM10. Research by Howell et al (2001) found that the association between PM10 levels and prevalence and incidence of respiratory morbidity were generally positive with the proportion of shale particles and PM10 levels higher in samples from opencast communities. The specific health effects for all particulates are believed to be: Short term exposure: lung inflammatory reactions, respiratory symptoms, adverse effects on the cardiovascular system, increase in medication usage, increase in hospital admissions and increase in mortality. Long term exposure: increase in lower respiratory symptoms, reduction in lung function in children, increase in Chronic Obstructive Pulmonary Disease, reduction in lung function in adults and reduction in life expectancy [1]

Access to Green Space Impacts upon Health

Non communicable disease

- These findings are supported by further review level evidence, drawn from the UK and other high and middle-income countries, in which access to green or open spaces has been shown to be associated with improved mental health outcomes [1] [2]
- Reduction of CVD mortality risk associated with increased residential greenness [2] [3]
- Use of green spaces is associated with: a decrease in health complaints, improved blood pressure and cholesterol levels, reduced stress, improved general health perceptions and a greater ability to face problems [4]

Change in activity Levels

- Urban environments that lack public gathering places can encourage sedentary living habits, while the provision of attractive parks and open spaces can facilitate opportunities for exercise [5]
- The likelihood of being physically active may be up to three times higher in residential environments that contain high levels of greenery, and the likelihood of being overweight or obese may be up to 40% less [5]
- The links between access to green space and levels of physical activity are well-established in research, which shows higher levels of physical activity in areas with more green space.¹⁰ Estimates suggest that an inactive person is likely to spend 37% more time in hospital and visit the doctor 5.5% more often than an active person.¹¹ In 2007, physical inactivity was estimated to cost the NHS between £1 billion and £1.8 billion. [5]

Social capital

- Based on evidence gathered together by Public Health England, the Institute of Health Equity at University College London has concluded that increases in the use of good-quality green spaces by all social groups is likely to improve health outcomes and reduce health inequalities, and can also bring other benefits such as greater community cohesion and reduced social isolation. [6]
- High-quality natural green open spaces of different sizes are easy to get to from dwellings –for example, no-one should live more than 300 metres from their nearest area of natural green space of at least two hectares in size. [7]

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Housing impacts on health

Overview

- It is estimated that 20% of the UK's housing stock does not meet decent home standard and that the cost to the NHS of poor quality housing is £2.5 billion per annum (BRE, 2010). [1] [2]
- There is evidence to suggest that living in a warm and energy efficient property can improve general health outcomes, reduce respiratory conditions, improve mental

health and reduce mortality (Gibson et al., 2011; Krieger et al., 2014; Thomson et al., 2009; Thomson et al., 2013; WHO 2005) [1]

Children

Pregnancy and early development

- Homelessness and temporary accommodation during pregnancy are associated with an increased risk of preterm birth, low birth weight, poor mental health in infants and children, and developmental delay (Stein and Gelberg 2000; Richards et al 2011, cited in NSPCC undated). [3]

Non communicable diseases

- Children living in cold homes are twice as likely to develop respiratory problems as those in warm homes and there are clear effects of fuel poverty on the mental health of adolescents (Marmot Review Team 2011). [3]
- Children living in overcrowded and unfit conditions are more likely to experience respiratory problems such as coughing and asthmatic wheezing. For many children this means losing sleep, restricted physical activity, and missing school. [4]
- Overcrowded conditions have been linked to slow growth in childhood, which is associated with an increased risk of coronary heart disease in later life. [4]

Communicable diseases

- Children in overcrowded housing are up to 10 times more likely to contract meningitis than children in general. Meningitis can be life threatening. Long-term effects of the disease include deafness, blindness and behavioural problems.
- There is a direct link between childhood tuberculosis (TB) and overcrowding. TB can lead to serious medical problems and is sometimes fatal. [4]

Injuries

- Poor-quality and overcrowded housing is associated with increased prevalence of injuries in children (RoSPA undated a) [4]
- Almost half of all childhood accidents are associated with physical conditions in the home. Families living in properties that are in poor physical condition are more likely to experience a domestic fire. [4]

Older adults

Injuries

- Hazards in the home and poor accessibility contribute to falls and accidents. [5]
- Costs to the health service The Building Research Establishment (BRE) estimate that poor housing costs the health service £600 million every year and that the total cost to society could be as high as £1.5 billion.²⁷ In 2012 [5]
- improvements to residential lighting and interventions to reduce hazards in the home can lead to improved social outcomes and reduce fall-related injuries among older adults (Bambra et al., 2010; McClure et al., 2008) [6] [1]

Non communicable diseases

- Research carried out by the Marmot Review Team [7] found a significant correlation between cold temperature and cardiovascular and respiratory disease. There are also links with colds, flu and pneumonia, as well as arthritis. [5]
- Cold can also affect mental health, which is likely to be exacerbated by worries about high energy bills. [7] [5]

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Traffic Impacts upon Health and Community cohesion

Overview

- Each year in the UK, around 40,000 deaths are attributable to exposure to outdoor air pollution, with more linked also to exposure to indoor pollutants. [1]
- Road transport accounts for 31% of nitrogen oxides (NOx), 19.5% of PM2.5 and 18% of PM10 UK emissions. [2]

Children

- Peak times for pollution caused by traffic can coincide with times when children are walking or cycling to school. [3]

Non communicable diseases

- Evidence collated by Defra, Public Health England and the Local Government Association shows that short-term exposure to high levels of air pollution can cause a range of adverse health effects including exacerbation of asthma, effects on lung function, increases in hospital admissions and mortality. A review by the World Health Organization concludes that long-term exposure to air pollution reduces life expectancy by increasing deaths from lung, heart and circulatory conditions. [4]

Noise

- The impacts on health can be difficult to quantify particularly when noise levels cause annoyance rather than actual damage to hearing. This is partly due to the subjective nature of annoyance which includes personal preferences and tolerance levels. A report on noise effects and illness showed a causal chain between health, annoyance and illness but the links were mainly associated with how the individual experiences the noise and the control they exert over their environment. Other research has found noticeable differences between annoyance impacts on different age groups. For adults, the main symptoms included depression and impacts on the cardiovascular, respiratory and musculo-skeletal systems. The main symptom experienced by the elderly population was an increase in stroke, while for children the effects of noise were primarily seen in respiratory symptoms. Night time noise is thought to be particularly problematic as it can affect sleep with subsequent impacts on health. Furthermore, research in the UK found that noise levels contributed to an exacerbation of asthma where city dwellers were unable to sleep with their window open because of noise [5]

Community cohesion

- All aspects of perceived liveability—absence of noise, stress, and pollution; levels of social interaction, territorial extent, and environmental awareness; and safety—were found to correlate inversely with traffic intensity. Traffic increases were also accompanied by the departure of families with children from these streets. (San Francisco) [6]
- The results confirmed that Appleyard's findings are applicable to the UK in the 21st century; specifically that the number of friends and acquaintances reported by residents was significantly lower on streets with higher volumes of motor traffic. The extent of people's home territories also diminished as motor traffic increased. Other notable outcomes from the research include the finding that individuals' perceptions of road safety in their neighbourhood may be disproportionately influenced by the

traffic conditions on their street of residence, especially affecting the degree of independence granted to children. (Replication of the above in Bristol.) [7]

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University development; health needs and social cohesion

Social cohesion

- Following the expansion of higher education in the 1990s, there have been increasing concerns amongst residents in some areas that the growing number of students living in the private rented sector has resulted in more rubbish and litter, noise, antisocial behaviour, poor housing quality and feelings of a 'loss of community and neighbourhood'. [1]

Mental health

- Over the past 10 years, there has been a significant increase in the number of first-year students who disclose a mental health condition to their HEI (see figure 4.1). In 2015/16, there were 15,395 UK-domiciled first-year students at HEIs in the UK who disclosed a mental health condition – almost five times the number in 2006/07 (3,145). [2]

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Appendix 5 County Durham Health Profile

County Durham Health Profile

County Durham is the seventh largest authority in England, lying at the heart of the North East region. It covers a total area of 862 square miles with a variety of landscapes rich in wildlife, attractive countryside, villages, historic towns and coastline. It is home to around 523,000 people. County Durham shares many of the problems of the North of England, arising from a long-term pattern of sectoral change and industrial decline. It also has unique challenges arising from its legacy of scattered industrial settlements, and its lack of large urban areas to drive growth.

The footprint of the Local Authority is coterminous with two Clinical Commissioning Groups (CCGs); North Durham CCG and Durham Dales, Easington and Sedgefield CCG. These can be further subdivided into six clinical commissioning localities/constituencies. AAPs have been set up to give people in County Durham a greater choice and voice in local affairs. The 14 partnerships allow people to have a say on services, and give organisations the chance to speak directly with local communities. AAP actions and spending are linked to the needs of local communities and focus on issues important them.

The health and wellbeing of the people in County Durham has improved significantly over recent years, but remains worse than the England average. Health inequalities remain persistent and pervasive. Levels of deprivation are higher and life expectancy is lower than the England average. There is also inequality within County Durham for many measures (including breastfeeding, babies

born to mothers who smoke, childhood obesity and premature deaths). The impact of this becomes obvious when looking at life expectancy; a child born today in the most deprived areas of County Durham could expect to live between 7 and 8 years less than one born in the least deprived areas.

General attributes of the population (including size, density, age, gender, income and employment, socio-economic status etc.)

The county, though commonly regarded as a predominantly rural area, varies in character from remote and sparsely populated areas in the west, to the former coalfield communities in the centre and the east, where villages tend to accommodate thousands rather than hundreds. Around 90% of the population lives east of the A68 road in approximately half of the county by area.

The 2017 Office for National Statistics (ONS) mid-year estimate of population for County Durham was 523,662. Between 2001 and 2017 the population of County Durham increased by 30,000 people (6.1%) with the North East increasing by 4.1% over the same period. These latest estimates show that the county's population has grown in number for each of the last 14 consecutive years. ONS predict (2016 projections) that the county's population will continue to grow over the coming years, increasing by 3.0% by 2026 and by 5.6% overall by 2041.

- There are around 28,000 children under 5 years old living in the county and over 100,000 under 18s.
- Unlike the national trend, the county has seen a gradual fall in the number of its children and young people since 2001.
- However, the number of pre-school children aged 0 to 4 is projected to increase by 3% by 2039.
- There are around 316,000 people of working age (18-64) living in County Durham and this is predicted to decline by over 2% by 2039.
- County Durham has an ageing population with over 105,000 people aged 65+ and over 12,000 aged 85 and over.
- The number of people aged 65 and over has increased nearly 30% over the last couple of decades and now represents one fifth of the county's resident population – this increase is predicted to continue.

Employment/income

The latest figures (2017/18) estimate that 71.2% of the county's 16 to 64 population are employed. This is slightly higher than the regional level (71.0%) but lower than national levels (75.1%). To achieve national levels of employment an additional 12,700 people of working age in County Durham would need to enter employment. This could be achieved if some of those people currently economically inactive and wanting a job (17,400 people) were to enter employment. The employment rate in County Durham for those with an Equality Act (EA) core or work limiting disability is 44.2%, much lower than the rate for those without a disability (80.6%).

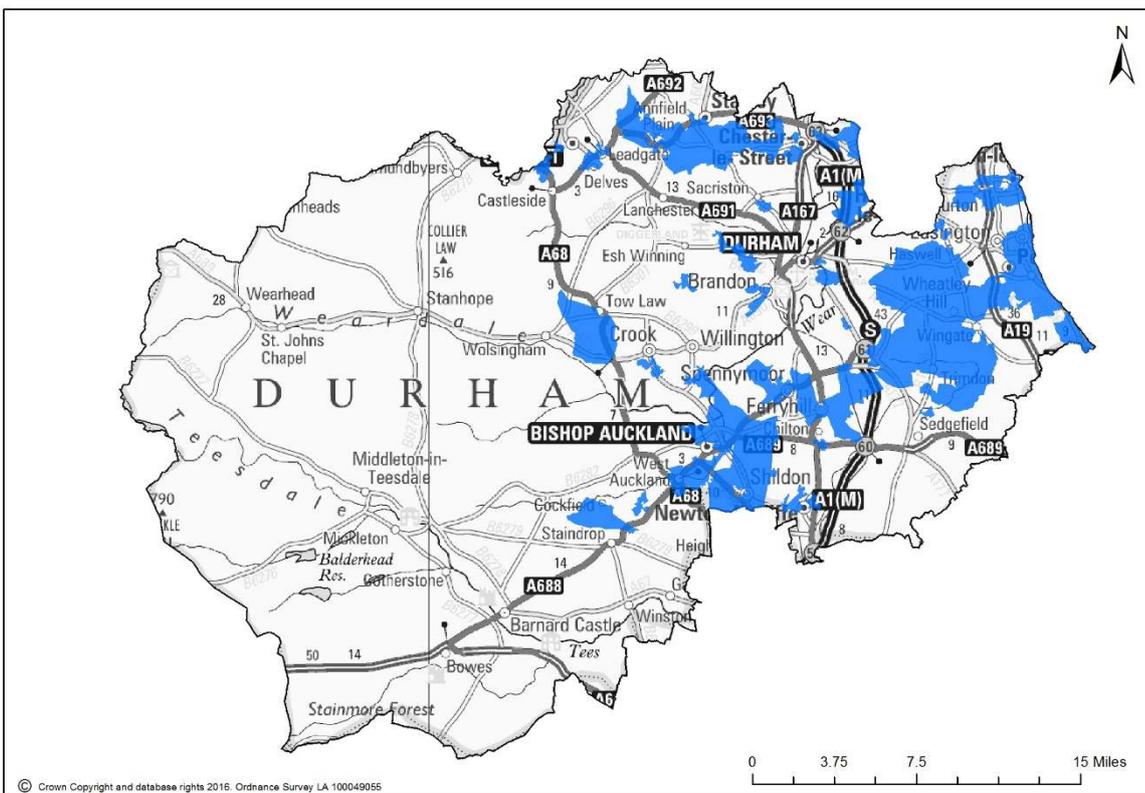
Latest data from NOMIS (for 2017) states that over 25,000 people in County Durham are economically inactive due to long term sick. That's almost 33% of all those economically inactive (aged 16-64), compared to 27.5% in the North East and 21% in England. Unemployment and

economic inactivity play a significant role in increasing poverty, social isolation and loss of self-esteem. These issues also decrease psychological wellbeing, physical health and mental health and wellbeing.

In County Durham, weekly gross pay for full-time workers has increased from £387.80 in 2008 to £492.20 in 2017, an increase of 27%. However, this equates to £71.50 per week below the UK and £22.80 per week below the North East per week.

Deprivation

County Durham experiences higher levels of deprivation than the national average. Over 40% of our population live in relatively deprived areas (43% of County Durham's Lower Super Output Areas (LSOAs) are in the 30% most deprived nationally). The variation in County Durham is shown on the map below.



It should be noted that pockets of relative deprivation exist across the County, even in more relatively affluent areas such as Durham and Chester-le-Street.

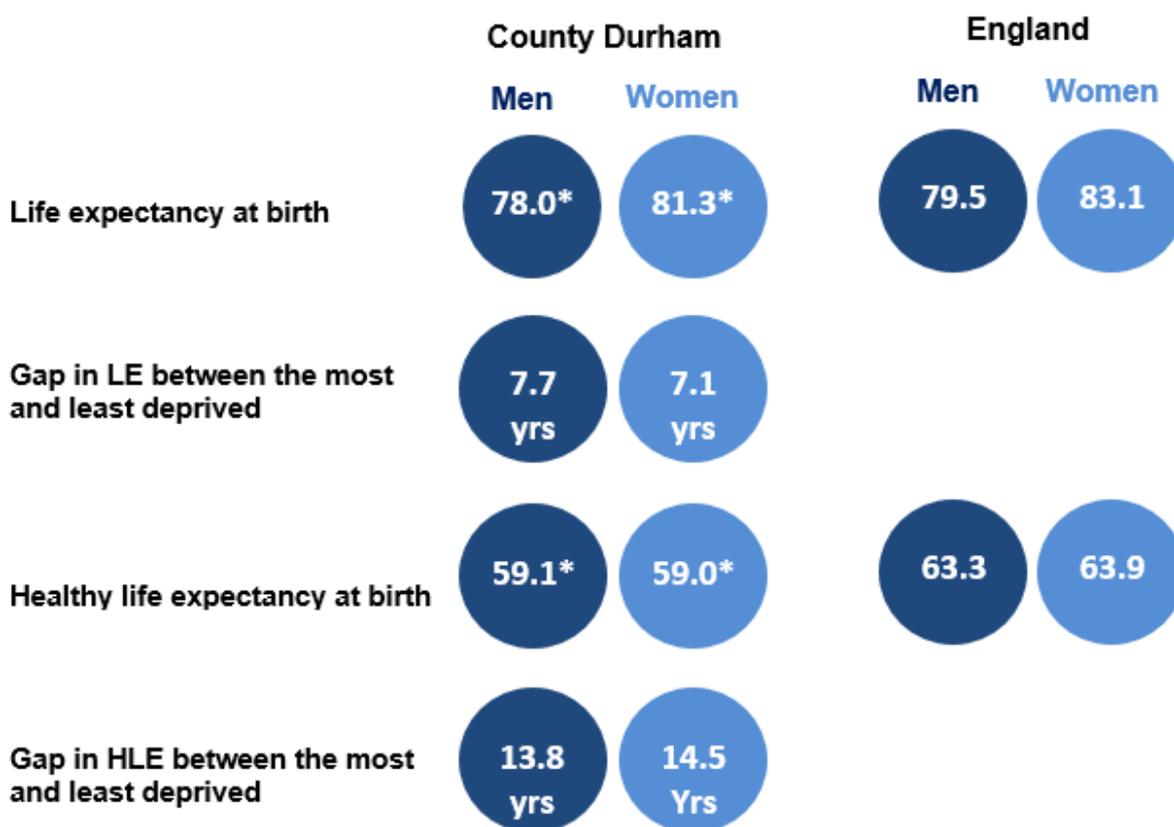
Health status, particularly of the population groups already identified as vulnerable and likely to benefit or be harmed by the proposal

Too many of our population suffer from avoidable ill-health or die prematurely. Lifestyles remain a key driver to reducing premature deaths but it is clear that social, economic and environmental factors also have a significant and direct impact on health and wellbeing. Marmot identified a clear social gradient for mortality and morbidity, where the poorer are sicker and die earlier. Mortality and morbidity, along with life expectancy and healthy life expectancy are influenced by the conditions in which one is born, lives and dies.

Life expectancy

Life expectancy and healthy life expectancy can be used as important measures of the overall health of County Durham’s population. People in County Durham are living longer; life expectancy for both men and women has been improving over time, but the rate of this increase has slowed and there is still a significant gap between the life expectancy in County Durham and the England average. The most recent figures are shown below.

Key life expectancy figures, men and women, County Durham and England. Source: PHOF, PHE.



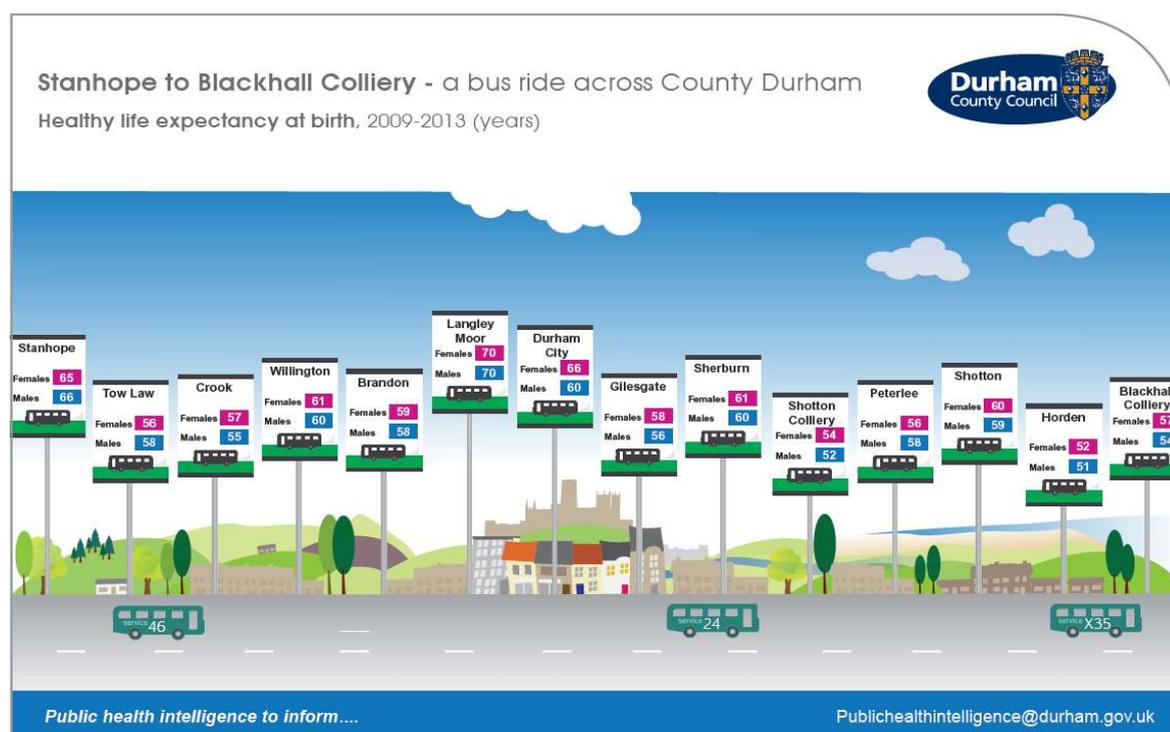
*= statistically significantly worse than England

There is inequality in life expectancy between County Durham and England. There is also a social gradient to LE within County Durham, where men and women in the most deprived areas have a life expectancy of between 7 and 8 years shorter than the least deprived areas.

It is also important to determine whether additional years of life are being spent in good health or prolonged poor health and dependency. Healthy life expectancy adds a quality of life dimension to life expectancy. Similar to LE there is inequality in healthy life expectancy between County Durham and England, and within County Durham. Male and female HLE in County Durham is statistically significantly lower than; men 59.1 years, women 59 years. There is also a social gradient to HLE within County Durham, where men and women in the most deprived areas have a life expectancy of between 13.8 and 14.5 years shorter than the least deprived areas.

The bus ride across County Durham show how healthy life expectancy differs across the length and breadth of our diverse county highlighting health inequalities.

Healthy life expectancy infographic.



Cause of death

The PHE Segment Tool shows the relative contribution to the difference in life expectancy made by various causes of death 1) between County Durham and England and 2) between the most and least deprived areas of County Durham. Results for County Durham illustrate the key role played by avoidable causes of death such as coronary heart disease and lung cancer on inequalities in life expectancy. It should be noted that deaths in younger people contribute to a larger proportion of the gap, as more years of life are lost.

The table below shows the main contributors to the lower life expectancy in County Durham compared to England. It illustrates that:

- For men
 - around one-third of the gap between County Durham and England (33.1%) is caused by higher rates of mortality from external causes (including suicide).
 - Around one-third of the gap between County Durham and England (30.9%) is caused by higher rates of cancer mortality.
 - Circulatory mortality accounts for 12% of the gap between County Durham and England.
- For women
 - Around one-quarter of the gap between County Durham and England (27.5%) is caused by higher rates of cancer mortality.
 - Respiratory mortality accounts for almost 20% of the gap between County Durham and England.
 - Circulatory mortality accounts for 12% of the gap between County Durham and England.

Scarf chart showing the breakdown of the life expectancy gap between County Durham as a whole and England as a whole, by broad cause of death, 2012-14. Source: The Segment Tool, PHE, 2016.

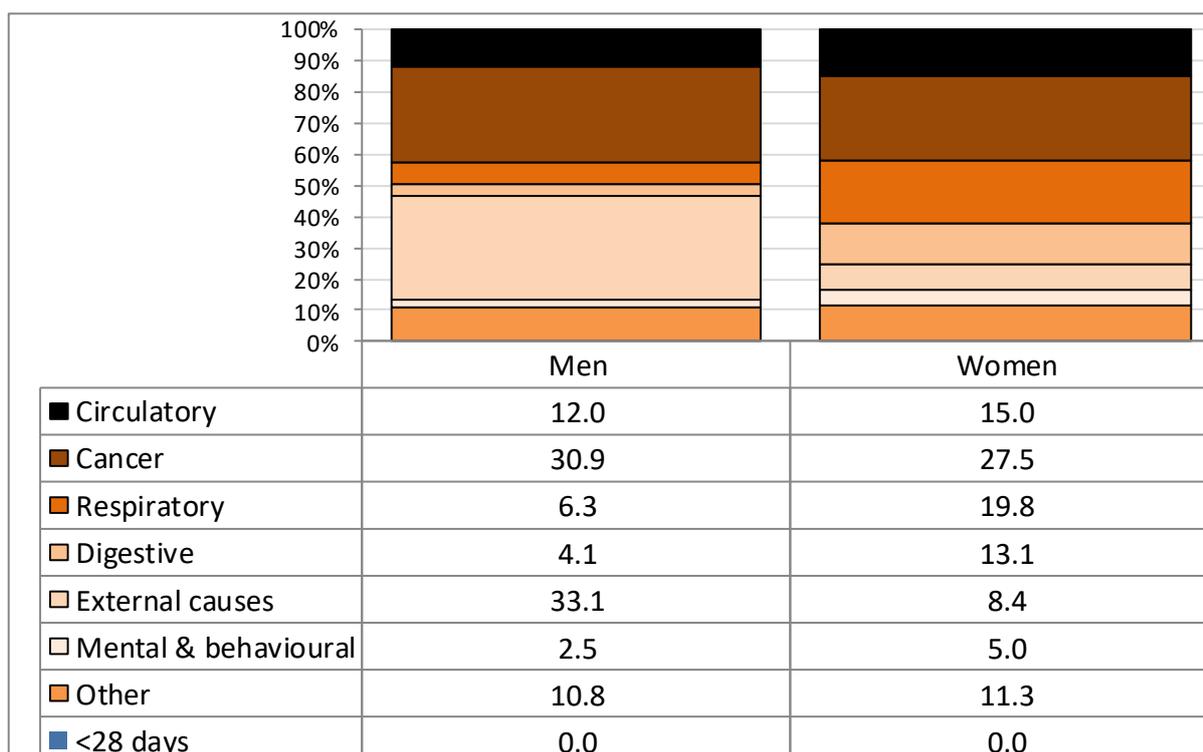
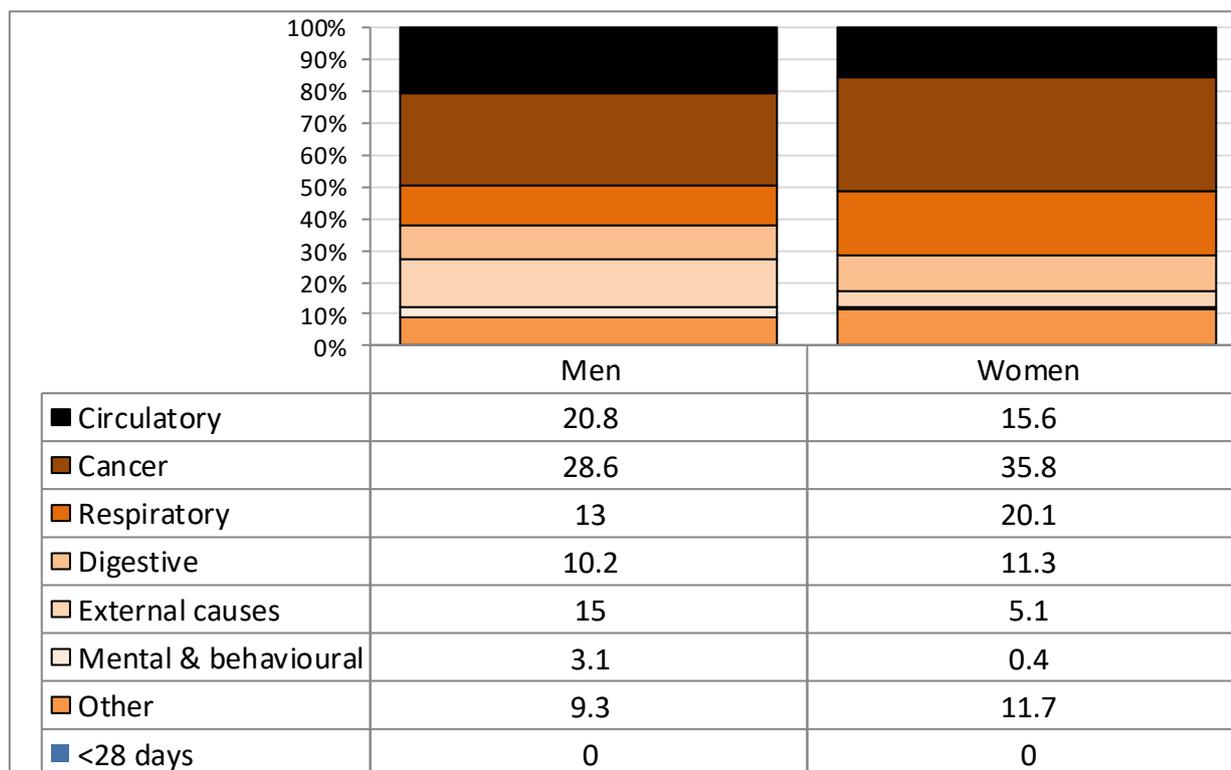


Figure shows the main contributors to the lower life expectancy between the most and least deprived communities in County Durham. It illustrates that:

Cancer is the biggest contributor to the gap between the most and least deprived communities in County Durham for both men (28.6%) and women (35.8%). Around 45% of excess cancer mortality in County Durham was due to lung cancer. Circulatory disease is the second biggest contributor to the gap between least and most deprived in County Durham for men (20.8%) and women (15.6%). External causes of death for men (15%) have a greater contribution to the gap between deprived and affluent communities in County Durham compared to women (5.1%).

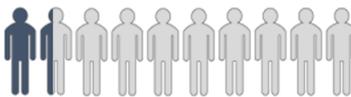
Scarf chart showing the breakdown of the life expectancy gap between the most and least deprived quintiles in County Durham, %, by broad cause of death, 2012-14. Source: The Segment Tool, PHE, 2016.

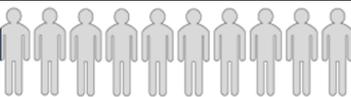
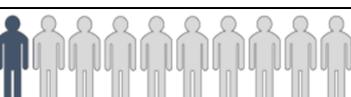
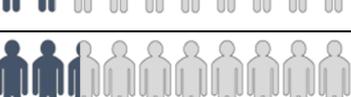
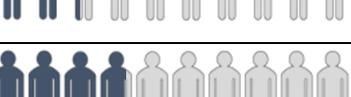


Many people in County Durham continue to engage in unhealthy behaviours when compared to England, directly linked to the social, economic and environmental factors outlined above.

Role of lifestyle

Indicators relating to unhealthy and risky behaviours in adults, County Durham, North East and England

Unhealthy behaviours	County Durham	North East	England
% of adults who are current smoker	 14%	16%	15%
% of adults who are not physically active	 33%	36%	34%
% of adults drinking over 14 units of alcohol a week	 33%	30%	26%
% adults not eating the recommended '5 –a-day'	 43%	44%	43%
% of adults with excess weight	 67%	64%	66%

Unhealthy behaviours	County Durham	North East	England
% deliveries to teenage mothers	 1.5%	1.4%	0.8%
% of 15 year olds who are regular drinkers	 9%	9%	6%
% 15 year olds who are current smokers	 11%	10%	8%
% of mothers smoking at time of delivery	 17%	16%	11%
% of 4-5 year olds with excess weight	 24%	25%	23%
% of 10-11 year olds with excess weight	 38%	37%	34%
% of 15 year olds not eating the recommended '5	 43%	44%	43%

-a-day'			
% of 15 year olds not eating the recommended '5-a-day'		55%	53% 48%

Indicators relating to unhealthy and risky behaviours in perinatal period, children and young people, County Durham, North East and England

Quality of life indicators

The county has many physical assets with a World Heritage Site, 70 parks and open spaces, an area of outstanding natural beauty covering upper Teesdale and Weardale and 15km of defined Heritage Coast. The attractiveness of the local environment is reflected in the number of awards the county has received which includes 21 green flags for parks and green spaces.

34.6% of residents have access to woodland of at least 2 hectares within 500m. This is the highest percentage in the North East and over twice that of England (16.8%). The proportion of people who use outdoor space for exercise (14.1%) is lower than the North East (17.3%) and England (17.9%) figures. County Durham is ranked second from bottom within both the North East and CIPFA nearest neighbour groupings.

Air pollution causes approximately 4% of annual deaths from all causes in those ages over 30 years.

Data modelling suggests that around 2% of the County Durham's population is exposed to road, rail and air transport noise of 65dB(A) or more during the daytime. This rises to 4% at night-time.

Health profile for geographic locations of policies selected for HIA

Policies 16, 12, 26 and 51 are county-wide policies and therefore the profile presented above for County Durham is the most relevant. Policy 5 related to 43 housing sites across the county and it is not within the scope of this HIA to examine each site in detail so therefore again, the County Durham profile is the most relevant. The five remaining policies do have a geographical focus. Four relate to sites within Durham City (policies 4, 6, 17 and 24) and one to a site within Durham Dales (policy 58).

The proposed sites within Durham City fall within Durham Area Action Partnership (AAP) (save for a section of Policy 24 the Western Relief Road). Some of the health issues experienced by residents of Durham AAP are set out in the following 'walk through the life course'. It shows how this area of the County compares to the other 13 AAPs, from starting well, living well and through to aging well. Understanding the differences helps us to focus our attention as to how policy changes may impact upon health.

Men and women in Durham AAP can expect to live 62 and 64 years respectively in good health. This is longer than the County Durham average of 59 years for men and 61 years for women.

Durham AAP is the best in the County for:

- % deliveries that are to teenage mothers
- % breastfeeding at 6/8 weeks
- % of registered patients diagnosed with COPD
- % of registered patients diagnosed with asthma
- % living with a limiting long term illness or disability

In addition to the above, Durham AAP is 20% better than the County Durham average for:

- % children living in poverty
- % mothers smoking at time of delivery
- % people living with low income
- % breastfeeding initiation
- % older people living in deprivation
- % unemployment

Durham AAP is not 20% worse than the County Durham average for any of the indicators.

The proposed site within Durham Dales (policy 58) fall within Teesdale Area Action Partnership (AAP). Some of the health issues experienced by residents of Teesdale AAP are set out in the following 'walk through the life course'. It shows how this area of the County compares to the other 13 AAPs, from starting well, living well and through to aging well. Understanding the differences helps us to focus our attention as to how policy changes may impact upon health.

Men and women in Teesdale AAP can expect to live 65 and 67 years respectively in good health. This is longer than the County Durham average of 59 years for men and 61 years for women.

Teesdale AAP is the best in the County for:

- % mothers smoking at time of delivery
- % breastfeeding initiation
- % children living in poverty

- % children with excess weight (reception)
- % living with low income
- % unemployment
- % pensioners living alone

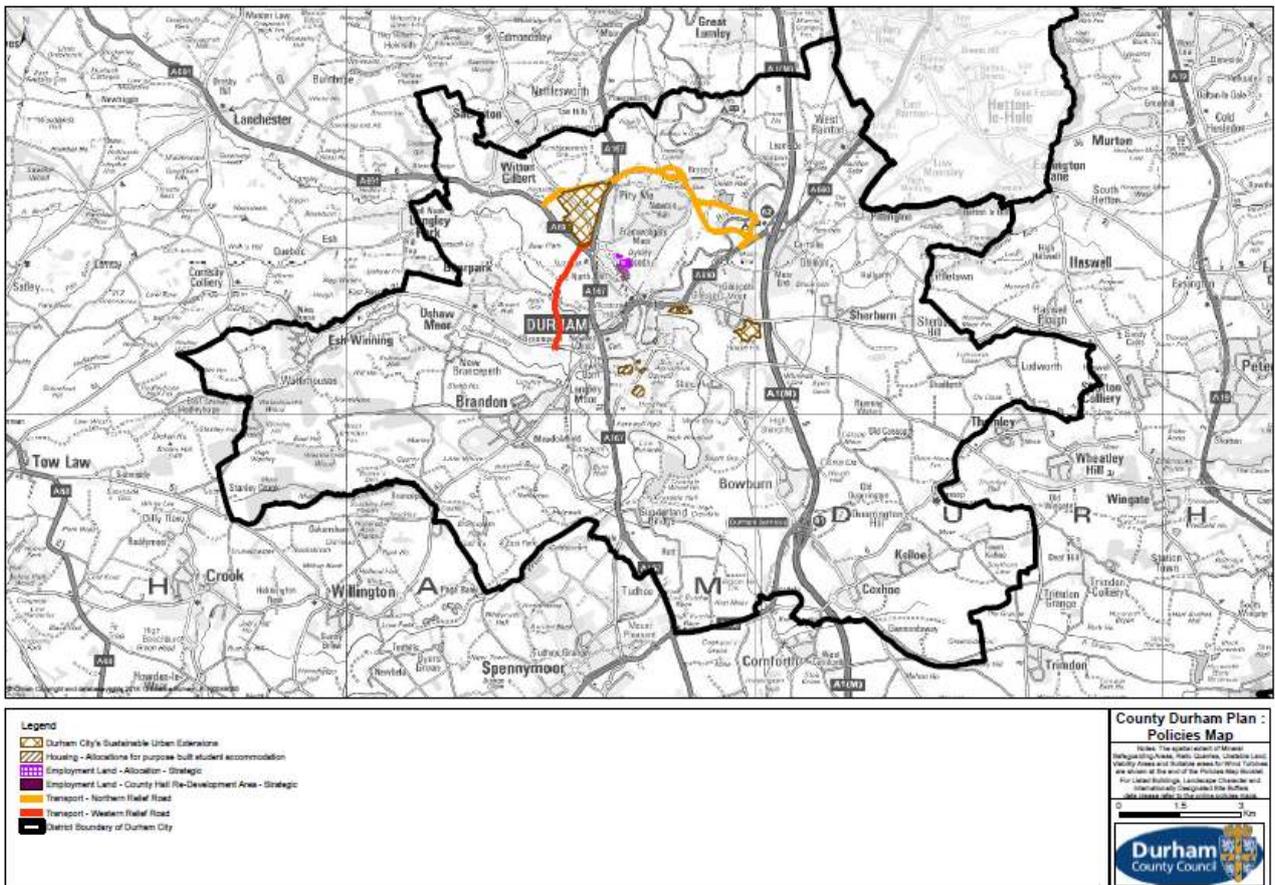
In addition to the above, Teesdale AAP is 20% better than the County Durham average for:

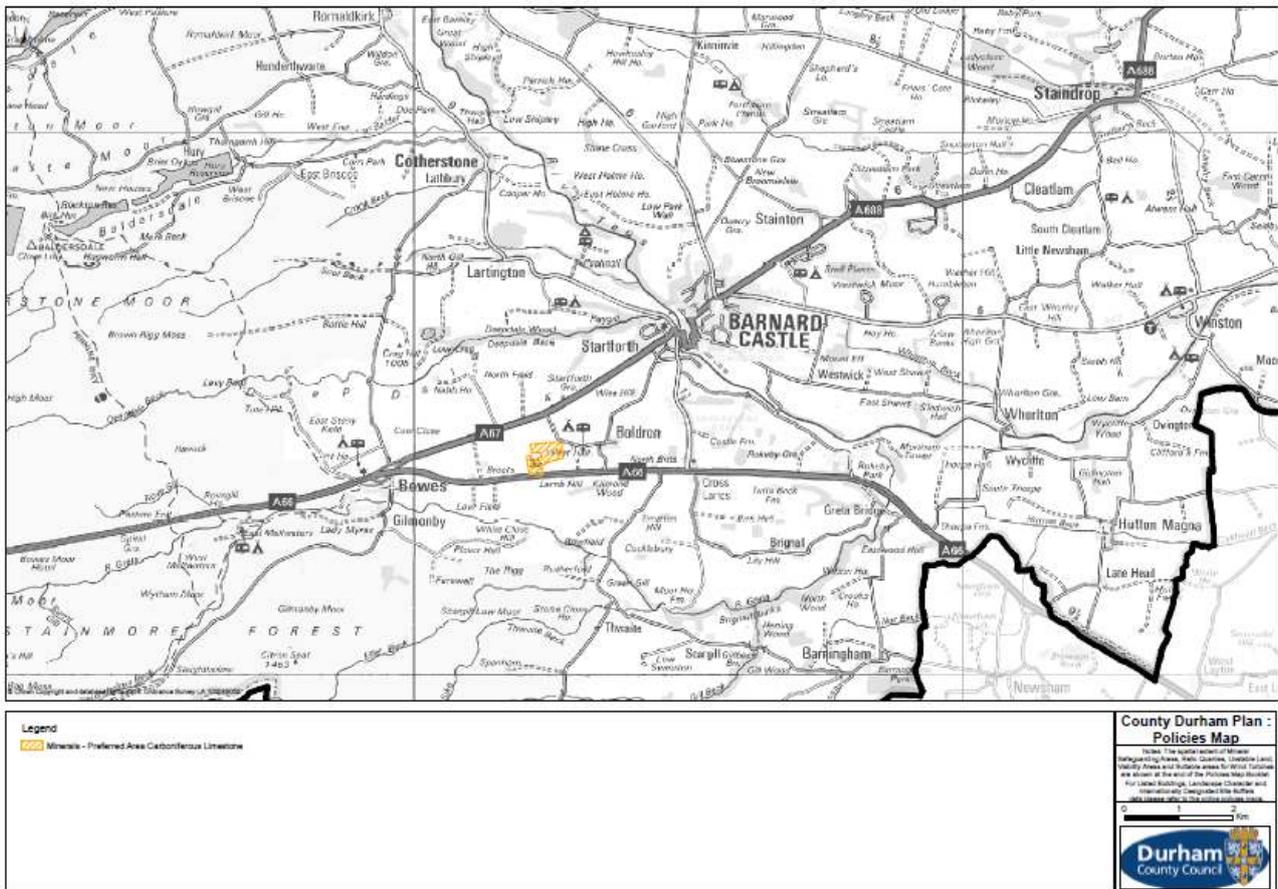
- % breastfeeding at 6/8 weeks
- % registered patients diagnosed with COPD
- % people living with low income
- % registered patients reporting moderate to extreme anxiety or depression
- % older people living in deprivation
- % registered patients recorded as smokers
- Admissions to hospital attributable to alcohol

Teesdale AAP is 20% worse than the County Durham average for:

- % registered patients diagnosed with dementia

Appendix 7 County Durham Plan Policies Map





Appendix 8 Public representations

Policy 4: Aykley Heads

Policy Outcome	Summary of representations
Change in economy	<ul style="list-style-type: none"> The development of this nature is vital to broadening Durham City's economic base and offering office space to rival the best in the North East. Aykley Heads may be an excellent location for high quality employment and offers a real opportunity to increase the number of graduates who choose to remain in Durham. I would like to compliment Durham County Council on their ambitious plans to create a prestige Business Park creating 6,000 much needed jobs for our ever improving City and Villages. Allows us to compete with other cities. There should not be hotels, restaurants, gym and drinking establishments allowed on the Aykley Heads site if this is allocated as a Strategic Employment Site. This would turn the site into an out of town leisure area with a night time economy in what is at present a quiet area of the city in the evenings and at weekends. It is also close to a residential area. Workers should not be encouraged to drink alcohol in their lunch hours.
Access to jobs	<ul style="list-style-type: none"> Wish to see the emphasis on sustainable travel provision in Policy 4 considerably strengthened to reflect the site's easy access by bus and rail transport. The site is NOT close to transport links other than public transport as the major highway links are to the East of the city.
Change in green space	<ul style="list-style-type: none"> ...with the loss of significant and valuable green space City dwellers can currently access the site for relaxation, exercise and recreation, and the loss of any part of this site for development purposes would have an impact on the welfare of the people of Durham. My concern is based both on intrusion into or loss of Green-Belt land and serious environmental degradation

	<p>which will impact in a totally unacceptable way in our neighbourhood where additional traffic flows will converge. Ecological loss - noise, air & light pollution.</p> <ul style="list-style-type: none"> • Green Belt in Durham seems to be something that can be moved whenever it suits the council. • However, the DLI grounds are not mentioned. These are incredibly sensitive and important to local people. • By designing a development site to utilise green infrastructure with sustainable drainage systems, the green infrastructure is able to provide further benefits in the form of improved water quality, reduced flood risk, whilst continuing to deliver the more recognised benefits, including amenity value and biodiversity enhancement. • The plan in its current form would result with the loss of significant and valuable green space It would in my view also severely harm the appeal of the historic City of Durham as a tourist attraction. The loss of the green belt will result in the historic city centre losing its appeal to visitors.
Change in mode of travel	<ul style="list-style-type: none"> • Traffic congestion which would also have a negative effect on city dwellers. • Impact to local traffic - more specifically has the impact on access for emergency vehicles to the hospital been considered? • That part of Durham City which will be directly impacted by these proposals faces the prospect of grid-lock, tailbacks and air and noise pollution as a direct consequence of traffic convergence through a complex of roundabouts surrounding the area in which we live. • Highway improvement should occur before office development alongside the improvement to pedestrian and cycling infrastructure • There is no infrastructure regarding roads, traffic congestion already at a standstill, schools, doctors etc. • Aykley heads will engender a level of increased traffic pressure in our neighbourhood which less intensive development at both Aykley Heads and Sniperley Park would moderate. • Aykley Heads which, when linked to 1900 new houses planned for Sniperley Park, will engender a level of increased traffic pressure in our neighbourhood which less intensive development at both Aykley Heads and Sniperley Park would moderate. This will include increased noise and light pollution, and, most worryingly, worsening air quality which would be intolerable. • We are concerned with the traffic congestion issues in and around Durham City and do not see any transport schemes to alleviate that. • The Aykley Heads site is located within very easy walking distance of main line rail services and bus services, and is at the centre of the County's largest settlement, on which all public transport services converge. • We know we have traffic issues caused by a lack of planning when allocating the busiest services e.g. schools, hospitals, land registry offices and County Hall to inner city sites. • We are pleased that the plan for Aykley Heads does not included the Green Belt (except for the small space currently the County Hall car park). The points about including and enhancing existing open spaces and green assets in the design and protecting the conservation aspects and World Heritage Site views are crucial. • To bring this many jobs into the city centre and close to our site of historic interest is totally at odds with the stated objective of protecting that site and improving air quality within the city.
Change occurring during the building process	<ul style="list-style-type: none"> • No Comments

Policy 5: Housing Allocations	
Policy Outcome	Summary of representations
Changes in housing standards/accessibility and affordability	<ul style="list-style-type: none"> • Sniperley Park offers a considerable opportunity to deliver an appropriate proportion of the housing need in Durham City. As the site is in a high value area, it is deliverable and will contribute a large number of the affordable and market dwellings required. The site represents a desirable location to live and is in close proximity to the facilities and services in Durham City. • There are already housing projects going on in Consett as well of the hundreds of new homes already completed but there are no new facilities to accommodate the boost in population. More housing is likely to decrease house prices. • High West Road, Crook: the proposed sites location is ideal, it is close enough to walk into the town and use the facilities and go shopping, use the restaurants and bars. There are bus stops close to the site for commuters who choose to use public transport to go to work. • The noise pollution from roads would in my option have a negative impact on the ability to sell houses on the proposed site.
Change in greenspace	<ul style="list-style-type: none"> • Sniperley Park - There are other towns in the county where this scale of housing could be provided – which would then reduce the pressures on congested Durham roads and reduce the need for the major road infrastructure in Durham as discussed above. • Given the current high profile of the positive contribution made by spending time in the natural environment to mental health and wellbeing - Loss of greenspace leads to less healthy lifestyle. • The footpaths and grassed area allotments and footpaths at the rear of Fellside has allowed parents

	<p>and children safe access to the surrounding countryside. Housing in this area is not needed and would have an adverse effect on the health and wellbeing of local residents of Templetown and Delves Lane - destroying people's recreational walking routes.</p> <ul style="list-style-type: none"> • 1.23 of the Plan says it 'plays a key role in shaping the physical environment which can have a significant impact on health and well-being and making it possible for people to make healthier lifestyle choices'. It is proven that when amenities are on your doorstep and easy to access they are more likely to be used. These fields are on our doorstep. • My daughter is my carer (I am 85) and she cannot leave me for very long periods of time. The local walks around the area in front of our house has been a lifeline to my daughter, it enables her to get out of the house for short periods & get some exercise and fresh air while not leaving me alone for too long. Building houses on these fields would take all that away from us. • A peaceful quiet neighbourhood allows you to relax or unwind easier & is key for many people as a way of coping & being able to walk out of your door & be in the countryside within 2 to 3 minutes helps so much. Building and additional 290 could severely impact on people's psychosocial outlook. The increased traffic levels would could mean increased stress levels. Consider the additional stress on people who house value will decrease due to the planned development putting many into negative equity, this could have a dramatic effect on people's health if we also have an increase in mortgage interest rates.
Change in infrastructure i.e. school, community	<ul style="list-style-type: none"> • Traffic - Areas are already heavily congested with vehicles parking on the footpath on the other side of the shops on Front Street. On occasion cars have mounted the pavement and driven straight at me. - Pedestrian safety is a prime concern. This amount of housing will create at least 2000 extra cars plus the amount of cars joining the a691 via the proposed relief roads would add to the congestion. - I am concerned that the increased traffic will cause a danger to local children who play in the green areas at the moment. - I believe this land is unsuitable for housing due to its proximity to a high speed road A688, which may have a significant safety risk and future health issues with the sound and air pollution. - Air pollution - the air quality that is already poor because of traffic, congestion and construction will be suffer greatly. • Health facilities are already struggling to cope with a large existing population; traffic flow to local amenities such as the Arnison retail park is already an issue, particularly at peak times; and the local schools are oversubscribed. Doctor's surgeries are full with waiting times for an appointment on average over 2 weeks. Regardless of the building of new surgeries, the current lack of GP will mean that the surgeries could not run effectively. • The County Council should be aware of the large spoil heap which was dumped by the last developer which leads up to the running track & also at the back of some of the houses. This has caused flooding & a large retaining wall to collapse in the past. I think the Council should think long & hard about this building project. Once again I must stress the health & safety problems this would cause. • I believe we need pedestrian crossings with lights and sound to enable visually, hearing and physically impaired people, able bodied walkers and bicycle users to cross the roads safely. If we want healthier communities through walking and cycling we need to ensure their safety. • Dust pollution – The development will take years to complete increasing the level of dust pollution and therefore affecting residents health. • Schools: Local primary schools are already full of all available spaces including changing rooms, libraries etc., being transformed into new class rooms to keep up with the demand. • The effect on the environment due building work would have consequences on people's physical and mental health.

Policy 6: Durham City's Sustainable Urban Extensions	
Policy Outcome	Summary of representations
Change in social cohesion	<ul style="list-style-type: none"> • You talk about healthy communities yet this plan clearly impinges on that, in terms of the new development at Sniperley (1900 houses) and the proposed new employment at Aykley Heads. This smacks of building a new road to feed employment and the amount of traffic movement from Sniperley to proposed inner city employment is unacceptable. • Public Transport services adjacent to the site allow connections directly to health care facilities including: Durham university hospital and doctors surgeries at Belmont. Behaviours of residents are key to use sustainable modes as part of their everyday life. Having existing services and routes in place from first occupation of a development supports sustainable choices being made, increases the potential for non-car trips and limits the impacts of air pollution on health. • By not considering demographic distribution within the city's traditional boundary, the Plan may encourage the growth of student ghettos. Note recent media interest in declining mental health among students.
Changes in green infrastructure (greenbelt)	<ul style="list-style-type: none"> • The proposed housing at Sniperley along with the western relief road would cripple the environment both visually and physically and totally goes against conserving the natural environment as it is proposed to be built on greenbelt land which is unspoiled, visually stunning and a sanctuary to important wildlife, as well as an important place for people to enjoy for their leisure and health. • I would emphasise that Durham's Green Belt is a haven for wildlife and home to many historic rights

	<p>of way where local people habitually exercise, explore nature and enjoy the natural environment to the great benefit of their health, both physical and mental. Green Belt is a unique and irreplaceable asset which we would say the County Plan should seek to nurture, protect and enhance rather than diminish.</p> <ul style="list-style-type: none"> The land is attractive, well used by walkers, dog-walkers, runners, football teams and harbours valuable flora and fauna. Loss of greenbelt land and proximity to congested traffic routes has been shown to have a detrimental effect on health and wellbeing of residents.
Change in noise	<ul style="list-style-type: none"> No comments
Change in infrastructure	<ul style="list-style-type: none"> We must have a new doctor's surgery/health centre as part of the Sniperley development. Simply trying to expand existing facilities will not work and will exacerbate existing traffic problems. We suggest there is mounting evidence from within the UK, and further afield, of a growing disaffection with the motor car. This is related we believe to issues, for example, around climate change, air pollution and the health scares associated with this, to the lack of exercise issue with regard to driving, not to mention the frustration of daily car commuting which often includes a spell of 'stop-start' motoring at some point on the journey.

Policy 16: Addressing Housing Need	
Policy Outcome	Summary of representations
Change in housing quality	<ul style="list-style-type: none"> The family properties should be built to anticipate long term needs; older children remaining with parents longer need larger bedrooms, level access to support parents with young children and older adults with health issues. A downstairs toilet helps young and old families alike. Make it standard to have several dropped kerb in every road.
Change in community cohesion	<ul style="list-style-type: none"> The Relly development would be community based and centred on mutual support, in an environment which lends itself to helping to maintain good physical, mental and emotional health, so reducing the damaging effects of isolation and loneliness, while raising the levels of overall 'wellbeing'. Facilities would encourage a healthy lifestyle for its residents with a communal meeting room/hall: allotment area: a communal outside sitting/recreation area plus a perimeter exercise path of approximately 1000 meters.
Change in inequalities	<ul style="list-style-type: none"> Affordable housing for elderly a must but please consider possible failing health and allow space for equipment 2 bedrooms to allow carers access to beds etc. when trying to keep people at home. Elderly may be fit when they get these homes but are likely to need support in future.

Policy 17: Durham University Development	
Policy Outcome	Summary of representation
Change in trade	<ul style="list-style-type: none"> No comments
Change in community cohesion	<ul style="list-style-type: none"> Poor management of rubbish and recycling at HMOs can lead to unattractive frontages, problems with vermin and raise concerns over health and safety. Such issues can affect the amenity of nearby properties and may lead to complaints from neighbouring residents. These matters should therefore be appropriately addressed at the planning application stage.
Change in healthcare provision	<ul style="list-style-type: none"> No comments

Policy 24: Durham City Sustainable Transport	
Policy Outcome	Summary of representation
Change in traffic and emissions	<ul style="list-style-type: none"> The resulting pollution would damage the locality and impact the health and well-being of local residents. The effect of increased noise pollution and vehicle emissions would be detrimental to the quality of life and health for the residents affected. The Wear Valley to the north of Durham city centre - hemmed -in by the NRR and the existing A690 link road - could also become a pollution "hot spot". In addition to the well-known health problems associated with air pollution, noise pollution caused by traffic has also been linked to poor mental health in light sleepers, and to increase anxiety in others (e.g. https://theconversation.com/can-noise-pollution-damage-your-health-54016). The sustainable transport would encourage more people that work in and visit Durham to leave the car at home. This idea would also have its own health benefits helping to ease pressure on the University Hospital. These locations will be below average for car ownership and above average for deprivation and poor health associated with obesity and inactivity. Providing a great cycle route that provides a high quality link from the villages to Durham City and the allocated employment areas would provide the opportunity for people to incorporate active travel into their routine, saving money and getting

	healthier at the same time.
Removal of green space	<ul style="list-style-type: none"> The proposed housing at Sniperley along with the western relief road would cripple the environment both visually and physically and totally goes against conserving the natural environment as it is proposed to be built on greenbelt land which is unspoiled, visually stunning and a sanctuary to important wildlife, as well as an important place for people to enjoy for their leisure and health. You should be ashamed even considering destroying such a beautiful area with no consideration for the wildlife, people's health or wellbeing. In a time when there is such a focus both on exercise and mental health - both of which can be helped with easy access to green space - it seems extraordinary that our council would even consider this plan. The western bypass and northern by pass roads were still part of the proposal despite the immense destruction they would cause to the local environment, the rural character and setting of Durham, the enjoyment of the countryside that benefits the health and wellbeing of local residents on the immediate outskirts of Durham city, the degrading and ruination of sustainable walking and cycling routes into Durham, and the destruction and loss of connectivity of valuable habitat, including mature woodland, both in the Browney valley and along the river Wear to the north of Durham. People need these green spaces for mental health and wellbeing; new roads will bring increased pollution (both noise and fumes) the potential for more building developments alongside them, and slowly and surely the green belt will be eroded along with the character of Durham. I use the nature reserve and old waggonways/rights of way as an area to exercise and enjoy doing so. Many other people in the area also use the area for this purpose as well as for general walks. This ensures a healthy and happy population. In a time when there is such a focus both on exercise and mental health - both of which can be helped with easy access to green space - it seems extraordinary that our council would even consider this plan.
Process of removing green space	<ul style="list-style-type: none"> No comments

Policy 51: Meeting the needs for primary aggregates	
Policy Outcome	Summary of representations
Change in traffic	<ul style="list-style-type: none"> No comments
Change in air quality	<ul style="list-style-type: none"> No comments
Change in employment	<ul style="list-style-type: none"> No comments

Policy 53: Surfaced Mined Coal and Fireclay	
Policy Outcome	Summary of representations
Change in housing values	<ul style="list-style-type: none"> No comments
Change in traffic	<ul style="list-style-type: none"> No comments
Change in employment	<ul style="list-style-type: none"> Part b1 also seems to suggest that there are sustainable employment opportunities from open casting. This is contrary to employment data since 2014 and the future closure of more markets for coal. As positive suggestions for the Plan, DCC could start by re-evaluating its association with opencast coal mining operators and develop strategies and collaborations which look ahead to 2035 to a low carbon renewable planning landscape. There are opportunities to investigate building upon the present wind generating technology base in the North East and sustainable employment opportunities for integrated solar generation in new build. The economic benefits of the proposal including its contribution to the maintenance of high and stable levels of economic growth through the provision of domestically produced coal for power generation and other sectors of the UK economy and the employment generated through the working, restoration and after-use of the site; Opencast coal extraction does not provide sustainable employment and should not be supported within the Durham Plan preferred options. The 2017 Digest of UK Energy Statistics (DUKES report), showed employment in opencast coal had fallen from just over 500 jobs in 2014 to 198 in 2016.
Change in greenspace	<ul style="list-style-type: none"> Our countryside is of much more worth left intact as a health, leisure and tourism resource. In fact, double the benefit can be gained from leaving coal in the ground and this rules out the harmful immediate effects of dust and pollutants as well as protecting local landscapes which are invaluable amenities for health promotional activities.

Policy 58: Preferred Area for Future Carboniferous Limestone Working

Policy Outcome	Summary of representation
Change in housing value	<ul style="list-style-type: none"> • No comments
Change in traffic	<ul style="list-style-type: none"> • No comments
Exposure to dust, materials, contamination	<ul style="list-style-type: none"> • No comments
Change in economy	<ul style="list-style-type: none"> • Aside from these mineral need and land bank issues, the proposed extension will help secure/ retain the jobs of those already directly and indirectly employed as part of the quarry operations and which contribute to the local economy through wages, business rates, use of local suppliers, and at a national level; to the economy through aggregates levy and other taxation processes.