



SLC Property

Health and Wellbeing Statement

**Prepared in support of a planning
application for a new railway
station at Ashington**

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1 Introduction

1.1 Overview

- 1.1.1 SLC Property are instructed on behalf of Northumberland County Council to deliver the 'Northumberland Line' scheme which realises long-term aspirations to re-introduce of passenger railway services on the historic 'Ashington, Blyth and Tyne' line. The scheme includes the construction of six new railway stations along the line. As part of this commission, SLC Property have been instructed to prepare this Health and Wellbeing Statement ('the statement') to consider the potential effects on health and wellbeing of the proposed new railway station at Ashington.
- 1.1.2 This statement seeks to identify issues that may harm or improve levels of health and wellbeing. It then seeks to demonstrate that the proposed development has been designed to ensure that harm to health is avoided and that opportunities to improve health and wellbeing have been integrated into the proposed scheme. The statement has been undertaken to:
- Identify the existing health levels of the communities most likely to be affected.
 - Identify any direct and indirect health effects during construction and operation; and
 - identify measures to mitigate any potential adverse impacts, and to enhance the positive effects on health and wellbeing, and on inequalities in health.
- 1.1.3 This statement draws together relevant information from the different impact assessment reports prepared and submitted in support of this planning application, to inform an analysis of the potential impact of the proposed development on health and wellbeing.

1.2 Background to the scheme

- 1.2.1 Northumberland County Council (NCC) is seeking to improve connectivity and accessibility in the South East Northumberland Corridor (SEN Corridor). Improving the links from towns such as Ashington and Blyth is critical to encouraging more sustainable access to the key regional economic centres in Tyne and Wear. This will assist in reversing the decline and deprivation of these areas of South East Northumberland, which has been evident during the decline of the mining and shipbuilding industries over the last 30-year period.
- 1.2.2 Enhancements to transport links within South East Northumberland will be instrumental in stimulating economic investment within the region and will help to bring forward the much-needed delivery of housing and other essential infrastructure. Various options to improve transport links have been considered over a number of years, with reopening of the Northumberland Line being identified as the preferred option.

- 1.2.3 The scheme includes the construction of six new railway stations at Northumberland Park, Seaton Delaval, Newsham, Blyth (Bebside), Bedlington and Ashington.
- 1.2.4 Northumberland Park station is located in North Tyneside Council's authority area.
- 1.2.5 Seaton Delaval, Newsham, Blyth (Bebside), Bedlington and Ashington are located within Northumberland County Council's authority area.
- 1.2.6 This statement pertains to the proposed new railway station at Ashington.

1.3 Purpose of this statement

- 1.3.1 The purpose of this statement is to describe and assess the impacts of the proposed station at Ashington on the health and wellbeing of those who may be affected.
- 1.3.2 This statement applies a broad definition of health, encompassing physical and mental wellbeing and quality of life. This understanding of health is captured in the World Health Organisation (WHO) definition:
- "Health is a state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity"*.
- 1.3.3 Evidence shows that health and wellbeing, and quality of life is linked to range of social, economic and environmental factors.
- 1.3.4 This statement will seek to identify how the key 'health determinants' may be impacted by the scheme, using 'Health Impact Assessment' guidance from the Department of Health as a guiding framework for assessing such potential impacts.

1.4 Structure of this Statement

- Chapter 2 sets out the policy context for this statement
- Chapter 3 identifies the methodology used to assess the health impact
- Chapter 4 identifies the baseline conditions relevant to key health determinants
- Chapter 5 screens the potential impacts of the scheme against Department for Health Criteria.
- Chapter 6 assesses the literature surrounding the key health determinants

¹ World Health Organisation (2020) <https://www.who.int/about/who-we-are/constitution>

- Chapter 7 assesses the impact of the proposed works at Ashington station on health determinants
- Chapter 8 provides a summary and conclusion

2 Policy Context

2.1 Introduction

- 2.1.1 This chapter seeks to identify the policy context for this statement.
- 2.1.2 The formal response of Northumberland County Council to the pre-application enquiry for the scheme did not specifically identify a 'Health Impact Assessment' (HIA), as a validation requirement. Notwithstanding the response, both local and national policy identify the merits of conducting a HIA for major developments. This statement has been prepared to provide an assessment of the potential benefits and disbenefits to health and wellbeing and will assist the local planning authority in its consideration of the application for planning permission.
- 2.1.3 This chapter of the report identifies the policy context upon which this statement is based.

2.2 Adopted Wansbeck District Local Plan

- 2.2.1 There are no policies pertaining to health and wellbeing in the Adopted Wansbeck District Local Plan. As such, greater weight will be given to the National Planning Policy Framework, and policies in the Emerging Northumberland Local Plan as identified below.

2.3 Emerging Northumberland Local Plan

- 2.3.1 Local Planning Authorities may give weight to relevant policies in emerging plans according to: *a) the stage of preparation of the emerging plan (the more advanced its preparation, the greater the weight that may be given); b) the extent to which there are unresolved objections to relevant policies (the less significant the unresolved objections, the greater the weight that may be given); and c) the degree of consistency of the relevant policies in the emerging plan to this Framework (the closer the policies in the emerging plan to the policies in the Framework, the greater the weight that may be given)*.
- 2.3.2 The Northumberland Local Plan is at advanced stage in the plan making process. Phase 2 hearings took place in November 2020 and it is anticipated the local plan will be adopted in Spring of 2021. As such, weight may be given to relevant policies in this plan.
- 2.3.3 Policy STP5 of the 'Emerging Northumberland Local Plan' requires that *'A Health Impact Assessment Screening will be required for all major development proposals, and a proportionate Health Impact Assessment submitted as part of the application process.*

Where adverse health impacts of development are identified, the Health Impact Assessment must include proposals to improve health or mitigate the adverse health impacts²

- 2.3.4 The application for planning permission for the new station and car park at Ashington is not a major application, as such a full HIA is not required. This statement provides an overview of the relevant health and well-being matters.
- 2.3.5 The policy supports development which *'promotes, supports and enhances the health and wellbeing of communities, residents, workers and visitors'*.
- 2.3.6 The policy identifies applications should be required to demonstrate that they:
- a) *are safe, comfortable, inclusive and attractive and prioritise pedestrian and cycle movement;*
 - b) *have a strong sense of place which encourages community cohesion and social interaction;*
 - c) *provide access to a range of facilities including public transport, health, education, social care, green spaces, sport, play and leisure facilities;*
 - d) *include appropriate green and blue infrastructure wherever possible, responding to opportunities to contribute positively towards urban greening;*
 - e) *are designed to promote and facilitate physical activity, and healthy lifestyles;*
 - f) *prevent negative impacts on amenity;*
 - g) *protect, and alleviate risk to people and the environment, support wider public safety, and do not have a negative impact upon ground instability, ground and water contamination, vibration, air and noise pollution*
- 2.3.7 The Emerging Northumberland Local Plan identifies that HIA screening should consider:
- whether the proposal is likely to impact on health, including consideration of determinants of health;
 - the possible scale of the impacts, who they are likely to affect and whether
 - these are likely to be positive or negative; and
 - the type of HIA that is appropriate for the development proposed.

² Page 61 Emerging Northumberland Local Plan Jan 2019 Reg 19 draft

2.3.8 Notwithstanding there being no requirement for a HIA, this statement assesses the scheme on the basis of the framework provided within the Policy STP5, as this policy will be given increasing weight in the determination of the planning applications for the proposed railway stations.

2.4 Northumberland Local Plan Health Impact Assessment

2.4.1 Northumberland County Council produced a Health Impact Assessment for the purpose of testing the health consequences of the Local Plan, in accordance with the requirements of the National Planning Policy Framework. Although not a statutory requirement of plan making, the Council has used the assessment to help engage with public health leads and other stakeholders.

2.4.2 The assessment identifies a number of potential impacts of local planning policies on health indicators. Some of the conclusions reached will support the conclusions of this statement, especially in relation to economic development, and connectivity and movement.

2.5 National Planning Policy Framework

2.5.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be required. The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions³.

2.5.2 The planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways- economic, social and environmental.

2.5.3 Health and wellbeing is fundamentally related social objectives in that it should '*support strong, vibrant and healthy communities*'. Notwithstanding, the Department for Health identifies the three main health determinants as the social and economic environment, the physical environment and the persons individual characteristics and behaviours.

2.5.4 As such, the objectives of the NPPF are strongly linked to the health determinants. If a scheme is granted planning permission; it has been considered to contribute to the three objectives which form 'sustainable development'. Given the similarities between the overarching objectives of sustainable development, and the determinants of health, it is reasonable to assume the two are intrinsically linked.

³ NPPF (2019) p4

- 2.5.5 The compliance of the Northumberland Line scheme with the NPPF will be a material consideration in the determination of this application, as such, the policies of the NPPF have been considered within this statement.

2.6 National Planning Practice Guidance

- 2.6.1 National Planning Practice Guidance (NPPG) sets out how the government's planning policies are expected to be applied.
- 2.6.2 NPPG on 'Healthy and safe communities' recognises HIAs as a useful tool to assess and address the impacts of development on health. HIAs ensure that the impact of development on health is considered and responded to effectively during the planning process.
- 2.6.3 As described in NPPG *'A healthy community is a good place to grow up and grow old in. It is one which supports healthy behaviours and supports reductions in health inequalities. It should enhance the physical and mental health of the community and, where appropriate, encourage:*
- 2.6.4 *Active healthy lifestyles that are made easy through the pattern of development, good urban design, good access to local services and facilities; green open space and safe places for active play and food growing and is accessible by walking and cycling and public transport.*
- 2.6.5 *The creation of healthy living environments for people of all ages which supports social interaction. It meets the needs of children and young people to grow and develop, as well as being adaptable to the needs of an increasingly elderly population and those with dementia and other sensory or mobility impairments.'* (Paragraph: 005 Reference ID: 53-005-20140306).

2.7 Department for Health

- 2.7.1 The Department for Health has published an assessment tool for recording the results of a HIA⁴. The framework identified has been utilised in the methodology identified in this statement.

2.8 Sustainable Development Goals

- 2.8.1 The Sustainable Development Goals are a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere. The 17 Goals were

⁴ Department for Health (2010) Health Impact Assessment tools. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/216008/dh_120106.pdf

adopted by all UN Member States in 2015, as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals.

- 2.8.2 The third of these goals is 'Good Health and Well-being', to ensure healthy lives and promote well-being for all at all ages.
- 2.8.3 The targets of this goal include '*Reducing road injuries and deaths*'; '*achieve universal health coverage*' and '*Reduce illnesses and death from hazardous chemicals and pollution*'.
- 2.8.4 The SDG's are not part of national planning policy however they can be considered to be relevant indicators and targets for the purpose of health and wellbeing.

3 Methodology

3.1 Introduction

3.1.1 This chapter identifies relevant local 'health determinants', then outlines the methodology for assessing the beneficial and adverse health effects associated with changes to health determinants resulting from the proposed development.

3.2 Scope and Study Area

3.2.1 The study area is based on the spatial distribution of the environmental and socio-economic impacts of the proposed development and the location of sensitive receptors. It predominantly focuses on local communities surrounding the site and also follows the study areas of other topics, such as transport, noise and air quality.

3.2.2 This statement considers site-specific impacts of the scheme within the catchment area of the Ashington station.

3.2.3 The baseline data is from the district council areas of 'Wansbeck' and 'Blyth Valley' as these are the historic district councils prior to the establishment of Northumberland County Council.

3.2.4 Together, these two districts represent the area of 'South East Northumberland' as the most densely populated area in Northumberland, and the (former) administrative areas within which five of the six proposed railway stations are located. The site of the proposed station at Ashington is located within the historic district of 'Wansbeck' district.

3.2.5 There is no prescribed framework for assessing the health effects of a development proposal. The methodology set out in this report is based on a review of existing guidance and links potential changes in health determinants to potential health outcomes.

3.3 Determinants of health

3.3.1 Many factors combine together to affect the health of individuals and communities. The NPPG guidance on Health and Wellbeing identifies *'the design and use of the built and natural environments, including green infrastructure are major determinants of health and wellbeing'*.

3.3.2 The World Health Organisation (WHO) identifies that determinants of health include:

- The social and economic environment
- The physical environment
- The persons individual characteristics and behaviours

3.3.3 The WHO also identifies the below factors, although this list is not exclusive:

1. **Income and social status** – higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.
2. **Education** – low education levels are linked with poor health, more stress and lower self-confidence.
3. **Physical environment** – safe water and clean air, healthy workplaces, safe houses, communities and roads all contribute to good health. Employment and working conditions – people in employment are healthier, particularly those who have more control over their working conditions
4. **Social support networks** – greater support from families, friends and communities is linked to better health. Culture – customs and traditions, and the beliefs of the family and community all affect health.
5. **Genetics** – inheritance plays a part in determining lifespan, healthiness and the likelihood of developing certain illnesses. Personal behaviour and coping skills – balanced eating, keeping active, smoking, drinking, and how we deal with life's stresses and challenges all affect health.
6. **Health services** – access and use of services that prevent and treat disease influences health
7. **Gender** – Men and women suffer from different types of diseases at different ages.

3.4 Screening Framework

3.4.1 The Department of Health 'HIA Tools' identify four screening questions to assess impacts on health and wellbeing. This statement uses these as a basis for the methodology.

1. **Direct Impact:** Will the proposal have a direct impact on health, mental health and wellbeing? e.g. ill health, affecting social inclusion, independence and participation?
2. **Indirect Impact:** Will the policy have an impact on social, economic and environmental living conditions that would indirectly affect health? e.g. housing, transport, child development, education, good employment opportunities, green space or climate change?
3. **Opportunity for self-improvement:** Will the proposal affect an individual's ability to improve their own health and well-being? e.g. ability to be physically active, choose healthy food, reduce drinking and smoking?

4. **Demand change:** Will there be a change in demand for or access to health and social care services? e.g. Primary Care, Hospital Care, Community Services, Mental Health and Social Services?

5. **Global health:** Will the proposal have an impact on global health?

3.5 'Assessment' Framework

3.5.1 Once the potential impacts have been 'Screened', they will be assessed. The assessment will describe the current conditions, using qualitative and quantitative data, related to the priority health issues identified in the scoping stage.

3.5.2 This assessment will include a literature review of similar schemes as per the guidance of the 'Health Impact Assessment Toolkit for Planners'. This literature review will help to identify the possible health impacts of the scheme.

3.5.3 The assessment will synthesise baseline data and analyse the potential impacts of the scheme.

3.5.4 The assessment will characterise the expected health effects using the following framework:

1. **Direction.** Is the impact positive, negative, neutral, or unclear?
2. **Magnitude.** How large is the expected effect?
3. **Severity.** What is the severity of the impact?
4. **Likelihood.** How certain is the effect to occur?
5. **Distribution.** Will the impact be shared equally among the exposed populations?

3.5.5 The criteria for this assessment is identified in the following subsections.

3.6 Magnitude

3.6.1 The magnitude of an impact relates to its severity and/or scale. Magnitude is determined by professional judgement, based on defined assessment criteria. The characteristics of an impact (i.e. whether direct or indirect, secondary or cumulative, short, medium or long-term, permanent or temporary, reversible or irreversible) is assessed and the magnitude classified as high, medium, low or very low. The assessment of magnitude also considers the nature of potential health outcomes associated with the change, e.g. effects on physical or mental health conditions, quality of life, or comfort.

Magnitude	Guidelines
High	A substantial change to a health determinant, with two or more of the following characteristics: <ul style="list-style-type: none">• assessed as 'major' by relevant environmental topics (where applicable);• likely to be perceived by the population as a major change;

Magnitude	Guidelines
	<ul style="list-style-type: none"> • has the potential to affect the occurrence of acute or chronic mental or physical illness; • long term duration or permanent.
Medium	<p>A moderate change to a health determinant, with two or more of the following characteristics:</p> <ul style="list-style-type: none"> • assessed as 'moderate' by relevant environmental topics (where applicable³); • likely to be perceived by the population as a moderate change; • has the potential to improve / reduce mental wellbeing or quality of life, exacerbate / alleviate symptoms of existing illness, or cause nuisance impacts; • medium to long-term duration.
Low	<p>A minor change to a health determinant, with two or more of the following characteristics:</p> <ul style="list-style-type: none"> • assessed as 'minor' by relevant environmental topics (where applicable³); • likely to be perceived by the population as a minor change; • has the potential to lower or raise wellbeing in terms of levels of comfort and contentment (for example in relation to noise, odour, or visual amenity); • short to medium term duration.
Very Low	<p>A 'very low' magnitude of impact is likely to be perceptible and localised. It may have the potential to lower or raise wellbeing in terms of levels of comfort and contentment.</p>

Figure 3.1 Magnitude Guidelines for HIA

3.7 Severity

3.7.1 To determine overall significance of impact, the assessment matrix provided in Figure 3.2 is used. This classifies significance of health impacts as major, moderate, minor or negligible.

Magnitude of impact	Population sensitivity			
	High	Medium	Low	Very low
High	Major	Major	Moderate	Minor
Medium	Major	Moderate	Minor	Minor
Low	Moderate	Minor	Minor	Minor
Very low	Minor	Minor	Negligible	Negligible

Figure 3.2 Severity Guidelines for HIA

3.7.2 A description of measures to be incorporated to reduce the adverse and/or enhance the beneficial effects of the proposed development on health determinants is identified in Chapter 7 and fully assessed in documents submitted in support of this planning application.

3.8 Distribution

3.8.1 The level of population exposure is defined by a combination of two factors: the size of the population exposed to an impact and its vulnerability to health effects. The size of the exposed population is judged on a scale of high, medium, low and very low, dependent on geographical area and number of people exposed. The vulnerability of the population is also judged on a scale of high, medium, low and very low based on indicators of the health and social status of the population. More vulnerable populations include those with higher levels of social deprivation or relatively poor health status.

Rating	Guidelines	
	Population exposure	Population Vulnerability
High	A high level of exposure would occur over a wide geographical area and/or be likely to affect a large number of people (e.g. over 500).	Affected population includes a higher than national average proportion of vulnerable or disadvantaged groups (such as children or older people) who are more likely to experience adverse health effects as a result of the impact in question.
Medium	A medium level of exposure would occur over a relatively localised area and/or be likely to affect a moderate-large number of people (e.g. 100-500).	Affected population includes an average or close to average proportion of vulnerable or disadvantaged groups who are more likely to experience adverse health effects as a result of the impact in question.
Low	A low level of exposure would occur over a small, local area and/or affect a small number of people (e.g. fewer than 100).	Affected population includes a below average proportion of vulnerable or disadvantaged groups who are more likely to experience adverse health effects as a result of the impact in question.
Very Low	very low level of exposure would affect a small number of individuals.	Not applicable (no population is considered)

Figure 3.3 Distribution Guidelines for HIA

3.8.2 These two measures are then combined to give an overall judgement on population sensitivity, on a scale of high, medium, low or very low.

Population Exposure	Population vulnerability			
	High	Medium	Low	Very low
High	High	High	Medium	Low
Medium	High	Medium	Low	Low
Low	Medium	Low	Low	Very low
Very Low	Low	Low	Very Low	Very low

Figure 3.4 Population Sensitivity Guidelines for HIA

3.9 Quantitative Data

3.9.1 It has been established that the determinants for health and wellbeing are wide ranging. Many of these health determinants are interrelated.

3.9.2 Where there is likely to be a direct or significant impact on a particular health determinant, the baseline of that determinant has been identified and compared against future projections.

1. 2011 Census Data
2. Benefit Claimant Count 2016
3. Annual Survey of Hours and Earnings 2016
4. Local bus and transport operator timetables

5. Air Quality⁵

6. Noise Quality⁶

- 3.9.3 The above data sets can provide evidence as to the potential impact of the scheme on individual health determinants. However, a robust quantitative assessment of health effects has been scoped out because most potential health effects cannot be reliably quantified.

3.10 Qualitative Assessment

- 3.10.1 There are currently no robust or scientifically widely agreed upon methods for quantifying potential health effects or because the types of data required cannot realistically be obtained. It is possible in theory to quantify health effects from increased exposure of a large population to noise and air emissions. However, given the relatively short duration of impacts and small number of people likely to be exposed, it would not be a worthwhile exercise.
- 3.10.2 It is more challenging to determine the quantitative impacts of the scheme where impacts are likely to be indirect or impact on an individual's opportunity for self-improvement.
- 3.10.3 Where it is not possible to provide a quantitative analysis, the possible impacts have been identified through qualitative assessment. The impacts identified are by no means exhaustive.

3.11 Limitations and assumptions

- 3.11.1 The assessment draws on outputs from other disciplines (economics, air quality, noise and vibration, traffic and transport and landscape and visual impacts) that are relevant to the health determinants scoped as part of this health assessment.
- 3.11.2 Literature and baseline data used in this assessment is limited to readily available public and published sources.
- 3.11.3 This statement identifies the impacts on the determinants of health, but there is less certainty regarding the resulting health effects of that impact as it is often dependent on a range of other factors. For example, the scheme may provide more opportunities for active travel, however, the uptake is reliant on individual decisions.
- 3.11.4 Where possible, the individual health impacts have been identified at each station, however this has only been possible where data is available.

⁵ See Ashington Air Quality Assessment (AECOM, 2021)

⁶ See Ashington Noise Assessment (AECOM, 2021)

4 Baseline Conditions

4.1 Introduction

- 4.1.1 In order to assess the potential impacts of the scheme on health and well-being, the baseline conditions of health and well-being in South East Northumberland must first be identified.
- 4.1.2 This chapter provides an overview of the existing spatial portrait within South East Northumberland.

4.2 South East Northumberland

- 4.2.1 Northumberland County Council is the largest unitary authority in England by geographic coverage. It is the most sparsely populated authority in England with only 63 people per square kilometre.
- 4.2.2 The population of Northumberland is approximately 320,300⁷ people. Northumberland is a rural county, with its largest settlements having no more than 40,000 residents.
- 4.2.3 The South East of the County is the most densely populated, this is due to the three largest towns, Blyth, Cramlington and Ashington being located in the South East. These towns act as main employment centres, drawing from a wider area than just South East Northumberland. They also provide a significant range of services in their respective centres and offer assets such as Northumberland College and large-scale leisure facilities.
- 4.2.4 The South East of the County faces some challenges. There is social and environmental deprivation arising from unemployment and poverty. This continues to frustrate the ability of communities to emerge from the post-industrial, coal mining legacy into sustained and sustainable growth. The closure of the RioTinto Alcan smelter at Lynemouth and Northumberland Foods in Amble have also had a detrimental impact upon the employment prospects of communities.
- 4.2.5 The former Wansbeck district includes the station sites of Ashington and Bedlington.

⁷ ONS Population estimates (2018)

4.3 Social Portrait

4.3.1 Historically, the North East region has had a declining population; however the population grew between the 2001 and 2011 Census (see Figure 4.1).

Area	2001 Population	2011 Population	Growth
Blyth Valley	81,265	82,174	1.12%
Wansbeck	61,138	62,354	1.99%
Northumberland	307,190	316,028	2.88%
North East	2,515,442	2,596,886	3.24%
England and Wales	52,041,916	56,075,912	7.75%

Figure 4.1 Census Data, Resident Population Growth

4.3.1 It should be noted that the growth of the population is lower than average for the region and the county.

4.3.2 It is possible that low population growth is a reflection on poor housing provision (in terms of both quality and availability) and poor accessibility to jobs, key services and facilities.

4.3.3 The population of Northumberland is also ageing, and the significance of this demographic change makes it a major policy issue for the prosperity and resilience of Northumberland communities: between 2016 and 2036 evidence presented for the Local Plan forecasts a significant increase in those over 65 (by almost half), with those over 80 years of age doubling in number. Conversely, the core working age population of 20- to-64-year-olds is projected to decrease by over 12%.

4.4 Socio-Economic Characteristics

4.4.1 Figure 4.2 summarises a series of socio-economic indicators across South East Northumberland. This demonstrates that deprivation rates are higher than average in the former districts of Blyth Valley and Wansbeck.

Factor	Base	Blyth Valley	Wansbeck	Northumberland	North East	England	Source
People not in good health	Resident Population (%)	7.1	8.3	6.3	7.4	5.5	2011 Census
People with limiting long term illness	Resident Population (%)	21.1	23.4	20.7	21.6	17.6	2011 Census
Average weekly wage by residents (FT)	Resident Population	N/A	N/A	487.1	492.2	544.7	Annual Survey of Hours and Earnings 2016
Mortality rates	Per 100,000 population	N/A	N/A	1016	1128	986.6	Death Registration 2015
Population living in the 20% most deprived SOAs	Resident Population (%)	22.6	39.7	16.4	N/A	N/A	IMD 2015
Residents claiming Job Seekers Allowance	Claimants	N/A	N/A	2.1	2.3	1.3	Claimant Count 2016
Residents claiming Incapacity Benefit	Claimants	N/A	N/A	6.4	8	6.2	Claimant Count 2016
Residents claiming Disability Living Allowance	Claimants	N/A	N/A	1	1.1	0.9	Claimant Count 2016
Residents with no qualifications	Working age population (%)	16.6	18.8	14.9	17.8	14.8	2011 Census
Residents with qualifications at degree level or above	Working age population (%)	20.7	19.9	27.3	24.3	29.8	2011 Census
Population living in local authority or other social housing rented properties	Working age population (%)	22.9	22.5	18.7	23	17.7	2011 Census

Figure 4.2 Social Statistics Summary

4.5 Economic Characteristics

- 4.5.1 Northumberland makes a major contribution to both regional and national prosperity. It is home to major globally competitive and connected companies. Northumberland is at the heart of the northern economy, sitting between the competitive city economies of Newcastle upon Tyne and Edinburgh, with good links to national and international markets via Newcastle International Airport, the strategic road and rail network and the Port of Blyth and the region's other seaports. There is increasingly good digital connectivity, which includes rural parts of the county.
- 4.5.2 Health is the largest economic sector in Northumberland, accounting for 16% of employment, with tourism accounting for 15%. Manufacturing sustains 11% of employment in the county. In 2017, small business accounted for 89% of all enterprises across the county.
- 4.5.3 The Northumberland economy has grown steadily in recent years. However, Gross Value Added (GVA), which is an economic measure of the value of goods and services produced in an area, is lower than both the North East Local Enterprise Partnership (North East LEP) area and national rate of growth. This can be explained by low productivity, which points to the need to improve the quality of jobs and skills in Northumberland and attract new business in higher value sectors. Figure 4.3 illustrates GVA for Northumberland in comparison with other areas.

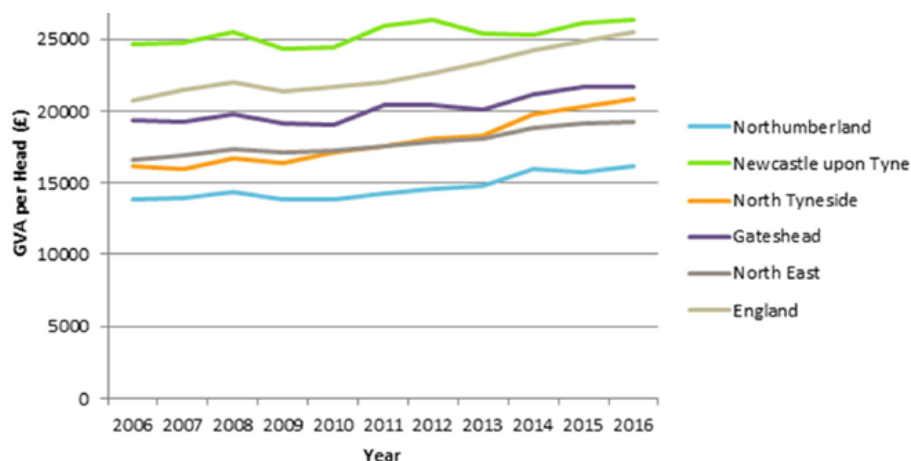


Figure 4.3 GVA Per Head (£)

4.5.4 Figure 4.4 illustrates the average weekly earnings across the region. Blyth Valley and Wansbeck have lower resident earnings than the county, region and country.

Location	Resident Earnings (£)	Workplace Earnings (£)
England	520.7	520.5
North East	472.3	470.2
Northumberland	479.4	437.9
Blyth Valley	468.0	439.7
Wansbeck	447.9	482.5

Figure 4.4 Average Weekly Earnings (2013) – Annual Survey of hours and earnings

4.5.5 Figure 4.5 demonstrates that the percentage of the working age population with no qualifications is higher than average in Blyth Valley and Wansbeck in comparison to the rest of Northumberland and England. However, Blyth Valley has a lower average than the North East region.

District	No Qualifications	Degree or Higher
Blyth Valley	16.6%	20.7%
Castle Morpeth	12.2%	36.4%
Wansbeck	18.8%	19.9%
Northumberland	14.9%	27.3%
North East	17.8%	24.3%
England	14.8%	29.8%

Figure 4.5 Qualifications in Northumberland for Working Age Population (Census 2011)

4.6 Indexes of Multiple Deprivation

- 4.6.1 Northumberland ranks 131 out of 317 English local authorities in the 'Indexes of Multiple Deprivation' (where 1st represents the most deprived).
- 4.6.2 In comparison, neighbouring North Tyneside is 128th, Newcastle is 74th, Gateshead is 54th and South Tyneside is 26th.
- 4.6.3 The county is ranked well in relation to low levels of crime and the quality of the living environment.
- 4.6.4 Northumberland is within the most deprived 20% of all local authorities for employment.
- 4.6.5 Notably, the county is ranked poorly in relation there being significant barriers for residents to access housing, poor employment opportunities and low levels of educational attainment.
- 4.6.6 Of these indicators, Northumberland ranks lowest in barriers to 'housing and living'. This consists of several indicators including:- levels of homelessness; housing affordability; household overcrowding; road distance to a post office, GP surgery, primary school and other local services.
- 4.6.7 These indicators are likely to reflect the rural nature of Northumberland.
- 4.6.8 Whilst Northumberland performs better overall in comparison to its neighbouring authorities, there is wide inequality across the local authority.
- 4.6.9 Figure 4.6 illustrates there is a concentration of deprivation within the most populous areas of South East Northumberland.

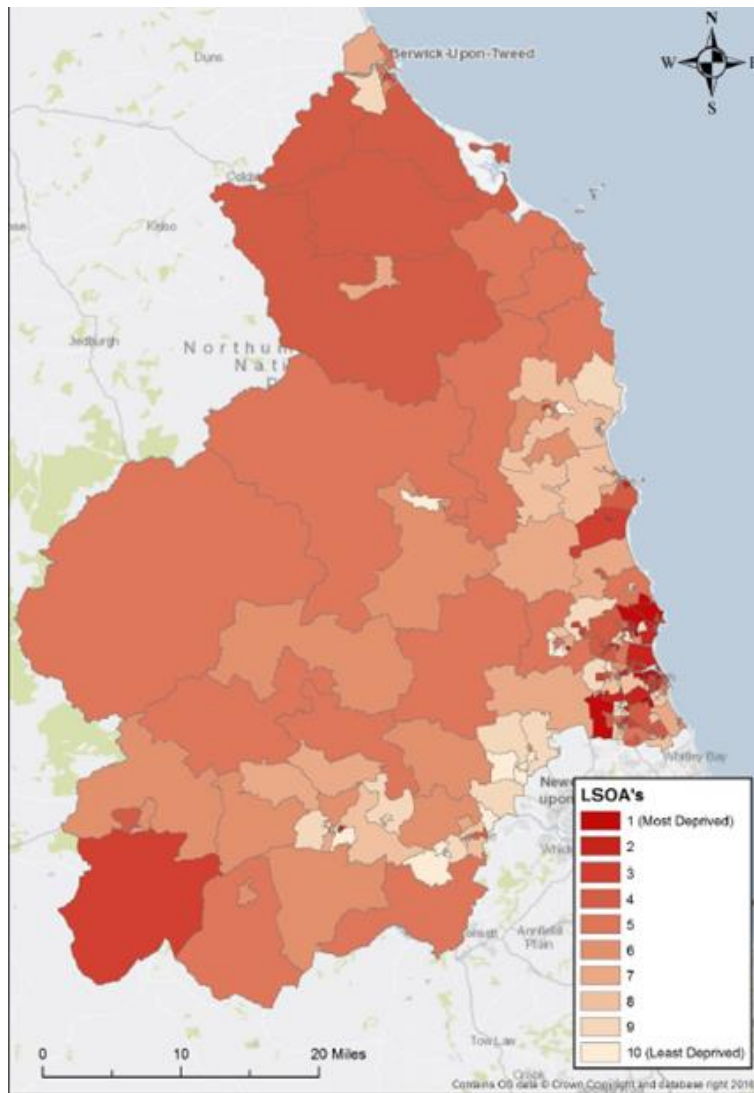


Figure 4.6 Indexes of Multiple Deprivation, Northumberland, 2015⁸

- 4.6.10 There are 197 Lower Layer Super Output Areas (LSOAs) within Northumberland. Of those, 23 LSOAs are in the most deprived 10% of the country. A further 17 are within 20% of the most deprived in the country, and a further 18 are within 30%.
- 4.6.11 In contrast, Northumberland has 19 LSOAs within the least deprived 10%.
- 4.6.12 The site of the proposed station at Ashington is located within 50% of the most deprived in the country (see Figure 4.7). However, there are 5 LSOAs within the 10% most deprived in the country located within 1km of the site.

⁸ Northumberland Health and Wellbeing Assessment (2019)



Figure 4.7 Indexes of Multiple Deprivation in Ashington

4.7 Transport Portrait

4.7.1 The long-distance transport movements in Northumberland are reasonably well served. The main trunk road network, which runs through the county, consists of the A1, running north to south from Edinburgh to London, and the A69, which runs east to west from Newcastle through to Carlisle. The East Coast Main Line railway also serves the area with regular passenger services between London and Scotland. A local service also uses this line, with regular connections between the communities of Morpeth, Cramlington and Newcastle. To the west of the county, the Tyne Valley Line provides frequent services to Newcastle, as well as providing a connection further west into Carlisle.

4.7.2 There is no rail passenger service for the most densely populated urban settlements such as Ashington and Blyth. These communities rely on local bus services for connections with Northumberland and beyond.

4.7.3 Figure 4.8 illustrates that car ownership is lower in the urban south east area of Northumberland.

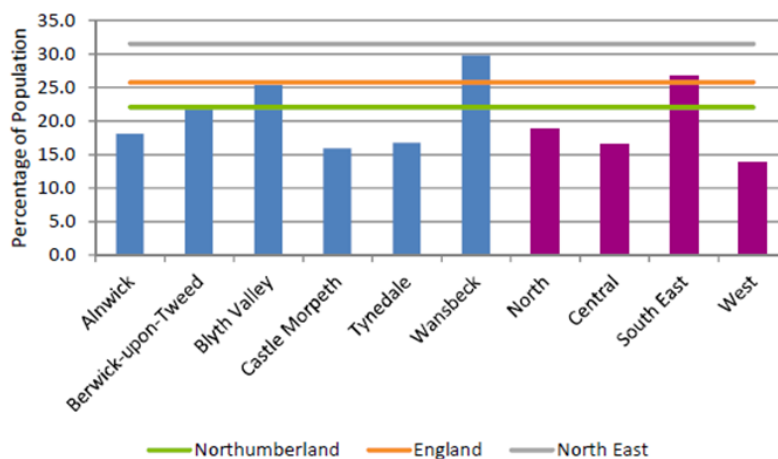


Figure 4.8 Households which do not own a car (Census, 2011)

4.7.4 Northumberland has an extensive bus network served by a number of bus operators. Arriva is the main operator serving South East Northumberland and is an essential service for commuter and retail/leisure trips into Newcastle and North Tyneside, with limited alternatives for those without access to a car. However, bus services compare very poorly against car trips for journey times.

4.7.5 Figure 4.9 demonstrates that bus journeys are often double those of car trips. This disadvantages households without a car to access workplaces and leisure facilities.

Origin	Destination	Bus Time (mins)	Car Time (mins)	Distance (miles)
Blyth (Central)	Newcastle city centre	65	30	14.8
Blyth (Central)	Team Valley	90	40	22.6
Blyth (Central)	Metrocentre	85	35	18.9
Blyth (Central)	Cobalt Business Park	46	18	9.1
Ashington (Central)	Newcastle city centre	64	35	18.3
Ashington (Central)	Team Valley	88	40	26.2
Ashington (Central)	Metrocentre	94	35	22.5
Ashington (Central)	Cobalt Business Park	72	20	14.7

Source Google maps/traveline (highway journey times represent quickest routes but journey times are variable)

Figure 4.9 Journey Times to Key Employment Sites (AM Peak)

4.7.6 Figure 4.10 illustrates accessibility by public transport to Newcastle city centre. The need for improved accessibility from Newcastle to Ashington is apparent.

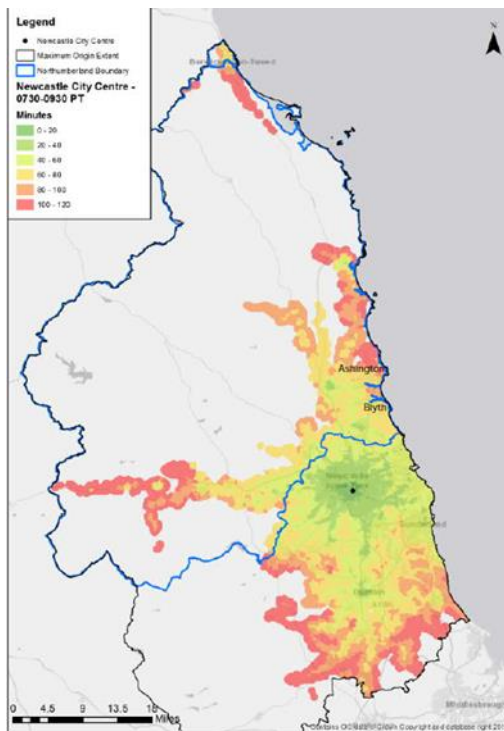


Figure 4.10 Accessibility by public transport to Newcastle city centre

4.8 Air Quality

- 4.8.1 Poor air quality, caused by harmful pollutants, can have a significant negative impact on health and wellbeing, and lead to the production of greenhouse gases. Air quality in Northumberland is generally good and there are currently no designated air quality management areas (AQMAs) in the County.
- 4.8.2 The Air Quality Assessment submitted as part of this planning application identifies the baseline air quality and sensitive receptors which may be impacted by air quality associated with the construction and operation of the proposed station at Ashington. It is not anticipated that there will be any adverse impacts on local air quality as a consequence of the new station at Ashington.

4.9 Noise

- 4.9.1 The proposed station at Ashington is located within the existing settlement and adjacent to an operational freight line. As such, residents are likely to experience an existing level of background noise associated with the urban setting.
- 4.9.2 Furthermore, one section of the site is an existing car park, as such the operational background noise is unlikely to significantly increase.
- 4.9.3 The Noise and Vibration Assessment submitted as part of this planning application identifies the baseline noise and sensitive receptors which may be impacted by noise associated construction and operation of the proposed station at Ashington.
- 4.9.4 The rail line is currently used by freight trains which contribute to existing noise levels. It is not anticipated that there will be any adverse impacts on local background noise levels as a consequence of the new station at Ashington.

4.10 COVID-19

- 4.10.1 Northumberland is currently affected by the ongoing COVID-19 crisis. Rates of infection have been shown to be higher within the South East of the county- including Ashington, Bedlington and Cramlington⁹.
- 4.10.2 Figure 4.2 demonstrates that there is a higher than average number of residents in the former Blyth Valley and Wansbeck districts who are not in good health, or who have limiting

⁹ <https://www.northumberlandgazette.co.uk/news/politics/council/coronavirus-rise-spreading-north-northumberland-hotspots-county-sees-cases-increase-exponentially-2982308>

long term illnesses. As such, the population is likely to be more susceptible to having more severe symptoms of the virus.

- 4.10.3 The current guidance urges residents to avoid public transport unless essential. Figure 4.8 identifies that South East Northumberland has lower than average car ownership. In a rural county, commuting by walking or cycling is often not viable. As such, many residents have no choice but to continue to rely on the public transport network to travel around the county and beyond.
- 4.10.4 Northumberland's largest economic sectors are health, tourism and manufacturing. As such, there is a dominance of non-office-based jobs. This will have impacted employment rates, and infection rates across the county in 2021 and the future.
- 4.10.5 The extent to which Northumberland's tourism industry has been impacted is not yet clear, however the national lockdowns are likely to have had significant impacts.

5 Screening of potential impacts

5.1 Introduction

5.1.1 This chapter uses the framework provided by the Department of Health to screen the potential negative impacts of the scheme.

5.2 Direct Impact

Will the proposal have a direct impact on health, mental health and wellbeing? e.g. ill health, affecting social inclusion, independence and participation?

5.2.1 The construction and operation of the new station may have a negative effect on the health and wellbeing of residents in close proximity to the site of the proposed station as a consequence of elevated noise levels. Although there will be some additional noise during construction this will be short term and mitigated by the Construction Environmental Management Plan (CEMP). As the line is an existing operational freight line the increase in noise will be marginal¹⁰.

5.2.2 The scheme will shorten journey times therefore providing improved access to employment opportunities and essential services.

5.2.3 The scheme has the potential to improve social inclusion, independence and participation for communities previously not well served by public transport. The scheme will improve access to employment and leisure opportunities for residents and encourage inward investment.

5.2.4 The scheme will encourage a modal shift to a more sustainable means of travel which may have consequential improvements to regional air quality.

5.2.5 The proposed development has the potential to adversely impact on habitats which may have a negatively impact biodiversity. However, with mitigation there is likely to be no net loss of biodiversity.

5.2.6 The scheme will provide for job opportunities at different skill levels for the construction and operation of train stations.

¹⁰ See Ashington Air Quality Assessment (AECOM, 2021)

5.2.7 The design of the scheme has the potential to negatively impact on residential amenity through an increase in noise from the passenger services. However, this can be mitigated¹¹.

5.2.8 The construction will require the removal of a number of trees. However, this can be mitigated¹².

5.3 Indirect Impact

'Will the proposal have an impact on social, economic and environmental living conditions that would indirectly affect health? e.g. housing, transport, child development, education, good employment opportunities, green space or climate change?'

5.3.1 Air Quality is unlikely to be adversely affected by increased railway traffic associated with new development and so there is unlikely to be any adverse effects on health.

5.3.2 The scheme promotes sustainable modes of travel and therefore will facilitate increased physical activity and reduction in carbon emissions. As such, regional air quality may improve as a result of a sub-modal shift from private vehicle to public transport. This has the potential to have a positive impact on the respiratory health of more than local populations.

5.3.3 The temporary increase in construction traffic in and around the station sites has the potential to have a negative impact on the amenity of adjacent residential areas. It is anticipated mitigation measures will be implemented to ensure this impact is not significant¹³.

5.3.4 The scheme will improve the desirability of the main towns and service centres as places to live, work and visit. The provision of a railway services will increase investment opportunities, therefore potentially increasing the number of jobs available. This is especially relevant to Ashington where there are pockets of severe deprivation. Better connected settlements reduces the need to live in the region's city centres and may encourage the retention of younger generations. This will have a positive impact on the population profile of Northumberland which currently has an ageing demographic.

5.3.5 Economic growth may have indirect positive impacts on social and economic conditions through choice of employment opportunities and also housing, transport, child development, education.

5.3.6 More employment opportunities will create more training opportunities and increase disposable income for individuals.

¹¹ See Ashington Noise Assessment

¹² See Ashington Arboriculture Assessment (AECOM,2021)

¹³ See Ashington Transport Assessment (AECOM, 2021)

- 5.3.7 Additional development could place increased pressure on already stretched educational and health services and facilities.
- 5.3.8 The increase in development and impermeable surface areas has the potential to increase the flood risk for surrounding communities.

5.4 Opportunity for self-improvement

'Will the proposal affect an individual's ability to improve their own health and well-being?.'

- 5.4.1 The scheme will provide additional options for travel across the region. This will improve access to housing and employment in and around the new station sites, and onward connections. Travel in South East Northumberland will be more equitable and active, offering more diverse transport options.
- 5.4.2 More diverse transport options will improve accessibility of the existing built environment and improved accessibility to future developments, offering more choice for individuals for leisure, employment, retail and housing.
- 5.4.3 Positive effects for mental and physical health could come from the reduction of cars across the road network. This may encourage individuals to make healthier transport choices.
- 5.4.4 New employment opportunities, particularly for those who are unemployed influences individuals' ability to improve their own health and wellbeing.
- 5.4.5 Economic development indirectly improves choice such as physical activities and access to healthy foods, as bigger communities can support greater services and amenities.

5.5 Demand Change

'Demand change : Will there be a change in demand for or access to health and social care services? e.g. Primary Care, Hospital Care, Community Services, Mental Health and Social Services?'

- 5.5.1 The provision of the station at Ashington will not lead to a change in the demand for health-related services.
- 5.5.2 There is the potential for development enabled by the scheme (if it does not include provision of additional services) to increase the demand for services.
- 5.5.3 Additional development and any development enabled by the scheme is likely to lead to an increase in greenhouse gas emissions. This may have a negative impact on physical health.
- 5.5.4 The station at Ashington includes land designated as protected open space. The loss of this will reduce access to open space within the local area.

- 5.5.5 The construction of the station may increase the desirability of nearby towns and villages as places to live, work and visit. This may cause a shift in the demographic portrait of South East Northumberland. As such, this may facilitate a change in demand for access to health and social care services. For example, an increased working age population facilitated by economic development will increase the number of taxpayers within the county. This could lead to improve the existing health and social care facilities available.
- 5.5.6 Furthermore, an increased working age population may lead to an overall improved health and wellbeing of local communities. This may reduce the pressure on existing health and social care services.

5.6 Global Health

- 5.6.1 ***'Global health: Will the proposal have an impact on global health?'***
- 5.6.2 Sub-modal shift could contribute to the overall reduction of locally generated greenhouse gas emissions.
- 5.6.3 Concentrating services and facilities which attract large numbers of people in accessible locations with good public transport links should reduce car travel therefore contribute to the reduction of greenhouse gas emissions.

6 Literature Review

6.1 Access to healthcare services and other social infrastructure

- 6.1.1 Access to services and community facilities affects health and wellbeing both directly and indirectly. Health and wellbeing is affected directly through access to treatment and care and access to appropriate fresh food retailers. Indirect impacts include access to social networks. Furthermore, leisure activities have been found to have a positive effect on people's physical, social, emotional and cognitive health through prevention, coping (adjustment, remediation, diversion), and transcendence¹⁴.
- 6.1.2 Access to healthcare services and social infrastructure is also influenced by appropriate transport provision. In 2003 research from the Social Exclusion Unit identified links between unequal mobility and inability to access jobs, education, training, healthcare, affordable food and leisure opportunities in the UK¹⁵.
- 6.1.3 A recent study in 2019 also confirmed the link between access to transport and social mobility¹⁶. The report identified that limited transport options reduce access to healthcare. According to Brand et al (2014)¹⁷, an estimated 10% of hospital outpatient appointments are missed due to transport problems, thereby putting people's health and wellbeing at risk. Low-income elderly people without cars face financial and physical barriers to access specialised health services and hospitals¹⁸.
- 6.1.4 The 2019 'Future of Mobility Access' identifies spatial inequalities in the provision of transport services. The report considered that the lack of private vehicles in low-income households, combined with inadequate public transport services in many peripheral social housing estates exacerbates the problem in many parts of the UK.
- 6.1.5 Lack of transport options also leads to social isolation. A study in rural Durham and Northampton found that many older people do not leave their homes more than once a week due to lack of private transport¹⁹. It is considered that travel by bus offers '*meaningful social interaction, a sense of belonging and visibility in the public arena and helped to alleviate chronic loneliness in the city*²⁰

¹⁴ Caldwell, L.L. (2005) Leisure and health: Why is leisure therapeutic?

¹⁵ Social Exclusion Unit (2003) Making the Connections: Final Report on Transport and Social Exclusion.

¹⁶ Lucas et al (2019) Future of Mobility: inequalities in mobility and access in the UK transport system

¹⁷ Brand et al (2014) Transport and access to healthcare: the role of new information technology

¹⁸ Shergold and Parkhurst (2012) Transport-related social exclusion amongst older people in rural Southwest England and Wales

¹⁹ Age UK (2012) Missed opportunities: the impact on older people of cuts to rural bus services.

²⁰ Jones et al (2012) Rethinking passive transport: bus fare exemptions and young people's wellbeing

- 6.1.6 Overall, the literature identifies that there is a direct link between mobility and health and wellbeing (through accessibility to healthcare services and other social infrastructure).

6.2 Access to open space and nature

- 6.2.1 Providing secure, convenient and attractive green space can lead to more physical activity and therefore reduce levels of ill-health related problems associated with sedentary occupations and stressful lifestyles²¹. For example, an evidence review by Natural England showed that access to natural environments promotes physical activity including walking, gardening and children's play²². The review shows evidence that people with poorer health tend to benefit more from physical activity in natural environments. Maas et al (2006) also identified that there is a positive association between the proportion of green space in a residential area and the perceived general health of residents, and that this relationship is strongest for lower socio-economic groups²³. Notwithstanding, green space has been found to have positive effects on physical and mental health, regardless of social class²⁴.
- 6.2.2 As such, the proximity, size and amount of green space available to people in urban environments has been found to influence physical and mental health outcomes²⁵. In addition to this a systematic review of physical activity and green spaces concluded that, compared with indoor activities, physical activity in natural environments is associated with greater feelings of revitalisation, increased energy and positive engagement, and decreases in tension, confusion, anger and depression²⁶.
- 6.2.3 Overall, the literature identifies a clear relationship between access to open space and health and wellbeing. The positive effects of access to open space are shown to be strongest for those in lower socio-economic groups.

6.3 Air Quality

- 6.3.1 The quality of the air in the local environment can have a significant impact on physical and mental health. Pollution caused by construction, traffic and commercial activity can result in poor air quality, noise nuisance and vibration. The WHO recognises outdoor air pollution as a

²¹ London Healthy Urban Development Unit (2019) Rapid Health Impact Assessment Tool.

²² Natural England Access to Evidence Information Note EIN019. (2016) Links between natural environments and physical activity: evidence briefing.

²³ Maas, J., Verheij, R., Groenewegen, P., de Vries, S. and Spreeuwenberg, P. (2006), *Green space, urbanity and health: how strong is the relation?* Journal of epidemiology and community health

²⁴ Hartig, Terry (2008) Green space, psychological restoration, and health inequality

²⁵ O'Brien, L., Williams, K. and Stewart, A. (2010), Urban health and health inequalities and the role of urban forestry in Britain: A review.

²⁶ Thompson Coon J., et al (2011) Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A Systematic Review. Environmental Science & Technology 45: 1761

major environmental health problem for all countries, including high-income countries²⁷. There is a wealth of evidence showing the association of nitrogen dioxide and particulate matter on poor health outcomes.

6.3.2 A Public Health England review²⁸ of interventions to improve outdoor air quality and public health found clear evidence that air pollution is the largest environmental risk to the health of the public in the UK. The review found that:

- It is estimated that between 28,000 and 36,000 deaths each year are attributed to humanmade air pollution
- There is a close association with cardiovascular and respiratory disease, including lung cancer
- There is emerging evidence that other organs may also be affected, with possible effects on dementia, low birth weight and diabetes.
- It concluded that the most impactful interventions would be those that reduce emissions of air pollution at source.

6.3.3 There is a well-established relationship between road traffic emissions and health and wellbeing. A WHO report in 2000 suggested that about 36,000–129,000 adult deaths a year are brought forward due to long-term exposure to air pollution generated by traffic in European cities.

6.3.4 In the UK is estimated that road transport accounted for approximately 26% of greenhouse gas emissions in 2016, of which the main source is from petrol and diesel vehicles²⁹.

6.3.5 Traffic-related air pollution is associated with the risk of death and chronic disease, including asthma and atopy, in children, worse pregnancy outcomes, and exacerbation of asthma and chronic chest illnesses³⁰.

6.3.6 In 2006, Defra commissioned a study to review the link between air quality and social deprivation in the UK³¹. The study identified that there is a tendency for higher relative mean annual concentrations of nitrogen dioxide (NO₂) and particulate matter (PM₁₀) in the most

²⁷ WHO Topic Sheet. (2018) Ambient (outdoor) air quality and health. [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

²⁸ Public Health England (2019), Review of interventions to improve outdoor air quality and public health.

²⁹ Department for Business, Energy and Industrial Strategy (2018). 2016 UK Greenhouse Gas Emissions, Final Figures.

³⁰ Schwartz, J. (2004). Air Pollution and Children's Health

³¹ Defra, Netcen, Department for Communities and Local Government, National Statistics. Air Quality and Social Deprivation in the UK: an environmental inequalities analysis - Final Report to Department of Environment, Food and Rural Affairs AEAT/ENV/R/2170, June 2006

deprived areas of the country. Whilst this relationship can largely be explained by the high urban concentrations driven by road transport sources, and the higher proportion of deprived communities in urban areas. If exceedances of National Air Quality Standards are considered, the correlation between poor air quality and deprivation is stronger, showing that when the most polluted areas are considered, the greatest burden is on the most deprived communities, and very little on the least deprived.

6.4 Noise

- 6.4.1 The quality of the local environment can have a significant impact on physical and mental health. Pollution caused by construction, traffic and commercial activity can result in poor air quality, noise nuisance and vibration.
- 6.4.2 The World Health Organisation consider that *'excessive noise seriously harms human health and interferes with people's daily activities at school, at work, at home and during leisure time. It can disturb sleep, cause cardiovascular and psychophysiological effects, reduce performance and provoke annoyance responses and changes in social behaviour'*³².
- 6.4.3 The Government's Noise Policy Statement for England³³ (NPSE) acknowledges that noise can affect people's quality of life and that there is emerging evidence linking noise with direct health effects.
- 6.4.4 Furthermore, studies prove that socially disadvantaged people are more likely to live near busy roads and are at greater risk of the negative effects of noise pollution³⁴.
- 6.4.5 The most common source of noise pollution in Europe is transport, and road traffic has been identified as the major cause of human exposure to noise³⁵.
- 6.4.6 Overall, the literature identifies that excessive noise has a negative impact on health and wellbeing. This impact is more likely to be felt in areas of deprivation. Furthermore, road traffic is identified as the main cause of human exposure to noise. As such, a reduction in traffic may result in benefits for sensitive noise receptors.

³² World Health Organization (2017) Noise

³³ Noise Policy Statement for England, Defra, March 2010

³⁴ British Medical Association healthy transport = healthy lives 2012; Transport and Health - briefing statement. Faculty of Public Health, December 2013

³⁵ World Health Organization. (2000) Transport, environment and health. WHO Regional Publications, European Series. No.89

6.5 Landscape and Visual Amenity

- 6.5.1 The quality of the local landscape and natural environment can have a significant impact on physical and mental health. In 2013, the Landscape Institute identified that health and wellbeing are positively influenced by factors such as attractiveness and the perceived safety of the environment³⁶.
- 6.5.2 A literature review by Abraham et al (2010) found that 120 studies identify a link between landscape and health. They consider that '*Landscapes have the potential to promote mental well-being through attention restoration, stress reduction, and the evocation of positive emotions; physical well-being through the promotion of physical activity in daily life as well as leisure time and through walkable environments; and social well-being through social integration, social engagement and participation, and through social support and security*³⁷.'
- 6.5.3 In addition to this, landscape and visual amenity is often associated with access to open space. This is because attractive green space can lead to more physical activity and therefore reduce levels of ill-health related problems associated with sedentary occupations and stressful lifestyles³⁸.
- 6.5.4 Overall, the literature identifies a clear relationship between visual amenity and health and wellbeing.

6.6 Road Safety

- 6.6.1 Areas with greater deprivation tend to have a higher density of roads and traffic which leads to higher collision rates³⁹ and can lead to community severance⁴⁰.
- 6.6.2 Vernon et al (2014) identified that road safety interventions can improve health and wellbeing through creating a safer physical road environment. These interventions not only reduce the level of danger posed to vulnerable road users but encourage physical activity by creating a safer environment for active forms of travel (ie walking and cycling)⁴¹. They also identify that the way people travel is influenced by concerns about perceived safety of

³⁶ Landscape Institute (2013), *Public Health and Landscape – Creating healthy places*,

³⁷ Abraham, A., Sommerhalder, K. and Abel, T. (2010), *Landscape and well-being: a scoping study on the health-promoting impact of outdoor environments*, International Journal of Public Health

³⁸ London Healthy Urban Development Unit (2019) Rapid Health Impact Assessment Tool.

³⁹ Transport and Health – briefing statement. Faculty of Public Health, December 2013

⁴⁰ ⁴⁰ Green space, urbanity, and health: how strong is the relation? Citation: Journal of Epidemiology and Community Health, 2006, vol./is. 60/7(587–592), 0143–005X Author(s): Maas, Jolanda, Verheij, Robert A, Groenewegen, Peter P, De Vries, Sjerp, Spreeuwenberg, Peter

⁴¹ Vernon, D. (2014), Road Safety and Public Health, Royal Society for the Prevention of Accidents (RoSPA)

the area. As such, road safety interventions can have a direct impact in encouraging more active travellers.

- 6.6.3 As such, improvements to road safety not only reduce the risk of accidents, but also encourage a physical activity. Such improvements can therefore be seen to have multiple positive impacts on health and wellbeing.

6.7 Accessibility and active travel

- 6.7.1 There is a large body of evidence linking physical activity with improved physical and mental health. As such, active forms of travel, such as walking and cycling, are the most sustainable forms of transport and are associated with a number of recognised health benefits. These include improved mental health, a reduced risk of premature death, and prevention of chronic diseases such as coronary heart disease, stroke, type 2 diabetes, osteoporosis, depression, dementia, and cancer⁴².
- 6.7.2 On the contrary, poor quality urban environments with high levels of motorisation and little space for walking and cycling further have been described as 'obesogenic'. This is because they are a barrier to active travel, and potentially cause sedentary behaviours which compound the health of people living in deprived areas where obesity levels are the highest⁴³.
- 6.7.3 Improvements to accessibility and active travel are directly linked to the benefits associated with improved access to social infrastructure (see section 6.1); and access to work and training (see section 6.9). This is because access and the provision of public services such as health, education and community facilities have been found to have a direct positive impact on human health⁴⁴. In contrast, a lack of accessibility excludes an array of employment and educational opportunities which aggravates regional inequalities.
- 6.7.4 Section 6.1 identifies that lack of transport options leads to social isolation, especially in older generations. This is aggravated by the fact that 40% of people with mobility issues do not have access to a private vehicle. As a result of the lack of a private vehicle, and the resulting reliance on public and voluntary transport, drivers with mobility difficulties make 40% less trips than the average driving population, spend less time travelling and travel shorter distances⁴⁵.

⁴² British Medical Association healthy transport = healthy lives 2012

⁴³ Law et al (2007) Obesity and health consequences

⁴⁴ HUDU (2013). HUDU Planning for Health. Rapid Health Impact Assessment Tool. (NHS) London Healthy Urban Development Unit

⁴⁵ Lucas et al (2019) Future of Mobility: inequalities in mobility and access in the UK transport system

- 6.7.5 The literature identifies a strong relationship between accessibility and active travel. In areas of lower-than-average car ownership, there are a higher percentage of the community who rely on public transport and accessibility for employment and leisure. A lack of opportunities for active travel have been found to lead to reduced social mobility, more limited employment opportunities and social isolation.

6.8 Crime reduction and community safety

- 6.8.1 A literature review by Bull and Bauman (2007) identifies a consistent relationship in research between perceived safety, pavements and physical activity participation⁴⁶. One study identifies that participants in areas with higher crime rates walked less often, with crime-related safety more adversely affecting walking rates among women than men⁴⁷. Furthermore, Vernon (2014) identifies that the way in which people travel is influenced by concerns about perceived safety of the area⁴⁸.
- 6.8.2 Fear of crime has also been identified as impacting mental health by increasing anxiety and decreasing trust and community participation and has been linked to reducing people's willingness to participate in physical activity⁴⁹.
- 6.8.3 Crime and fear of crime have been proven to have a substantial impact on health, however it has been identified the ways in which this is influenced is often indirect and mediated by environmental factors⁵⁰. These environmental factors include visibility and signs of neglect, which can often be linked to poor design or quality within the built environment⁵¹.
- 6.8.4 A systematic view of studies on childhood obesity and physical activity⁵²; found that children were less likely to undertake physical activity if living in an unsafe environment.
- 6.8.5 Overall, the literature demonstrates a direct link between perceived safety and physical and mental wellbeing. The literature points towards opportunities within the built environment to create safe places.

⁴⁶ Environmental Correlates of Physical Activity And Walking in Adults and Children: A Review of Reviews Bull A and Bauman F NICE, Feb 2007

⁴⁷ Doyle, S., Kelly-Schwartz, A., Schlossberg, M., Stockard, J. 2006. "Active Community Environments and Health: The Relationship of Walkable and Safe Communities to Individual Health." *Journal of the American Planning Association*, 71(1): 19–31.

⁴⁸ Vernon, D. (2014), *Road Safety and Public Health*, Royal Society for the Prevention of Accidents (RoSPA)

⁴⁹ Jackson, J. and Stafford, M. (2009), *Public health and fear of crime*, *British Journal of Criminology Advance*

⁵⁰ Lorenc, T., Clayton, S., Neary, D., Whitehead, M., Petticrew, M., Thomson, H., Cummins, S., Sowden, A. and Renton, A. (2012), *Crime, fear of crime, environment, and mental health and wellbeing: mapping review of theories and causal pathways*, *Health Place*

⁵¹ Lorenc, T., Petticrew, M., Whitehead, M., Neary, D., Clayton, S., Wright, K., Thomson, H., Cummins, S., Sowden, A. and Renton, A. (2013), *Fear of crime and the environment: systematic review of UK qualitative evidence*, *BMC Public Health*

⁵² R. An et al (2017) *Influence of Neighbourhood Safety on Childhood Obesity: A Systematic Review and Meta-analysis of Longitudinal Studies*. *Obesity Reviews*. Nov;18(11):1289–1309

6.9 Access to work and training

- 6.9.1 There is a large body of evidence linking employment and income levels with health. The World Health Organization (WHO) identifies a list of health determinants⁵³ that combine to affect the health of individuals and communities. Included in this list is: *'income and social status - higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health'*. Education is also identified as a health determinant, as *'low education levels are linked with poor health, more stress and lower self-confidence'*.
- 6.9.2 The London Health Commission identify unemployment as a *'significant risk factor for poor physical and mental health and a major determinant of health inequalities⁵⁴'*. Whilst evidence researching the links between employment and health are most commonly focused on the negative impacts of unemployment, although this can be used to infer the positive impacts associated with gaining employment.
- 6.9.3 The Marmot Review (2010) seeks to identify the differences in health and wellbeing between social groups⁵⁵. The report identifies six policy objectives for reducing health inequalities, one of which is to *'Create fair employment and good work for all'*. The review also identifies that *'being in good employment'* is important for health and wellbeing.
- 6.9.4 Furthermore, improved qualifications have generally been found to lead to better wages and employment opportunities, thus providing greater access to the health benefits associated with good and secure employment⁵⁶. This is supported by the Economic and Social Research Council, who suggest that a level of education correlates with health and wellbeing for an individual⁵⁷.
- 6.9.5 Whilst mechanisms to improve access to work and training can be implemented by increasing the range of qualifications and employment opportunities available, a recent study has also confirmed the link between access to transport and social mobility⁵⁸. Individuals can be excluded from employment opportunities because of lack of a private

⁵³ World Health Organization (2017), Health Impact Assessment - The determinants of health, <http://www.who.int/hia/evidence/doh/en/>.

⁵⁴ London Health Commission's report Health in London: Review of the London Health Strategy High Level Indicators (2005)

⁵⁵ Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish D., Grady, M. and Geddes, I., 2010, Fair society, healthy lives: Strategic review of health inequalities in England post-2010, The Marmot Review

⁵⁶ Vorhaus, J., Duckworth, K., Budge, D. and Feinstein, L. (2008), *The Social and personal benefits of learning: A summary of key research findings*, Centre for Research on the Wider Benefits of Learning, Institute of Education, University of London, London

⁵⁷ Economic and Social Research Council. Evidence Briefing: The wellbeing effect of education. July 2014. <https://esrc.ukri.org/files/news-events-and-publications/evidence-briefings/the-wellbeing-effect-of-education/>

⁵⁸ Lucas et al (2019) Future of Mobility: inequalities in mobility and access in the UK transport system

vehicle and poor public transport links. This is more likely to occur in more deprived locations, therefore widens regional inequality.

- 6.9.6 The literature clearly identifies a strong relationship between access to good employment and training opportunities and improved health and wellbeing. Furthermore, the literature considers that transport can be a key barrier to employment and reduce access to education and training opportunities.

6.10 Climate Change

- 6.10.1 Research completed by the Intergovernmental Panel on climate change and human health has concluded '*with high confidence, that climate change would cause increased heat-related mortality and morbidity, decreased cold-related mortality in temperate countries, greater frequency of infectious disease epidemics following floods and storms, and substantial health effects following population displacement from sea level rise and increased storm activity*⁵⁹'.
- 6.10.2 The release of greenhouse gas emissions has led to anthropogenic climate change which is progressively transforming the environment. There are a number of health impacts which will be directly and indirectly impacted as the climate continues to change⁶⁰.
- 6.10.3 A paper released by the UK Health Protection Agency in 2012 identifies a number of significant impacts facing the UK, including changes to weather patterns impacting food production, increased flooding and exposure to pollution⁶¹.
- 6.10.4 The effects of climate change will have significant and wide-reaching impacts on health and wellbeing. Any reduction in greenhouse gases will contribute to reducing the impact of climate change in the long term.

6.11 COVID-19

- 6.11.1 During the COVID-19 outbreak, members of the public have been encouraged to avoid public transport.
- 6.11.2 In April 2020, nearly 47% of people in employment had completed some of their work from home. Occupations requiring higher qualifications were more likely to provide homeworking

⁵⁹ WHO Climate change and human health—risks and responses summary.

⁶⁰ Thomas, Felicity; Sabel, Clive; Morton, Katherine; Hiscock, Rosemary; Depledge, Michael (2014) Extended impacts of climate change on health and wellbeing. *Environmental Science and Policy*. 44. P271–278.

⁶¹ Health Protection Agency (2012) Health Effects of Climate Change in the UK.

opportunities than jobs such as manual operations⁶². Young workers (aged 16 to 24) were least likely to be working from home.

- 6.11.3 Early indications suggest that the shift to home working necessitated by the COVID-19 outbreak may increase the shift in housing demand in the long term⁶³. It is considered demand is likely increase for houses outside of city centres, with improved access to green space. Northumberland as a neighbouring county to the Tyne and Wear urban conurbation, may become more attractive as a place to relocate.
- 6.11.4 COVID-19 has increased social isolation and feelings of loneliness due to the implications of social distancing and lockdowns. Research suggests that social isolation can have a profound impact on physical and mental wellbeing⁶⁴. As such, whilst the uptake of home working during the pandemic has been significant, there is growing evidence that working from home cannot substitute daily social interactions within the workplace.
- 6.11.5 There is concern that a decrease in public transport demand could result in a reduction in services, which would have an isolating impact on individuals with limited mobility⁶⁵. A reduction in public transport provision would increase road traffic and air pollution, thus reducing the health and wellbeing of the community, as identified in the sections above.
- 6.11.6 As such, whilst there is potential for the pandemic to facilitate a long-term shift to remote working, there is still a need to provide sustainable transport solutions which support the social, economic and environment needs of the community.

⁶² ONS Statistics (2020)

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/coronavir-usandhomeworkingintheuk/april2020>

⁶³ <https://post.parliament.uk/life-beyond-covid-19-what-are-experts-concerned-about/>

⁶⁴ <https://www.theguardian.com/world/2020/mar/18/coronavirus-isolation-social-recession-physical-mental-health>;

<https://doi.org/10.1177%2F1745691614568352>

⁶⁵ <https://post.parliament.uk/infrastructure-and-covid-19-what-are-experts-concerned-about/>

7 Assessment of health effects

7.1 Introduction

7.1.1 The following chapter assesses the potential impacts of the construction and operation of the scheme on health and wellbeing indicators at Ashington. A summary of the identified impacts can be found in Appendix A.

7.2 Access to healthcare services and other social infrastructure

7.2.1 Access to services and community facilities can affect health and wellbeing directly, through access to health treatment and care, and indirectly through access to broader social networks, such as community groups. This is particularly important for more vulnerable groups, such as elderly people.

7.2.2 It is not considered the construction of the proposed station at Ashington will impact upon access to healthcare services or social infrastructure. As a result, there would be no health and wellbeing effects on this determinant of health.

7.2.3 During operation, the reintroduction of the Newcastle to Ashington railway service and the construction of six new railway stations will improve access to healthcare, services, community facilities and other social infrastructure for the local population. This is particularly important in South East Northumberland where car ownership is lower than average (as identified in Figure 4.8).

7.2.4 The proposed station site is located in the centre of Ashington town centre, to the south of Wansbeck Square shopping centre. The railway line will provide improve accessibility to healthcare services and other social infrastructure for residents in nearby communities to Ashington. In addition to this, by improving accessibility to adjacent settlements, the scheme widens the choice of services and community facilities for residents of Ashington.

7.2.5 The provision of active travel supports those without access to private transport, who may currently be confined to services and infrastructure in their local area, or on existing bus infrastructure.

7.2.6 This is expected to result in a medium magnitude health effect as the railway station will provide significant improvements for local movement in Ashington and surrounding areas.

7.2.7 The population sensitivity is assessed as medium based on:

- **High population exposure:** due to the large number of residents who would access the site itself and use the improved public transport network to access the services and infrastructure in the wider area; and
- **Low population vulnerability:** access to service is not expected to exacerbate vulnerabilities.

7.2.8 Therefore, this is likely to result in a **minor beneficial** health effect, which is not **significant**.

7.3 Access to open space and nature

7.3.1 Access to nature and green spaces can have positive effects on mental health, alleviating symptoms of anxiety and depression, and restoring capacity for concentration and attention.

7.3.1 There are no Public Rights of Way (PROW) within the site at Ashington, however there is a permissive path which crosses the site. During construction, this path will be closed to the public and the alternative route is likely to be the local road network. During operation the walkway will be replaced to enable pedestrian access through the site.

7.3.2 A section of the site at Ashington is identified as 'Protected Open Space' in the Emerging Northumberland Local Plan. The Planning Statement submitted with this application includes an Open Space Assessment. The assessment uses evidence from the 'Open Space, Sport and Recreational facilities PPG17 Assessment 2011 (as amended in 2018)' to assess the relative importance of this open space. The assessment concluded that South East Northumberland has a surplus of amenity greenspace. Notwithstanding, this planning application seeks to make compensatory provision to offset the loss of open space required to facilitate the development, as such the proposed development is not likely to have an adverse impact on access to open space.

7.3.3 Tourism accounts for 15% of the economic sector in Northumberland. The Northumberland Local Plan and Northumberland Economic Strategy both seek to support and improve the tourist economy thorough out the county. The local plan identifies that cycling and walking holidays are an integral part of the outdoor tourism offer in Northumberland⁶⁶. Improving accessibility to and from South East Northumberland will encourage an increase in visitors for recreational and leisure purposes.

7.3.4 As such, it is considered the operation of a new station at Ashington will improve accessibility to outdoor recreational sites in close proximity to the station, such as Ashington community woodland, Queen Elizabeth II Country Park and Newbiggin beach. The station will also improve accessibility to outdoor recreation sites across South East Northumberland.

7.3.5 Furthermore, it is considered the operation of the train station will improve access to the wider PROW network, by providing a sustainable mode of transport to access the network. This includes PROW 600/090 located approximately 400 metres to the north of the site. National Cycle Network (NCN) Route 155 is also located approximately 300 metres to the north of site, which connects with NCN 1 at the coast. Thus, the station is ideally located for

⁶⁶ Emerging Northumberland Local Plan p96

onward travel for cyclists and pedestrians to access open space, the countryside and the coast.

7.3.6 As such, the impact on access to open space is anticipated to be of low magnitude health effect as the scheme results in a slight reduction in open space, but has the potential to increase accessibility to alternative open spaces. The population sensitivity is assessed as medium based on:

7.3.7 The population sensitivity is assessed as medium based on:

- **Medium population exposure:** impacts would be largely confined to the local population.
- **Medium population vulnerability:** the local population includes a number of vulnerable groups who are more sensitive to changes in access to open space and nature, such as the elderly and young families.

7.3.8 Therefore, this is likely to result in a **neutral / minor adverse health effect**, which is **not significant**.

7.4 Air Quality

7.4.1 Air quality can affect respiratory health, and air quality is considered a major environmental health problem by the WHO.

7.4.2 Construction activities and increased HGV traffic on roads could result in adverse changes to the outdoor neighbourhood amenity, including air quality and dust.

7.4.3 Although air quality can affect respiratory health, the scale of impact from changes in air quality is too small to give rise to any measurable effects on the health of the population. Nevertheless, it is likely the community will be concerned about the health effects of construction emissions, particularly with regards to children's health and those with existing respiratory conditions. Additionally, dust from construction sites has the potential to cause nuisance and irritation.

7.4.4 During operation, it is anticipated the proposed scheme will see a transfer of trips from car to the rail network. This will reduce CO₂ and NO_x emission in the area which will have a positive impact of air quality in the region. This will contribute to improved health, well-being and quality of life.

7.4.5 Local air quality may be affected if there is congestion on local roads associated with cars travelling to park at the station. However, any impact would be very localised, occasional and the impact would be offset by the overall transfer of trips from car to the rail network⁶⁷.

⁶⁷ See: Ashington Air Quality Impact Assessment (AECOM, 2021)

- 7.4.6 As such, the impact on air quality is expected to be of medium magnitude due to potential improvements to air quality across the county. The population sensitivity is assessed as high based on:
- **High population exposure:** impacts have the potential to cover a wider geographical area.
 - **Medium population vulnerability:** the local population includes a number of vulnerable groups who are more sensitive to changes to air quality such as the elderly and young families.

7.4.7 Although it is anticipated the scheme will have a potential impact on a wide geographical area, it is not anticipated the change will be prominent. As such, it is anticipated the impact on air quality will be **minor beneficial**, which is **not significant**.

7.5 Noise

7.5.1 Excessive noise can interfere with people's daily activities, disturb sleep, cause cardiovascular and psychophysiological effects, reduce performance and provoke annoyance responses and changes in social behaviour.

7.5.2 Construction activities and increased HGV traffic on roads could result in short term adverse changes to local noise levels.

7.5.3 The noise associated with the construction and operation of the station has the potential to have an adverse impact on the quality of the outdoor environment for adjacent residential properties, especially those located on John Street, Ashbourne Crescent, Oakland Terrace and Kenilworth Road. However, the CEMP will mitigate the adverse impacts and an outline CEMP has been submitted in support of this planning application. A detailed CEMP will be produced prior to the commencement of any construction activities. It is expected that such measures will mitigate noise impacts.

7.5.4 The rail line is currently used by freight trains, therefore there is an existing background level of noise across the railway line from Newcastle to Ashington. The introduction of a regular passenger service will introduce between 38 and 65 new passenger services per day (Monday to Saturday) which will increase noise levels.

7.5.5 It is envisaged that these services will operate between circa 05:30 hours to 00:00 hours. Noise will be generated at the stations from the diesel engines and tannoy announcements and in the car parks with the opening and closing of car doors.

7.5.6 The Noise Impact Assessment submitted in support of this planning application identifies that the change in ambient sound levels is assessed as low magnitude. The population sensitivity is assessed as medium based on:

- **Medium population exposure:** impacts are localised to the residential properties located directly adjacent to the site.

- **Medium population vulnerability:** the local population includes a number of vulnerable groups who are more sensitive to changes residential amenity.

7.5.7 Without mitigation measures, it is anticipated the impact on noise would be **moderate adverse**. However, as there will be measures to mitigate this impact these will reduce the potential impact to **neutral / minor adverse** and **not significant**.

7.6 Visual Amenity

7.6.1 The Landscape and Visual Assessment submitted as part of this application does not identify a significant impact on local residents as any visible activity will be temporary, short-term and reversible.

7.6.2 Notwithstanding, the activities associated with the construction of Ashington station are likely to temporarily impact on the views of the townscape.

7.6.3 The proposed station at Ashington is in the centre of a built-up area with several existing humanising elements in the surrounding townscape. As such, the stations would be in keeping with the landscape and would not have a negative visual impact. Furthermore, it is considered the proposed development will improve the appearance of existing brownfield unkempt sites. Through good design and associated landscape works, the proposed development will benefit the landscape.

7.6.4 The combination of the loss of the trees and impacts from construction noise has the potential to give rise to negative feelings in relation to quality of life and the local environment. This could change behaviours, such as deterring the use of outdoor space during the construction phase.

7.6.5 As such, the impact on visual amenity is expected to be of medium magnitude as the change in the landscape will have a long-term impact for residents adjacent to the associated stations. The population sensitivity is assessed as medium based on:

- **Medium population exposure:** impacts are localised to the adjacent properties
- **Medium population vulnerability:** the local population includes a number of vulnerable groups who are more sensitive to changes residential amenity.

7.6.6 Notwithstanding there being an unkempt area of land, without mitigation measures, it is possible the impact on landscape and visual amenity would be minor adverse. The residual impacts are likely to be adverse, however with mitigation measures this will ensure the potential impact is **neutral** and **not significant**.

7.6.7 Mitigation measures are anticipated to include additional planting to screen the car parking areas within the wider landscape. A Landscape Plan is submitted in support of this planning application. It is anticipated detailed mitigation measures will be discussed and agreed with Northumberland County Council and will be the subject of a planning condition.

7.7 Road Safety

- 7.7.1 Increased traffic on Station Road and Kenilworth Road during operation may lead to increased concerns about road safety for active travellers such as pedestrians and cyclists which would reduce the quality of the local amenity in this area.
- 7.7.2 A sub-modal shift has the potential to decrease cars on the roads which has the potential to have a positive impact on road safety. It is anticipated a Road Safety Audit will be submitted during the determination of this application to full assess the impact on road safety.
- 7.7.3 A number of design considerations also aim to improve pedestrian safety and prioritise pedestrian movement on the site, which are detailed on the submitted plans.
- 7.7.4 The stations are designed to include separate pedestrian access and provide cycle parking infrastructure.
- 7.7.5 The impact on road safety is expected to be of low magnitude. The population sensitivity is assessed as medium based on:
- **Medium population exposure:** impacts are localised to the residents and visitors to the area.
 - **Medium population vulnerability:** the local population includes vulnerable groups and young people. Active travellers rely on the availability of safe road crossings and highways safety.
- 7.7.6 As such, it is anticipated the impact on road safety will be **minor beneficial**, which is **not significant**, as the scheme will include a number of improvements to the road network and provision of additional walkways and safety measures.

7.8 Accessibility and active travel

- 7.8.1 There is a potential for construction traffic to increase concerns around road safety relating to the presence of HGVs. This could deter people from using active forms of travel in areas adjacent to the site during construction.
- 7.8.2 The literature review demonstrates that all groups benefit from regular exercise, and that it is children and older people who would be more vulnerable to increases in HGVs, potentially being discouraged (or prevented by concerned parents in the case of children) from active travel during this construction period as a result.
- 7.8.3 During construction it is anticipated the scheme will have a minor negative impact on accessibility and active travel, as cyclists and pedestrians may be temporarily deterred from using footpaths and cycleways in close proximity to the proposed station site.

- 7.8.1 The baseline data in Chapter 4 demonstrates that communities in South East Northumberland suffer from high levels of deprivation and lower than average car ownership. Figure 4.7 demonstrates that bus services are not competitive compared to travel by private vehicle.
- 7.8.2 A Transport Assessment is submitted in support of this planning application which fully assesses the anticipated transport impacts of the scheme and outlines improvements to accessibility and safety for all modes of travel.
- 7.8.3 The station at Ashington will increase accessibility for residents, providing improved choice of transport modes and more competitive journey times, both to Newcastle and within South East Northumberland.
- 7.8.4 As such, the scheme will significantly improve accessibility in the region.
- 7.8.5 The impact on accessibility and active travel is expected to be of high magnitude. The population sensitivity is assessed as medium based on:
- **High population exposure:** impacts will be regional
 - **Medium population vulnerability:** the local population includes vulnerable groups and young people. Active travellers rely on the availability of safe road crossings and highways safety.
- 7.8.6 As such, it is anticipated the impact on accessibility will be **moderate beneficial**, which is **significant**, as the scheme provides an additional mode of transport to a high population area.

7.9 Crime Reduction and community safety

- 7.9.1 During construction there is a chance that crime related to the site may increase as a result of potential theft of construction materials.
- 7.9.2 A CEMP will be produced prior to the commencement of construction. This will include details of how the site would be made safe and secure during construction to prevent unauthorised access and potential theft or criminal damage.
- 7.9.3 Public safety would also be managed through the CEMP which would include details of public access during construction and managing safety during times when only part of the site is occupied.
- 7.9.4 Evidence shows that reducing fear of crime can have positive effects on mental health and wellbeing and encourages greater use of the public realm and open spaces by more vulnerable groups such as women, older people and people with disabilities (see Section 6.8).

- 7.9.5 The proposed development could attract anti-social behaviour, especially due to the increase night-time activity as trains operate into the late hours. This would affect levels of safety and perceptions of safety for local residents and users of the stations.
- 7.9.6 In addition to this, the later operations of trains would also offer an alternative and quicker route home for people during later hours between Newcastle and Ashington, especially for shift workers.
- 7.9.7 Passive surveillance mechanisms have been incorporated into the scheme design, such as ensuring public areas are overlooked by nearby homes and car parking to ensure clear lines of sight. Public spaces would be surrounded by active frontages and public routes and spaces would be appropriately illuminated.
- 7.9.8 On balance, it is therefore expected to result in a low magnitude health effect due to the provision of well-designed public space and alternative modes of transport late at night, helping to reduce fear of crime. The population sensitivity is assessed as medium based on:
- **Medium population exposure**; and
 - **Medium population vulnerability**: due to the presence of vulnerable groups in the local area who may be particularly concerned about crime and fear of crime, such as the elderly or young families.
- 7.9.9 Therefore, this is likely to result in a **minor beneficial** effect on health, which is **not significant**.

7.10 Access to work and training

- 7.10.1 It is anticipated construction of the proposed development will support construction jobs. This would provide employment opportunities for local and regional communities.
- 7.10.2 Good employment is known to have psychological benefits improve life expectancy and enable healthier lifestyle choices (as a result of reliable income) (see section 6.9).
- 7.10.3 Due to the presence of a local workforce on site, the construction of the station is likely to support wider supply chain and service industries in the vicinity.
- 7.10.4 Any new employment or increase in profit generated by the construction works is likely to bring positive effects to the local economy and be beneficial to the wellbeing of the local communities within these supply chain and service industries. This includes the shops within Wansbeck Square such as Wilkinson. These businesses will also benefit from increased footfall facilitated by the operation of the railway station.
- 7.10.5 Where possible, employees will be sourced locally for civil engineering, earthwork/construction workforce requirements, as well as for posts such as site security and cleaning. Details of how this would be achieved have not yet been confirmed but is likely to include a requirement for local recruitment within contractor contracts.

- 7.10.6 This is expected to result in a very low magnitude health effect due to the relatively low number of construction jobs predicted for the duration of works.
- 7.10.7 It is considered the impact of construction of the scheme on access to work and training will be minor beneficial.
- 7.10.8 The reintroduction of the Newcastle to Ashington railway service and the construction of six new railway stations will improve access to employment and training opportunities by enhancing transport links to and between major employment hubs in the region.
- 7.10.9 The provision of active travel supports those without access to private transport, who may currently be confined to employment and training opportunities in the local area.
- 7.10.10 The operation of the station will increase the footfall in the local area. As such, local businesses may benefit from increased trade facilitated by the reintroduction of the station.
- 7.10.11 This is expected to result in a medium magnitude health effect due to the health benefits associated with increased income and employment. The population sensitivity is assessed as high based on:
- **High population exposure:** due to the high number of jobs, range of different job types and wider economic benefits generated by the proposed development; and
 - **Medium population vulnerability:** due to the presence of some areas of income and employment deprivation locally.
- 7.10.12 Therefore, this is likely to result in a **moderate beneficial** effect on the local population, which is **significant**.

7.11 Climate Change

- 7.11.1 The short-term construction period for the proposed development is not likely to necessitate significant changes in the local climate over this time which would affect health.
- 7.11.2 The short-term construction works may result in increased HGV movements and the use of materials to construct the temporary compounds, car parks and station infrastructure. Whilst this has potential to have a short-term effect from a climate change perspective, it is unlikely to result in any effects from a health and wellbeing perspective.
- 7.11.3 The creation of a new railway station is likely to facilitate a modal shift away from single occupancy car trips towards rail travel. Additionally, the provision of new footpaths and cycle routes could encourage active travel which would be both incidental (just passing through the site) and also intentional (to travel to the rail station or adjacent towns). This would contribute towards increased uptake of sustainable transport and therefore minimise wider climate change issues related to emissions.
- 7.11.4 This is likely to result in a very low magnitude effect on health as the change is unlikely to be perceptible to the local population. The sensitivity is assessed as **low** based on:

- **Low population exposure;** and
- **Low population vulnerability:** the effect would not exacerbate vulnerabilities

7.11.5 Therefore, this is anticipated to have a **negligible effect** on health, which is **not significant**.

7.12 COVID-19

7.12.1 The scheme has the potential to support the Northumberland's recovery from the damaging impact of COVID-19 restrictions.

7.12.2 Section 4 of this document identifies that South East Northumberland has a lower-than-average car ownership. In addition to this, non-competitive journey times on public transport contribute to many individuals disadvantaged when seeking employment or access to health and social care.

7.12.3 It is considered the station site will improve access to employment and training opportunities by enhancing transport links to major employment hubs in the region.

7.12.4 Furthermore, the proposed station may improve the viability of Ashington town centre by supporting existing businesses and attracting new investment to the area.

7.12.5 The re-introduction of passenger services on the Northumberland Line will relieve the pressure on the existing bus and Metro network. As such, the services will be capable of providing additional capacity to ensure appropriate social distancing are in place, should this be a requirement in the future.

8 Conclusions

8.1 Introduction

8.1.1 This assessment has sought to identify the potential impacts of the proposed development at Ashington station on key health and wellbeing determinants.

8.2 Positive Impact

8.2.1 The scheme will significantly improve access to nearby settlements, both through the construction of new railway stations and connecting with the existing public transport network. The scheme will provide direct access by train from Ashington to Newcastle, Manors, Seaton Delaval, Newsham, Bebside, Bedlington and Northumberland Park. The scheme will improve overall journey times and therefore improve accessibility and choice of transport modes for onward travel including:

- Onward journeys from Newcastle train station
- Connectivity to Newcastle metro network (including Newcastle Airport and the coast)
- Key employment sites within Newcastle City Centre
- Key employment sites within North Tyneside such as Cobalt Business Park and Quorum
- Key employment sites within Northumberland such as the Port of Blyth

8.2.2 As such, the proposed development will provide improved access to a range of facilities in the local and regional area.

8.2.3 The development will not only have a significant impact on accessibility and travel in the local area, but also improve mobility between employment and training opportunities, healthcare services and social infrastructure.

8.2.4 The scheme is likely to provide a minor beneficial impact on crime reduction and community safety by offering local residents an improved public transport service throughout the evening. This will especially benefit shift workers and users of the night-time economy.

8.2.5 Road traffic may increase as a result of private vehicles parking adjacent to station to travel on the trains. The scheme aims to prioritise pedestrian and cycle movements through the station and integrate with the existing footway network. Furthermore, the scheme seeks to facilitate a sub-modal shift to reduce private vehicle movements on the local road network. A reduction of road traffic will improve road safety. As such, it is considered the proposed development will provide a minor benefit to the health determinant of road safety.

- 8.2.6 The proposed development has the potential to have a negative impact on air quality through the use of diesel trains, however, it is considered the indirect benefit of a sub-modal shift may contribute to a positive impact on air quality.

8.3 Adverse Impact

- 8.3.1 The scheme may have an adverse impact on some aspects of residential amenity within Ashington.
- 8.3.2 The scheme has the potential to result in changes to the local noise levels, both during construction and operation. During construction, a CEMP which identifies mitigation measures will be adhered to, to ensure the impact on noise is less than significant.
- 8.3.3 During operation, the operation of regular train services, station noise and associated traffic may negatively impact on the ambient noise quality for nearby residents, notably those on Ashbourne Crescent and Oakland Terrace. The design of the station has sought to mitigate negative noise impacts where possible, however the proposed development may have a neutral/minor adverse effect on the ambient background noise levels, this change is not significant.
- 8.3.4 The site of the proposed development is currently open space. Therefore, the construction of the station will reduce open space in the surrounding area. However, the Open Space Assessment included in the Planning Statement submitted with this application, considers there is an excess in provision of both quality and quantity within walking distance of the site. As such, the reduction of open space provision within Ashington is not considered to be significant.
- 8.3.5 The reduction of open space will have an impact on local landscape and visual amenity. However, the proposed new planting scheme will soften the visual impact of the car park and station. Furthermore, the site is not considered high quality green space. As such, the impact on landscape character and visual amenity is not considered to be significant.

8.4 Summary

- 8.4.1 Whilst the scheme has the potential to negatively impact on some health determinants such as noise, air quality and visual amenity, the potential impacts can be mitigated and are not considered to be significant.
- 8.4.2 The substantial positive benefits associated with improved accessibility, landscaping, employment and economic benefits are considered to outweigh the adverse impacts of the scheme. As such, it is considered the proposed development, and the overall scheme will have positive long-term impact on health and wellbeing within Ashington and the wider North East region.

8.4.3 It is considered the proposed development will support South East Northumberland and North Tyneside's economic recovery following the COVID-19 pandemic and help to pursue long- term national targets to reduce greenhouse gas emissions.

Appendix A- Summary of Health and Wellbeing Assessment

Health Determinant	Receptor (s)	Sensitivity of receptors	Magnitude of Impact	Significance of impact	Comments
Access to healthcare services and social infrastructure	Local residents (including the young and elderly and those with pre-existing health conditions)	Medium	Medium	Significant (minor beneficial)	
Access to open space and nature	Local residents especially active travellers	Medium	Low	Not significant (neutral/minor adverse)	
Air Quality	Local residents	High	Medium	Not significant (minor beneficial)	Air quality is anticipated to improve as a result of a sub-modal shift to public transport.
Noise	Local Residents	Medium	Medium	Not significant (neutral/ minor adverse)	
Visual Amenity	Local residents and visitors	Medium	Medium	Not significant (neutral/ minor adverse)	
Road Safety	Local residents especially active travellers	Medium	Low	Not significant (slight beneficial)	
Accessibility and active travel	Local residents especially active travellers and those reliant on public transport	High	Medium	Significant (moderate beneficial)	A significant beneficial effect is anticipated due to the addition of six railway stations and associated walkways and cycle provision.
Crime Reduction and community safety	Local residents, especially shift workers and users of the night-time economy	Medium	Low	Not significant (minor beneficial)	
Access to work and training	Job seekers, students and local residents	Medium	Medium	Significant (moderate beneficial)	A significant beneficial effect is anticipated due to improvements to local transport networks allowing the local population to access a wider range of opportunities. The scheme is anticipated to act as a catalyst for economic regeneration and investment.

Health Determinant	Receptor (s)	Sensitivity of receptors	Magnitude of Impact	Significance of impact	Comments
Climate Change	Local and wider community	Very low	Low	Not significant (negligible)	