

**East Midlands Gateway  
Phase 2 (EMG2)**

**Document [6.18]**

ENVIRONMENTAL STATEMENT

**Volume 1 Main Statement**

Chapter 17

# Population and Human Health

[January] 2025

# 17

The East Midlands Gateway Phase 2  
and Highway Order 202X and The East Midlands Gateway  
Rail Freight and Highway (Amendment) Order 202X

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# 17. Population and Human Health

## 17.1. Introduction

17.1.1. This chapter presents the findings of the assessment work undertaken concerning potential impacts of the **Scheme** on population and health matters.

17.1.2. Population and health can be influenced (both adversely and beneficially) by a number of environmental and socio-economic determinants which can vary on a project by project basis, and are further modified by local community circumstance and existing health burden.

17.1.3. The purpose of the population and health chapter is to draw from and build upon the key outputs provided in the project description and within each relevant ES topic chapter to further test potential risk to local communities, and where appropriate, to set such risk into context.

17.1.4. Figures relevant to this chapter are as follows:

- Figure 17.1: Baseline study area.

17.1.5. The chapter is supported by the following technical appendices:

- Appendix 17a: Informal Scoping Exercise with LCC;
- Appendix 17b: Population and Health Baseline;
- Appendix 17c: Health Impact Assessment; and
- Appendix 17d: Equality Statement.

## 17.2. Scope and Methodology of the Assessment

### Study area

17.2.1. There are two elements to the human health study area:

- the study area for baseline data collection in order to establish the existing local burden of poor health and associated sensitivity to changes in the environmental and socio-economic environment; and
- the study area for receptors assessed, and the associated environmental and socio-economic changes at these receptors.

17.2.2. Environmental health determinants (such as changes to air quality and noise exposure) typically have a local distribution pattern, where the hazards are limited by their concentration and physical dispersion characteristics. Likewise, changes in transport nature and flow rate have a particular distribution on the local road network.

17.2.3. As baseline data is limited to administrative boundaries, the collection of health data (relevant to environmental health determinants) focusses upon all administrative wards that fall within 500m of **Scheme**. This comprises:

- Castle Donington Central;
- Castle Donington Castle;
- Castle Donington Park<sup>1</sup>;
- Daleacre Hill;
- Kegworth;
- Long Whatton & Diseworth; and
- Worthington & Breedon.

17.2.4. It should be noted that trend data is not readily available at the ward level and therefore data presented in the population and health baseline primarily relates to North West Leicestershire District, which all of the above wards are located within and is therefore considered to be representative of the communities living in these wards. Despite district level data being used for presentation purposes, data at the lowest geographic level possible is used for any quantitative assessment to ensure the highest levels of accuracy possible.

17.2.5. Socio-economic health determinants (such as employment and related income generation) have a wider geographic scope of influence than environmental health determinants due to the willingness to commute significant distances to work. The study area for socio-economic baseline statistics is consistent with the socio-economic technical discipline (**Chapter 5**), extending beyond just North West Leicestershire.

17.2.6. The study area defining the relevant sensitive receptors identified for assessment purposes is consistent with the inter-related technical aspects which inform the assessment of population and human health. For example, noise and air quality will assess different receptors as they have different distribution characteristics; the population and health assessment will use key outputs at the receptor level for both noise and air quality to establish the secondary effect on health and wellbeing.

17.2.7. A study area of 500m from the **Scheme** has been used in order to identify receptors that will be the focus of **Appendix 17d: Equality Statement**. Within this area, OS Address Base data will be analysed to identify community facilities that are primarily used by individuals with protected characteristics and could therefore experience disproportionate or differential effects (for example, schools, care homes and places of worship), consistent with the Equality Act 2010.

## Consultation

17.2.8. **Table 17.1** overleaf summarises all comments made by PINS and the relevant statutory consultees during scoping consultation which are relevant to health and equality matters, outlining how/where they will be addressed in the ES.

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<sup>1</sup> Located marginally beyond the 500m criteria for inclusion, but scoped in for completeness to capture the entire community of Castle Donington.

**Table 17.1: Summary of consultation with PINS and statutory consultees**

ID	Consultee	Summary of PINS comment	Applicant Response
3.0.1	PINS	The Scoping Report does not confirm whether population and human health impacts will be considered in relation to other environmental topics such as (but not limited to) electromagnetic fields (EMF), ground conditions, lighting (including landscape and visual impacts), or flood risk. Not all details of the Proposed Development are yet defined, and this has affected the Inspectorate's ability to comment on this matter.	This Chapter of the ES considers population and human health. The inclusion of all health determinants listed have been explored as part of the informal scoping exercise provided in <b>Appendix 17a</b> , with the rationale for scoping in/out also detailed. The Applicant is engaging with Leicestershire County Council on the proposed scope and focus.
3.0.1	PINS	In light of comments raised by consultation bodies in relation to the assessment of human health, the Inspectorate considers that a broader range of potential population and human health effects than air quality, noise and socio-economics could arise. As such, the Inspectorate considers this is best addressed together in a comprehensive human health and population chapter.	An assessment of a broader range of health determinants than those listed has been included in this chapter.
n/a	Kegworth Parish Council	<p>Kegworth Parish Council would like to see the following included in the ES:</p> <ul style="list-style-type: none"> <li>• A description of the production processes (manufacturing) at the main site, and a description of the effects on human health from any such air pollution and radiation</li> <li>• An estimate of expected noise from the expanded rail freight interchange and a description of the noise's likely significant effects on human health</li> <li>• A description of the expected significant adverse effects of the development on the environment (including to human health) deriving from the vulnerability of the development to risks of accident and disaster</li> </ul>	<p>As outlined in <b>Appendix 17a</b>, potential human health effects from air quality and noise have been scoped into the population and health assessment. The intention is to provide a more in depth analysis than <b>Chapter 8: Air Quality</b> and <b>Chapter 7: Noise</b> would independently, where impacts are considered beyond just pre-defined thresholds.</p> <p>Radiation has been scoped out on the basis that there are no significant sources of ionising or non-ionising radiation.</p> <p>The potential impacts on human health from major accidents and disasters will be considered within its own independent chapter (<b>Chapter 20: Major Accidents and Disasters</b>).</p>
n/a	LCC	The Applicant has justified the scoping out of population and human health on the basis that noise, air quality and socioeconomic impacts will be considered in separate	This population and human health chapter includes a health specific baseline which identifies any existing burdens of poor health.

ID	Consultee	Summary of PINS comment	Applicant Response
		<p>chapters. However, air quality, noise and socio-economic impacts do not cover the full extent to which this proposal would impact on health. Chapters on air quality, noise and socio-economic impacts may not specifically look through the lens of health in the same way that a dedicated population and human health chapter would. This could result in the chapters failing to consider the health needs of the local population, current challenges to health, and the likely cumulative impact to health on the local population, therefore missing the opportunity to mitigate any risks identified and/or enhance any positive impacts.</p>	<p>This chapter will draw from key outputs across a range of technical disciplines (such as those listed: air quality, noise and socio-economic) to robustly consider the potential impacts, including cumulative impacts, from a public health perspective.</p>
n/a	LCC	<p>LCC consider that the following would be assessed more fully if a population health chapter or health impact assessment were to be included within the scope of the ES:</p> <ul style="list-style-type: none"> <li>• Direct influences on health and behaviour – including but not limited to physical activity and mental wellbeing.</li> <li>• Community and Social Influences - including but not limited to local pride, divisions in community, social isolation, community identity, cultural and spiritual ethos, design for low crime.</li> <li>• Living environmental conditions potentially affecting health – including factors such as built environment, noise, air and water quality, flooding risk, attractiveness of area, street furniture, shade and rest, green space, blue space, outdoor physical activity, community safety, smell/odour, waste disposal, road hazards / safety, community severance, cycling and walking facilities and infrastructure, public transport, prioritise pedestrian and cyclists, traffic calming, walkability including connectivity, mixed land use, injury hazards.</li> <li>• Economic conditions and links affecting health - including unemployment, income, economic inactivity, type of</li> </ul>	<p>A HIA will be appended to the population and human health ES chapter. An informal scoping exercise has been undertaken in <b>Appendix 17a</b> to establish which health determinants outlined in IEMAs Guide to Effective Scoping of Human Health in EIA are considered relevant to the proposed development, with the rationale for scoping in/out also detailed. The Applicant is engaging with LCC on the proposed scope and focus.</p>

ID	Consultee	Summary of PINS comment	Applicant Response
		<p>employment and workplace conditions.</p> <ul style="list-style-type: none"> <li>• Access to and quality of services - including public amenities, transport including parking; public transport including stops, education and training and information technology.</li> <li>• Macro-economic, environmental and sustainability factors - this domain considers factors such as Government policies, gross domestic product, economic development, biological diversity, climate.</li> </ul>	
n/a	LCC	<p>LCC request that the following areas (middle layer super output areas), which are identified as high risk in terms of potential health inequalities, to be considered more fully in a dedicated population and human health chapter and supported by a Health Impact Assessment:</p> <ul style="list-style-type: none"> <li>• Charnwood: Loughborough Lemington &amp; Hastings, Storer and Queens Park, University, Shelthorpe &amp; Woodthorpe, Syston West and Shepshed East</li> <li>• Harborough: Market Harborough Central</li> <li>• Hinckley and Bosworth: Barwell, Hinckley Central and Hinckley Clarendon Park</li> <li>• Melton: Melton Mowbray West</li> <li>• North West Leicestershire: Agar Nook, Coalville</li> <li>• Oadby and Wigston: Wigston Town, South Wigston</li> </ul>	<p>While we appreciate that the MSOAs listed by LCC are identified as high risk in terms of potential health inequalities, all fall outside the proposed study area for baseline data collection in relation to environmental determinants of health and some are located at large distances from the site.</p> <p>It should be reiterated that the wards which make up the proposed study area for baseline data collection in relation to environmental determinants of health are those located within 500m of the DCO limits and are likely to experience the most impacts.</p> <p>As the study area for the socio-economic assessment would extend beyond North West Leicestershire, it is more likely that some of these MSOAs will be captured for this part of the assessment where existing high levels of deprivation may result in disproportionate benefits to these communities through employment opportunities associated with the proposed development.</p> <p>We will keep under review the distribution of environmental impacts reported as part of receptor analysis across the relevant topics and will capture within the population and</p>

ID	Consultee	Summary of PINS comment	Applicant Response
			health assessment if appropriate.
n/a	LCC	<p>Implications to the following groups should be explored:</p> <ul style="list-style-type: none"> <li>• People who identify as Lesbian, Gay, Bisexual or Transgender (LGBT)</li> <li>• People with a disability, including people with a learning disability</li> <li>• People who are homeless</li> <li>• Victims of modern slavery</li> <li>• Sex workers</li> <li>• Vulnerable migrants</li> <li>• Carers</li> <li>• People with severe mental illness</li> <li>• Prisoners</li> <li>• People who have experienced trauma</li> <li>• Looked after children and care experienced adults</li> <li>• People living in poverty/deprivation</li> <li>• A complex picture was identified around race and ethnicity but evidence of health inequalities being most common for people who are Bangladeshi, Pakistani or Gypsy or Irish Travellers</li> </ul>	The potential impact (adverse and beneficial) on vulnerable receptor groups (as defined by LCC) will be considered in the population and health assessment where appropriate. As discussed with LCC, some groups may be scoped out from analysis – the rationale for this will be provided clearly in the final report.
n/a	LCC	We would ask for the proximity to Traveller sites near to the development and potential health impacts to be scoped within a population health chapter or health impact assessment. At least two traveller sites appear to be close to the development area.	LCC have provided local insight on the location of gypsy/traveller sites, which will be included in the equality assessment.
n/a	LCC	In relation to air quality and noise, consideration should be given to the cumulative impacts on the health and wellbeing of local residents during both construction and operational phases.	Consistent with the regulatory requirements of EIA, cumulative population and human health effects will be assessed within this chapter.
n/a	LCC	The air quality chapter (in addition to a standalone population health chapter) should examine current health outcomes for the area including links to air pollution, for example Dementia rates. Dementia rates in North West Leicestershire are significantly higher than the England average. Asthma QOF prevalence (6 years plus) in North West Leicestershire (at 7.8%) is also higher than the value for East Midlands and England. The chapter should also consider population	Baseline health circumstance will be explored as part of the baseline assessment and will include analysis of health outcomes relevant to air pollution, for example dementia, hospital admissions for respiratory disease. While the intention will be to collect data at the lowest geographical level possible, this will be limited by third party availability.

ID	Consultee	Summary of PINS comment	Applicant Response
		groups most vulnerable to the impacts of poor air quality on health as per the Chief Medical Officer Annual Report on Air Quality 2022. Taking into consideration areas of vulnerability indicated by the Health Inequalities JSNA and likely population changes to the districts shown in the Demography JSNA.	The equality assessment will consider impacts on people with protected characteristics (e.g. young people, older people and people with existing health conditions/disabilities).
n/a	UKHSA	We believe the summation of relevant issues into a specific section of the ES provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions, and residual impacts, relating to human health.	Detailed consideration of all topics from a public health perspective are considered in this chapter unless otherwise stated.
n/a	UKHSA	UKHSA and OHID's predecessor organisation Public Health England produced an advice document 'Advice on the content of Environmental Statements accompanying an application under the NSIP Regime', setting out aspects to be addressed within the Environmental Statement.	The advice document 'Advice on the content of Environmental Statements accompanying an application under the NSIP Regime' is noted and will be taken into consideration, although the main guidance documents of reference when undertaking the population and human health assessment will be the more recent IEMA Guide to Effective Scoping of Human Health in EIA and IEMA Guide to Determining Significance for Human Health in EIA.
n/a	UKHSA	Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.	The justification for scoping out health determinants is included in <b>Appendix 17a</b> .
n/a	UKHSA	With regards to air quality, our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e, an exposed population is likely to be subject to potential harm at any level and that reducing public exposure to non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address	Air quality is specifically assess in <b>Chapter 8: Air Quality</b> . However air quality is a key determinant of health and exposure to non-threshold pollutants is assessed in this chapter. Embedded mitigation measures to reduce air quality impacts will be considered in the assessment of significance.



ID	Consultee	Summary of PINS comment	Applicant Response
		inequalities (in exposure) and maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent.	
n/a	UKHSA	The applicant should assess the potential public health impact of EMFs associated with electrical equipment on the development, or, alternatively, provide a statement or explain why EMFs can be scoped out. Further UKHSA advice is available in the document 'Advice on the content of Environmental Statements accompanying an application under the NSIP Regime'.	The rationale for scoping out EMF is provided in <b>Appendix 17a</b> .
n/a	UKHSA	The following wider determinants of health and wellbeing we expect the ES to address, to demonstrate whether they are likely to give rise to significant effects, are: <ul style="list-style-type: none"> <li>• Access</li> <li>• Traffic and Transport</li> <li>• Socioeconomic</li> <li>• Land Use</li> </ul>	As detailed in <b>Appendix 17a</b> , the listed health determinants will be assessed in this chapter.
n/a	UKHSA	Diseworth will be the most likely affected community, where the residents will already be subject to effects from East Midlands Airport in addition to any East Midlands Gateway intra-project cumulative effects.	The existing impacts of East Midlands Airport will be taken into consideration through establishing the current baseline circumstance for public health and all relevant determinants of health (e.g. air quality, noise and transport). Therefore, the main assessment will take into consideration the intra-project effects.
n/a	UKHSA	Within a population health chapter consideration should be given to the cumulative impacts of multiple changes in determinants of health cross all potential impacts. These collectively can have the potential to significantly affect the population, and vulnerable population groups, and the combined effect should be identified, considered and appropriately mitigated.	Consistent with the regulatory requirements of EIA, cumulative, inter-related and in-combination population and human health effects will be assessed within this chapter.
n/a	UKHSA	Environmental noise can cause stress and sleep disturbance, which over the long term can lead to a number of adverse health outcomes.	Noise is a key determinant of health that will be assessed in this chapter. The overall significance of effect will take into consideration the NPSE aims. The study area for assessing the population and

ID	Consultee	Summary of PINS comment	Applicant Response
		<p>The Noise Policy Statement for England (NPSE) sets out the government's overall policy on noise. Its aims are to:</p> <ul style="list-style-type: none"> <li>• avoid significant adverse impacts on health and quality of life;</li> <li>• mitigate and minimise adverse impacts on health and quality of life; and</li> <li>• contribute to the improvement of health and quality of life.</li> </ul> <p>UKHSA's consideration of the effects of health and quality and life attributable to noise is guided by the recommendations in the Environmental Noise Guidelines for the European Region 2018 published by the World Health Organization and informed by high quality systematic reviews of the scientific evidence including the UKHSA' Spatial Assessment of the Attributable Burden of Disease due to Transportation Noise in England.</p> <p>For noise exposure, UKHSA expects assessments of significance to be closely linked to the associated impacts on health and quality of life in line with the NPSE, and not on noise exposure per se.</p>	<p>health impacts of changes in the noise environment will remain consistent with the noise assessment to ensure that all areas that are impacted are captured.</p>

## Baseline study

17.2.9. Information on population and health was collected through a detailed desktop review of existing studies and datasets. These are summarised at **Table 17.2**.

**Table 17.2: Summary of desktop study sources**

Indicator	Source	Year
Population estimates	NOMIS	2021
Employment	OHID Fingertips	2022/23
Life expectancy at birth	OHID Fingertips	2020-22
Healthy life expectancy	OHID Fingertips	2018-20
Mortality rate (all-cause, cancer, circulatory disease, respiratory disease)	NOMIS	2022
Hospital admissions (respiratory disease, coronary heart disease)	OHID Fingertips	2022/23
Hospital admissions (coronary heart disease)	OHID Fingertips	2022/23
Suicide rate	OHID Fingertips	2020-22
Dementia diagnosis rate	OHID Fingertips	2024

Indicator	Source	Year
Hospital admissions for intentional self harm	OHID Fingertips	2022/23
Admission episodes for alcohol-specific conditions (under 18s)	OHID Fingertips	2020/21 – 2022/23
Admission episodes for alcohol-related conditions	OHID Fingertips	2022/23
Smoking prevalence	OHID Fingertips	2022/23
Physically active adults	OHID Fingertips	2022/23
Year 6 prevalence of obesity	OHID Fingertips	2022/23
Adults classified as overweight or obese	OHID Fingertips	2022/23

### Uncertainties and/or limitations

17.2.10. The population and health assessment draws from and builds upon the technical outputs from several inter-related technical topics (most notably the air quality, noise and vibration, transport and socio-economic assessment chapters), to investigate changes in environmental and socio-economic conditions directly attributable to the **Scheme**. As a consequence, the limitations of the supporting assessments, and the conservative assumptions applied to address them, are inherent to the assessment of health.

17.2.11. The technical outputs from the supporting inter-related technical topics are being developed. As a consequence, this preliminary population and health chapter identifies the scope and methodology for the assessment, the applicable policy, baseline conditions and matters scoped in/out. The impacts to be assessed both during the construction and operational phases are reported but the qualitative assessment of those impacts and any residual effects after mitigation is ongoing and will be included in the final version of this chapter. The identification of the impacts to health determinants which are to be assessed is provided to enable consultees an opportunity to comment on those identified health determinants.

### Assessment criteria

17.2.12. The significance of an effect is determined based on the magnitude of an impact and the sensitivity of the receptor. This section describes the criteria applied in this chapter to characterise the magnitude of potential impacts and sensitivity of receptors.

### Magnitude of impact

17.2.13. Magnitude of impact, based on the change that the **Scheme** would have upon the receptor, is considered within the range of major, moderate, minor and negligible. Consideration is given to scale, duration and frequency of impact, and reversibility with reference to the definitions in **Table 17.3**.

17.2.14. The magnitude of impact classification will be informed by the detailed analysis provided in **Appendix 17c: Health Impact Assessment**, which will be summarised in Section 17.5.

**Table 17.3: Criteria for magnitude of impact**

<b>Magnitude of impact</b>	<b>Description</b>
Major	High exposure or scale; long-term duration; continuous frequency; severity predominantly related to mortality or changes in morbidity (physical or mental health) for very severe illness/injury outcomes; majority of population affected; permanent change; substantial service quality implications.
Moderate	Low exposure or medium scale; medium-term duration; frequent events; severity predominantly related to moderate changes in morbidity or major change in quality-of-life; large minority of population affected; gradual reversal; small service quality implications.
Minor	Very low exposure or small scale; short-term duration; occasional events; severity predominantly related to minor change in morbidity or moderate change in quality-of-life; small minority of population affected; rapid reversal; slight service quality implications
Negligible	Negligible exposure or scale; very short-term duration; one-off frequency; severity predominantly relates to a minor change in quality-of-life; very few people affected; immediate reversal once activity complete; no service quality implication.

### **Sensitivity of receptors**

- 17.2.15. Within a defined population, individuals will range in level of sensitivity due to a series of factors such as age, socio-economic deprivation and the prevalence of any pre-existing health conditions which could become exacerbated. These individuals can be considered particularly vulnerable to changes in environmental and socio-economic factors (both adversely and beneficially) whereby they could experience disproportionate effects when compared to the general population.
- 17.2.16. As an example, the elderly, young children and individuals with chronic pre-existing respiratory conditions would be more sensitive to adverse changes to air quality, with the potential for emergency admission to hospital more likely than for someone of working age who has good respiratory health. On the other hand, an individual who has been unemployed for a long period of time would benefit more from employment opportunities generated by the **Scheme** in comparison to an individual who is already employed.
- 17.2.17. A scale for sensitivity of the relevant receptors is identified in **Table 17.4**. The thresholds have been derived with reference to the IEMA Guidelines, best practice and professional judgment.

**Table 17.4: Criteria for sensitivity**

<b>Sensitivity</b>	<b>Description</b>
High	High levels of deprivation (including pockets of deprivation); reliance on resources shared (between the population and the project); existing wide inequalities between the most and least healthy; a community whose outlook is predominantly anxiety or concern; people who are prevented from undertaking daily activities; dependants; people with very poor health status; and/or people with a very low capacity to adapt.
Medium	Moderate levels of deprivation; few alternatives to shared resources; existing widening inequalities between the most and least healthy; a community whose outlook is predominantly uncertainty with some concern; people who are highly limited from undertaking daily activities; people providing or requiring a lot of care; people with poor health status; and/or people with a limited capacity to adapt.
Low	Low levels of deprivation; many alternatives to shared resources; existing narrowing inequalities between the most and least healthy; a community whose outlook is predominantly ambivalence with some concern; people who are slightly limited from undertaking daily activities; people providing or requiring some care; people with fair health status; and/or people with a high capacity to adapt.
Negligible	Very low levels of deprivation; no shared resources; existing narrow inequalities between the most and least healthy; a community whose outlook is predominantly support with some concern; people who are not limited from undertaking daily activities; people who are independent (not a carer or dependant); people with good health status; and/or people with a very high capacity to adapt.

17.2.18. Extensive baseline data has been collected in order to interpret local health circumstance and consequent population sensitivity. This information is provided in **Appendix 17b: Population and Health Baseline**. Overall, it is concluded that baseline local health circumstance in the study area is comparable to or better than the regional and national averages.

17.2.19. As such, when looking at the population in general, the existing burden of poor health and sensitivity of the population within the study area is “low”. However, this does not exclude the probability that there will be individuals within a defined population who are particularly sensitive and could experience disproportionate effects.

17.2.20. Consistent with IEMA guidance, vulnerable groups have also been considered in the population and health assessment. The Leicestershire Inequalities Joint Strategic Needs Assessment has been used to inform the assessment of vulnerable groups, which are outlined in **Table 17.5**. These vulnerable groups will be assessed as having “high” sensitivity. As discussed with LCC, some vulnerable groups are not considered relevant to the **Scheme**; the rationale for scoping these vulnerable groups is provided where this is the case.

**Table 17.5: Vulnerable group analysis**

<b>Vulnerable group</b>	<b>Scoped in/out (including rationale)</b>
People who identify as Lesbian, Gay, Bisexual or Transgender (LGBT)	Scoped out – gender reassignment and sexual orientation are both protected characteristics. While no specific receptors have been identified where LGBT people are the priority user, LGBT people are considered within the thematic assessment provided in <b>Appendix 17c: Equality Statement</b> .
People with a disability, including people with a learning disability	Scoped out – disability is a protected characteristic. Residential institutions and medical facilities, where people with disabilities are likely to be a primary user group, have been identified in receptor-led assessment provided in <b>Appendix 17c: Equality Statement</b> . In addition, disabled people are considered within the thematic assessment provided in <b>Appendix 17c: Equality Statement</b> .
People who are homeless	Scoped out – construction and operational activities would not have an impact on people who are homeless.
Victims of modern slavery	Scoped out – dealt with at a strategic level through compliance with The Modern Slavery Act 2015 to address modern slavery in businesses and their supply chains.
Sex workers	Scoped out – it has been established during the informal scoping process with LCC that the construction and operational workforce would commute on a daily basis and would not contribute to risk taking behaviour. As a result, construction and operational activities would not have an impact on sex workers.
Vulnerable migrants	Scoped out – [TBC]
Carers	Scoped out – construction and operational activities would not have an impact on carers.
People with severe mental illness	Scoped out – disability (including mental illness) is a protected characteristic. Residential institutions and medical facilities, where people with disabilities (including those with mental illness) are likely to be a primary user group, have been identified in receptor-led assessment provided in <b>Appendix 17c: Equality Statement</b> . In addition, disabled people are considered within the thematic assessment provided in <b>Appendix 17c: Equality Statement</b> .
Prisoners	Scoped out – there are no prisons located close enough in proximity to the Scheme to be impacted by changes in environmental factors. [TBC]
People who have experienced trauma	Scoped out – construction and operational activities would not have an impact on people who have experienced trauma.
Looked after children and care experienced adults	Scoped out – age is a protected characteristic. Elderly people (including those who are under care in residential institutions) have been identified in the receptor-led and thematic assessments provided in <b>Appendix 17c: Equality Statement</b> . Similarly, children (including those attending education facilities) have been the receptor-led and thematic assessments provided in <b>Appendix 17c: Equality Statement</b> .
People living in poverty/deprivation	Scoped in

Racial and ethnic minorities (particularly those who are Bangladeshi, Pakistani or Gypsy or Irish Travellers)	Scoped out – one gypsy/traveller site has been identified approximately [TBC] km from the Scheme. As race is a protected characteristics, an assessment on this vulnerable receptor is provided in <b>Appendix 17c: Equality Statement</b> .
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17.2.21. In addition to considering the above vulnerable groups generally as part of the population and health assessment, specific community receptors within 500m that may have protected characteristics have been considered in **Appendix 17d: Equality Statement**.

### Significance of effect

17.2.22. The predicted level of effect is based on the consideration of magnitude of impact and sensitivity of the receptor to come to a professional judgement, in line with IEMA Guidance, as to how important this effect is, using **Table 17.6** as a guide.

17.2.23. For the purposes of this assessment the level of impact is considered significant in circumstances when the overall significance of effect is moderate or above. In addition to the significance of the impact, the nature of the impact, being either beneficial or adverse, has also been considered accordingly.

**Table 17.6: Significance of effect**

Receptor sensitivity	Magnitude of impact			
	Major	Moderate	Minor	Negligible
High	Major	Major/moderate	Moderate/minor	Minor/negligible
Medium	Major/moderate	Moderate	Minor	Minor/negligible
Low	Moderate/minor	Minor	Minor	Negligible
Negligible	Minor/negligible	Minor/negligible	Negligible	Negligible

## 17.3. Policy, Guidance and Legislative Context

17.3.1. While a wide range of environmental, social and economic factors have the potential to influence population and health, to ensure a focused list, the policy, guidance and legislation referenced in this section have been included only if they explicitly relate to health and/or wellbeing.

### Legislation

17.3.2. There is no legislation directly relevant to the assessment of population and human health beyond Paragraph 5(2)(a) and Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, that requires an EIA to assess the effects likely to be significant on population and human health.

## **National policy**

### **National Policy Statement for National Networks (NPSNN)**

- 17.3.3. Health is a key theme of the National Policy Statement for National Networks (NPSNN), whereby paragraph 4.71 states that new or enhanced national network infrastructure may have direct impacts on health because of traffic, noise, vibration, air quality and emissions, light pollution, community severance, dust, odour, polluting water, hazardous waste and pests. They may also have indirect health impacts: for example, if they affect access to key public services, local transport, opportunities for walking, cycling and wheeling, or the use of open space for recreation and physical activity.
- 17.3.4. Paragraph 4.72 states that effects on human beings should be assessed, identifying any potential adverse health impacts, and identify measures to avoid, mitigate or as a last resort compensate for adverse health impacts as appropriate. Enhancement opportunities are also mentioned, and should be identified by promoting local improvements for active travel and horse riders driven by the principles of good design to create safe and attractive routes to encourage health and wellbeing; this includes potential impacts on vulnerable groups within society.

### **National Planning Policy Framework 2024**

- 17.3.5. The National Planning Policy Framework (NPPF) sets out the planning policies for England.
- 17.3.6. Promoting healthy and safe communities is a central theme, whereby the NPPF states that planning policies and decisions should aim to achieve healthy, inclusive and safe places and beautiful buildings which promote social interaction (including opportunities for meetings between people who might not otherwise come into contact with each other), are safe and accessible, and enable and support healthy lifestyles (Paragraph 96).
- 17.3.7. Furthermore, the NPPF (Paragraph 98) states that to provide the social, recreational and cultural facilities and services that communities need, planning policies and decisions should:
- plan positively for the provision and use of shared spaces, community facilities and other local services;
  - take into account and support the delivery of local strategies to improve health, social and cultural wellbeing;
  - guard against the unnecessary loss of valued facilities and services;
  - ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and
  - ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.
- 17.3.8. Paragraph 101 also states that to ensure faster delivery of other public service infrastructure, such as healthcare infrastructure, local planning authorities should work proactively and positively with delivery partners and statutory bodies to plan for required facilities and resolve key planning issues before applications are submitted. Significant weight should be placed on the importance of new, expanded or upgraded public service infrastructure when considering proposals for development.



## Local Policy

### North West Leicestershire Local Plan (2021)

17.3.9. Objective 1 of the adopted North West Leicestershire Local Plan is to promote the health and wellbeing of the district's population. Beyond this, there are limited references to human health which largely relate to hot food takeaways (not relevant to the **Scheme**) and provision of community health infrastructure to support residential development (also not relevant to the **Scheme**).

### Draft North West Leicestershire Local Plan 2020-2040

17.3.10. Objective 1 of the draft North West Leicestershire Local Plan 2020-2040 is also to enable the health and wellbeing of the district's population. In addition, objective 11 is to maintain access to services and facilities including jobs, shops, education, sport and recreation, green space, cultural facilities, communication networks and health & social care and ensure that development is supported by the physical and social infrastructure the community needs and that this is brought forward in a coordinated and timely way; of most relevance to the **Scheme** is maintenance of access to jobs, education, green space and cultural facilities.

17.3.11. The following draft policies are considered relevant to the **Scheme**.

17.3.12. Policy AP5 – Health and Wellbeing (Strategic Policy) is a new policy, the draft text for which states that development that maintains and improves the health and wellbeing of our residents, encouraging healthy lifestyles by tackling the causes of ill health and inequalities will be supported. Health considerations will be embedded in decision making and the Council will support the creation of a high quality, accessible and inclusive environment. Of relevance to the **Scheme**, the policy goes on to state that to achieve this, the Council will: support the delivery of a safe walking and cycling network to increase access to active travel, considering active design within development and connections with the wider community, services and employment opportunities; promote and increase access to, and the protection and improvement of, green and blue spaces, sports facilities and play and recreation opportunities; prevent negative impacts on residential amenity and wider public safety from noise, ground instability, ground and water contamination, vibration and air quality; and support healthy eating and promote healthy food choices.

17.3.13. Policy AP6 – Health Impact Assessments is a new policy. While no draft text is provided, this is directly relevant to the population and human health assessment, which will embed the methods and principles of health impact assessment within the regulatory requirements of EIA.

## Guidance

17.3.14. The assessment has been carried out with reference to the following guidance:

- National Planning Practice Guidance;
- IEMA Guide to Effective Scoping of Human Health; and
- IEMA Guide to Determining Significance for Human Health.

17.3.15. The National Planning Practice Guidance (NPPG) supports the NPPF and provides guidance across a range of topic areas. As stated in the NPPG, planning and health need to be considered firstly in terms of creating environments that support and encourage healthy lifestyles, and secondly in terms of healthcare capacity. In addition, engagement with individuals and/or organisations, such as the relevant Director(s) of Public Health, will help ensure local public health strategies and any inequalities are considered appropriately.

17.3.16. The IEMA guidance on 'Effective Scoping of Human Health in EIA' defines the approach for scoping wider determinants of health in or out of an EIA and is derived from EU EIA Directive 2014/52/EU.

17.3.17. Furthermore, the IEMA guidance on 'Determining Significance for Human Health in EIA' responds to gaps and inconsistencies across existing guidance as to how health, particularly regarding significance (including sensitivity and magnitude classifications), is assessed in EIA. This promotes greater consistency in the assessment process; particularly in how EIA health conclusions are reached, interpreted, defended and applied to the greatest positive effect.

## 17.4. Baseline Conditions

### Current baseline

17.4.1. Individuals and communities have varying susceptibilities to adverse and/or beneficial population and health effects associated with changes in environmental and socio-economic conditions as a result of: demographic structure (for instance, age); existing burden of poor health; behaviours (for instance, lifestyle choices which constitute risk factors); and socio-economic circumstance.

17.4.2. The current baseline is provided in full in **Appendix 17b: Population and Health Baseline**. In summary, the population living in the ward study area are more elderly than the national average. Life expectancy in the district study area is comparable to (male) or higher than (female) the regional and national averages; consistent with this, mortality rates in the ward and district study area are comparable to or lower than the regional and national averages. District-level hospital admissions for coronary heart disease are also lower than the national average, while hospital admissions for respiratory disease are higher than the national average (data only available for the NHS Region). At the ward level, hospital admissions are also either comparable to or better than the regional and national averages.

17.4.3. Mental health statistics show that the district study area has comparable mental health to the regional and national averages. Dementia diagnosis on the other hand is comparatively low.

17.4.4. Alcohol specific conditions (under 18s) and adult smoking prevalence in the district study area are better than regional and national averages, while alcohol related admissions in the adult population has increased to a level which is worse than regionally and nationally. Physical activity in adults has fluctuated over the years and recently shows an increase to a level which is higher than all relevant comparators. While this is the case, the percentage of adults classified as overweight or obese in the district study area has been consistently higher than the regional and national averages and has increased over time. The prevalence of obesity in children has also been increasing in the district study area, consistent with regional and national trends, but remains consistently lower than all relevant comparators.

17.4.5. Overall, the majority of indicators are either comparable to or better than the regional and national averages. As such, it can be concluded that the population living in the study area is not considerably more or less sensitive to changes in environmental and/or socio-economic conditions associated with the **Scheme**.

### **Future baseline**

17.4.6. Consistent with recent local and national trends, the health of the population living within the study area is likely to improve over the lifetime of the **Scheme**. This will be the case with or without the **Scheme**.

17.4.7. While this is the case, any improvement is challenging to predict with high confidence and unlikely to be substantial. On this basis, it is considered appropriate (and precautionary) to use present-day statistics for the purpose of this assessment, offering a precautionary approach.

## **17.5. Potential Impacts**

### **Introduction**

17.5.1. As previously stated, this section has been informed by the detailed analysis provided in **Appendix 17c: Health Impact Assessment**, which will be summarised in the sections below to reach a conclusion on magnitude of impact and significance of effect.

### **Construction phase**

[This section is under development and will assess the following matters during the construction of the **Scheme**]

- a. Health effects from access to open space and PRow for physical activity, leisure and recreation
- b. Health effects from changes in transport, access and connections
- c. Health effects from changes in the visual environment
- d. Health effects from changes in socio-economic factors (employment and income)
- e. Health effects from changes in air quality
- f. Health effects from changes in noise and vibration

### **Operation phase**

[This section is under development and will assess the following matters during the operation of the **Scheme**]

- a. Health effects from access to open space and PRow for physical activity, leisure and recreation
- b. Health effects from changes in transport, access and connections
- c. Health effects from changes in the visual environment
- d. Health effects from changes in socio-economic factors (employment and income)

- e. Health effects from changes in air quality
- f. Health effects from changes in noise and vibration

## **17.6. Mitigation Measures**

17.6.1. Public health is by definition preventative in nature. Therefore, mitigation measures adopted as part of the construction and operation of the **Scheme** will focus on precursors to health and wellbeing outcomes, thereby providing an opportunity for intervention to prevent any adverse impacts.

## **17.7. Residual Effects**

17.7.1. [The residual effects on population and human health after mitigation measures have been adopted will be assessed by reference to the significance]

## **17.8. Cumulative effects**

17.8.1. [This section is under development and will detail any remaining residual cumulative effects of significance after mitigation]

## **17.9. Summary of Effects and Conclusions**

17.9.1. [This section is to be completed once the assessment is finalised.]