

## Chapter 4

# Population and human health

## Policy Context

### International

**4.1 The 2030 Agenda for Sustainable Development** (2015) [\[See reference 34\]](#): This initiative, adopted by all United Nations Member States, provides a shared blueprint for peace and prosperity for people and the planet and includes 17 Sustainable Development Goals (SDGs), designed to achieve a better and more sustainable future for all. Relevant to this topic are:

- SDG 3: Good Health and Well-being
- SDG 9: Industry, Innovation and Infrastructure.
- SDG 10: Reduced Inequalities
- SDG 11: Sustainable Cities and Communities

**4.2 United Nations Declaration on Sustainable Development** (the '**Johannesburg Declaration**') (2002) [\[See reference 35\]](#): Sets broad framework for international sustainable development, including building a humane, equitable and caring global society aware of the need for human dignity for all, renewable energy and energy efficiency, sustainable consumption and production and resource efficiency.

**4.3 United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters** (the '**Aarhus Convention**') (1998) [\[See reference 36\]](#): Establishes a number of rights of the public (individuals and their associations) with regard to the environment. The

Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional, or local level) will contribute to these rights to become effective.

# National

## 4.4 National Planning Policy Framework (NPPF) (2021) [\[See reference 37\]](#)

includes, as part of its social objective, the promotion of “strong, vibrant and healthy communities”. The NPPF supports proposals which “enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green/blue infrastructure, and layouts that encourage walking and cycling”. The planning system supports developments that promote sustainable transport i.e., through limiting the need to travel and providing a choice of public and active transport modes, which will help to reduce congestion and emissions, and improve air quality and public health.

## 4.5 The NPPF is supported by planning practice guidance relating to:

- **Healthy and safe communities** (2019) [\[See reference 38\]](#) - Provides guidance on achieving healthy, safe and inclusive communities, estate regeneration and school place provision.
- **Noise** (2019) [\[See reference 39\]](#) - Advises on how planning can manage potential noise impacts in new development.
- **Light pollution** (2019) [\[See reference 40\]](#) - Advises on how to consider artificial light within the planning system.
- **Travel Plans, Transport Assessments and Statements** (2014) [\[See reference 41\]](#) - Provides advice on when Transport Assessments and Transport Statements are required, and what they should contain.

## 4.6 The **White Paper Levelling Up the United Kingdom** (2022) [\[See reference 42\]](#) sets out how the UK Government will spread opportunity more

equally across the UK. It comprises 12 UK-wide missions to achieve by 2030. Missions which relate to population and human health state that by 2030:

- Local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.
- The gap in Healthy Life Expectancy (HLE) between local areas where it is highest and lowest will have narrowed, and by 2035 HLE will rise by five years.
- Well-being will have improved in every area of the UK, with the gap between top performing and other areas closing.

**4.7 National Design Guide (2021) [See reference 43]:** sets out the Government's priorities for well-designed places in the form of ten characteristics: context, identity, built form, movement, nature, public spaces, uses, homes and buildings, resources and lifespan. The National Design Guide states that a well-designed movement network defines a clear pattern of routes that:

- are safe and accessible for all;
- functions efficiently to get everyone around; takes account of the diverse needs of all its potential users; and provides a genuine choice of sustainable transport modes;
- limits the impacts of car use by prioritising and encouraging walking, cycling and public transport, mitigating impacts and identifying opportunities to improve air quality;
- promotes activity and social interaction, contributing to health, well-being, accessibility and inclusion; and,
- incorporates green infrastructure, including street trees to soften the impact of car parking, help improve air quality and contribute to biodiversity.

**4.8 COVID-19 Mental Health and Wellbeing Recovery Action Plan (2021) [See reference 44]** sets out the Government's plan to prevent, mitigate and

respond to the mental health impacts of the pandemic during 2021 and 2022. Its main objectives are to support the general population to take action and look after their own mental wellbeing; to take action to address factors which play a crucial role in shaping mental health and wellbeing outcomes; and, to support services to meet the need for specialist support.

**4.9 Planning for the Future White Paper (2020) [See reference 45]:** Sets out a series of potential reforms to the English planning system, to deliver growth faster. One of the aims of the White Paper is to focus on design, sustainability and infrastructure delivery.

**4.10 Using the planning system to promote healthy weight environments (2020) [See reference 46], Addendum (2021) [See reference 47]** provides a framework and starting point for local authorities to clearly set out in local planning guidance how best to achieve healthy weight environments based on local evidence and needs, by focusing on environments that enable healthier eating and help promote more physical activity as the default. The Addendum provides updates on the implications for planning for a healthier food environment, specifically on the hot food takeaways retail uses, and sets out recommended actions in light of changes to the Use Class Order (UCO) in England from 1 September 2020.

**4.11 Public Health England, PHE Strategy 2020-25 (2019) [See reference 48]:** identifies PHE's priorities upon which to focus over this five-year period to protect people and help people to live longer in good health.

**4.12 A Green Future: Our 25 Year Plan to Improve the Environment [See reference 49]:** Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to the topics of population growth, health and wellbeing are 'using and managing land sustainably' and 'connecting people with the environment to improve health and wellbeing'. Actions that will be taken as part of these two key areas are as follows:

- Using and managing land sustainably:
  - a) Embed an 'environmental net gain' principle for development, including housing and infrastructure.
- Connecting people with the environment to improve health and wellbeing:
  - b) Help people improve their health and wellbeing by using green spaces including through mental health services.
  - c) Encourage children to be close to nature, in and out of school, with particular focus on disadvantaged areas.
  - d) 'Green' our towns and cities by creating green infrastructure and planting one million urban trees.

**4.13 The Environmental Noise Regulations [See reference 50]** apply to environmental noise, mainly from transport. The regulations require regular noise mapping and action planning for road, rail and aviation noise and noise in large urban areas. They also require Noise Action Plans based on the maps for road and rail noise and noise in large urban areas. The Action Plans identify Important Areas (areas exposed to the highest levels of noise) and suggest ways the relevant authorities can reduce these. Major airports and those which affect large urban areas are also required to produce and publish their own Noise Action Plans separately. The Regulations do not apply to noise from domestic activities such as noise created by neighbours; at workplaces; inside means of transport; or military activities in military areas.

**4.14 Healthy Lives [See reference 51]:** investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health on the basis that there is “overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities”. **Marmot Review 10 Years On [See reference 52]** revisits Fair Society, Healthy Lives. It found that, since 2010, life expectancy in England has stalled, which suggests society has stopped improving. In addition, there are marked regional differences in life expectancy – the more deprived the area, the shorter the life

expectancy. Mortality rates are increasing in those aged 45-49, child poverty has increased and there is a housing crisis and rise in homelessness.

**4.15 Healthy Lives, Healthy People: Our strategy for public health in England [See reference 53]:** Sets out how the Government's approach to public health challenges will:

- Protect the population from health threats – led by central Government, with a strong system to the frontline.
- Empower local leadership and encourage wide responsibility across society to improve everyone's health and wellbeing and tackle the wider factors that influence it.
- Focus on key outcomes, doing what works to deliver them, with transparency of outcomes to enable accountability through a proposed new public health outcomes framework.
- Reflect the Government's core values of freedom, fairness and responsibility by strengthening self-esteem, confidence and personal responsibility; positively promoting healthy behaviours and lifestyles; and adapting the environment to make healthy choices easier.
- Balance the freedoms of individuals and organisations with the need to avoid harm to others, use a 'ladder' of interventions to determine the least intrusive approach necessary to achieve the desired effect and aim to make voluntary approaches work before resorting to regulation.

## Regional and Local

**4.16 Brentwood Local Plan 2016-2033 [See reference 54]:** Brentwood Council voted to adopt their Local Plan on 23<sup>rd</sup> March 2022 which aims to deliver 7,752 new residential dwellings over the plan period, along with the creation of at least 5,000 additional jobs.

**4.17 Castlepoint Adopted Local Plan 1998 [See reference 55]:** The current Local Plan was adopted in November 1998; it was saved in its totality on 28<sup>th</sup> September 2007 and since then only certain policies are still in place. In June 2022, the Local Plan 2018-2033 was withdrawn, and a programme for the preparation of a new Local Plan is still to be agreed by the Council.

**4.18 Dartford Core Strategy 2011 [See reference 56]:** The Council adopted its current Local Plan in September 2011. The preparation of the new Local Plan is currently underway with the Pre-Submission Dartford Local Plan submitted to the Planning Inspectorate on 13<sup>th</sup> December 2021, which plans for the generation of 8,000 to 16,000 jobs and 11,900 new homes over the plan period. Stage 1 Hearing Sessions considering the Duty to Co-operate, and other Legal Compliance Matters, took place in June 2022. Further details regarding the arrangements for Stage 2 of the Examination are yet to be released.

**4.19 Gravesham Local Plan Core Strategy 2014 [See reference 57]:** The Core Strategy covers the period from 1 April 2011 to 31 March 2028. It plans for the delivery of at least 6,170 high quality homes and the delivery of at least 4,600 new jobs over the plan period.

**4.20 Havering Local Plan 2016-2031 [See reference 58]:** The Havering Local Plan 2016-2031 was adopted in 2021. It plans for the delivery of at least 18,930 high quality homes over the plan period.

**4.21 Basildon District Local Plan Saved Policies 2007 [See reference 59]:** Approved by the Secretary of State via a Direction issued on 20 September 2007, the Saved Policies were originally part of the Basildon District Local Plan, adopted in March 1998 with Alterations in September 1999. In March 2022, the Council resolved to withdraw the new Basildon Borough Local Plan 2014-2034 from Examination. Basildon Council is in the process of preparing a new Local Development Scheme which is due to be reported to the Cabinet for approval on 8<sup>th</sup> September 2022.

**4.22 Essex Transport Strategy [See reference 60]:** The Essex Transport Strategy outlines the County Council's priorities and strategic objectives for improving the transport network across Essex, including by encouraging a modal shift towards public transport, walking and cycling over single occupancy car journeys. The Plan supports the use of cleaner, lower carbon transport technologies, and car share schemes.

**4.23 Sustainable Modes of Travel Strategy [See reference 61]:** The Sustainable Modes of Travel Strategy aims to reduce the number of private vehicles using the highway network and increase the use of more active and sustainable modes available to businesses, residents and schools within Essex. A key objective is to manage congestion during peak times and improve the environment by reducing the need to travel by car and potentially reducing CO<sub>2</sub> and other emissions.

**4.24 Transport East Active Travel Strategy [See reference 62]:** The vision for the region is that half of all journeys within towns and cities (up to three miles from the urban centre) will be made by walking and cycling. By 2050, half of all trips in the Transport East region will be made by walking or cycling. In Thurrock, a "Go Dutch" scenario (which applies Dutch rates for cycle commuting in England adjusting for distance and hilliness) would result in almost a twelve-fold increase of the population who could commute to work by cycle, to 24.9%.

**4.25 Transport East Draft Transport Strategy [See reference 63]:** The Draft Transport Strategy aims to outline a collective vision for the future of transport in the region and set out key investment priorities needed to deliver it. The overarching vision is underpinned by four strategic priorities: decarbonisation to net-zero, connecting growing towns and cities, energising coastal and rural communities, and unlocking international gateways. The four strategic priorities overlap and together form an integrated strategy for the region. The Draft Transport Strategy sets out the pathways and key goals needed for the delivery of their Vision, which include goals focused around improving sustainable and active travel options, reducing demand for travel via digital connectivity, encouraging behaviour change, increasing access for coastal and rural



communities, improving efficiency of freight transport, and creating better connected ports and airports to unlock international gateways.

**4.26** Section 5 of the Draft Transport Strategy highlights place-based strategic corridors which link key destinations with the region. For Thurrock, this includes improved links with South Essex, London, Basildon and Southend. The Strategy identifies the area as a major location for economic growth, particularly in relation to the major international ports at London Gateway, Purfleet and Tilbury (now Thames Freeport). At present, the area is heavily congested which acts as a major barrier to growth. The Strategy identifies the need for improved road, freight capacity, passenger rail and bus networks to support economic and population growth in the region.

**4.27 South Essex Green and Blue Infrastructure Strategy: Resilient by Nature [See reference 64]:** This strategy sets out a vision for an integrated green and blue infrastructure (GBI) network across South Essex and key objectives and projects to achieve this. This includes improving connectivity within and across the landscape through active travel links such as walking and cycling.

**4.28 Green Essex Strategy [See reference 65]:** This Strategy seeks to enhance, protect and create an inclusive and integrated network of high-quality green infrastructure in Greater Essex, to create a county-wide understanding of green infrastructure – its functions and values, and to identify opportunities for implementing green infrastructure. The Strategy promotes the use of the green infrastructure network for sustainable and active modes of transport such as walking and cycling.

**4.29 Thurrock Active Place Strategy [See reference 66]:** An Active Place strategy has been developed by Thurrock Council to inform the development of the Thurrock Local Plan. The strategy outlines three studies that present a planning related evidence base relating to the Borough's open spaces, indoor sports facilities and playing pitches. It also outlines an Active Travel Strategy for Thurrock which reviews the existing cycle network in the Borough. The strategy presents a number of detailed key objectives and recommendations for open

spaces, indoor facilities, playing pitches, as well seven geographical priority areas where physical improvements to active travel routes should be made. Recommendations to address mental barriers to active travel in the Borough are also included in the strategy.

### **4.30 Draft Thurrock Transport Strategy** (internal draft, currently unpublished):

The Interim Draft Transport Strategy builds on the existing Transport Strategy (2013 – 2026), taking into account much of the rapid change Thurrock is undergoing, including major regeneration projects and proposed development which will fundamentally alter the way people and goods move around Thurrock and the wider region. Key projects include Grays Town Centre regeneration, the port expansion of Tilbury and London Gateway, proposed development of a logistics ‘superhub’ at Thames Enterprise Park, the Thames Freeport, Purfleet regeneration, and the proposed construction of the Lower Thames Crossing (LTC). The Draft Transport Strategy outlines key challenges and opportunities for Thurrock which include supporting sustainable economic growth, supporting the health and wellbeing of Thurrock’s residents and addressing the Climate Emergency. These factors inform the Transport Vision Statement (‘Connecting Thurrock’), as well as 10 interconnected overarching goals and nine strategic focus areas specified in the Draft Transport Strategy. The Draft Transport Strategy will be supported by a series of shorter-term delivery documents, setting out more specific actions that aim to achieve the overarching vision and goals.

**4.31 Thurrock Transport Strategy 2013-2026** [\[See reference 67\]](#): The strategy sets out the aims, objectives and policies for delivering transport improvements in Thurrock, including (but not limited to) to respond to large scale growth at Lakeside, Tilbury Port and London Gateway. The strategy focusses on the need to address the following key areas: Delivering Accessibility, Tackling Congestion, Improving Air Quality and Addressing Climate Change, Safer Roads and Facilitating Regeneration. This strategy also sets out the long-term approach to walking and cycling in the Borough.

**4.32 2020/2021 Air Quality Annual Status Report** [\[See reference 68\]](#): The 2020/21 Thurrock Air Quality Annual Status Report provides the most recent

overview of air quality within Thurrock, as well as identifying actions that have been undertaken to improve it and the Council's future priorities. The report highlights that the main pollutant of concern in Thurrock is nitrogen dioxide (NO<sub>2</sub>), and to a lesser extent particulate matter (PM<sub>10</sub>), both arising from road traffic emissions. NO<sub>2</sub> was monitored at 67 diffusion tube sites and three automatic monitoring sites across the Borough in 2020. The report notes the limitations of using 2020 data due to the travel restrictions as a result of the COVID-19 pandemic and provides 2019 figures for reference. The Council plans to conduct a detailed and up to date assessment of all declared AQMAs across the Borough.

**4.33 Thurrock Air Quality and Health Strategy [See reference 69]:** The overarching aim of the strategy is to improve air quality in the Borough in order to reduce the health impacts of air pollution. The report outlines the baseline conditions for both air quality and health in the Borough, and highlights the correlation between the two. It highlights the dangers of certain pollutants and the need to act faster to reduce levels of harmful emissions due to impacts on public health. The report presents a strategy which includes to reduce transport emissions; tackle health inequalities; explore options for the implementation of clean air zones; and ensure air quality policies will be incorporated into future development, regeneration and planning guidance. The strategy also outlines the Air Quality Action Plan (AQAP) for all AQMAs, as well as Borough-wide interventions. The implementation of the strategy will be monitored and progress on air quality assessed.

**4.34** Thurrock Council is currently preparing a **Green and Blue Infrastructure Strategy**, a **Strategic Growth Location Infrastructure Needs Assessment**, a **Health and Wellbeing Strategy** and an update to the **Air Quality and Health Strategy**, all of which will be taken into account in the next iteration of the SEA.

## Implications of the policy review for the Interim Thurrock Transport Strategy SEA

In order to align with the international, national, regional and local policies outlined above, the Interim TTS should seek to encourage healthy and active lifestyles; to create fair, safe and inclusive communities; and to improve the sustainable transport network within the Plan area. The SEA is able to respond to this through the inclusion of SEA objectives relating to health and wellbeing, social inclusion, and sustainable transport.

## Baseline Information

### Population

**4.35** Thurrock lies within the East of England comprising of 165 sq. km. Thurrock is located on the north side of the River Thames, immediately to the east of London.

**4.36** The population of Thurrock in the 2011 Census was 158,300 [\[See reference 70\]](#) (note the results of the 2021 Census have not been published at the time of writing). The population of Thurrock was estimated to be 175,531 in mid-2020 [\[See reference 71\]](#). By 2043, it is estimated that the population of Thurrock will increase to 205,469 [\[See reference 72\]](#). There are 67,200 households in Thurrock [\[See reference 73\]](#).

**4.37** The Borough has a number of main settlements, including Grays, Stanford-le-Hope, Corringham, South Ockendon and Tilbury. Thurrock also contains the relatively new community of Chafford Hundred and also the Lakeside Regional Shopping Centre, located west of Grays and east of the

M25. With the exception of principal urban area of Thurrock, and the towns and villages, all of the land within the Borough is designated as Green Belt [\[See reference 74\]](#).

**4.38** Much of the population of Thurrock lives within and around Purfleet, Chafford Hundred, Aveley, Ockendon and Grays. These are mainly the settlements that are within closest proximity to London on the western edge of the Borough. **Table 4.1** presents the most recent estimates of population by ward in Thurrock [\[See reference 75\]](#).

**Table 4.1: Estimated populations by ward in Thurrock**

Ward	Estimated Population (as of 2018)
Aveley and Uplands	10,082
Belhus	10,546
Chadwell St Mary	10,265
Chafford and North Stifford	8,338
Corringham and Fobbing	5,407
East Tilbury	6,724
Grays Riverside	13,277
Grays Thurrock	9,657
Little Thurrock Blackshots	6,260
Little Thurrock Rectory	6,067
Ockendon	11,248
Orsett	6,171
South Chafford	7,965
Stanford East and Corringham Town	8,493
Stanford-le-Hope West	6,850

Ward	Estimated Population (as of 2018)
Stifford Clays	6,776
The Homesteads	8,344
Tilbury Riverside and Thurrock Park	7,696
Tilbury St Chads	6,330
West Thurrock and South Stifford	13,277

**4.39** Thurrock has a higher proportion of people under the age of 65 (86.2%) compared to the national average (81.7%), however, has less people over the age of 65 at 13.8% compared to the national average of 18.4% **[See reference 76]**. The older population, is projected to grow significantly by 2031, moving more in line with the national average, placing additional pressures on housing and social care services, as well as public transport services.

## Housing

**4.40** Thurrock needs to accommodate around 30,000 new homes over the period to 2040 in order to provide a 15-year supply to meet Government requirements. There were 493 net additional dwellings completed between 1<sup>st</sup> April 2020 and 31<sup>st</sup> March 2021. 76.9% of the 493 dwelling completions that took place were on previously developed/brownfield land. 105 affordable houses were completed during 2020/21, 21% of the total number of completions. 100% affordable housing was provided at two Thurrock Council-built schemes – a total of 83 new dwellings. Housing provision in Thurrock has seen significant fluctuations between 2011 and 2021. Housing completions have dropped since an increase in annual completions between 2015 and 2018 **[See reference 77]**.

## Health

**4.41** Health is a cross-cutting topic and as such many topic areas explored in this Scoping Report influence health either directly or indirectly. 'Health' in Thurrock is in the bottom 20% for England [\[See reference 78\]](#). Thurrock has an overall Health Index score of 97.2, which is down 0.2 points compared with the previous year. The area is ranked 250<sup>th</sup> most healthy out of 307 local authority areas in England.

**4.42** Thurrock performs worse than the East of England and national averages for the three main health domains: 'healthy people' [\[See reference 79\]](#), 'healthy lives' [\[See reference 80\]](#), and 'healthy places' [\[See reference 81\]](#). Health in Thurrock is strongest among measures relating to the 'mental health' subdomain (social, emotional and mental health, mental health conditions, self-harm and suicides). Thurrock remains in the bottom 40% for the 'children and young people' subdomain.

## Life expectancy

**4.43** Life expectancy at birth in 2019 in Thurrock was 79.2 years for males and 82.5 years for females, which is 'significantly worse' than the national average of 79.7 years and 83.2 years respectively [\[See reference 82\]](#). Life expectancy at birth in Thurrock was 8.7 years lower for men and 6.4 years lower for women in the most deprived areas of Thurrock when compared to the least deprived areas [\[See reference 83\]](#). This is lower than average for England where the gap in life expectancy at birth between the least and most deprived areas was recorded as 9.4 years for males and 7.7 years for females [\[See reference 84\]](#). The ratio of deaths from cancer, circulatory disease, coronary heart disease and respiratory disease are all 'significantly worse' than the England averages [\[See reference 85\]](#).

## Obesity

**4.44** Being overweight or obese carries numerous health risks, including increased likelihood of type 2 diabetes, cancer, heart and liver disease, stroke and related mental health conditions. It is estimated this health issue places a cost of at least £5.1 billion on the NHS and tens of billions on the wider UK society every year. In Thurrock, 69.4% of adults are classified as overweight or obese which is higher than the regional percentage of 62.3% and the national percentage of 62.8%. Prevalence of overweight including obesity in Year 6 children is higher in Thurrock at 38.9% than the national average of 34.6% **[See reference 86]**.

**4.45** The number of hospital admissions with the primary diagnosis of obesity within Thurrock is 20 per 100,000 in 2018/19. This figure is slightly higher than the regional figure of 15 and equal to the national figure of 20 persons per 100,000 **[See reference 87]**.

## Overview of health indicators for the Borough

**4.46** Health indicators in which figures for Thurrock are significantly worse than national and regional averages are life expectancy at birth (males); killed and seriously injured casualties on England's roads; smoking prevalence in adults; percentage of physically active adults; percentage of adults classified as overweight or obese; Year 6: prevalence of obesity; and violent crime (hospital admissions for violence).

**4.47** The plan area performs significantly better than the national and regional averages in terms of suicide rate; emergency hospital admissions for intentional self-harm; and admission episodes for alcohol-specific conditions (under 18s) **[See reference 88]**.



## Access to services and facilities

**4.48** Services and facilities include hospitals and GPs, recreational resources, food retailers, employment and education centres, and other aspects of social infrastructure such as community centres and places of worship. Good and equitable accessibility and the provision of sufficient community facilities is a vital part of development's role in improving the health and well-being of a community.

**4.49** Development which alters access to services and facilities can affect health and well-being in a number of ways. It can have direct links in terms of providing access to healthcare facilities, it can encourage walking or cycling, which may help to prevent or reduce obesity and the risk of cardiovascular disease, or it can restrict accessibility by non-car modes of transport, which may be particularly detrimental for certain social groups. Having suitable access to employment, education, places of worship and community centres is also important for well-being.

**4.50** According to the most recent Department for Transport 'journey time statistics' [See reference 89], the average journey time taken to reach the nearest key services in Thurrock by car was 10.4 minutes, which is less than the regional average for East of England (11.3 minutes) but marginally above the national average for England (10.3 minutes). The average journey time by public transport/walking was 18.4 minutes which is below the regional average for East of England (20.7) but again is above the national average (17.9 minutes). The same pattern exists for cycling, where the average journey time of 16.3 minutes was lower than the East of England average of 18.6 minutes but above the national average (15.6 minutes). The average journey time by walking was 31.4 minutes which is also below the East of England average (34.1 minutes) but is above the national average of 28 minutes.

**4.51** These results suggest that access to key services and facilities in Thurrock is above average for the East of England region but below the national average.

## Open spaces, sports and recreation

**4.52** Thurrock has a variety of parks across the Borough, which include a number of Nature Parks; a variety of Riverside Parks; Langdon Hills Country Park and Belhus Woods Country Park. The RSPB maintains Rainham Marshes Nature Reserve, which consists of an ancient, low-lying grazing marsh that is important for wildlife.

**4.53** Friends of the Earth has used official data to map the availability of green space for people living in neighbourhoods across England. The map has been created by combining official data on public green space, garden space, and open access land such as mountain, moor, heath, down or common land, with data on neighbourhood populations, ethnicity and income. Local authorities were assessed against the three categories and a rating from A to E was assigned. E rated neighborhoods are those most deprived of green space, including gardens and parks, whereas A rated neighborhoods get the health and nature benefits from plenty of green space.

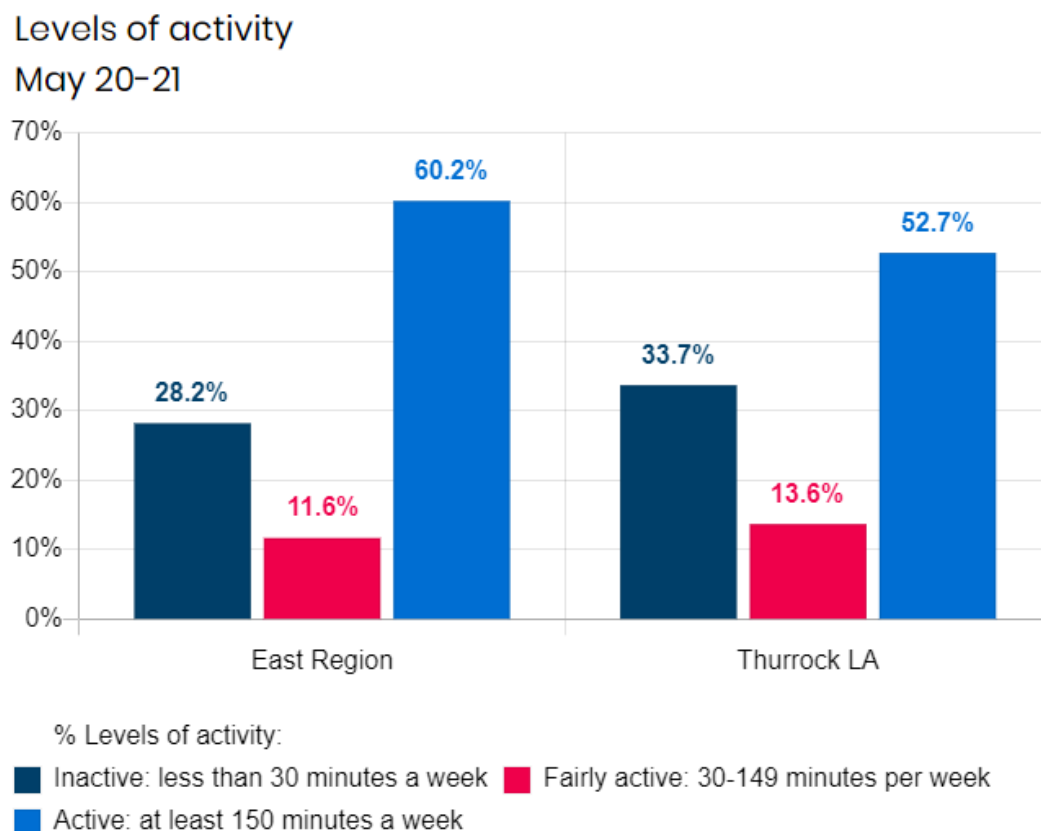
**4.54** Two areas within Thurrock (Orsett, Bulphan & Hordon-on-the-Hill and Corringham North & London Gateway) received an A rating. These areas fall within the more rural parts of Thurrock. The lowest rating given was a D at Purfleet, South Stifford & Lakeside; Tilbury; and Grays Town. Generally, the more urbanised areas within Thurrock received a lower rating [\[See reference 90\]](#).

**4.55** A further study conducted by Friends of the Earth identified adequate and equitable access to high-quality green and blue environments as an issue in Thurrock, with 22% of Thurrock neighbourhoods having poor access to nature and 47% having only moderate access, particularly affecting disadvantaged neighbourhoods [\[See reference 91\]](#).

**4.56** The most recent Active Lives Survey by Sport England (reporting for the period May 2020/21) estimated 52.7% of the population in Thurrock are active, 13.6% are fairly active, while 33.7% are inactive [\[See reference 92\]](#). As

illustrated in **Figure 4.1**, the population of Thurrock are generally less active / more inactive than averages for the East Region.

**Figure 4.1: Active Lives Survey results for Thurrock and East Region**



**4.57** Between 64.1% of adults from the Borough walk at least once a week and between 6.1% cycle. The walking average was lower than the national average which was 71.1%. In terms of bicycle travel, Thurrock is lower than the national average of 11.2%. However, the percentage of the adult population cycling at least once a week is generally low across all authorities [\[See reference 93\]](#).

## Deprivation

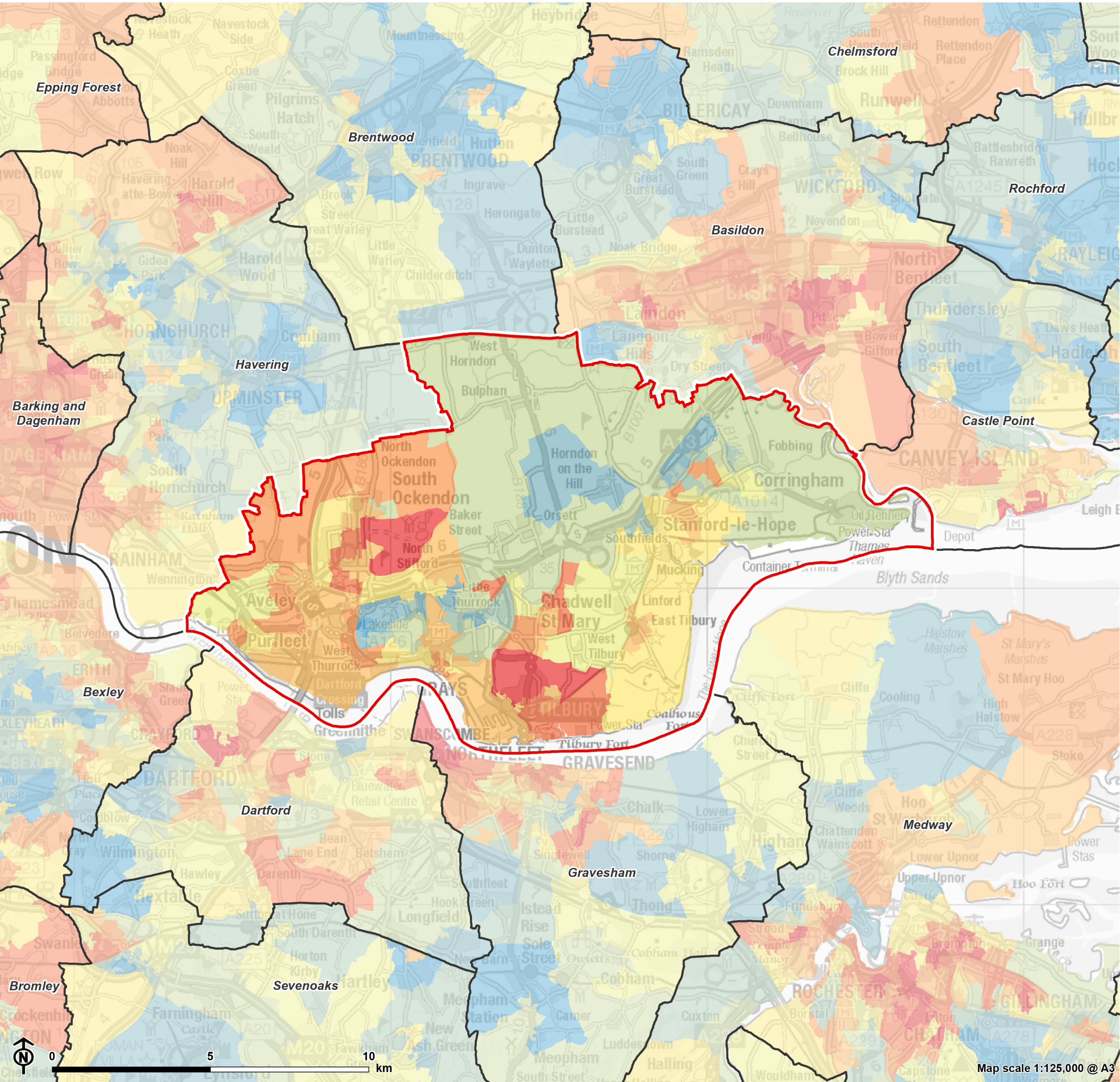
**4.58** The Index of Multiple Deprivation 2019 (IMD2019) [\[See reference 94\]](#) combines information from the seven domains to produce an overall relative measure of deprivation. The domains are combined using the domains: Income Deprivation, Employment Deprivation, Education, Skills and Training Deprivation, Health Deprivation and Disability, Crime, Barriers to Housing and Services, and Living Environment Deprivation. The IMD2019 uses Lower Layer Super Output Areas (LSOA) to measure deprivation at local authority and county level.

**4.59** The 2019 Indices of Multiple Deprivation ranked Thurrock 116 out of 317 local authorities in England (1 being the most deprived) in terms of overall deprivation (see Figure 4.2). The most deprived areas within Thurrock lie around the more built-up centres of South Ockendon, Grays and Tilbury. There are four LSOAs (Thurrock 018H, 018E, 018D and 006A) (4% of all LSOAs in the Borough) in the Tilbury St Chads and Belhus wards falling within the 10% most deprived areas in the UK. There are also seven LSOAs (7%) within the 20% most deprived areas including in the Belhus, Tilbury Riverside and Thurrock Park, Tilbury St Chads, Chadwell St Mary, Ockendon, and Little Thurrock Blackshots wards. The rural parts of Thurrock to the north and the east and parts of South Chafford fall within the least deprived areas. This includes 41 neighbourhood LSOAs. Thurrock 019D (South Chafford) is the only neighbourhood within Thurrock that's falls within the 10% least deprived.

**4.60** The latest census data available determines that average car ownership in Thurrock is 1.27 per household, which is slightly higher than the national average of 1.16. Areas such as Ockendon, Tilbury and Chadwell St Mary have low levels of car ownership, limiting resident's mobility and access to services and opportunities in the wider area. These areas also have higher levels of deprivation compared to the rest of the Borough [\[See reference 95\]](#). Mobility and accessibility inequalities are highly correlated with social disadvantage [\[See reference 96\]](#) and improvements in transport networks is key to improving access for all residents – not just those with access to a car.



Figure 4.2: Index of Multiple Deprivation (Overall)





## Crime

**4.61** The areas where most crimes are committed in Thurrock are recorded in Grays South, Grays North, Grays East, Grays West, Chafford Hundred, East Tilbury, Aveley, West Thurrock, Grays Central, Belhus and Ockendon, Upminster and North Ockendon, Corringham East, Corringham West, Stanford-le-Hope, Chadwell St Mary and Tilbury Town. Grays is the third major town in Essex with the highest level of recorded crime. The overall crime rate in Grays in 2021 was 101 crimes per 1,000 people. This compares poorly to Essex's overall crime rate, coming in 19% higher than the Essex average rate of 81 per 1,000 residents [\[See reference 97\]](#).

**4.62** Total recorded crime within Essex saw a decrease of 3.2% between September 2020 and September 2021. This period saw decreases in the total level of recorded crime in the East of England (4.3%) and England (0.6%). In Essex, the overall decrease in crime included decrease in drug offences (12.9%); robbery (5.8%); theft (14.0%); criminal damage and arson (12.6%) and possession of weapons offences (17.2%). During the same period, instances of violence against the person (3.9%); public order offences (6.0%); and sexual offences (20.1%) increased [\[See reference 98\]](#).

## Air quality

**4.63** In 2020, 1.00 billion vehicle miles were travelled in roads in Thurrock. Since 2003, vehicles miles within Thurrock for all vehicles have been gradually increasing up to 2019 when there was a sudden drop in vehicles miles from 1168.3 million miles to 996.1 million miles in 2020. This sudden drop in vehicle miles between 2019 and 2020 is likely due to travel restrictions imposed during the COVID-19 pandemic [\[See reference 99\]](#).

**4.64** Air quality is fully considered in **Chapter 6**. In summary, Thurrock has 18 Air Quality Management Areas (AQMAs) [\[See reference 100\]](#). These are located mainly in the west of the Borough, close to major transport routes such

as the M25 and A13 and are a result of traffic related pollution along busy roads used for commuter traffic or logistical purposes. The routes are often saturated with traffic during peak hours and there are many areas where there is relevant public exposure, predominantly in the form of residential dwellings in close proximity. Thurrock only has AQMAs declared for road traffic-based emissions; there are no industrial based AQMAs. The AQMAs are all declared for exceedance of the long-term objective for NO<sub>2</sub> (40 µg/m<sup>3</sup>). AQMA data in Thurrock is now over 16 years old. The Council is developing a new air quality model to update the air quality data for the Borough.

**4.65** Air pollution is associated with a number of adverse health impacts and is recognised as a contributing factor in the onset of heart disease and cancer. Pollution particularly affects the most vulnerable in society such as children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation between poor air quality areas and less affluent areas. Thurrock Air Quality and Health Strategy [\[See reference 101\]](#) sets out the Council's overarching objectives, policies and actions to improve air quality.

**4.66** Research from the British Lung Foundation [\[See reference 102\]](#) highlighted that background PM<sub>2.5</sub> levels (2018) were at 11.45µg/m<sup>3</sup>, which is in breach of WHO limits (10µg/m<sup>3</sup>) and is considered dangerously high. The worst performing location was on the A282 Dartford Crossing. The research suggests that in 2018 an estimated 6.14% of deaths were attributable to PM<sub>2.5</sub> air pollution, which was equivalent to 78.6 deaths. Further to this, Thurrock has 67 nurseries, schools and colleges in areas where levels of fine particulate matter (PM<sub>2.5</sub>) are above the World Health Organisation's recommended limit.

**4.67** A correlation can be observed between recorded health issues within Thurrock and the presence of AQMAs. For instance, declared AQMAs in areas such as Tilbury Riverside and Thurrock Park Way alongside West Thurrock and South Stifford have above average incidences of lung cancer within their populations. Similarly, West Thurrock, South Stifford, Purfleet, Aveley and Tilbury, all of which have one or more AQMAs, had extremely high emergency admissions for Chronic Obstructive Pulmonary Disorder (COPD). AQMAs within Purfleet, West Thurrock and Aveley also fall within the 20% most deprived

areas in the country for living environment, which includes air pollution indicators. There is a prevalence of HGVs in nearly all of these areas [\[See reference 103\]](#) .

## Noise

**4.68** High levels of road freight in Thurrock contribute to issues of transport-related noise. Noise is a common problem arising from transport, and studies have shown it can have major negative direct and indirect effects on health and well-being, on quality of life and on wildlife. Exposure to noise can increase stress levels, disrupt communications and disturb sleep. There is scope for noise emissions from transport to be reduced including through reducing the number of cars on the road, shifting road freight to sustainable alternative, and by installing noise road surfacing and noise barriers.

## Road safety

**4.69** Historic collision data indicates a downward trend in the number of people killed or seriously injured in Thurrock in the last twenty years. However, the downward trend has not continued in recent years, with a slight increase since 2015. Collisions are concentrated in urban centres in the south and west of Thurrock, with the proportion involving vulnerable road users; pedestrians, cyclists and motorcyclist increasing and those involving motorised vehicles having decreased. The Council has committed to achieving 'Vision Zero' by 2040, which aims to eliminate road deaths and serious injury [\[See reference 104\]](#).



## **Key sustainability issues and likely evolution of these issues without the Interim Thurrock Transport Strategy**

**4.70** Population growth and demographic change will place additional demand on the transport network (as well as on housing availability, education, health and social care facilities, etc.). The Interim TTS offers an opportunity to deliver an integrated and accessible transport system that improves access to services and facilities for all of Thurrock's population. As the older population of the Borough is predicted to grow, the Interim TTS offers an opportunity to consider age friendly design, including design for dementia, and potential for increasing access to health services in development of transport proposals to better an older population.

**4.71** 'Health' in Thurrock is in the bottom 20% for England, ranking 250<sup>th</sup> out of 307 local authority areas. Life expectancy in Thurrock is lower than the national averages, with life expectancies significantly lower in the most deprived areas of the Borough. The ratio of deaths from cancer, circulatory disease, coronary heart disease and respiratory disease are all 'significantly worse' than the England averages. In Thurrock, 69.4% of adults are classified as overweight or obese which is higher than the regional percentage of 62.3% and the national percentage of 62.8%. The population of Thurrock are generally less active / more inactive than averages for the East of England. Levels of noise pollution, poor air quality, rural isolation and loneliness, and barriers to active travel all have multi-ranging effects on physical and mental health. The Interim TTS has an important role to play in improving health in the Borough through improving access to services and facilities (including health facilities), encouraging active travel modes such as walking and cycling, reducing transport-related air and noise pollution, and reducing spatial connectivity inequalities that impact health.

**4.72** Thurrock has a variety of parks and open spaces however, adequate and equitable access to high-quality green and blue environments is an issue, with 22% of Thurrock neighbourhoods having poor access to nature and 47% having

only moderate access, particularly affecting disadvantaged neighbourhoods. The Interim TTS offers the opportunity to address this by improving accessibility to high quality open spaces / recreation facilities and delivering green and blue infrastructure networks as active travel corridors.

**4.73** There is a need to reduce inequality between those living in the most deprived areas of Thurrock and those living in the least deprived areas of the Borough. Without the Interim TTS, it is possible that the gap between the most and least deprived areas in the Borough will remain. The Interim TTS presents an opportunity to close the gap through spatial planning. Reducing inequality can be achieved by improving access to education facilities, healthcare facilities, employment opportunities, and improving connectivity between communities.

**4.74** The crime rate in certain areas of Thurrock, particularly Grays, compares poorly to Essex's overall crime rate. Anti-social behaviour and violence and sexual offences are two principal contributors of crime in Thurrock. Crime on public transport in the UK particularly with regards to sexual assault, violent crimes, and disruption is increasing particularly affecting women, disabled and those from ethnic minority groups. The Interim TTS presents an opportunity to contribute to reducing crime by supporting the development of a safe and secure transport network for all users.

**4.75** With traffic levels returning to pre-pandemic levels, there is an increase in the number of accidents and casualties on Thurrock's roads. Fatalities on rural roads are more likely than on other road types. Thurrock has the highest number of people killed or seriously injured (KSI) on the roads at 49.5 people (per 100,000 resident population) in South Essex. The Interim TTS presents an opportunity to reduce road traffic collisions by encouraging a modal shift towards public transport and active travel, but also through the provision of traffic calming measures such as speed limits and addressing new challenges such as from e-scooters.