<u>Justification for the request for a full Health Impact Assessment to be undertaken for the Lower</u> Thames Crossing development

With regards to the Scoping Environmental Impact Assessment (EIA) report for the Lower Thames Crossing proposal it is felt important that consideration is paid to the potential human health impacts in respect of this proposed development. This relates to the health and wellbeing of any person(s) employed during construction and operational stages, local residents living in communities within close proximity to the proposed development, and the wider community as a whole where impacts may be felt via the wider transport network.

It is felt to be a useful starting point to provide a definition of what is meant by the term 'human health', to support and enable full consideration of any potential health impacts that may arise from this proposed development. This will allow the appropriate and adequate mitigation processes to be developed and implemented to reduce such impacts on health.

The World Health Organisation (WHO) defines health as "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmary". This definition encapsulates the 'holistic' and 'whole' person. Health and wellbeing can be affected by a variety of complex and interrelated factors including the built environment and communities that people live within it. This definition also focusses on keeping people well. In order to support people to remain well, acknowledgement of the role that the wider determinants of health can play needs to be recognised. This includes consideration of issues in the built environment such as landscape, traffic, congestion and air quality, and how these issues can impact on health.

The proposed route for the Lower Thames Crossing essentially divides the borough into two halves. This has the potential to sever links across the borough and create two sets of communities that work in isolation from each other. The health impacts of such a proposal on community and social cohesion as well the potential to inhibit access to health services and local amenities (e.g. healthy food environments) requires careful consideration. Alongside this, it will be vitally important to determine what the health needs of different wards within the borough are, and how they might be affected, as well as identifying what the cumulative effects might be, as a result of the development of the crossing. Wards have been identified where it is thought resident's health has the potential to most likely be affected by the proposed crossing and each are discussed below in turn. As a result, it is strongly recommended that a Health Impact Assessment (HIA) is undertaken. This should be completed in relation to this proposed development to ensure that any negative consequences of the development are identified and mitigated, and that opportunities for improving the well-being of the community are maximised. The Council requests that they are included and consulted on during the process of completing the HIA, in particular around the scope and methodology employed. As the Council has access to more localised health intelligence, it is felt that it would be useful for Highways England to consult with Thurrock Council Public Health Team to ensure all health impacts are fully identified and assessed, and to inform appropriate mitigation measures.

In order to support this request for a Health Impact Assessment, the key health issues for the communities that have the potential to be impacted by this development have been highlighted in the following sections.

Proximity to residential housing, local amenities and local health profile

Thurrock has a population of 165,184 people. It is served by 20 wards, 9 of which may experience potentially significant health impacts related to the proposed Lower Thames Crossing development. Each is discussed below in turn, and an overview of the health needs of each sub-population group

will be included that provides the 'bigger picture' of the health needs of Thurrock. This is focussed on the wards that are most likely to be impacted on by the proposed development. Further to this, inclusion of the potential cumulative impacts on Thurrock as a whole will be outlined. The populations of people most likely to be affected by the proposed development are children, older people, those living with long term conditions and those living in areas of higher deprivation.

Tilbury

The town of Tilbury lies to the West of the proposed Lower Thames Crossing. It is covered by two wards (Tilbury Riverside and Thurrock Park and Tilbury St Chads). The total population of Tilbury is 13,495 people (7274 –Tilbury Riverside and Thurrock Park; 6221 – Tilbury St Chads).

Key health concerns in these wards (Tilbury Riverside and Thurrock Park and Tilbury St Chads) - (taken from Local Health Data, 2017) include:-

- The percentage of children aged 0-15 years Tilbury Riverside and Thurrock Park 28.2% and Tilbury Chads 25.8%. This is significantly higher than the Thurrock (22.3%) and England averages (19%).
- The percentage of older people (aged 65+) in Tilbury Riverside and Thurrock Park and Tilbury St Chads are 10.8% and 10.6% respectively.
- Life expectancy for males in Tilbury Riverside and Thurrock Park (75 years) and Tilbury St Chads (76.3 years) is significantly lower than Thurrock (79.1 years,) and national (79.4 years) averages.
- Life expectancy for females in Tilbury Riverside and Thurrock Park (79 years) is significantly lower than the Thurrock (82.5 years) and national (83.1 years) averages. Life expectancy for females in Tilbury St Chads (80 years) is significantly lower than the national average.
- Poverty 38.6% (Tilbury St Chads) and 40.2% (Tilbury Riverside and Thurrock Park) of children are living in poverty which is significantly higher than the Thurrock (21.8%) and national averages (19.9%).
- Deprivation Tilbury Riverside and Thurrock Park (36.6) and Tilbury St Chads (40.1) have significantly higher IMD score than Thurrock (21.6) and the national (21.8) averages.
- Limiting long term illness/disability 15.7% of people in Tilbury Riverside and Thurrock Park and 18.4% of people in Tilbury St Chads are living with a long-term condition. There is a significantly higher percentage of people with a long-term condition residing in Tilbury St Chads than the national (17.6%) average.
- Premature mortality rates for conditions for deaths from all causes- The Standardised Mortality Ratio (SMR) for under 75's - 145.4 in Tilbury Riverside and Thurrock Park and 148.7 in Tilbury St Chads which is significantly higher than both Thurrock (103) and England (100) averages.
- Deaths and early deaths that could largely be prevented circulatory disease (all ages) and respiratory disease deaths are significantly higher than the Thurrock and national averages in both wards that comprise Tilbury.
- In Tilbury St Chads premature deaths from Coronary Heart Disease for all ages (223.2 SMR) are significantly higher than the Thurrock (114.9) and National (100) averages.
- In Tilbury Riverside and Thurrock Park premature deaths from CHD (all ages) measured by SMR is 150. This is significantly higher than the national (100) average.
- Premature deaths from cancer across all ages measured by SMR is 130.9. This is significantly higher than the national (100) average.
- Deaths or early deaths from stroke are significantly higher than the National (100) average in Tilbury Riverside and Thurrock Park (173.1 SMR).

- Hospital admissions for Coronary Obstructive Pulmonary Disease (COPD) The Standardised Admission Ratio (SAR) is significantly higher for Tilbury (209) than the Thurrock (118.6) and national (100) averages.
- The incidence of lung cancer –The Standardised Incidence Ratio (SIR) in both wards is 122.9.
- Social Isolation (based on number of pensioners living alone) lots or people experience social isolation 39.1% Tilbury Riverside and Thurrock Park and 32.1% Tilbury St Chads. The percentage of people living in Tilbury Riverside and Thurrock Park living in social isolation is significantly higher than the Thurrock (31.9%) and National (31.5%) averages.
- Childhood obesity –13% of 4-5 year olds in Tilbury. This is significantly higher than the national average (9.3%). Of 10-11year olds 26.2% children in Tilbury are obese, which is significantly higher than the national (19.3%) average.

To summarise, existing residents are more likely to be living in poverty and deprivation. They are more likely to die at a younger age from several conditions that could be appeased by better environmental conditions. There are higher proportions of older people living alone, leaving them at risk of social isolation. Additionally, childhood obesity is a key health priority in this area.

East Tilbury

East Tilbury is located to the East of the proposed Lower Thames Crossing. East Tilbury has a population of 6469 people.

Key health concerns in this ward (taken from the Local Health data 2017) include:-

- 21.4% are aged 0-15 and 13.1% are aged 65+. There significantly higher numbers of children in East Tilbury than the national average (19%).
- Emergency hospital admissions for COPD The SAR is 147.3 which is significantly higher than the England (100) average.
- The incidence of lung cancer The SIR in East Tilbury is 132.
- Social Isolation 22.2% of people living in this ward experience social isolation.
- Obesity 29.3% of adults, 7% of 4-5 year olds and 19.4% of 10-11 year olds are obese.

There are higher numbers of children residing in this ward, who may be more vulnerable to the potential health impacts arising from the proposed development. In East Tilbury there are high levels of emergency hospital admissions for COPD which could be reduced by better environmental conditions that promote health.

Orsett

This ward lies to the North-East of the proposed Lower Thames Crossing and has a total population of 6168.

Key health concerns in this ward (taken from Local Health Data 2017) include:-

- 18% are aged 0-15 and 20.2% are aged 65+. There are significantly higher numbers of people aged 65+ living in Orsett than both the Thurrock (13.8%) and England (17.7%) averages.
- Limiting long term illness/disability 14.2% (876 people) in Orsett.
- Social Isolation 19.5% of the people in this ward.
- Obesity 25.6% of adults and 11% of 4-5 year olds are obese. This rises to 18.9% of 10-11 year old children living in Orsett.

Orsett has a significantly higher proportion of people aged 65 and over who may be more vulnerable to health impacts, including social isolation and poor health generally.

Ockendon

Ockendon is located West of the proposed site and is the most Northern ward on the West side of the borough. Ockendon has a population of 10,691.

Key Health concerns in this ward (taken from Local Health Data 2017) include:-

- 23.3% are aged 0-15 years which is significantly higher than the national average (19%). There are 13.1% of people living in Ockendon who are aged 65+.
- Limiting long term illness/disability 18.1% of population have an long-term condition which is higher than the Thurrock and England averages (15.6% and 17.6% respectively).
- Poverty 24.4% of children are living in poverty which is significantly higher than both Thurrock (21.8) and England (19.9%) averages.
- Premature mortality rates for deaths from all causes The SMR for deaths in those aged under 65 is 110.3.
- Deaths and early deaths from conditions which could be prevented as measured by SMR –
 Cancer (all ages) 132.1and CHD (all ages) 138.5 SMR are significantly higher than the
 National (100) average.
- Emergency hospital admissions for COPD The SAR is 148.1 which is significantly higher than the national (100) average.
- The incidence of lung cancer The SIR is 140.
- Social Isolation –38% of people in Ockendon. This is significantly higher than the Thurrock (31.9%) and England (31.5) averages.
- Obesity 28.6% of adults, 10.1% of children aged 4-5 years of age and 24.9% of 10-11 year olds are obese. The percentage of children aged 10-11 years who are classified as obese is significantly higher than the national averages (19.3%).

In Ockendon higher proportions of people are living with long-term conditions, alongside higher premature mortality rates from conditions that could be reduced by better environmental conditions. Poverty is also a concern, with high levels of children and families living in deprivation. As with some of the other wards in the borough, social isolation is a health concern in Ockendon. Obesity is also a key consideration particularly in relation to children and promoting their health and wellbeing.

Chadwell St Mary

This ward lies to the South-West of the proposed development. Chadwell St Mary has a population of 10,195 people

Key health concerns for this ward (taken from Local Health Data 2017) include:-

- 22.1% are aged 0-15 years which is higher than the national (19%) average. There are 18.6% of people living in Chadwell St Mary who are aged 65+. This is significantly higher than the Thurrock (13.8%) and national (17.7%) averages.
- Life expectancy for males is 77 years. This is significantly lower than the England (79.4 years) average.

- Life expectancy for females is 80.3 years. This is significantly lower than both the Thurrock (82.5 years) and England (83.1 years) averages.
- Poverty- 31.1% of children are in poverty which is significantly higher than the Thurrock (21.8%) and national (19.9%) averages.
- The IMD score of for deprivation in Chadwell St Mary (28.4) is significantly higher than both than the Thurrock (21.6) and national (21.8) averages.
- Limiting long term illness/disability The percentage of people living with a limiting long term condition in Chadwell St Mary (21.9%) is significantly higher than the Thurrock (15.6%) and England (17.6%) averages.
- Premature mortality rates for deaths from all causes the SMR for deaths for under 75's is 137.2 which is significantly higher than both Thurrock and England average (103 and 100 SMR respectively).
- Deaths and early deaths from conditions that could be prevented Cancer (under 75's) as measured by SMR is 144.2 is significantly higher than both the Thurrock (105.9) and England (100) averages.
- Premature deaths from cancer across all ages (132.8 SMR) and respiratory condition (all ages) 142.1 SMR are significantly higher than the England (100) average.
- Deaths or early deaths from strokes, measured by SMR, is 107.5.
- Emergency hospital admissions for COPD the SAR is 144.3 which is significantly higher than the national average (100).
- The incidence of lung cancer the SIR is 124.6.
- Social Isolation 32.1% of the population of Chadwell St Mary.
- Obesity 27.6% adults, 12.3% of 4-5 year olds and 20% of 10-11 year olds are classified as obese in this ward. The percentage of obese young children in this ward is significantly higher than the national (9.3%) average.

Chadwell St Mary is an area with high levels of poverty. Life expectancy is significantly lower for both males and females. Premature mortality from several conditions could be appeased by better environmental conditions. There are high levels of people living with long-term conditions as well as emergency hospital admissions relating to COPD. Obesity is a priority health area for young children (aged 4-5 years) who may be more vulnerable to health impacts.

Little Thurrock Blackshots

Little Thurrock Blackshots lies to the South-West of the proposed Lower Thames Crossing and has a total population is 6,059.

Key health concerns for this ward (taken from Local Health Data 2017) include:-

- 18.6% are aged 0-15 years and 21.3% are aged 65+. There is a significantly higher number of people aged 65 and over living in this ward than the Thurrock (13.8%) and England (17.7%) averages.
- Limiting long term illness/disability -18.4% of people in this ward which is significantly higher than the Thurrock (15.6%) average.
- Poverty 15.1% of children live in poverty.
- Social Isolation 29.4% of people living in this ward experience social isolation.

In Little Thurrock Blackshots, there are high numbers of older people and people with long-term health conditions. Additionally, many older people are living alone and as such are at increased risk of experiencing social isolation, which can negatively impact on both physical and mental health.

Stifford Clays

Stifford Clays lies west of the proposed site. There is a total population of 6,628 people living in this ward.

Key health concerns for this ward (taken from Local Health Data 2017) include:-

- 19% aged 0-15 years and 21.6% are aged 65+. There is a significantly higher number of people aged 65+ living in this ward than the Thurrock (13.8%) and national (17.7) averages.
- Limiting long term illness/disability 20.4% of people in Stifford Clays live with an LTC which is significantly higher than the Thurrock (15.6%) and national (17.6%) averages.
- Emergency hospital admissions for COPD the SAR is 125.8 in this ward which is significantly higher than the national average (100).
- Premature deaths from conditions that could be prevented (CHD –all ages) the SMR is 118.3 in Stifford Clays.
- Social isolation 35.9% of people in this ward experience social isolation which is significantly higher than Thurrock (31.9%) and national (31.5%) averages.

There are significantly higher numbers of people with long-term health conditions in Stifford Clays. High numbers of emergency hospital admissions related to COPD as well as premature mortality from CHD could be reduced with better environmental conditions. As with the many of the other wards discussed, there are higher numbers of older people living alone which puts them at increased risk of social isolation.

Belhus

Belhus lies between Ockendon and Stifford Clays and is West of the proposed Lower Thames Crossing. Belhus has a population of 10,256 people

Key health concerns for this ward (taken from Local Health Data 2017) include:-

- 23.2% are aged 0-15 years which is significantly higher than the national (19%) average. There are 11.5% of people living in Belhus who are aged 65+.
- Poverty— 25.2% of children are in poverty which is significantly higher than the Thurrock (21.8) and national (19.9%) averages.
- The IMD score for deprivation in Belhus is 32 which is significantly higher than the Thurrock (21.6) and England (21.8) averages.
- Limiting long term illness/disability 18.9% of people have an LTC in Belhus. There are significantly higher percentages of people living with long-term conditions in this ward than both Thurrock (15.6) and England (17.6%) averages.
- Premature deaths from all causes The SMR for deaths in under 75's is 132.1 which is significantly higher than both the Thurrock (103) and England (100) averages.
- Deaths or early deaths from conditions that could be prevented cancer (under 75's), and CHD (all ages), are significantly higher than the Thurrock and National averages.
- Social Isolation 34.9% of people experience social isolation in this ward which is significantly higher the national (31.5%) average.
- Obesity 30.2% of adults, 9.9% of 4-5 year olds and 26.3% of 10-11year olds are obese. The percentage of 10-11 year old children who are obese in Belhus is significantly higher than the national (19.3%) average.

Existing residents living in Belhus experience high levels of deprivation. The number of people dying prematurely from many conditions could be appeased by better environmental conditions. There are significantly higher numbers of older people living alone in this ward. This places these individuals at increased risk of social isolation. Obesity is an area of priority in relation to children, in terms of promoting health and wellbeing.

Thurrock - Borough-wide considerations

Key Health concerns across Thurrock (taken from Public Health England) include:-

- Exposure to rail, air and traffic noise of 65DB (A) + (day and night) 2.7% (4460 people) are affected by daytime exposure and 4.8% (7929 people) at night.
- 5.6% of premature deaths are attributable to air pollution particulate matter (PM2.5) which is higher than the England average (4.7%). Thurrock have the highest number of deaths attributable to particulate matter when compared with their CIPFA comparators and 2nd highest across the East of England region.
- Annual level of air pollution particulate matter (PM2.5) The annual level is 10ug/m3.
 Thurrock has the highest level of annual air pollution than their CIPFA comparators and is 2nd highest in the East of England region.
- Currently, there are 18 AQMAs across the borough, predominantly in the South and West of
 the borough. All of these have the potential to be impacted further by the proposed crossing
 in terms of the broader impact that it may have on the local road network and potential for
 traffic congestion. Therefore the potential health impact this might have on residents near
 these AQMAs needs to be assessed.
- Common Mental Health Disorders (CMHDs) 17.9% of people aged 16-74 years have a CMHD.
- Depression 8.5% of people are recorded as having depression.
- 5-a-day recommended intake of fruit and vegetables only 40.1% of adults and 49.2% of children (aged 15) eat the recommended 5-a-day.
- Physical activity 53.9% of adults meet recommended physical activity levels per week, 31% of adults are classed as inactive, and only 13.7% of children are physically active for at least 1hour per day. 76% of children are engaged in sedentary behaviour for 7+ hours per day.

Thurrock experiences higher levels of air pollution annually, than other similar areas, as well as across the East of England. 5.6% of premature deaths are attributable to poor air quality, which could be reduced by introducing better environmental conditions. As described above there are many existing residents who are already affected by noise pollution, reportedly more during the night. This could be affecting individuals' ability to sleep, and as such could lead to sleep deprivation. Getting a good night's sleep is beneficial for improving concentration, mood and wellbeing.

There are high numbers of existing residents in the borough who experience poor mental health, which for some may be associated with living alone, and as such being at increased risk of social isolation. There are low numbers of both adults and children who eat the recommended 5-a-day portions of fruit and vegetables. There are high numbers of existing residents who are inactive or who do meet the recommended physical activity levels.

As can be seen from the information presented above, Thurrock as a whole is very varied in terms of health needs across the borough. There are many pockets of extreme deprivation and numerous existing health inequalities. These existing issues have the potential to be exacerbated by the development of the Lower Thames Crossing, particularly in relation to the potential for increased levels of air and noise pollution, and severance of local communities. There is also potential that

some of the 'Rights of Way' may be impeded upon which in turn will affect people's ability to move across the borough or engage in walking and cycling as a form of physical activity.

It is also possible that there may be some indirect impact on other areas (outside of the 9 wards described above) as a result of the proposed Lower Thames Crossing. Consideration should be given to whether there may be increased demand on existing health services (e.g. GP practices and secondary care services at Basildon Hospital) which are already oversubscribed and under pressure, as a result of the proposed new crossing.

Evidence Base

Although the evidence base on the built environment and particularly transport and health is in its infancy in parts or is sometimes differential or conflicting for different populations at a local or wider level, the emerging health evidence is also considered as a basis for fully investigating the health impact the proposed new road and crossing.

Some of the highlighted impacts of new roads and transport interventions which are considered important in terms of the evidence base and the subsequent impact on local population health include:

- Noise in particular its impact on mental health and wellbeing related to stress from noise, and sleep disturbance from noise, and on cardiovascular health (increased blood pressure and increased risk of coronary heart disease).
- Air Pollution impacts on respiratory and cardiovascular health and on vulnerable groups.
- Community severance impacts on mental well-being, social isolation, access to healthcare and amenities and services.
- RTAs consideration of the safety of the intersect between old and new road networks and the prevention of shifts in RTAs to other roads.
- Physical Activity impact on obesity, long-term conditions (such as cardiovascular diseases), and mental health and wellbeing.
- Health Inequalities the proposed route is located close to areas of high deprivation and health inequality. This proposed development has the potential to add a further burden to already disadvantaged communities.

Additional considerations

Additionally, as part of any subsequent EIA, HIA and planning applications, we would like to see the following included:-

- A noise impact assessment that takes into account the importance of implementing adequate noise mitigation measures (as needed) to reduce the impact on resident's health and wellbeing.
- An air quality impact assessment that includes consideration of the impact on human health that poor air quality can have, particularly in areas where health inequalities exist, and where premature mortality rates are high and there are large numbers of people with respiratory conditions or COPD that can be exacerbated by air pollution (as is the case in many of the wards located in close proximity to the proposed Lower Thames Crossing see above for details). This will be vital considering the potential increase in traffic within the borough's transport network as a result of the proposed Lower Thames Crossing.
- Consideration should also be paid to the inclusion of cycling and walking infrastructure across the borough to mitigate wider transport network activity and the replacement and

- enhancement of any potentially lost existing rights of way, as part of the development, which promotes social cohesion and encourages residents to engage in physical activity.
- Visually pleasing environments are beneficial for mental health and wellbeing and can support people to spend more time outside being physically active, feel safe in their local communities, enhance a sense of pride of their local area and increase social cohesion. Incorporation of mitigating actions such as green bridges that will connect local areas that will be severed by the proposed route would create aesthetically pleasing environments, connects communities and enhances social cohesion. Such bridges could incorporate some of the walking and cycling infrastructure proposed above to promote more sustainable modes of travel and increase physical activity.
- There is emerging evidence about the effectiveness of urban greening and tree planting in mitigating the effects of air pollution. Strategic planting of trees can reduce the impacts of poor air quality. Some of the best species to use in terms of reducing air pollution as calculated by the urban tree air quality score (UTAQS) include; alder, field maple, hawthorn, larch, laurel, Lawson cypress, Norway Maple, pine and Silver birch. More broadly urban greening and planting create stimulating and pleasing environments which as noted above are beneficial to mental health and wellbeing. Introduction and enhancement of green environments also benefit in terms of participation in physical activity, social connectivity, and access to nature. Consideration should therefore be paid to the inclusion of tree planting and urban greening as part of the development process.

Conclusion

Based on the above information, we request that a comprehensive Health Impact Assessment (HIA) be undertaken as part of the planning process. This is in light of the size of the development and the potentially large impacts on health that may be result from the development. The HIA should consider all aspects of human health and how they may be affected by the proposed development. Alongside this, clear mitigation measures should be included that aim to reduce and minimise the impact of the development on the health of the existing and future residents who live in Thurrock. As Thurrock has a currently higher proportion of young children and a growing older population who are more likely to have multiple health needs, a HIA that protects and promotes their right to good health, will be of vital importance.

As noted earlier in this report we would request that the Council is consulted during the process of completing the HIA, in particular around the scope and methodology employed. As the Council has access to more localised health intelligence, and therefore it is felt that it would be useful for Highways England to consult with Thurrock Council Public Health Team to ensure all health impacts are fully identified and assessed and to inform appropriate mitigation measures.

Ockendon Key Health Concerns: -

- 18.1% of population have an LTC which is higher than the Thurrock and England averages (15.6% and 17.6% respectively).
- 24.4% of children are living in poverty which is significantly higher than both Thurrock (21.8) and England (19.9%) averages
- Deaths and early deaths from conditions which could be prevented as measured by SMR – Cancer (all ages) – 132.1and CHD (all ages) – 138.5 SMR are significantly higher than the National (100) average.
- Emergency hospital admissions for COPD The SAR is 148.1 which is significantly higher than the national (100) average.

Belhus Key Health Concerns:

- 30.2% of adults, 9.9% of 4-5 year olds and 26.3% of 10-11 year olds are obese. The percentage of 10-11 year old children who are obese is significantly higher than the national (19.3%) average.
- Premature deaths from all causes The SMR for deaths in under 75's is 132.1 which is significantly higher than both the Thurrock (103) and England (100) averages.
- Deaths or early deaths from conditions that could be prevented – cancer (under 75's), and CHD (all ages), are significantly higher than the Thurrock and National averages.
- 25.2% of children are in poverty which is significantly higher than the Thurrock (21.8) and national (19.9%) averages.

Little Thurrock Blackshots Key Health Concerns:-

- Population 18.6% are aged 0-15 years and 21.3% are aged 65+. There is a significantly higher number of people aged 65 and over living in this ward than the Thurrock (13.8%) and England (17.7%) averages.
- Limiting long term illness/disability -18.4% of people in this ward which is significantly higher than the Thurrock (15.6%) average.
- Poverty 15.1% of children live in poverty.
- Social Isolation 29.4% of people living in this ward experience social isolation.

Stifford Clays Key Health Concerns:

- Population 19% aged 0-15 years and 21.6% are aged 65+. There is a significantly higher number of people aged 65+ living in this ward than the Thurrock (13.8%) and national (17.7) averages.
- Limiting long term illness/disability 20.4% of people in Stifford Clays live with an LTC which is significantly higher than the Thurrock (15.6%) and national (17.6%) averages.
- Emergency hospital admissions for COPD the SAR is 125.8 in this ward which is significantly higher than the national average (100).
- Social isolation 35.9% of people in this ward experience social isolation which is significantly higher than Thurrock (31.9%) and national (31.5%) averages.

Orsett Key Health Concerns:-

- Population 18% are aged 0-15 and 20.2% are aged 65+. There are significantly higher numbers of people aged 65+ living in Orsett than both the Thurrock (13.8%) and England (17.7%) averages.
- Limiting long term illness/disability 14.2% (876 people) in Orsett.
- Social Isolation 19.5% of the people in this ward.
- Obesity 25.6% of adults and 11% of 4-5 year olds are obese. This rises to 18.9% of 10-11 year old children living in Orsett.

thurrock.gov.uk Health Needs in Wards Potentially Impacted by Proposed Lower Thames Crossing 4 East Tilbury AQMA's and Health Needs in Thurrock Air Quality Management Areas (numbered) 23 Thurrock Boundary Tilbury St. Chads Selected Health Needs Wards Road Network Motorways A Roads B Roads Proposed Lower Thames Crossing Scale 1:84,78 ight and database rights 2016 Ordnance Survey 100025457

Chadwell St Mary Key Health Concerns:-

- Life expectancy for males is 77 years.
 This is significantly lower than the England (79.4 years) average.
- Life expectancy for females is 80.3 years. This is significantly lower than both the Thurrock (82.5 years) and England (83.1 years) averages.
- Premature deaths from cancer across all ages (132.8 SMR) and respiratory condition (all ages) — 142.1 SMR are significantly higher than the England (100) average.
- Emergency hospital admissions for COPD — the SAR is 144.3 which is significantly higher than the national average (100).

East Tilbury Key Health Concerns:

- Population 21.4% are aged 0-15 and 13.1% are aged 65+. There significantly higher numbers of children in East Tilbury than the national average (19%).
- Emergency hospital admissions for COPD – The SAR is 147.3 which is significantly higher than the England (100) average.
- Social Isolation 22.2% of people living in this ward experience social isolation.
- Obesity 29.3% of adults, 7% of 4-5 year olds and 19.4% of 10-11 year olds are obese.

Tilbury Riverside & Thurrock Park Key Health Concerns:-

- 40.2% of children are living in poverty which is significantly higher than the Thurrock (21.8%) and national (19.9%) averages.
- Deaths and early deaths from circulatory disease (all ages) and respiratory disease deaths are significantly higher than the Thurrock and national averages in this ward.
- The percentage of people living in Tilbury Riverside and Thurrock Park (39.1%) living in social isolation is significantly higher than the Thurrock (31.9%) and National (31.5%) averages.
- Tilbury Riverside and Thurrock Park (36.6) has a significantly higher IMD score than Thurrock (21.6) and the national (21.8) averages.

Tilbury St Chads Key Health Concerns:-

- Life expectancy for males in Tilbury St Chads (76.3 years) is significantly lower than Thurrock (79.1 years,) and national (79.4 years) averages.
- Life expectancy for females in Tilbury St Chads (80 years) is significantly lower than the national average.
- In Tilbury St Chads premature deaths from Coronary Heart
 Disease for all ages (223.2 SMR) is significantly higher than the
 Thurrock (114.9) and National (100) averages.
- There is a significantly higher percentage of people with an LTC residing in Tilbury St Chads than the national (17.6%) average.