Designated Site	Approximate minimum distance of Natura 2000 site from LTP4[1]	Relevant strategic priority	Connectivity between the Natura 2000 site and the LTP4 strategy	Potential impacts	Avoidance or mitigation measures[2]	Screening in/out (with mitigation)	Project level HRA required
Medway Estuary and Marshes SPA, UK9012031	Adjacent	Swale's transport priorities	There is potential for the strategy to affect the SPA (indirectly and directly) via district transport schemes, with the Swale acting as a pollution pathway.	Damage to habitat via pollutants entering the water system. Disturbance to breeding /wintering birds from noise. Decrease in bird populations.	Standard pollution prevention measures in line with Environment Agency. Noise barriers and/or exclusion zones must be in place to reduce the disturbance to birds.	Out	Yes
The Swale SPA, UK9012011	Adjacent	Swale's transport priorities	There is potential for the strategy to affect the SPA (indirectly and directly) via district transport schemes, with the Swale acting as a pollution pathway.	Damage to habitat via pollutants entering the water system. Disturbance to breeding /wintering birds from noise. Decrease in bird populations.	Standard pollution prevention measures in line with Environment Agency. Noise barriers and/or exclusion zones must be in place to reduce the disturbance to birds..	Out	Yes
Thanet Coast and Sandwich Bay SPA, UK9012071	Adjacent	Port expansion, Dover's and Thanet's transport priorities.	There is potential for the strategy to impact the qualifying features of the SPA due to the proximity of the site to future schemes.	Damage to habitat via pollutants entering the water system. Disturbance to turnstones from noise resulting in a decrease in their population.	Standard pollution prevention measures in line with Environment Agency. Noise barriers and/or exclusion zones must be in place to reduce the disturbance to birds.	Out	Yes
Stodmarsh SPA, UK9012121	5.7km	Port expansion, Dover's and Thanet's transport priorities.	The SPA could be indirectly impacted by the strategy through district schemes. The Great Stour watercourse flows close to these schemes and is linked to Stodmarsh SPA.	Damage to habitat via pollutants entering the water system.	Standard pollution prevention measures in line with Environment Agency. Noise barriers and/or exclusion zones must be in place to reduce the disturbance to birds.	Out	Yes

Designated Site	Approximate minimum distance of Natura 2000 site from LTP4[1]	Relevant strategic priority	Connectivity between the Natura 2000 site and the LTP4 strategy	Potential impacts	Avoidance or mitigation measures[2]	Screening in/out (with mitigation)	Project level HRA required
Thames Estuary and Marshes SPA, UK9012021	3.6km	National Strategic Priority – Lower Thames Crossing	The SPA could be indirectly impacted. The route has not yet been decided by Central Government. HRA Screening has already been undertaken by Highways England, and Appropriate Assessment will be undertaken by HE in due course. There is thus no additional value in KCC undertaking such an exercise.	Disturbance to bird species from noise pollution. Pollutants entering the water system, damaging habitat and resulting in a reduction in the bird population.	Standard pollution prevention measures in line with Environment Agency. Noise barriers and/or exclusion zones must be in place to reduce the disturbance to birds.	Out	Yes

5.2 In-combination effects

5.2.1 It has been assumed that KCC has accounted for the below plans/strategies when comprising the LTP4 and has therefore considered any major in combination effects. However at this stage a detailed in combination assessment would not be valuable at this stage and this should be reassessed as part of the project level HRA.

5.2.2 Kent LTP4 has been informed by the following national and local policies and strategies:

- Better Homes; Mind the Gap (Kent's Health Inequalities Action Plan); Productivity Strategy; Home to School Transport Policy; 16-19 Transport Policy; Development and Infrastructure Framework - Creating Quality Places; Kent Design Guide; Kent Cultural Strategy; KCC Environmental Policy; Joint Health and Wellbeing Strategy; Kent Downs AONB Management Plan; Kent Environment Strategy.

5.2.3 The LTP4 is delivered through the following supporting strategies, policies and action plans:

- Road Casualty Reduction Strategy; Congestion Strategy; Active Travel Strategy; District/Borough Cycling Strategies; Freight Action Plan; Rail Action Plan; Air Quality Action Plans; Facing the Aviation Challenge/Policy on Gatwick Airport; Winter Service Plan; Countryside and Coastal Access Improvement Plan; Rural Streets and Lanes – A Design Handbook.
- Kent Environment Strategy 2016 (Ref.9):This strategy and associated implementation plan seeks to provide support to decision makers to ensure the county of Kent remains the highly desirable location of choice for visitors, residents and businesses. Strategies include LTP3, Kent Nature Partnership Action Plan and Areas of Outstanding Natural Beauty (AONB) Management Plans.

6 Conclusions and Recommendations

6.1.1 All 20 Natura 2000 Sites have been screened (Stage1, HRA) to determine whether there are any likely significant effects as a result of the LTP4 strategies. Two LTP4 priorities were identified as potentially significant: The expansion of Lydd (London Ashford) Airport in Shepway, and the Lower Thames Crossing in Gravesham:

6.1.2 The expansion of Lydd Airport has been approved by the Secretary of State following rigorous assessment and Public Enquiry, including of the risk to Natura 2000 sites; the highway improvements form a minor part of this scheme and in themselves are unlikely to affect Dungeness SAC.

6.1.3 The Lower Thames Crossing is also a significant project and has the potential to affect the Thames Estuary and Marshes SPA. However the results of the options consultation have not yet been published and final Option selection has not yet been undertaken.

6.1.4 Considering the above all 20 Natura 2000 Sites has been screened out and an Appropriate Assessment has not been deemed necessary at LTP4 level.

6.1.5 It should be noted that at the time of writing this HRA Screening Report, it is not known exactly how and when the LTP4 Strategies assessed will be implemented. There is therefore some uncertainty in the assessment of potential significance and the precautionary approach has been applied.

6.1.6 Project level HRA Screening of 'Likely Significant Effects' for all SAC's/SPA's stated in Table 4 will also be required (in consultation with Natural England) when further details of the delivery of transport schemes (Countywide, National and District) are available, together with the details of other plans, to ensure compliance with the Habitats Regulations.

6.1.7 It is suggested that further HRA takes place at project level rather than LTP level for the following reasons;

- Many of the district schemes may not be implemented or change due to Council funding constraints;
- At present there is not enough information on many of the transport schemes to determine whether the uncertain effects in this report (Table 4) are really likely to be significant effects.

6.1.8 When it is known which transport schemes may be implemented and there is more information on what works they will entail, it will be possible to devise appropriate avoidance and mitigation measures that are scheme-specific.

7 References

1 EUROPEAN ECONOMIC COMMUNITY (EEC) *Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive).*

2 EUROPEAN COMMISSION (2000) *Managing Natura 2000 Sites* (The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC).

3 Natural England (2013) *Natural England Standard: Habitats Regulations Assessment (HRA).*

4 Highways Agency (2009) DESIGN MANUAL FOR ROADS AND BRIDGES (DMRB). VOLUME 11, SECTION 4, PART 1, HD 44/09. *Assessment of implications (of highways and/or roads projects) on European sites (including Appropriate Assessment).*

5 DTA PUBLICATIONS (2014). *The Habitats Regulations Assessment Handbook.* www.dtapublications.co.uk

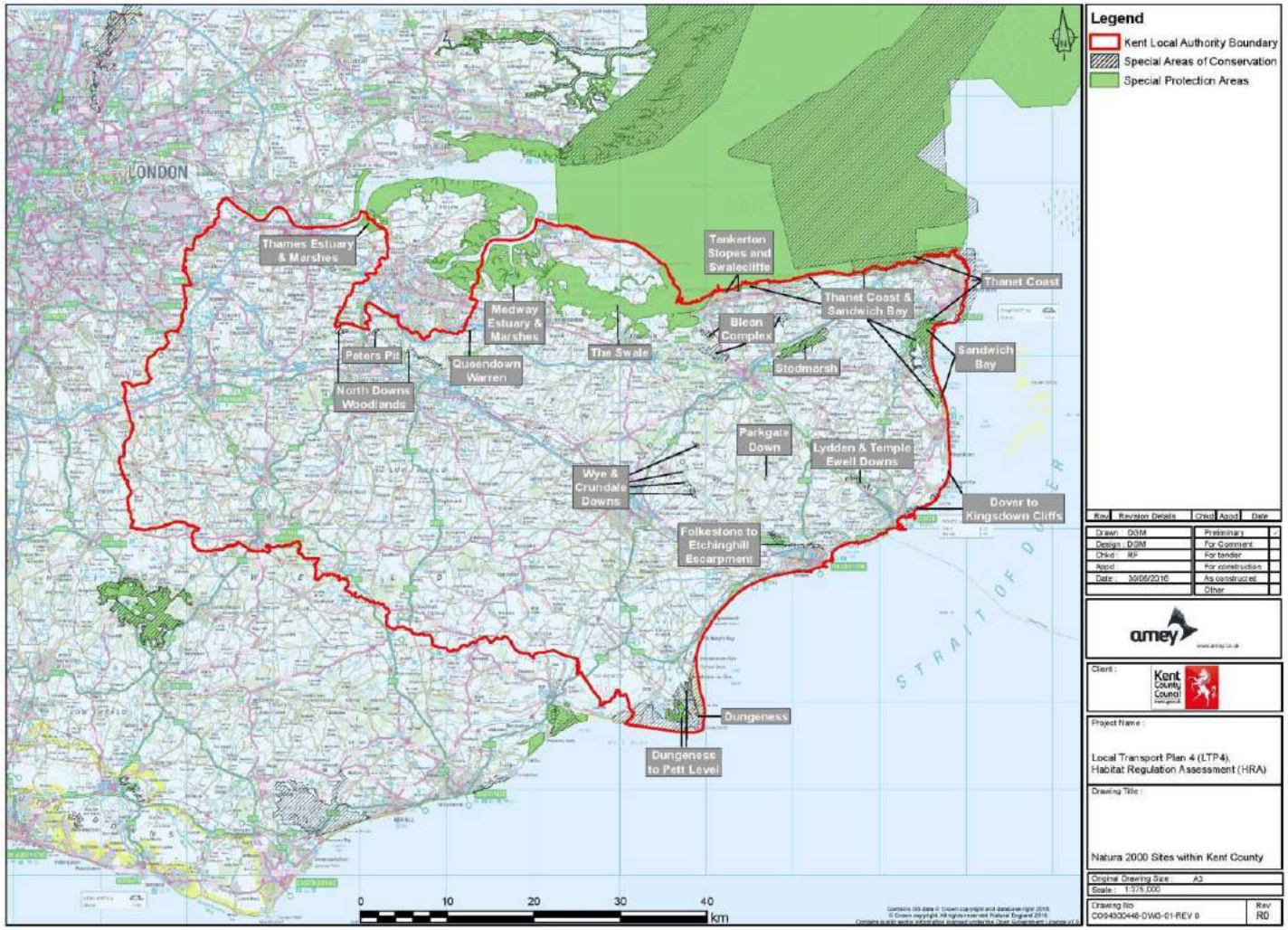
6 JOINT NATURE CONSERVATION COMMITTEE (JNCC). Website: http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0016618

7 NATURA 2000 STANDARD DATA FORM: Website: http://jncc.defra.gov.uk/protectedsites/sacselection/n2kforms/UK0016618.pdf

8 URS, 2011. Sustainability Appraisal and Habitats Regulations Assessment of Kent's Local Transport Plan 3 (LTP3).

9 Kent Environment Strategy. A Strategy for Environment, Health & Economy - March 2016

Appendix A Drawing No. CO04300448-DWG-01-REV 0



Appendix J Health Impact Assessment Report

Health Impact Assessment (HIA) of Kent County Council's Draft Fourth Local Transport Plan (LTP4)

CO04300448/HIA/REV 0

July 2016

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Document Control Sheet

Project Name:	LTP4 SEA Post-Scoping
Project Number:	CO04300448
Report Title:	Health Impact Assessment (HIA) of Kent County Council's LTP4
Report Number:	CO04300448/HIA1

Issue Status/Amendment	**Prepared**	**Reviewed**	**Approved**
Rev 0 Draft for inclusion in SEA Environmental Report for Public Consultation	Name: Helen Bresser Signature:  Date: 04/07/2016	Name: Jennifer Craig Signature:  Date: 10/07/2016	Name: Jenefer Taylor Signature:  Date: 13/07/2016
Rev 1	Name: Signature: Date:	Name: Signature: Date:	Name: Signature: Date:
Rev 2	Name: Signature: Date:	Name: Signature: Date:	Name: Signature: Date:

Contents

Introduction

Health Impact Assessment (HIA) is a process that uses a combination of procedures, methods and tools to help identify possible health impacts of a programme, policy or project. Health is determined by a combination of factors, coined 'the determinants of health' by the World Health Organisation. The determinants of health include;

- The social and economic environment;
- The physical environment, and
- A person's individual characteristics and behaviours.

HIA can contribute to improved health by:

- Raising awareness among decision makers of the relationship between health and the physical, social and economic environments;
- Demonstrating how a proposal may affect the health of a population;
- Providing recommendations on how a proposal could be modified to maximise opportunities for health gain and minimise chances of health loss.

This HIA forms part of the Strategic Environmental Assessment (SEA) of Kent's Local Transport Plan (LTP) 4: Delivering Growth without Gridlock. The assessment considers the relationship between transport and human health and the likely positive and negative effects of LTP4 on human health.

Kent's LTP4: Delivering Growth without Gridlock

The Local Transport Plan for Kent (LTP4) details the overarching transport strategy for Kent from 2016 to 2021. This HIA assesses Kent-wide priorities and each of the five 'outcomes for transport' detailed within the Plan, which are as follows:

Outcome 1: Economic growth and minimised congestion

Policy: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development, meeting demand from a growing population.

Outcome 2: Affordable and accessible door-to-door journeys

Policy: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.

Outcome 3: Safer travel

Policy: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties, and encourage other transport providers to improve safety on their networks.

Outcome 4: Enhanced environment

Policy: Deliver schemes to reduce the environmental footprint of transport, and enhance the historic and natural environment.

Outcome 5: Better health and wellbeing

Policy: Promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.

Report Structure

The report is presented in the following key sections:

Section 1: Transport and Human Health - Policy Context

This section outlines the key national and local policies and guidance that relate to transport and human health.

Section 2: Transport and Human Health - Evidence

This section analyses the Kent community profile against secondary research in relation to the impact of transport and human health.

Section 3: Assessment Scope, Methodology and Limitations

This section summarises the scope of the health impact assessment of LTP4, the methodology used and limitations associated with the approach.

Section 4: The Assessment

This section provides the assessment of LTP4 against the SEA objectives, relevant to health.

Section 5: Recommendations for Mitigation and Enhancement

This section provides recommendations for mitigation and enhancement based on the findings of the research and the assessment.

Section 1: Transport and Human Health - Policy Context

This section outlines the national and local context in relation to the impact of transport on health.

1.1. National

The Health and Social Care Act 2012 provides a new focus on Public Health and related inequalities and wider determinants, with transport being explicitly identified as such: Transport policy can have considerable input with regards to tackling obesity, promoting healthy and active lifestyles, supporting independent living and reducing death/injury from road accidents, as well as reducing polluting emissions. Local Authorities are given responsibility for improving health and wellbeing in their areas by the Act.

Adult physical inactivity is ranked as the fourth leading risk factor for global mortality and claims more lives worldwide annually than being overweight or obese (WHO, 2010). Physical inactivity has been directly linked with causing a range of non-communicable disease (NCD) conditions and has been identified as the cause of 10.5% of UK coronary heart disease burden, 13% of Type II diabetes, 18% of breast cancers and 19% of colon cancers (Lee et al., 2012). There is clear evidence that increasing levels of physical activity can be effective in preventing the development of conditions as well as managing existing chronic NCD conditions (Kent County Council (KCC), 2015c).

The Public Health Outcomes Framework Policy (Public Health England (PHE), 2013a) sets out the desired outcomes for public health, with indicators to help understand how well public health is being improved and protected. Two of these indicators relate to physical activity:

- 2.13(i) number of physically active adults (defined by recommended level of 150 minutes of activity per week) and
- 2.13(ii) number of physically inactive adults (defined by managing 30 minutes of activity in one week)

Public Health England's '*Everybody Active, Every Day*' published in 2014, sets out a framework to address the physical inactivity problem using an evidence-based approach. The solution to the epidemic is for everybody to become more active, every day, with the four key aims being *active society*, *moving professionals*, *moving at scale* and *active environments*. In promoting physical activity, the Framework places emphasis on creating environments and cultures that can sustain physical activity including; active travel and opportunities to walk and cycle, based on locally-identified demand.

Obesity is regarded as one of the most serious public health problems facing the UK, with obese people dying on average 9 years earlier than those of normal weight (KCC, 2015e). Obesity is also associated with increased mortality and morbidity as a result of circulatory disease, as well as several cancers. The Marmot Review (Marmot, 2010) looked at health inequalities in England and found that obesity is more common in those with a social disadvantage.

In order to tackle the issue of obesity, a holistic approach to the problem is required including transport, the built environment, housing, education and leisure facilities. Prevention is the main priority in the NHS England's Five Year Forward View (October 2014).

The National Institute for Health and Care Excellence (NICE) implement a range of public health publications for the promotion of active transport and travel including:

- PH41 Walking & Cycling (2012): guidance on how people can be encouraged to increase the amount they walk or cycle for travel or recreation purposes;
- PH8 Physical activity and the environment (2008a): guidance with evidence-based recommendations on how to improve the physical environment to facilitate physical activity;
- PH13: Physical activity in the workplace (2008b): guidance on encouraging employees to be more physically active, either through supporting physical activity when travelling to work and/or during the working day.

The Department for Transport has published a range of policy documents which put a focus on active and sustainable travel:

- *Cycling and Walking Investment Strategy (Draft; 2016)*: a long term vision for walking and cycling to become the preferred option for shorter commutes in everyday life, with a transformative change in the way these activities are part of everyday life.
- *Door to Door Strategy (2013)*: a strategy for improving sustainable transport and connecting people from A to B more efficiently with an overall smaller carbon footprint. Takes into account convenience, price, safety, accuracy and accessibility
- *Creating Growth, Cutting Carbon (2011)*: The Government's vision for a sustainable local transport system that supports the economy and reduces carbon emissions.

The Department of Health has published guidance: *Start Active, Stay Active (2011a)*, which puts a focus on the services needed to promote regular physical activity, with guidelines on the volume, duration, frequency and type of physical activity required to achieve general health benefits.

With a particular focus on children, the Department for Education's: *Home to school travel and transport guidance (2014)* places a duty on Local Authorities to deliver Home to School travel and transport, and sustainable travel for children living within each Local Authority.

In relation to people's safety on the roads, the Road Traffic Act 1988 focuses on road safety and reducing the likelihood of road casualties occurring through the offences it places on all drivers for careless and reckless driving.

One of the objectives of the Department of Health's: *No Health without Mental Health (2011b)* is to ensure more people with mental health problems achieve good physical health. Their aim is to improve outcomes for people with mental health problems and build individual and community resilience and wellbeing in order to prevent mental ill health.

1.2. Local

KCC implement a range of local policy documents to address some of the health issues encountered within the county, and those relating to transport are acknowledged below. These inevitably will have an impact on the LTP4 and the future direction taken.

The *Active Travel Strategy (Draft; 2016a)* aims to make the use of non-motorised transport more attractive, safer and ultimately the preferred choice for short journeys in Kent, thereby increasing physical activity across the population.

There is also a *Strategic Framework for Sport and Physical Activity in Kent (2012)* which provides direction for sport and physical activity.

KCC's strategic statement *Increasing Opportunities, Improving Outcomes (2015)* sets out their 5 year vision from 2015 to 2020 to improve outcomes for residents, businesses and communities in Kent.

In relation to health and health inequalities, the Kent Health and Wellbeing Board *Joint Health and Wellbeing Strategy (2014a)* sets out Kent's direction for improving health care across the NHS, social care and public health services as well as reducing the health inequalities that exist in the county. Kent's Public Health Board have also produced *Mind the Gap* which is an action plan to reduce the gap in health status between the least deprived and most deprived communities in the county.

The *Kent Environment Strategy (2016b)* covers three themes; living well within environmental limits, rising to the climate change challenge and valuing our natural, historic and living environment. The two business plans in relation to growth, environment and transport and social care, health and wellbeing set the key priorities for the year ahead including support for residents, communities and businesses, and the focus to improve lives through delivering better outcomes.

The Road Casualty Reduction Strategy (2014b) is a Strategy aimed at reducing road casualties in Kent, including targets relating to the number of people killed or seriously injured (KSI) in road collisions. The Crash Remedial Measures (CRM) Programme targets safety critical schemes, which are locations where there is a statistically higher than expected number of KSI casualties.

Kent also implement a range of other policies/guidance aimed at enhancing the community within which residents live, work and enjoy life, including:

- Kent Design Guide (2000)
- Unlocking Kent's Cultural Potential (2010-2015)
- Development and Infrastructure, Creating Quality Places
- Kent Better Homes - Better homes: localism, aspiration and choice (2011a)
- KCC's Countryside and Coastal Access Improvement Plan (2013)

Across Kent there are local cycling strategies to promote physical activity. Kent also implement local air quality action plans to address exceeding pollution levels, the outcomes of which will have an influence on transport and consequently health. These impacts are discussed in further detail in Section 2.

Section 2: Transport and Human Health - Evidence

2.1. Introduction

This section explores the relationship between transport and health by providing an analysis of secondary research findings and applying these to Kent's community profile.

A large proportion of the Kent population are in very good health, with figures similar to the England and Wales average. Only 5.1% of the population class themselves as being in bad or very bad health (KCC, 2011b).

Transport planning can impact upon human health in a number of ways from air and noise pollution to mental health and community severance. Outcomes of LTP4 will have an impact on people's travel behaviour, with factors including cost, practicality and individual preference all having an influence on the decisions people make with regard to transport.

Transport has a significant impact on physical activity and obesity, with the health implications of travel choices being considerable. Table 2.1 indicates the modes of travel to work by residents aged 16 to 74 years in Kent, taken from the census of 2011. Driving a car or van to work is the most common mode of transport at 39.7% of the population, which is slightly higher than the national average at 37.1%. This mode of transport is generally the mode of transport which results in the least physical activity.

2.2. Physical activity

Currently 28.1% of adults in Kent are classed as physically inactive, meaning 3 out of 10 adults do not manage 30 minutes of physical activity in one week. This figure is comparable to the national average of 27.73%, and the Kent trend appears to show a net increase in the number of physically inactive people since 2012 (KCC, 2015c). 57.1% of the adult population meet the recommended level of 150 minutes per week of physical activity in order to improve or maintain health, which is slightly higher than the national average of 56.0% (PHE, 2015). Kent is therefore performing at level close to the national average, however the trends show that inactivity is increasing.

Thanet has the highest percentage of physically inactive people and the lowest number of physically active people, whilst Sevenoaks has the highest percentage of physically active people and the lowest percentage of physically inactive people (KCC, 2015c). There is a strong correlation between levels of physical inactivity and socio-economic status (PHE, 2013b), with research showing that people living in the most deprived regions are twice as likely to be physically inactive as those living in the least deprived regions (UK Active, 2014).

The benefits of increased levels of physical activity include the prevention and management of the symptoms associated with additional disease burden that are often linked to people from highly deprived areas, e.g. excess weight, hypertension and mild to moderate depression (KCC, 2015c). Analysis suggests that physically inactive people from populations in areas of high deprivation should be considered as a primary target group for increasing levels of physical activity.

KCC recognise that increasing physical activity is necessary and action is required to integrate physical activity into transport and environmental planning and other services (KCC, 2015c).

Table 2.1: 2011 Census: Method of Travel to Work (KCC, 2011)

	Work mainly at or from home	Underground, metro, light rail, tram	Train	Bus, minibus or coach	Taxi	Motorcycle ,scooter or moped	Driving a car or van	Passenger in a car or van	Bicycle	On foot	Other method of travel to work	Not in employment
Kent	**41,072**	**1,884**	**63,247**	**25,917**	**2,756**	**5,991**	**419,206**	**35,285**	**11,948**	**77,057**	**4,071**	**366,963**
Ashford	3,995	95	3,755	1,507	151	377	36,833	3,134	1,465	5,920	314	26,706
Canterbury	4,165	186	3,384	3,279	196	446	38,249	3,201	1,803	10,363	348	46,247
Dartford	1,786	362	8,537	2,563	327	691	28,785	2,184	535	3,609	232	20,877
Dover	2,685	89	1,883	1,830	245	439	32,435	3,100	1,086	6,227	427	30,390
Gravesham	1,837	214	5,187	3,177	198	536	28,875	3,021	463	3,864	267	25,552
Maidstone	4,705	120	5,257	2,945	222	538	50,131	3,819	935	9,023	395	35,141
Sevenoaks	4,470	258	11,172	873	214	558	31,387	2,016	471	4,214	382	26,083
Shepway	2,705	94	1,905	2,358	250	362	30,422	2,654	893	6,261	376	29,658
Swale	3,165	101	4,329	1,258	242	588	40,843	3,455	1,385	7,086	358	35,797
Thanet	2,940	102	2,168	3,502	364	575	33,109	3,793	1,395	6,890	362	39,252
Tonbridge and Malling	3,768	134	7,295	1,293	168	526	37,883	2,630	855	5,151	290	26,442
Tunbridge Wells	4,851	129	8,425	1,332	179	355	30,254	2,278	662	8,449	320	24,818
UA Medway	4,615	283	11,252	5,903	444	1,416	80,403	7,778	1,449	12,461	685	67,469

2.3. Obesity

It is estimated that approximately 21% of the Kent adult population is obese (KCC, 2015e), and over 18% of school children aged 10-11 (PHE, 2015), both figures of which are below the national averages of 23% and 19% respectively. Swale, Shepway and Dartford have the highest levels of adult obesity in Kent. Swale is above the national average and Canterbury and Tunbridge Wells are below the national average.

2.4. Healthy living

The Kent Joint Strategic Needs Assessment (JSNA) identifies that projections signal a clear decline in the prevalence of healthy weight with a simultaneous significant increase in the prevalence of obesity and severe obesity (KCC, 2015e). In a consultation questionnaire on people's lifestyles, of which 602 responses were received from the Kent population, over 40% said they wanted to live healthier lifestyles, were concerned about their health or wanted to change how they looked. When questioned about the helpful aids to weight loss, the top 3 that people strongly agreed with included; available and affordable fresh fruit and vegetables (64.4%), being able to cycle or walk near to where to you live (53.5%) and having advice on healthy eating (52%). The responses were similar across gender, age and white and other ethnic groups.

Cardiovascular disease (CVD) includes all diseases of the heart and circulation and kills one in three people in the UK. It is the main cause of death and premature death (under 75 years) and is more common in deprived communities (KCC, 2015d). CVD was responsible for 26% of all deaths in Kent in 2015 and is the most significant contributor to the inequality gap in life expectancy in the county.

Coronary Heart Disease (CHD) prevalence in Kent appears to be increasing in line with national trends, largely due to increased awareness and effective diagnosis. Thanet district appears to experience relatively higher CHD mortality rates compared to the rest of Kent while Tonbridge and Malling see relatively lower levels (Figure 2.1).

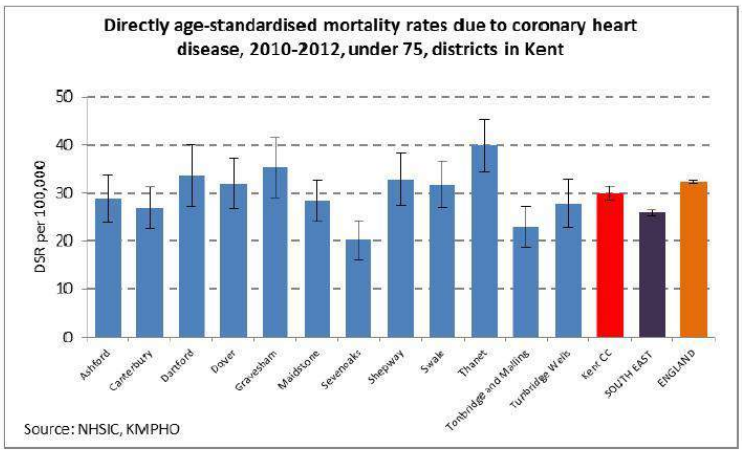

Figure 2.1: Directly age standardised mortality ratio due to CHD 2010-2012 in those aged less than 75 (KCC, 2015a)

Thanet is the most deprived district, and figure 2.1 illustrates that deprivation is strongly linked to CHD, as well as lower life expectancy. Analysis of life expectancy across Kent shows that there are stark differences between the most deprived and least deprived areas.

A poor diet high in fat and cholesterol, excess weight and a sedentary lifestyle are some of the risk factors of CHD. Only 28% of Kent residents consume at least 5 portions of fruit and vegetables a day with only 21% in Swale and Dartford (KCC, 2015e). Promotion of physical activity is required to reduce the burden and impact of CVD on the population through local planning of health and wellbeing services.

2.5. Respiratory diseases

15% of all deaths in Kent in 2015 were due to respiratory illness. Figure 2.2 shows that, in 5 districts, mortality rates are higher than the Kent and national average (31.9), with Thanet having the highest rate. There are clear social class gradients in respiratory disease mortality (KCC, 2015a).

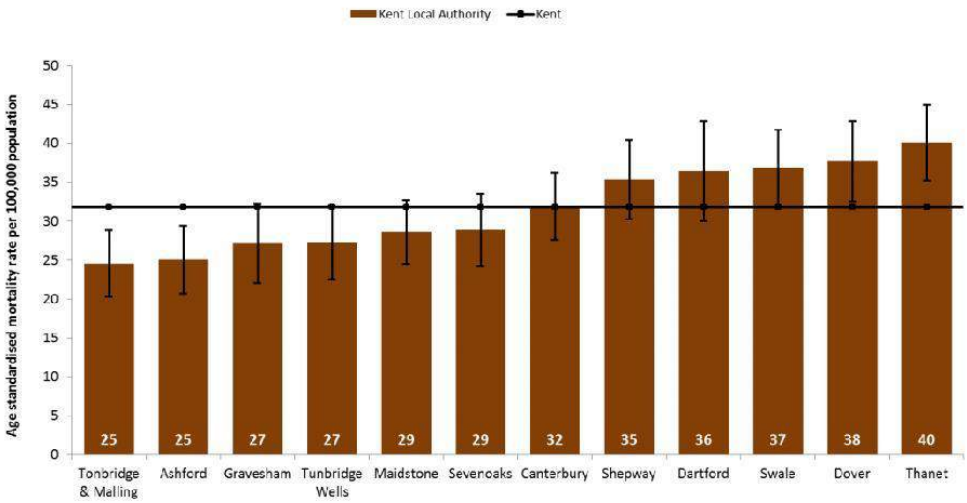

Figure 2.2: Age standardised mortality rate from respiratory causes (under 75 years' persons), 2011 to 2015

2.6. Mental health and wellbeing

Poor mental health is the largest single cause of disability and accounts for 23% of the national disease burden in the UK (Department of Health, 2013) with significant morbidity and mortality rates. Health inequalities are also evident in the case of mental illness, with those at a disadvantage within a community, e.g. with a lower socioeconomic status, often affected the most.

There are many mental health and wellbeing risk factors which can increase the likelihood of experiencing mental health problems, such as; low income, poor education, poor housing, unemployment and family breakdown (Bird, 2011).

The estimated prevalence of common mental illnesses (any neurotic disorder, e.g. anxiety) in Kent in 2013/14 was 144,558 people, which is 12.5% of the total registered population of Kent (aged 18-64) (KCC, 2015b).

Transport can impact upon mental health in a number of ways with access to a car having a positive impact (Health Scotland, 2007). Regular physical activity is important for sound mental health, with the two being interconnected. People who are physically impaired have a higher risk of suffering from a mental illness (King's Fund, 2012).

Traffic noise has the potential to impact a person's mental health through inducing nervousness, depression, elevated blood pressure, sleeplessness, undue irritability and in some cases long-term physiological effects. This is more prevalent in vulnerable groups such as children, the elderly, shift workers, those vulnerable to physical/mental disorders and in areas with low background noise levels. People can demonstrate aggressive behaviour when faced with congested traffic situations; increasing the likelihood of involvement in a car accident (OCC, 2015).

A child's mental health can be positively influenced through physical exercise, with benefits to development, cognition, concentration and academic performance (OCC, 2015). Greater participation in walking and cycling can also be advantageous to a child's self-confidence. However, traffic build up is a major hindrance to a child's ability to access infrastructure for physical activity, e.g. walking and cycling for short distances, as parents can perceive the danger is too high to allow participation. Sustrans illustrated this cycle of the restricted movement of children, as shown in figure 2.3.

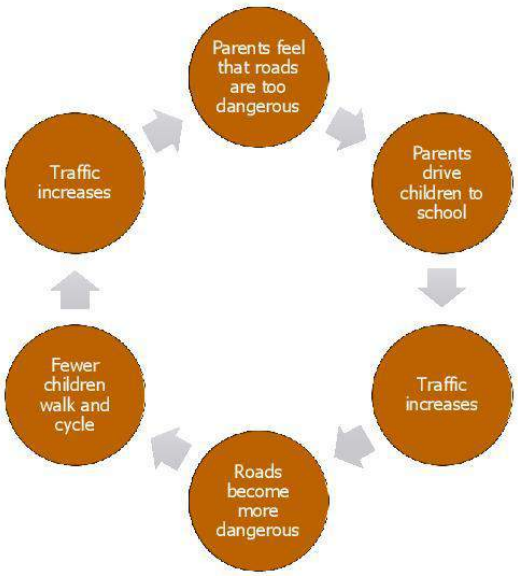

Figure 2.3: The effect of ever increasing traffic on Children's freedom of movement (Source: Sustrans)

In addition to fears of road traffic preventing the use of sustainable modes, fear of crime can also act as a deterrent. Fears about crime-related personal safety when travelling on or waiting for public transport can have a significant impact on the number of people choosing to use sustainable modes. Personal safety perceptions vary according to many different factors this can include individual factors such as age and gender and external factors such as location of infrastructure (e.g. bus stops) and time of day .

2.7. Community severance

Community severance, or the 'barrier effect', can occur when the transport system limits people's mobility, instead of facilitating it. Transport can have a wide range of beneficial and detrimental effects on health. Positive effects include recreation, exercise; and access to employment, education, shops, social support networks and health services.

A study carried out into the barrier effect showed that the elderly (65+) are many times more susceptible to barrier effects than other adults (Hine and Russell, 1996), with the UK and Kent experiencing an aging population; this suggests that access to public transport for the 65+ age group is of great importance.

2.8. Inequalities and vulnerable groups

The health effects of transport will impact certain areas of the county and certain groups of people more so than others. KCC recognise the health inequalities across the county and are taking action to tackle the impact of social disadvantages on the population's health. Location and socio-economic factors influence these inequalities.

Deprivation

Kent is within the least deprived 50% of all counties and unitary authorities in England. The level of deprivation in eight out of twelve Kent local authority districts has increased since 2010 relative to other areas in England, with the north Kent coastal areas having some of the highest levels of deprivation across the county, with Thanet District being the most deprived district (KCC, 2015b). The east of Kent also has high levels of poverty, but there are localised areas of high affluence amongst these areas. Parts of central and south west Kent have the lowest levels of deprivation. Life expectancy and relative deprivation levels are strongly correlated across the county as a whole, as well as by district, illustrating the health inequalities within Kent. The gap between the most deprived 20% of the population and the two most affluent areas appears to show no sign of narrowing.

Poverty

Using the Children in Low-Income Families Local Measure, 16.5% of children (53,295 children) in Kent are living in poverty. This is above the regional average of 13.2% but below the England average of 18.0%. Child poverty has decreased in Kent by 1.0% since 2014 (565 fewer children living in poverty) (KCC, 2015).

Location

The negative impacts of transport on health are more pronounced in inner cities and along busy roads where people live and work as traffic density is significantly higher. Within urban areas there is greater severance within the community, an increased risk of injury and death for pedestrians and cyclists as well as the exacerbated emission levels and poor air quality in

comparison to suburban and rural areas (Croxford et al., 1996). The most deprived communities reside in these areas and figure 2.4 illustrates the strong correlation between area deprivation and accident rates for child pedestrians.

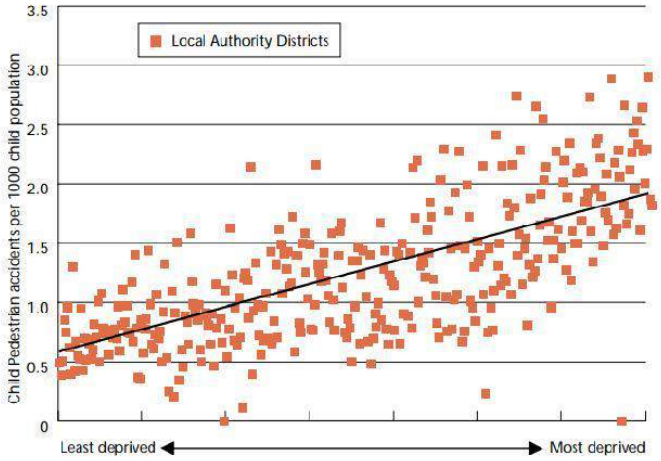

Figure 2.4: Child pedestrian accident rates in local authority districts, by index of multiple deprivation (Source: Centre for Transport Studies) SEU, 2002

Despite overall traffic volumes on rural roads being lower than that found on urban roads, traffic speeds on rural roads result in a disproportionate number of accidents which are fatal when compared with urban road accidents (OCC, 2015). Travelling at high speed and the sinuosity of rural roads can result in loss of control (Department for Transport, 2015). In 2014, approximately 59% of all fatal accidents in Great Britain occurred on rural roads, with 38% occurring on rural A-roads and a further 21% on other rural roads. The South East includes 39 of the worst 20% of deprived rural areas in England – 24 (62%) of these are in Kent (Rural Community, No date).

Drivers from the most socially deprived areas are more likely to have road collisions with causes being linked to driving at excessive speed, driver intoxication, failure to wear seat-belts and unlicensed/uninsured driving (Clarke et al., 2009).

Disabled People

There are 257,038 disabled people within Kent, which accounts for approximately 17.6% of the population (KCC, 2011). This is only marginally less than the national average at 17.9%. It is imperative that this group of the population have affordable access to healthcare, for which the transport network is vital.

Age

Life expectancy for both males and females born in 2015 in the county is higher than the national average at 79.4 and 83.1 respectively (PHE, 2015). The number of deaths in Kent has been falling steadily over recent years, with Kent having an older age profile than the national average. Age statistics and transport related death rates are detailed below:

- The greatest number of pedestrian deaths is within the age group 18-59 (48%), but there is a disproportionate amount of 60+ year old pedestrians (43%) being killed on the road (Department for Transport 2014).
- Approximately one third of all drivers who are killed or seriously injured on the road are under 29, but license holders are only a percentage of this age bracket.
- A third of accidental deaths amongst children aged 0-14 year olds is accounted for by road accidents, and over half of accidental deaths for 5-14 year olds (CAPT, 2012). This is a greater percentage than other causes of accidental death in children including drowning, asphyxia and falls.

Pedestrians and Cyclists

Pedestrians and cyclists are vulnerable road users. Their incident rate for crashes is particularly high given the duration of time spent on the road and distance generally travelled. In comparison to other road users, children are most at risk of being killed or seriously injured on the roads when they are on foot. In 2014 1,379 pedestrians under 16 years old were killed or seriously injured whilst on foot (Department for Transport, 2015), in comparison to 279 under 16 year old cyclists in the UK.

The severity of pedestrian and cyclist casualties is exacerbated when collisions occur with vehicles travelling at more than 20 miles per hour (OCC, 2015). In 2014, after car occupants, pedestrians were the second largest causality killed in reported accidents (25%) in Great Britain, followed by motorcyclists (19%) and pedal cyclists (3.5%) (Dft, 2015).

Although pedal cyclist deaths have seen a long-term decline (Dft, 2013), cyclists are still 12 times more likely to be killed on the road than people in cars. HGVs are the biggest threat to pedal cyclists on the roads; between 2009 and 2013 they were involved in around a quarter of fatal collisions despite comprising only 5 per cent of traffic in GB.

Transport-related injury and death

Road traffic, by 2030, will be accountable for nearly 5% of the global disease burden, and be the third highest cause of death overall (WHO, 2011). Young people are most at risk with road traffic injury being the second highest cause of death between ages 5 and 29 years. Children are vulnerable road users; however, a reduction in traffic density has previously been accompanied by falling child pedestrian deaths (WHO, 2011).

Pedestrians and cyclists are vulnerable road users with a higher fatality rate per distance travelled in comparison to other road uses, excluding motorcyclists. Personal safety is a cause for concern and may be a barrier to people participating in active transport (OCC, 2015). People from areas of a low deprivation are also at risk as walking is sometimes the only mode of transport available.

Figure 2.5 below shows that over time the number of people killed or seriously injured (KSI) on Kent roads has significantly decreased, however, there was an 11% increase between 2013 and 2014. The 2020 target figure is 495 casualties and in 2014 there were 658 (33% above target). The number of cyclist collisions has increased from 441 in 2013 to 480 in 2014, with a similar trend shown in the number of cyclist KSI casualties, with the 2014

figure now 126% above the 2004 to 2008 average. The number of pedestrian KSI casualties has also increased by 20 in 2014 and total pedestrian casualties by 42 in 2014.

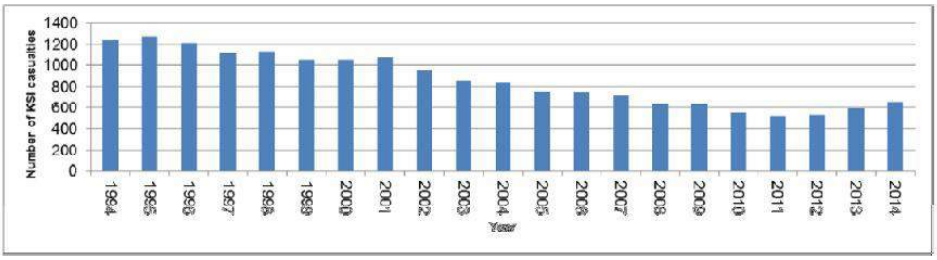

Figure 2.5: KSI casualties in Kent from 1994 to 2014 (KCC, 2014)

Figure 2.6 shows KSI by district with Ashford having the highest proportion, and Gravesham having the lowest.

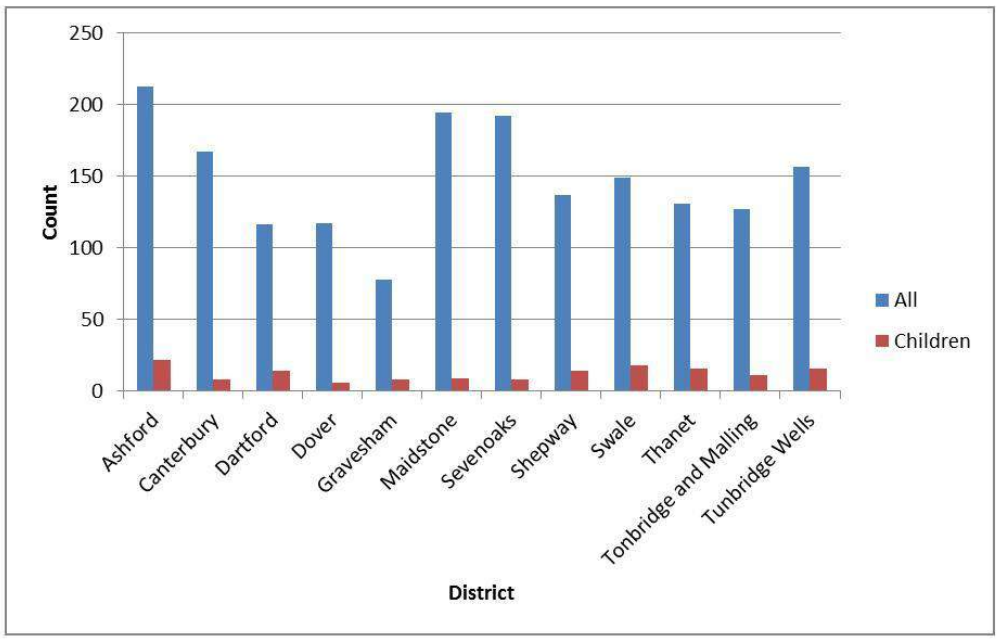

Figure 2.6: People killed or seriously injured on Kent's roads, 2012-2014 (pooled) by District (Source: Department for Transport) (KCC, 2015a)

2.9. Transport-related air pollution

Outdoor air pollution in the UK is believed to cause 40,000 premature deaths each year (RCP, 2016) and road transport is the largest source of urban air pollution. Transport-related air pollutants are linked to a range of ill health problems including asthma, chronic bronchitis, heart and circulatory disease and cancer (Krzyzanowski et al., 2005), see table 2.2. Overall, UK air pollution levels are low in comparison to many other countries; however, pollution levels in some major cities are close to/above recommended levels.

Living near a busy road, and areas of high traffic flow and density is associated with poorer child and adult health, and higher death rates (Brugge et al., 2007, Health Effects Institute, 2010).

Table 2.2: Transport-related air pollutants and their associated health outcomes

Transport-related pollutant	Health outcome
Black smoke, ozone, $PM_{2.5}$	Mortality
Black smoke, ozone, nitrogen dioxide, VOCs, CAPs, diesel exhaust	Respiratory disease (non-allergic)
Ozone, nitrogen dioxide, PM, VOCs, CAPs, diesel exhaust	Respiratory disease (allergic)
Black smoke, CAPs	CVD
Nitrogen dioxide, diesel exhaust	Cancer
Diesel exhaust; also equivocal evidence for nitrogen dioxide, carbon monoxide, sulphur dioxide, total suspended particles	Adverse reproductive outcomes

Adapted from Krzyzanowski et al., 2005

Pollutants of most concern to human health are particulate matter $PM_{2.5}$ and PM_{10}. Due to their microscopic size they can infiltrate deep inside the respiratory system and cumulative, long-term exposure to these particles is linked to reduced lung function, increased frequency of respiratory disease and reduced life expectancy (WHO, 2011). Oxides of nitrogen, VOCs and carbon monoxide are also particularly harmful to health. Short term exposure is also known to increase rates of daily mortality and hospital admissions (WHO, 2011).

Many areas of the UK are failing to comply with European air quality limits, particularly in relation to nitrogen dioxide (NO_2), and health based national air quality objectives. As part of Local Air Quality Management, Local Authorities are required to assess air quality within their area for a number of key pollutants, defined by the National Air Quality Strategy. Where air quality objectives are not met, the Local Authority must declare an Air Quality Management Area (AQMA) for the area, along with action plans for improvement. Of the 513 AQMAs in England, 487 are due to a range of road transport sources. Transport emissions contribute approximately 30% of total nitrogen oxide (NO_x) emissions and 20% of total PM emissions (RAC Foundation, 2014). In Kent, there are currently 44 AQMAs in council areas of Canterbury (2), Dartford (4), Dover (3), Gravesham (7), Maidstone (1), Medway (3), Swale (4), Sevenoaks (11), Thanet (1), Tonbridge and Malling (7) and Tunbridge Wells (1), these however are not all designated for road transport, some are for industrial monitoring.

Improved emission standards within new cars, to reduce emissions per vehicle has not taken place as expected, and new diesel cars appear to be generating higher direct emissions of nitrogen dioxide into vehicle exhausts (OCC, 2015). Although air quality monitoring takes place, there are still ten towns and cities in the UK, where PM_{10} levels have exceeded safe levels, and a further 39 urban areas which have breached safe levels for $PM_{2.5}$ (Johnston, 2016)). Some public health professionals believe that current air pollution levels within the UK are a public health crisis, despite European levels showing slight improvements, the recorded levels are still dangerously high.

Improvements in technology may be offset by traffic growth, with emission levels likely to increase further if congestion levels increase. The transport network needs to accommodate additional vehicle loads to avoid congestion. With cars being the main mode of transport in urban areas for relatively short journeys, traffic pollution has increased. A cumulative impact occurs within urban areas as a result of the shorter distances that vehicles travel. In order for catalytic converters to function effectively, the engine needs to be operational for some time; therefore, the shorter distances travelled in urban areas lead to higher levels of pollution (Krzyzanowski et al., 2005).

Air pollution is closely linked with climate change, and it is thought that the impacts of climate change on health will increase, in relation to changing temperatures, ground level ozone levels and sunlight. The National Planning Policy Framework (NPPF) requires 'preventing both new or existing development from contributing to...unacceptable levels of soil, air, water or noise pollution'; the LTP4 should therefore take into account road related emissions and ensure targets are in place to reduce, control or mitigate these. A reduction in average particulate concentrations from 75µg/m^3 for PM_{10} (a level common in many cities) to 20µg/m^3 for PM_{10} (the WHO guidelines) could potentially result in mortality rates falling by 15% (WHO, 2011).

2.10. Transport-related noise pollution

Road traffic is the largest source of community noise in towns and cities and can cause a range of health issues (WHO, 2011). Exposure to noise for long periods can cause annoyance, disruption, sleep disturbance and increased aggression, with negative impacts for mental health. Noise can be a subjective matter, but when levels constantly exceed 30dbLAeq people can struggle to sleep, and most people would appear 'moderately annoyed' at 50dbLAeq (OCC, 2015).

Noise is also linked to higher stress levels, heart disease and hypertension. There may be other contributing factors to transportation noise, e.g. proximity to airports and railway lines but road traffic is the largest concern (Dora and Phillips, 2000). Amongst children living in areas with high levels of road traffic noise, impaired reading and mathematics performance can be more prevalent (Ljung et al., 2009).

Proximity of people to noise, traffic volumes and high traffic speeds can all affect noise level exposure. Reductions in these 3 factors can reduce community noise levels and emissions, thus decreasing the impact on health, as well as removing some of the barriers for active transport (WHO, 2011).

Section 3: Assessment Scope, Methodology and Limitations

3.1. Scope of Assessment

Based upon the evidence discussed in Section 2, this assessment focuses on the following 'relevant' SEA objectives; relevance has been established as those objectives which are most closely associated with human health:

- Promote accessible, integrated and sustainable transport networks that support the needs of the economy and local communities.
- Support transport solutions that promote positive health outcomes through active and sustainable travel choices and improved road safety.
- Improve air quality in urban areas and achieve the NAQS and AQMA objectives across the county.
- Seek to reduce noise at source, particularly in existing Noise Important Areas, and to prevent the creation of new Noise Important Areas; protect tranquil areas from impact, including cumulative impact.
- Reduce vulnerability to climate change related extreme weather events by creating a resilient transport infrastructure and identifying appropriate adaptation and mitigation measures.

For further detail in relation to how the SEA objectives were developed, see section 3.2 of the Environmental Report.

3.2. Methodology

The following section 4 provides the assessment of Kent's LTP4 outcomes and Kent-wide priorities against the SEA objectives, outlined above, to determine the potential positive and negative health impacts of LTP4.

Potential impacts were considered in relation to whether they were likely to be (in the context of Kent):

- Major positive
- Minor positive
- None/unknown
- Minor negative
- Major negative

3.3. Limitations and Assumptions

This assessment focuses on the Kent-wide priorities and the 'outcomes of transport' contained within LTP4 rather than individual schemes or projects. Without assessing individual schemes it is difficult to estimate the population likely to be affected as a result of LTP4.

Section 4: The Assessment

Table 4.1: Health Impact Assessment of LTP4 against SEA objectives

SEA Objectives	Link to Human Health	Relevant LTP4 Outcome	Impact	Reason
Promote accessible, integrated and sustainable transport networks that support the needs of the economy and local communities.	Transport plays a key role in access to employment, education, shops, social support networks, health services. There is a strong correlation between levels of physical inactivity and socio-economic status (PHE, 2013b), with research showing that people living in the most deprived regions are twice as likely to be physically inactive as those living in the lease deprived regions (UK Active, 2014). Therefore, access to affordable public transport and walking/cycling infrastructure is especially important for those living in deprived areas.	Affordable and accessible door to door journeys Economic growth and minimised congestion	Minor positive	A key outcome of LTP4 is to promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services. Affordable transport will have a positive health impact on the Kent community due to access to essential services. A key outcome of LTP4 is to deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development, meeting demand from a growing population. Home to school transport is treated as a priority in LTP4. Where transport to school is a barrier KCC aim to get pupils home safely and on time. This can take the form of advice or the provision of free or subsidised transport where the child is eligible under Section 509 of the Education Action 1996. Ensuring that school transport is affordable is likely to have a positive health impact across Kent, especially for those in areas of deprivation, however LTP4 provides limited detail on how affordable transport will apply to those not in education.

Support transport solutions that promote positive health outcomes through active and sustainable travel choices and improved road safety.	Improved health and wellbeing is associated with modal shift to cycling, walking and public transport. Those leading active lifestyles are at a reduced risk of suffering from; obesity, cardio vascular disease and diabetes. In addition to this, access to transport can also impact mental health. Regular physical activity is important for sound mental health. People who are physically impaired have a higher risk of suffering from a mental illness (King's Fund, 2012). Pedestrians and cyclists are vulnerable road users with a higher fatality rate per distance travelled in comparison to other road uses, after motorcyclists. Fear for personal safety can act as deter people from participating in active transport (OCC, 2015). In comparison to other road user types, children are most at risk of being killed or seriously injured on the roads when they	Affordable and accessible door to door journeys Better health and wellbeing Safer travel	Major Positive	A key outcome of LTP4 is better health and wellbeing by promoting active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality. LTP4 encourages the use of public transport and the commercial running of these services. However, KCC state that they must take a pragmatic approach to funding commercially unviable bus services and will seek to support other means of provision that can achieve the same aims, such as community bus services. KCC work with operators through Quality Bus Partnerships (QBP) and Punctuality Improvement Partnerships (PIP), and invest in infrastructure improvements that can enhance the attractiveness of these services. Working in close partnership with both the principal rail franchise operator in the county and Network Rail continues to be important. KCC will seek to ensure that the specification for the new franchise, together with Network Rail's plans for investment in Kent's rail network, meet the growing travel needs of residents and visitors alike. LTP4 outlines KCC's aspiration to make active travel an attractive and realistic choice for short journeys in Kent. KCC will encourage walking and cycling as a means of transport by integrating active travel in to planning, providing and maintaining appropriate routes for walking and cycling and supporting young people through training and building skills. KCC plan

	are on foot. Cyclists are 12 times more likely to be killed on the road than people in cars. HGVs are the biggest threat to pedal cyclists on the roads; between 2009 and 2013 they were involved in around a quarter of collisions despite comprising only 5 per cent of traffic in Great Britain.			to establish Kent as a pioneering county for active travel in line with KCC's Active travel Strategy. Safer travel is a key outcome in LTP4. KCC are committed to providing a safer road, footway and cycleway network to reduce the likelihood of casualties, in addition to encouraging other transport providers to improve safety on their networks. In LTP4 KCC outline their duty, moral and financial imperative to promote road safety and act to reduce the likelihood of road casualties occurring. One way KCC will reduce casualties is through the Crash Remedial Measures (CRM) Programme which targets safety critical schemes. At least 50% of the Integrated Transport block funding is top sliced for CRM schemes. Therefore, at least 50% of transport scheme funding is prioritised for the Safer travel outcome. In addition to allocating funding to the CRM schemes, KCC also carry out educational and enforcement activities and are implementing a Road Casualty Reduction Strategy. It is likely that by; enhancing public transport provision, encouraging active modes of travel and driving safety improvements, major positive health impacts will be achieved.

Improve air quality in urban areas and achieve the NAQS and AQMA objectives across the county.	Outdoor air pollution in the UK is believed to cause 40,000 premature deaths a year (RCP, 2016) and road transport is the largest source of urban air pollution. Transport-related air pollutants are linked to a range of ill health problems including asthma, chronic bronchitis, heart and circulatory disease and cancer (Krzyzanowski et al., 2005). Living near a busy road, and areas of high traffic is associated with poorer child and adult health, and higher death rates (Brugge et al., 2007, Health Effects Institute, 2010).	Enhanced environment Better health and wellbeing	Unknown	A key outcome of LTP4 is an enhanced environment. KCC aim to deliver schemes to reduce the environmental footprint of transport and enhance the historic and natural environment. LTP4 places focus on encouraging active travel (cycling and walking) and public transport, greater up-take of these modes of travel would reduce single-car occupancy and reduce associated emissions. Another outcome of LTP4; to achieve economic growth and minimise congestion will also have a positive impact on air quality. Numerous studies have shown that reduced vehicle speeds and frequent braking during congestion leads to an increase in vehicle emissions, thereby resulting in negative air quality impacts. Positive impacts will be seen where congestion is reduced and active travel is taken up by communities. Negative impacts could be seen as a result of new transport infrastructure, both during construction and/or operation. Due to the possibility of both positive and negative impacts and the need to asses this on a scheme by scheme basis, it is suggested that the impact, at present, is unknown.
Seek to reduce noise at source, particularly in existing Noise	Traffic noise has the potential to impact a person's mental health through inducing nervousness, depression, elevated blood	Enhanced environment Better health	Unknown	Whilst there is no specific mention of reducing noise within LTP4, noise reduction is implied as a result of reducing congestion, delivering schemes to reduce the environmental footprint of transport and enhance the

Important Areas, and to prevent the creation of new Noise Important Areas; protect tranquil areas from impact, including cumulative impact.	pressure, sleeplessness, undue irritability and in some cases long-term physiological effects. This is more prevalent in vulnerable groups such as children, the elderly, shift workers, those vulnerable to physical/mental disorders and in areas with low background noise levels.	and wellbeing		historic and natural environment and by encouraging active modes of travel. Positive and negative health impacts are likely to be localised as a result of specific schemes. Due to a lack of information around noise reduction within LTP4, it is suggested that the impact at present is unknown.
Reduce vulnerability to climate change related extreme weather events by creating a resilient transport infrastructure and identifying appropriate adaptation and mitigation measures	Air pollution is closely linked with climate change, and it is thought that the impacts of climate change on health will increase, in relation to changing temperatures, ground level ozone levels and sunlight. The NPPF requires 'preventing both new or existing development from contributing to...unacceptable levels of soil, air, water or noise pollution'. A reduction in average particulate concentrations from 75µg/m^3 for PM_{10} (a level common in many cities) to 20µg/m^3 for PM_{10} (the WHO guidelines) could potentially result in mortality rates falling by 15% (WHO, 2011).	Enhanced environment	Unknown	A key outcome of LTP4 is an enhanced environment. KCC aim to deliver schemes to reduce the environmental footprint of transport and enhance the historic and natural environment. The reduction of emissions as a result of encouraging the use of public transport and walking and cycling (discussed in more detail previously in air quality, above) will reduce KCC's greenhouse gas emissions footprint and contribution to climate change; likely resulting in a positive impact. LTP4 does not, however, include detail around how resilient infrastructure will be created and mitigation measures identified. It is therefore concluded that the impact is unknown.

Section 5: Recommendations for Mitigation and Enhancement

This HIA has explored the relationship between transport and health and has assessed KCC's LTP4 against SEA objectives and research evidence. In summary, the outcome of the assessment demonstrates that some of the strategic outcomes and Kent-wide priorities within LTP4 will lead to positive health impacts for the Kent population; however, in some instances the health impacts at this stage are unknown. To ensure positive benefits are maximised, the following recommendations for mitigation and/or enhancement are proposed:

- Prioritise the allocation of funding to schemes with the least impact or positive impact on health.
- Asses each scheme/proposal for health impacts in order to maximise the positive health impacts of each scheme.
- Plan construction activities to minimise disturbance to pedestrians, residents, tourists and workers within affected areas, for example through the use of temporary acoustic screening, low emission equipment and sound on site practices.
- Continue to encourage people to use sustainable modes of transport, prioritising walking and cycling and educating people in the health benefits of doing so, focusing on the most deprived areas of the county.
- Communicate with schools and health care providers to establish the most appropriate method for encouraging the young and physically inactive to cycle and walk in addition to raising awareness around safety.
- Consider investment in cycle infrastructure and awareness for cyclists and other motorists (including HGVs), due to the vulnerability of cyclists.
- Consider investment in public transport provision in deprived areas.
- Carefully plan schemes in terms of location, scale and design at the project level to ensure air quality reductions are realised.
- Seek to implement measures to counteract traffic growth (e.g. by continuing to improve opportunities for sustainable transport).
- Consider the use of trees in appropriate locations to filter out pollution.
- Ensure that schemes are designed and implemented in line with other KCC policies and guidance concerned with improving public health.

5.1. Recommendation for Further Assessment

Many of the effects of LTP4 are cumulative; meaning that a number of effects will impact on each other. For example, there is likely to be a cumulative positive health impact as a result of proposals to make active travel more attractive by integrating active travel in to planning, providing and maintaining appropriate routes for walking and cycling and reducing congestion. Human health in this instance would be improved by increased physical activity and a reduction in pollutant emissions. It is suggested that these cumulative impacts should be assessed when making decisions in relation to allocation of funding.

APPENDIX A: Abbreviations

CAPs: Concentrated Ambient Particles
CVD: Cardiovascular diseases
CHD: Coronary Heart Disease
Dft: Department for Transport
JSNA: Joint Strategic Needs Assessment
KCC: Kent County Council
KSI: Killed or seriously injured
KHPO: Kent Health Public Observatory
NPPF: National Planning Policy Framework
PM: Particulate matter
PHE: Public Health England
NCD: Non-communicable disease
RCP: Royal College of Physicians
VOC: Volatile Organic Compound
WHO: World Health Organisation

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Appendix K Equality Impact Assessment Report

KENT COUNTY COUNCIL
EQUALITY ANALYSIS / IMPACT ASSESSMENT (EqIA)

This document is available in other formats, Please email alternativeformats@kent.gov.uk or telephone on 03000 421553 (text relay service 18001 03000 421553).

Directorate: Growth, Environment and Transport (GET)

Name of policy, procedure, project or service
Local Transport Plan 4: Delivering Growth without Gridlock (2016 – 2031)

What is being assessed?
An updated Local Transport Plan.

Responsible Owner/ Senior Officer
Joe Ratcliffe

Date of Initial Screening
12/11/2015

Date of Full EqIA:

Version	Author	Date	Comment
1	Bhalraj Singh	12/11/2015	
2	Clive Lever	23/11/2015	Equality and Diversity Team comments supplied
3	J Hill	13/4/2016	Equality and Diversity Team comments supplied
4	Akua Agyepong	23/06/2016	Equality and Diversity Team comments supplied
5	Lucy Campbell	04/07/2016	Consultation draft
6	Nola Cooper	10/02/2017	First review following consultation revisions
7	Akua Agyepong	13/02/2017	Comments for review
8	Katie Pettitt	13/02/2017	Revised following Equality and Diversity Team comments

Screening Grid

Characteristic	Could this policy, procedure, project or service affect this group less favourably than others in Kent? YES/NO If yes how?	Assessment of potential impact HIGH/MEDIUM LOW/NONE UNKNOWN		Provide details: a) Is internal action required? If yes what? b) Is further assessment required? If yes, why?	Could this policy, procedure, project or service promote equal opportunities for this group? YES/NO - Explain how good practice can promote equal opportunities
		Positive	Negative	Internal action must be included in Action Plan	If yes you must provide detail
Age	No	Medium	None	No further assessment required. However, any specific schemes and policies that achieve LTP4 outcomes would be subjected to their own EqIA.	Yes. LTP4 commits KCC to promoting affordable, accessible and connected transport to enable access for all to jobs, education, health, and other services. This will benefit all age groups, but particularly those who are less likely to have access to a private car, such as the elderly and the young, and supports independence. Statistically, more road casualties are young men[2], providing a safe road network (including through education and training) will mitigate this. Other LTP4 outcomes will also benefit all age groups.
Disability	No	Medium	None	No further assessment required. However, any specific schemes and policies that achieve LTP4 outcomes will be subjected to their own EqIA.	Yes. As above, accessible transport will support independence, more notably providing wider benefits for those whose impairments prevent them from driving. Other LTP4

[2] http://www.brake.org.uk/safedrivingreports/15-facts-a-resources/facts/488-young-drivers-the-hard-facts

					outcomes will also benefit those with disabilities – such as better health and wellbeing and safer travel.
Gender	No	Medium	None	No further assessment required. However, any specific schemes and policies that achieveLTP4 outcomes will be subjected to their own EqIA	Yes. Affordable and accessible transport for all will benefit specific groups, such as women with children and single mothers. Safer travel will improve opportunities for travel for women, as they are likely to use public transport more than men but drive less than men. Personal safety amongst women should improve, as they are more vulnerable when travelling at night[3]. Men are more likely to be road casualties and providing a safer road network (including through education) will help mitigate this.
Gender identity	No	None	None	No	No
Race	No	Medium	None	No further assessment required. However, any specific schemes and policies that achieve LTP4 outcomes will be subjected to their own EqIA	Yes. Certain ethnic groups are in lower than average income groups and promoting affordable travel will promote equality for them in enabling access to greater employment and education opportunities.
Religion or belief	No	None	None	No	No
Sexual orientation	No	None	None	No	No
	No	Medium	None	No further assessment required. However, any	Yes. Women with children will benefit

[3] http://content.tfl.gov.uk/women.pdf

Pregnancy and maternity				specific schemes and policies that achieve LTP4 outcomes will be subjected to their own EqIA	from improved accessibility connectivity within transport, as well as it being more affordable.
Marriage and Civil Partnerships	No	None	None	No	No
Carer's responsibilities	No	Medium	None	No further assessment required. However, any specific schemes and policies that achieve LTP4 outcomes will be subjected to their own EqIA	Yes. Safer, affordable, accessible and connected travel will promote equality for this group. In some instances, those who they care for may benefit, particularly for people needing to travel by bus through the Kent companion bus pass scheme. Schemes to ease congestion will make travelling between clients more reliable in terms of journey time.

PART 1: INITIAL SCREENING

Proportionality – From the Risk Matrix which has been completed above, the initial screen suggests that the potential for a negative impact on certain protected characteristics as a result of the implementation of the Local transport plan update delivery plan document is low.

Low	Medium	High
Low relevance or Insufficient information/evidence to make a judgement.	Medium relevance or Insufficient information/evidence to make a Judgement.	High relevance to equality, /likely to have adverse impact on protected groups

Context

The document is the successor to Local transport Plan 3, which was due to expire at the end of 2016. The new *Local Transport Plan 4: Delivering Growth without Gridlock* (LTP4) also incorporates the 2010 document *Growth without Gridlock: A Transport Delivery Plan for Kent*, which acted as a lobbying document to the government for infrastructure improvements. Therefore, LTP4 is both a policy document and sets KCC's priorities for transport at strategic, countywide and local levels. LTP4 has five outcomes for transport supported by five policies that have been based on the Government's National Transport Goals as set out in the 2009 guidance for Local Transport Plans.

It has been made clear within LTP4 that all schemes listed as a priority will undergo their own Equality Impact Assessment (and likewise environmental assessments, as well as planning, etc.) as the schemes are progressed.

Aims and Objectives

The key ambition of LTP4 is "To deliver safe and effective transport, ensuring that all Kent's communities and businesses benefit, the environment is enhanced and economic growth is supported." This is so as to facilitate the safe transport of people and goods within and through Kent, providing a transport network of all modes, which enables access to the best employment, education, retail, leisure and health services in the county. This ambition will be realised through five overarching policies that are targeted at delivering specific outcomes:

Outcome 1: Economic growth and minimised congestion
Policy: Deliver resilient transport infrastructure and schemes that reduce congestion and improve journey time reliability to enable economic growth and appropriate development, meeting demand from a growing population

Outcome 2: Affordable and accessible door-to-door journeys
Policy: Promote affordable, accessible and connected transport to enable access for all to jobs, education, health and other services.

Outcome 3: Safer travel
Policy: Provide a safer road, footway and cycleway network to reduce the likelihood of casualties, and encourage other transport providers to improve safety on their networks.

Outcome 4: Enhanced Environment
Policy: Deliver schemes to reduce the environmental footprint of transport, and enhance the historic and natural environment.

Outcome 5: Better health and wellbeing
Policy: Provide and promote active travel choices for all members of the community to encourage good health and wellbeing, and implement measures to improve local air quality.

Beneficiaries

The delivery of the outcomes outlined in LTP4 will generally have a positive impact for all Kent residents, commercial operations and also tourists as transport network improvements will improve their experience of Kent. The delivery of improved transport infrastructure and public transport will increase accessibility to key services, jobs and education. The schemes will also support economic growth in the county by unlocking housing and commercial development allowing for job creation in Kent. This will be particularly beneficial to resident within East Kent where particularly high unemployment rates occur. Overall, carrying out the screening grid has identified that a number of groups will benefit from the aims of the policy. For example, it is clear that individuals with less access to a private car (such as the elderly and young people) will benefit from promotion of modes of transport that are different from a car in terms of affordability and accessibility. Those residents who are unable to drive (such as those with a disability), will benefit from improved travel options and this will also benefit carers across Kent. Due to the nature of their travels and independence from a car, women will also gain from affordable and improvement transport. Some of the benefits will be greater within some protected characteristic groups due to their greater use of certain transport systems.

Information and Data

As of 2014, the current estimated population for Kent is 1,510,400[4]. Going forward the population growth for Kent is expected to rise due to natural increase (more births than deaths) and addition more people moving into Kent than leaving. Analysis of 2011 census data about equality and diversity in Kent has been undertaken to better understand the demographics of the Kent population and the impact the Local Transport Plan will have. Focus has been made on groups that tend to rely on public transport, with the access of a car being limited.

[4] http://www.kent.gov.uk/about-the-council/information-and-data/Facts-and-figures-about-Kent/population-and-census

Equality and diversity data from 2011[5] shows that:

- Kent has an ageing population, as estimates indicate the number of 65+ year olds is forecast to increase by 55% between 2013 – 2033, however the proportion of population aged under 65 is only forecasted to increase by 6.9%.
- There are more female residents in Kent than male. In 2014, this equated to 51% and 49% (770,300 females and 740,100 males).
- 93.7% of Kent residents are white, compared to 6.3% BME residents.
- The 2011 office labour market statistics census data for Kent has the following statistics[6]:
    A. The number of males and females (16+) owning a car or van, or having access to these within households, (including company vehicles that are available for private use): 91% of males vs 88% of females.
    B. The car or van availability by gender and for those who consider they have a long-term health problem or disability: 86% of males vs 83% of females.
    C. The number of females (16+) with a disability of which there are no cars or vans in the household: 17% compared to 12% of males.

- KCC Road Casualties in Kent (Annual Review 2014)[7] – there was an increase in the number of people killed or seriously injured (KSI) compared to 2013 of 11% (594 KSIs increasing to -658 KSIs).
- Casualty data for Kent roads between 2012-2014, shows there are generally more male casualties than females across all age groups[8]:

    A. 0-16, there were 1,861 casualties of which 57% were male and 43% female.
    B. 17-24, there were 4,126 casualties of which 58% were male and 42% were female.
    C. 25-64, there was a total of 10,029 causalities, which is the largest out of all age sets of which 58% were male and 42% female.

- According to the Kent Public Health Observatory,[9] the percentage of adults in Kent currently classed as physically inactive is 28.1%. Currently 56.3% of

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[5] http://www.kent.gov.uk/about-the-council/information-and-data/Facts-and-figures-about-Kent/equality-and-diversity-data
[6] DC3407EW - Long-term health problem or disability by car or van availability by sex by age https://www.nomisweb.co.uk/census/2011/dc3407ew
[7] http://www.kent.gov.uk/__data/assets/pdf_file/0020/11819/Personal-injury-crashes-in-Kent.pdf
[8] Transport Intelligence Team: Casualty data 2012-2014 against age and gender
[9] http://www.kpho.org.uk/joint-strategic-needs-assessment/jsna-behaviour-and-lifestyle/jsna-physical-activity

the adult population meet the physical activity guidelines of 150mins per week to improve or maintain health.

- In addition, the Kent Joint Strategic Needs Assessment (Kent JSNA) showed that obesity is at 64.6%, which translates into 771,476 individuals who are 16+. This is particularly relevant as one of the outcomes of LTP4 is to provide and promote active travel choices, therefore, helping to tackle a national issue.
- The ONS 2011 Census Analysis - Method of Travel to Work in England and Wales Report[10] - found that in the South East 66.8% use road vehicles as a method of travelling to work, however only 12.1% use public transport and 13.9% choose to walk or cycle.
- Using the ONS 2011 Census to break down method of travel to work by age (Age 16 – 65+) and gender shows in Kent that[11]:

    A. 14% of females travel to work using active travel compared to 10% of males in the county choosing to travel by bicycle or foot, thereby males will further benefit from outcome five of the policy as it's promoting active travel.

    B. 13% of males choose to travel by rail, bus, minibus or coach. The female population comes out slightly lower with 12%.
    C. 62% of males either use a car or van to travel to work or are a passenger. The number of females under the same criteria comes to 63%. This data is particularly relevant bearing in mind the Local Transport Plan promotes improvements to road journeys and public transport, but also the cycleway network.

- For 2015-2016, September Quarter 2 the number of[12]:
    - Older person's bus passes were 266,949
    - Disabled person's bus passes were 20,312
    -Disabled Person companion bus passes were 5,133

- According to a study conducted by Transport for London (TfL)[13], women are more likely to travel with buggies than men. This can therefore affect transport choices and so women may choose to travel by public transport to and from Kent. In addition, women tend to be more concerned than men about their personal safety are when travelling after dark. This could be relevant to Kent as some female Kent residents may choose to commute to London for work or simply may want to travel into London for leisure purposes.

[10] http://www.ons.gov.uk/ons/dcp171766_299766.pdf
[11] DC7101EWla - Method of travel to work (2001 specification) by sex by age https://www.nomisweb.co.uk/census/2011/dc7101ewla
[12] Revenue and Capital Budget Monitoring for 2015-2016, Quarter 2 paper. Page 136
[13] http://content.tfl.gov.uk/women.pdf

- According to a study conducted by Transport for London (TfL)[14], BME individuals are more likely to use buses than white individuals (although they are less likely to travel by bicycle). In addition they are more likely to express concerns for their safety and more likely to be injured in road accidents.

Involvement and Engagement

As part of a pre-consultation exercise, the Transport Strategy Team liaised and consulted with various officers across KCC, such as Education, Highways, Transportation and Waste in order to get their views about the proposed Local Transport Plan. Alongside this, an informal Member Task and Finish Group was set up, which consisted of one representative from each political party sitting on the Environment and Transport Cabinet Committee. District councils were extensively consulted regarding their own transport priorities and the presentation of information on their specific areas. In addition, the views of the Kent and Medway Economic Partnership (KMEP) were taken into account. KMEP is a federated area of the South East Local Enterprise Partnership (SELEP) consisting of district council, local business, and local educational representatives designed to drive forward economic growth.

The final draft of LTP4 was available for public consultation for a twelve-week period between Monday 8th August and Sunday 30th October 2016. During this period, a range of stakeholder groups were invited to respond to the consultation, including voluntary and community organisations such as Ashford Youth Hub, Dartford BME Community, Polish Association in Kent, and Royal National Institute for the Blind.

The consultation sought to gather the views and opinions of a range of stakeholders on the draft Local Transport Plan 4, including whether they agree with the priorities or think additional priorities should be included, and whether they have any comments on the EqIA and SEA.

Consultation Feedback

The consultation asked for feedback on the content of the draft LTP, including views on the proposed Ambition, Outcomes, Supporting Policies and transport priorities for the county. Overall, the consultation received over 500 responses.

The consultation responses showed general agreement with the draft LTP4, particularly the strategy parts of the document. The named transport priorities in the plan at all levels (strategic, Kent-wide and district) received a mix of responses but nevertheless there was a greater extent of agreement than disagreement. A number of amendments were also proposed by stakeholders including the district councils.

Following the close of the consultation, responses were reviewed and considered, with appropriate amendments made to the LTP4. A final version of

[14] http://content.tfl.gov.uk/BAME-summary.pdf

LTP4 will be submitted to Environment and Transport Cabinet Committee and Cabinet in March 2017, and then full County Council for adoption in July 2017. A full summary of the amendments can be found in the "You Said, We Did" document accompanying LTP4 but the key changes are:

- The strategic priorities map has been updated so the bifurcation of the M2/A2 and M20/A20 is clearer and the labels match the revisions later on in the document.

- The supporting policy for Outcome 5 (Better health and wellbeing) has been changed to include a commitment to "provide", as well as "promote", active travel choices in line with the Active Travel Strategy.

- The splitting of the previous priority "Rail and Bus Improvements" into two separate priorities, one for rail and one for bus. Many respondents wanted more information on both the rail and bus networks and felt more emphasis on public transport provision was needed.

- The 'Enabling Growth in the Thames Gateway' has been amended to reflect the geography of the Thames Estuary Commission, including the whole of the north Kent coast.

- The cross-district priorities were previously displayed on a map but the consultation showed that the public did not fully understand what the schemes were without a description. Separately, respondents felt that there was a general lack of sustainable transport schemes in the draft LTP4. These cross-district priorities are targeted at sustainable transport and include initiatives to encourage modal shift. Therefore, they have been moved to a new section on Sustainable Transport in the 'Countywide Priorities' section. Additionally, a section has been added to explain the importance of travel within Kent and the schemes that will deliver benefits across district boundaries.

- The transport priorities section in the consultation draft was divided into 'Strategic', 'Kent-wide' and 'District' level schemes. In the consultation respondents questioned whether these were in a priority order, and the use of the term 'Kent-wide' for priorities such as highway maintenance was confusing when also categorising some of the strategic priorities as 'countywide'. Consequently, in this section the first page has been amended to introduce the three geographical levels of transport priorities (which are now called 'Strategic', 'Countywide' and 'Local') Some of the 'Strategic' priorities have also been highlighted as being of national importance, reflecting feedback from key stakeholders including the Port of Dover.

- A new section on Public Rights of Way has been added as a countywide priority. This was requested in the consultation and now the links between highways, Public Rights of Way, public transport and active travel are better reflected.

- There were many suggestions for new priorities, which have all have been considered. Potential schemes that are feasible have been added to the district maps.

- A new section has been added to signpost the Strategic Environmental Assessment and Equalities Impact Assessment to explain what they are.

This EqIA has been reviewed and updated following the feedback received during the consultation and taking into account the changes made to LTP4.

Feedback on the EqIA from the consultation

The consultation included a question asking for views and comments on the draft EqIA. A total of 26% of respondents gave a view on the EqIA, and much of the feedback was regarding the principle of the assessment. This includes positive comments, such as one Sevenoaks district resident stating:

"An excellent document, which in my opinion addresses all of the issues."

Comments relating to specific protected characteristics included that:

- Paid carers are increasingly unable to get to their clients owing to traffic congestion.
- Air pollution disproportionately impacts on the health of residents in the lower socio-economic bands/children/pregnancy.
- More consideration needs to be given to those without access to the private car.
- Cycling is the most viable alternative to the car, and requires more recognition in the EqIA.

There were also concerns about issues such as pavement parking, disabled access to railway stations, and footway maintenance. Following these comments, and similar comments received elsewhere in the consultation, it was deemed appropriate to strengthen commitments in LTP4 to active travel, and make clear reference to the 'Access for All' programme that facilitates disabled access at railway stations.

LTP4 has taken a holistic approach to transport in Kent and so whilst there is an emphasis on economic growth there is also a commitment to promote affordable and accessible transport, as well as providing opportunities for active travel. LTP4 commits to ensuring the required assessments, including EqIA and environmental assessments, are completed for each scheme as they progress. This will ensure that assessment of impacts on protected characteristics occurs when the scheme is at an appropriate level of development. It is in this way that the impacts commented on in the consultation will be mitigated. Likewise, any changes to daughter documents of LTP4 (such as footway resurfacing policy) would have an EqIA too.

Initial Screening

Potential Impact

After completing an initial assessment, it was clear the new Local Transport Plan and its infrastructure proposals will have an impact on Kent Residents.

Adverse Impact:
After completing the initial screening grid, it indicated that LTP4 will not have a significant negative impact on any of the protected characteristics. As stated earlier, individual schemes (example two of the strategic priorities in the Plan are a new Lower Thames Crossing and solution to Operation Stack) will be subject to an individual Equalities Impact Assessment as the schemes are developed and taken forward for delivery to ensure that no protected characteristics are adversely impacted.

The consultation was tailored to ensure that a range of people with protected characteristics, and groups representing them, had the consultation specifically promoted to them. This is so we could take their views into account and revise LTP4 and this EqIA accordingly. KCC's Inclusive Communication Policy was followed so that those members of the public that have a disability, for example visual impairments or learning disabilities, were able to access the information in alternative formats.

Positive Impact:
The objectives and aims of LTP4 through the delivery of schemes will promote a better quality life for all residents in Kent by providing a transport network of all modes that enables access to jobs and services within the county. Therefore, it will benefit the overall needs of residents within Kent.

The older generation and families with younger children tend to rely on public transport, and therefore will benefit from more affordable and accessible transport solutions (bus and rail) that will enable them to enjoy their journeys throughout Kent, for example through accessing jobs and education services. The provision and promotion of active travel choices will potentially benefit all residents' health and well-being, but equally reducing congestion and pollution will benefit road users. Disabled people, who rely on public transport, will also be a beneficiary.

JUDGEMENT

Option 2 Full EqIA
The revised LTP4 will be adopted in July 2017 by County Council, subject to comments by Environment and Transport Cabinet Committee and Cabinet in March 2017.

Action Plan
This EqIA assesses the impact of LTP4 in its own right. EqIAs have not been completed for the individual schemes detailed within LTP4 but will be carried out as those schemes progress towards delivery, ensuring that they are at an appropriate stage of development so that an EqIA is meaningful and changes can be made to the design in response to the assessment. Likewise, any changes to existing policies that sit below LTP4 and aid its delivery (such as the Freight Action Plan) will be subject to their own EqIA.

The Action Plan (see overleaf) addresses how to meet the needs of protected characteristic groups during the lifetime of LTP4.

Protected Characteristic	Observations made	Action to be taken	Expected outcomes	Owner	Time Scales	Cost Implications
Age	• Kent has an ageing population. • Older Kent residents are: less mobile; less likely to use independent travel; have greater concerns with safety.	• Ensure the elderly and young can access future consultations. • Ensure there are alternative formats of new transport information. • Include design features for those with limited mobility (e.g. dropped curbs). • Include design features for those with safety concerns (e.g. well-lit pedestrian paths).	The LTP's five outcomes deliver a net benefit for all members of the community: Outcome 1) Economic growth and minimised congestion Outcome 2: Affordable and accessible door-to-door journeys Outcome 3: Safer travel Outcome 4: Enhanced Environment Outcome 5: Better health and wellbeing All schemes and policies are expected to have	Director of Highways, Transportation and Waste – Roger Wilkin Director of Environment, Planning and Enforcement – Katie Stewart	Ongoing	Will vary dependent on the individual scheme or policy.
Disability	• Disabled Kent residents are: less mobile; less likely to use independent travel.	• Ensure the disabled can access future consultations and developments • Ensure there are alternative formats of new transport information • Include design features for those with limited				

		mobility (e.g. dropped curbs) • Work with other transport operators to ensure they accommodate disabled users. For example, in January 2017, the Supreme Court ruled that bus drivers must try to persuade other passengers to make room for wheelchair users[15].	regard to achieving these outcomes.			
Race	• BME Kent residents are more likely to: be dependent on public transport systems; be concerned with safety.	• Ensure BME communities can access future consultations and developments • Ensure there are alternative formats of new transport information (including other languages)				

[15] https://www.theguardian.com/society/2017/jan/18/court-backs-wheelchair-user-who-was-stopped-from-boarding-bus-yorkshire-leeds

Gender	• Female residents are: less likely to use independent travel by car; be concerned with safety; make journeys with additional dependents; have multiple stages to their journeys. • Male residents are more likely to suffer injuries or fatalities in a car accident; statistically undertake longer journeys.	• Ensure all genders can access future consultations and developments • Ensure alternative formats of new transport information • Include design for those with safety concerns (e.g. well-lit pedestrian paths)				

Monitoring and Review

This EqIA has been reviewed and updated following the public consultation. The Local Transport Act 2008 affords Local Transport Authorities (including KCC) the ability to review their Local Transport Plans when deemed necessary, rather than the strict 5-year periods as previously specified. Therefore, if it is appropriate to update or revise LTP4 during the time period 2016 – 2031 this EqIA will also be reviewed and updated.

Sign Off

I have noted the content of the Equality Impact Assessment and agree the actions to mitigate the potential adverse impacts that have been identified.

Senior Officer

Signed:  Name: Joseph Ratcliffe

Job Title: Transport Strategy Manager Date: 14 February 2016

Head of Service

Signed:  Name: Tom Marchant

Job Title: Head of Strategic Planning & Policy Date: 14 February 2017

Appendix L Summary of consultation responses

Scoping Report

The Scoping Report was the subject of consultation from January to February 2016. The report detailed comments received from the Scoping Report consultation are summarised below:

Author	Comment	KCC response
Swale	It would be useful here to explain the relationship between LTP4 and Local Transport Strategies as well as the relationship with Local Plans themselves and the and the SA processes for those plans	Response sent through email
Swale	Define NO2 and PM10 here	Changed
Swale	Figures 3 and 4 completely miss the AQMAs for Swale. This needs to be corrected and any consequent adjustments to 2.2.3 made. Are AQMAs from other LAs also missing?	Query resolved with Amey – scale of drawing means AQMAs not visible but are included
Swale	Isn't increasing population and more road vehicles likely to mean that this level will go up?	Changed
Swale	Does this include the A2 in Swale?	Accepted comment – no change required
Swale	This sentence seems a little vague – more than what?	Changed
Swale	I think 3 SMPs are relevant – 1. Medway Estuary and Swale 2. Isle of Grain to South Foreland and 3. South Foreland to Beachy Head Font size is smaller in this paragraph	Changed Changed
Swale	Should another objective be to repair pot holes etc, caused by extreme weather events etc, more quickly?	Disagree – All potholes regardless of cause have SLA
Swale	2.5.5 Addition: "and between the County, Local Planning Authorities and other agencies and organisations".	Accepted
Swale	The issues of Best and Most Versatile Agricultural Land is not addressed in the section, but is a big issue for Swale in allocating sites for development and it would be appropriate to make reference to it here, including the economic value of this land and soils in general.	Safeguarding our Soils added as a data source and reference to agricultural land added in 2.6.3.
Swale	The CPRE may have more up to date data on this – may be worth checking? A section seems to be missing here	Email sent to CPRE - Up to date maps not available yet Under drawing

Author	Comment	KCC response
Swale	Are the economic impacts of adequate transport infrastructure or lack of them adequately covered in this report?	Disagree – This is purely about the environmental impacts and not the economy
Kent Downs AONB unit	It is amended to include reference to the Countryside and Rights of Way Act 2000, which at Section 85 requires all statutory undertakers in carrying out their duties to have regard to the purpose of conserving and enhancing Areas of Outstanding Natural Beauty. This is applicable to Kent County Council as highways authority.	Included in section 2.9.2 - Section 85 of the Countryside and Rights of Way Act 2000 requires all statutory undertakers in carrying out their duties to have regard to the purpose of conserving and enhancing Areas of Outstanding Natural Beauty. This is applicable to Kent County Council as Highway Authority.
Kent Downs AONB unit	In addition, it would also be appropriate to include reference to the Kent Downs AONB Management Plan 2014 to 2019 and the Kent Downs AONB Rural Streets and Lanes – a Design Handbook, both of which have been adopted by Kent County Council. These documents could be included under either the Data Source Section at Section 2.9 or the Policy Section at 2.9.2.	In order to support the conserving and enhancement of areas of outstanding natural beauty within the county, supporting policy has been created through the Kent Downs AONB Management Plan 2014 to 2019 and the Kent Downs AONB Rural Streets and Lanes.
Natural England	We support your recognition that "it is important to retain connectivity of existing habitats within the LTP area and reduce fragmentation of habitats where possible".	Comment noted
Natural England	The recognition that the "main ways in which the existing transport network may impact on biodiversity and wildlife are pollution in the form of noise, air and water contaminants" is welcomed. It would be helpful to map existing conditions for these tree themes where this is possible.	Noted
Natural England	The Kent Minerals and Waste Local Plan HRA seemed to be based on good data. It would be helpful if some of that data on traffic levels, pollutant deposition rates and critical loads – particularly for sensitive sites approaching their critical levels and loads -could be used to inform consideration of the air quality implications of changes outlined in the LTP. Similarly for water, noise, light etc.	Noted
Natural England	Seems pessimistic. The challenges are significant, however the condition and direction of travel of SSSIs is generally heartening and plans, land managers and partners should respond to the challenge set out in NPPF - to halt the decline in biodiversity	Noted
Natural England	The opportunities set out here are supported. In practice, the key route (for the first bullet point) would be through measures such as avoiding areas rich in habitats and the stepping stones and corridors that link them. Where the best alternative is likely to result in losses, early consideration of adequate mitigation and compensation is essential. Good data (as recognised by para 2.1.6) is essential.	Noted

Author	Comment	KCC response
Natural England	Focuses on air quality and human health, however there are clear threats to the natural environment arising from airborne pollution (noted earlier in the SEA scoping document). The APIS website provides a wealth of data on this matter.	Noted
Natural England	Landscape considerations and the use of NCAs are welcomed (section 2.9). Some use of Landscape Character Assessment and Landscape and Visual Impact Assessment is important in the early stages of considering any new significant infrastructure Para 2.9.3 indicates that any type of new transport infrastructure or expansion of existing infrastructure "has the ability to significantly affect the landscape through many different ways such as land take, visual intrusion, light pollution and loss of tranquillity". We welcome commitment in para 2.9.5 that LTP4 should aim to value, enhance and protect natural environmental assets including AONBs, historic landscapes, open spaces, parks and gardens and their settings.	Noted
Maidstone Borough Council	The LTP4 SEA Scoping Report sets out the data sources and background information for each of the 11 environmental topics, and this provides the evidence to take forward 10 of these topics for assessment in the SEA's Environmental Report. Opportunities for LTP4 to positively impact the situation for each topic are also concisely presented.	Noted