MOTT MACDONALD

Cambridgeshire and Peterborough Combined Authority Local Transport Plan

SEA - Environmental Report
Appendix F - Environmental Indicators

May 2019

Cambridgeshire and Peterborough Combined Local Authority

Mott MacDonald
22 Station Road
Cambridge CB1 2JD
United Kingdom

T +44 (0)1223 463500
F +44 (0)1223 461007
mottmac.com

Cambridgeshire and Peterborough Combined Local Authority

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Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	07.05.19	S Robinson	N Levy	S Price J Hitchcock	Issue for client comment
B	16.05.19	S Robinson	N Levy	J Hitchcock	Second Issue for Comment

Document reference: 402819 | 001 | B

Information class: Standard

Contents

F. Baseline Indicators

Table 1 presents the baseline indicators to support the baseline review and key issues and opportunities. Where relevant, indicators will be selected for the monitoring framework to monitor the implementation of the LTP.

Table 1: Environmental Indicators

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
Population, Communities and Human Health				
Improve the health of the population and reduce health inequalities between areas and groups	Mortality rates by cause	Cambridgeshire (2015-2017) under 75 mortality rates: • All causes – 282 per 100,000 • Cardiovascular diseases – 60.7 per 100,000 • Respiratory diseases – 27.1 per 100,000 • Cancer – 119.9 per 100,000 Peterborough (2015-2017) under 75 mortality rates: • All causes – 382 per 100,000 • Cardiovascular diseases – 87.07 per 100,000 • Respiratory diseases – 41.1 per 100,000 • Cancer – 145.7 per 100,000	Cardiovascular is the second highest cause of death in both Cambridgeshire and Peterborough after cancer. Deaths from cardiovascular diseases have a particularly strong relationship nationally with socio-economic deprivation. Mortality rates for all causes, cardiovascular diseases and respiratory in Cambridgeshire are better than England and the East of England. However, mortality rate for the above causes in Peterborough is worse than both England and East of England rates.	Public Health England, National Public Health Profile
	Life expectancy rates (at birth)	Cambridgeshire (2014-16): • Male – 81 – Cambridge – 80.6 – East Cambridgeshire – 81.6 – South Cambridgeshire – 82.3 – Fenland – 78.4 – Huntingdonshire – 81.3 • Female – 84.3 – Cambridge – 84.1 – East Cambridgeshire – 84.6 – South Cambridgeshire – 85.2 – Fenland – 82.3 – Huntingdonshire – 84.8 Peterborough (2014-16) • Male – 78.6 • Female – 82.2	Life expectancy rates are better in Cambridgeshire than in Peterborough. Within Cambridgeshire, South Cambridgeshire has the highest life expectancy whereas Fenland has the worst. Life expectancy has improved since 2005-07. There is an association, at district-level, between higher levels of deprivation and lower life expectancy.	Public Health England, National Public Health Profile
	Journey time to nearest key service by public transport/walk (primary and secondary schools, GPs and hospitals)	Cambridgeshire (2016) • Primary school – 11 minutes • Secondary school – 24 minutes • GP – 14 minutes • Hospitals – 59 minutes Peterborough (2016) • Primary school – 9 minutes • Secondary school – 19 minutes • GP – 11 minutes • Hospitals – 44 minutes	The journey times for Cambridgeshire is higher than for Peterborough, however this is likely attributable to the rural setting of Cambridgeshire.	Department for Transport, Journey Time Statistics
	Percentage of people with a limiting long-term health problem or illness	Percentage of population (2011) • Cambridgeshire – 15.3% – Cambridge – 13% – East Cambridgeshire – 15.4% – South Cambridgeshire – 13.9% – Fenland – 21% – Huntingdonshire – 14.9% • Peterborough – 16.7%	The percentage of the population with a long-term health problem or disability is lower than the average for England.	Public Health England, Public Health Profiles
	Physically active adults*	Percentage of population (2016/17) • Cambridgeshire – 71.1% – Cambridge – 77.1% – East Cambridge – 62.8% – Fenland – 60.7% – Huntingdonshire – 75.1% – South Cambridgeshire – 73.1% • Peterborough – 61.1%	On average, Cambridgeshire is above the national average (66%) with Cambridge being the most physically active. However, Fenland and Peterborough are below the national average.	Public Health England, Public Health Profiles Cambridgeshire LTP3 SEA, Atkins (2013)

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
	Prevalence of overweight and obese children at Year 6*	Percentage of population (2017/18) Year 6: Prevalence of Overweight • Cambridgeshire – 13.3% • Peterborough – 12.1% Year 6: Prevalence of Obesity (including severe obesity) • Cambridgeshire – 15.1% • Peterborough – 20.7%	The prevalence of overweight children at Year 6 is similar between Cambridgeshire and Peterborough, however it is higher in Cambridgeshire. However, obesity at Year 6 (including severe obesity) is more prevalent in Peterborough by approximately 5%.	Public Health England, Public Health Profiles
	Prevalence of overweight and obese children at Reception*	Percentage of population (2017/18) Reception: Prevalence of Overweight • Cambridgeshire – 11% • Peterborough – 12.2% Reception: Prevalence of Obesity (including severe obesity) • Cambridgeshire – 6.5% • Peterborough – 8.7%	The prevalence of overweight children at Reception is similar between Cambridgeshire and Peterborough, however it is higher in Peterborough. However, obesity (including severe obesity) at Reception is more prevalent in Peterborough by approximately 2%.	Public Health England, Public Health Profiles
	Percentage of adults who feel safe walking alone after dark	East of England (2015/16) • Men – 87.8% • Women – 61.3%	Men feel safer walking alone at night than women. The percentage of males and females who feel safe walking alone at night is similar to the national average (87.7% and 61.4% respectively). The percentage of residents who feel fairly safe or very safe outside after dark increased between 2003-04 and 2006-07.	ONS, Measuring National Well-being (2018) Cambridgeshire LTP3 SEA, Atkins (2013)
	Open space per 1,000	• 2011: Cambridge – 743.59ha (6.2ha per 1,000 population) • 2012/13: East Cambridgeshire – 135ha (1.6ha 1,000 population) • 2006: Fenland – 192ha (2.1ha per 1,000 population) • 2006: Huntingdon – 1.7ha per 1,000 population • 2013: South Cambridgeshire – 217.6ha (0.6ha per 1,000 population) • Peterborough – not available		CCC, Open Space and Recreation Strategy (October 2011) South Cambridgeshire, Recreation and Open Space Study (2013) Fenland, Open Space Site Specific Issues and Options Paper (2006) Huntingdonshire, Open Space, Sport and Recreation Needs Assessment and Audit (2006) East Cambridgeshire District Council, Play and Open Space Audit (2013)
	Percentage of the population who cycle at least three times per week*	2016/17 • Cambridgeshire and Peterborough - 14%	The number of people walking at least three times per week has increased, although only by 1%, since 2015/16.	Department for Transport, proportion of adults that cycle, by frequency, purpose and local authority, England, 2016-2017, Table CW0302
	Percentage of the population who make journeys by walking at least three times per week*	2016/17 • Cambridgeshire and Peterborough – 44%	The percentage of the population who make journeys by walking has increased since 2015/16. This is highest in Cambridgeshire at 50% compared to being the lowest in Fenland at 35%.	Department for Transport, proportion of adults that cycle, by frequency, purpose and local authority, England, 2016-2017, Table CW0303
	Community transport – district car schemes reason for travel*	2013/14 • Cambridgeshire – Social Journeys – 47% – Medical Journeys – 32% – Hospital Appointments – 20% – Hospital Visits – 1% • Peterborough – no data available	Over 53% of journeys of the community car scheme was for health appointments. This includes travel to GPs, or precipitations and for hospitals.	Cambridgeshire Transport and Health JNSA, Access to Transport (2015)
	Fraction of mortality attributable to particulate air pollution (PM2.5)*	2017 • Cambridgeshire – 5.4% – Cambridge – 5.6% – East Cambridgeshire – 5.2% – Fenland – 5.1% – Huntingdonshire – 5.4% – South Cambridgeshire – 5.4% • Peterborough – 5.3%	Cambridge has the highest fraction of mortality attributable to particulate air pollution whereas Fenland has the lowest. Both Cambridgeshire and Peterborough are above the average for England which is 5.1%.	Public Health England, Public Health Profiles

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Improve the health and safety of the transport network, reducing the number of accidents and other incidents	Total road traffic accidents by severity	Cambridgeshire (2017) • Fatal - 41 • Seriously injured - 334 • Slightly injured – 1,667 Peterborough (2017) • Fatal – 7 • Seriously injured - 102 • Slightly injured - 640	Fatal accidents and accidents where people were seriously injured increased in both Cambridgeshire and Peterborough between 2014 and 2017. Accidents where those involved were slightly injured decreased in Cambridgeshire but increased in Peterborough.	Department for Transport, Reported casualties by severity, by local authority area
	Total local road traffic accidents*	2018 • Cambridge - 260 • East Cambridgeshire - 130 • Fenland - 190 • Huntingdonshire - 300 • South Cambridgeshire - 311 • Peterborough - 451	The total number of road traffic accidents is highest in South Cambridgeshire and lowest in East Cambridgeshire. The total road traffic accidents have decreased by 12% since 2013 across all the regions, however it decreased most significantly between 2017 and 2018 by 10%.	Cambridgeshire Insight, Cambridgeshire Road Traffic Collision Counts
	Total reported road accidents involving cyclists or pedestrians*	Cambridgeshire (2017) • Pedestrian - 155 • Cyclist - 316 Peterborough (2017) • Pedestrian - 89 • Cyclist - 84	Accidents involving pedestrians has increased in both Cambridgeshire and Peterborough between 2014 and 2017. However, accidents involving cyclists has decreased in both.	Department for Transport, Reported casualties by region, local authority and road user type
	Total crime rate per 1000 population	Cambridgeshire and Peterborough (2018) • Cambridge – 115.71 • East Cambridgeshire – 39.87 • Fenland – 70.25 • Huntingdonshire – 55.81 • South Cambridgeshire – 48.53 • Peterborough – 112.66	Cambridge and Peterborough are both higher than the average for the Cambridgeshire (including Peterborough) Police force.	Cambridge Insight, Cambridgeshire and Peterborough Crime and Community Safety Overview Report Cambridgeshire LTP3 SEA, Atkins (2013)
	Vehicle crime	Cambridgeshire and Peterborough (October 2017 – November 2018): • 5,861 vehicle crime counts • 6.9 per 1000 population	The vehicle crime decreased in the most recent figures compared to 2017 (Jan-Dec), however it has increased since the 2016 reporting period. The vehicle crime rate per 1000 population for the CPCA region is lower than the East of England and the national UK rate (7.13 and 7.85 per 1000 population respectively. Crime and fear of crime within the transport network act as barriers to encouraging the use of public transport and walking and cycling.	Cambridge Insight, Cambridgeshire and Peterborough Crime and Community Safety Overview Report Cambridgeshire LTP3 SEA, Atkins (2013)
	Vehicle theft	Cambridgeshire and Peterborough (2017/18) • 965 cars stolen	Approximately 50% increase in car theft in Cambridgeshire and Peterborough over the last five years.	Cambridgeshire Constabulary
	Total number of assaults on public transport per annum*	Data not available.	-	-
	Survey data – “I feel that Public Transport is safe to use”*	Data not available.	-	-
Improve accessibility to key services, employment and recreational areas for all areas of the community	Distance travelled to work	Average distance travelled to work (2011) • Cambridgeshire – 15.6km – Less than 2km – 18% – 2km to 5km – 27% – 5km to 10km – 17% – 10km to 20km – 6% – Over 20km – 15% – Work mainly from home – 8% • Peterborough – 18.1km – Less than 2km – 16% – 2km to 5km – 15% – 5km to 10km – 13% – 10km to 20km – 17% – Over 20km – 20%	For all usual residents aged 16 to 74 in employment, the majority of people (27%) travel 2km to 5km to work in Cambridgeshire whereas in Peterborough, the majority of people travel over 20km (20%).	ONS, Census 2011, Distance travelled to work ONS, Census 2001, Travel to work

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		– Work mainly from home – 12%		
	Journey time to nearest town centre by public transport/walking*	2016 • Peterborough – 23 minutes • Cambridgeshire – 28 minutes – Cambridge – 16 minutes – East Cambridgeshire – 34 minutes – Fenland – 23 minutes – Huntingdonshire – 27 minutes – South Cambridgeshire – 38 minutes	Journey times to the nearest town centre have generally remained the same between 2014 and 2016. Cambridge has the lowest journey time whereas South Cambridgeshire has the highest.	
	Percentage of residents within 30-minute walk/public transport of nearest town centre*	2016 • Peterborough – 87% • Cambridgeshire – 63% – Cambridge – 98% – East Cambridgeshire – 43% – Fenland – 80% – Huntingdonshire – 75% – South Cambridgeshire – 22%	Within Cambridge and Peterborough 98% and 87% of residents are within 30 minutes of walking or public transport access of a town centre, this falls to just 22% of residents of South Cambridgeshire.	Department for Transport, Journey Time Statistics
	Ratio of median house prices to median salary*	2017 • Cambridgeshire and Peterborough – 9.48	The average ratio of median house prices to median salary has increased since 2014 for Cambridgeshire and Peterborough. The ratio is highest in Cambridge at 13.46 and lowest in Peterborough at 6.64 in 2017.	Office for National Statistics, Ratio of house price to workplace-based earnings (2017)
	Ratio of lower quartile house price to lower quartile salary*	2017 • Cambridgeshire and Peterborough – 9.86	The average ratio of lower quartile house price to lower quartile salary has increased since 2014. The ratio is highest in Cambridge at 14.22 and lowest in Fenland at 7.14 in 2017.	Office for National Statistics, Ratio of house price to workplace-based earnings (2017)
	Ratio of new dwellings to population increase*	2016/17 • Cambridgeshire and Peterborough – 0.42	-	Ministry of Housing, Communities and Local Government, Net additional dwellings (2017)
	Ratio of housing targets to housing completions*	Data not available.	-	-
Support and contribute to local economic growth and competitiveness by delivery reliable and efficient transport network	Number of commuters*	2011 • Cambridgeshire – 55,216 • Peterborough – 19,034	There is a significant number (approximately 70,000) people commuting into the CPCA area for work.	ONS, Location of where people live when working and place of work (Census 2011)
	Non-frequent bus services running on time	2016/17 • Cambridgeshire and Peterborough – 76% – Cambridgeshire – 73% – Peterborough – 79%	The non-frequent bus services are more on time in Peterborough than in Cambridgeshire. The percentage of bus services running on time has is generally improved over time, although it decreased in 2014/15 for Cambridgeshire and 2014/15 was exceptionally high for Peterborough.	Department for Transport, Bus Statistics (0902)
	Average excess waiting times for frequent services*	2016/17 • Cambridgeshire – 1.4 minutes • Peterborough – 2.5 minutes	Average excess waiting times for frequent services are higher in Cambridgeshire than in Peterborough. The average excess waiting times was at its highest in Peterborough in 2016/17. Average excess waiting times have generally been increasing in Cambridgeshire since 2008/09.	Department for Transport, Bus Statistics (0903)
	Travel time to employment centre by car*	Employment centre with 100-499 jobs (2016) • Peterborough – 8 minutes • Cambridgeshire – 9 minutes – Cambridge – 8 minutes – East Cambridgeshire – 9 minutes – Fenland – 8 minutes – Huntingdonshire – 9 minutes – South Cambridgeshire – 10 minutes Employment centre with at least 5000 jobs (2016) • Peterborough – 12 minutes • Cambridgeshire – 23 minutes	Journey time to employment centre by car has generally remained the same between 2014 and 2016 for both Cambridgeshire and Peterborough. However, it had increased in Fenland for employment centres with at least 5,000 jobs. Fenland has the longest journey time to employment centres with over 5,000 jobs.	Department for Transport, Journey Time Statistics

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		– Cambridge – 11 minutes – East Cambridgeshire – 30 minutes – Fenland – 37 minutes – Huntingdonshire – 21 minutes – South Cambridgeshire – 21 minutes		
	GVA per head*	All industries (2016) • Cambridgeshire and Peterborough - £27,563 – Peterborough - £27,595 – Cambridge - £38,900 – East Cambridgeshire - £21,700 – Fenland - £22,837 – Huntingdonshire - £25,004 – South Cambridgeshire - £29,343	GVA per head is highest in Cambridge and is similar in Peterborough and South Cambridgeshire. It is lowest in East Cambridgeshire followed by Fenland. GVA per head has grown in all areas of the Cambridgeshire and Peterborough area since 2010.	ONS, Regional GVA(I) by local authority in the UK (2017)
	Unemployment rates	July 2017 – June 2018 • Peterborough – 4.5% • Cambridge - 3.4% • East Cambridgeshire – 2.4% • Fenland – 3.7% • Huntingdonshire – 2.6% • South Cambridgeshire – 2.1%	The unemployment rate is highest in Peterborough is the highest and is followed by Fenland. South Cambridgeshire has the lowest unemployment rate. The unemployment rate has improved since 2012/13.	
	Rail cancellations and significant lateness*	2016/17 Cambridgeshire and Peterborough – 7.2%	-	Office of Rail and Road, Cancellations and significant lateness (2018)
	Average minimum journey times by walking or public transport to nearest of selected rail stations*	2015 Cambridgeshire and Peterborough – 47 minutes	The average minimum time by walking or public transport to nearest of selected rail stations is 47 minutes. This is higher in Cambridgeshire at 66 minutes compared to 29 minutes for Peterborough.	Department for Transport, Journey Time Statistics (2018)
	Average minimum journey times by car to nearest of selected rail stations*	2015 Cambridgeshire and Peterborough – 26 minutes	The average minimum time by car to nearest of selected rail stations is 26 minutes. This higher in Cambridgeshire at 38 minutes compared to 14 minutes in Peterborough.	Department for Transport, Journey Time Statistics (2018)
	Average minimum journey times by car to the nearest of selected airports*	2015 Cambridgeshire and Peterborough – 80.5 minutes	The average minimum journey time by car to the nearest of selected airports is higher in Peterborough at 98 minutes compared to 63 minutes in Cambridgeshire.	Department for Transport, Journey Time Statistics (2018)
	Average minimum journey times by public transport to the nearest of selected airports*	2015 Cambridgeshire and Peterborough – 113 minutes	The average minimum journey time by public to the nearest of selected airports is higher in Peterborough at 121 minutes compared to 105 minutes in Cambridgeshire.	Department for Transport, Journey Time Statistics (2018)
	Birth of businesses per 100,000 population*	2016 Cambridgeshire and Peterborough – 555	-	Office for National Statistics, Business Demography – Enterprise Births, Deaths and Survivals (2016)
	Number of tourists per annum*	Data not available.	-	-
	Total Foreign Direct Investment (FDI)*	Data not available.	-	-
	Survey – “Does your business think that the transport network in the local network is of a high standard”*	Data not available.	-	-
Reduce road traffic and congestion through reducing the need to travel by car and improve and promote sustainable modes of transport including public transport, cycling and walking	Total passenger services on local bus services	2016/17 • Cambridgeshire – 20 million • Peterborough – 10.1 million	Passenger bus journeys have decreased in both Cambridgeshire and Peterborough since 2009/10.	Department for Transport, Bus Statistics (0109a)
	Method of travel to work	2011 • Cambridgeshire – Private Car – 41.1% – Bus – 2.4% – Train – 2.6% – Foot or bicycle – 13.2%	Travel to work by private car is similar in both Cambridgeshire and Peterborough. However, this is varied within Cambridgeshire. In South Cambridgeshire it is as high as 47% and as low as 19% in Cambridge. Cambridge has the highest percentage of those travelling to work by bicycle in the country at 18%.	ONS, Method of Travel to Work (Census, 2011)

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
		• Peterborough – Private Car – 40.1% – Bus – 5% – Train – 1.7% – Foot or bicycle – 10%		
	Method of travel to school	2016 • East of England – Car – 38% – Bus – 11% – Foot – 42% – Bicycle – 3%	The use of car as a mode of travel has increase since 2014 in the East of England, however the use of bus has also increased. The number of children walking to school has decreased and travelling by bicycle has remained the same across the East of England.	Department for Transport, Transport Survey 2017
	Traffic volumes on major roads*	2017 • Cambridgeshire – 3.5 million vehicles • Peterborough – 710, 696	Traffic volumes on major roads are increasing in both Cambridgeshire and Peterborough. Since 2000, traffic has increase by 0.7 million in Cambridgeshire and by 126,302 in Peterborough.	Department for Transport, Traffic Counts
	Traffic Counts at Cordons*	2018 • Cambridgeshire – Pedestrians – 12% – Bicycle – 15% – Car – 83% – Motorcycles – 1% – LGVs and HGVs – 15% – Buses – 1% • Peterborough – no data	Car constitutes the highest proportion of vehicles on the road in Cambridgeshire. The number of people walking and cycling in Cambridgeshire is continuing to increase. Walking has also increased throughout Cambridgeshire; however, it is noticeably higher in market towns compared to Cambridge city.	Cambridgeshire County Council, Road Traffic Data Cambridgeshire JNSA, Active Transport
	Proportion of adults that walk or cycle for leisure or travel	2017 • Cambridgeshire – Once per month – 83.9% – Once per week – 77.5% – Three times per week – 54.3% – Five times per week – 41.4% • Peterborough – Once per month – 80.4% – Once per week – 72.9% – Three times per week – 47.1% – Five times per week – 34.9%	The proportion of adults who walk or cycle for leisure or travel more than five times per week is higher in Cambridgeshire than in Peterborough. It is varied across Cambridgeshire where 60.6% of adults in Cambridge walk or cycle five times per week whereas it is 26.8% in Huntingdonshire.	Department for Transport, Proportion of adults that walk or cycle for leisure or travel
	Travel time to employment centre by public transport/walking*	Employment centre with 100-499 jobs (2016) • Peterborough – 15 minutes • Cambridgeshire – 21 minutes – Cambridge – 11 minutes – East Cambridgeshire – 22 minutes – Fenland – 18 minutes – Huntingdonshire – 21 minutes – South Cambridgeshire – 33 minutes Employment centre with at least 5000 jobs (2016) • Peterborough – 19 minutes • Cambridgeshire – 53 minutes – Cambridge – 12 minutes – East Cambridgeshire – 88 minutes – Fenland – 102 minutes – Huntingdonshire – 44 minutes – South Cambridgeshire – 44 minutes	Time to travel to employment centres by public transport and walking has generally remained the same in both Cambridge and Peterborough between 2014 and 2016. However, the journey time to employment centre with over 5,000 has doubled in Fenland.	Department for Transport, Journey Time Statistics
	Congestion – average journey time per mile during morning peak	2012 • Cambridgeshire – 3.75 minutes per mile • Peterborough – data not available	The average journey time during the morning peak time has increased since in 2007-08 and 2006-07. However, it is in line with the 3.75 revised target published in the LTP3.	Cambridgeshire LTP3 2011-2031 (2015)

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
	Total station entries and exits*	2017/18 Cambridge and Peterborough – 25 million	The estimate total station entries and exits using full priced, reduced priced and season tickets has increased by approximately 1 million since 2016/17. Based on these figures, station entries and exits is highest in Cambridge at approximately 12 million for 2017/18 followed by Peterborough at 4 million. Fenland has the lowest at around 452,000.	Office of Rail and Road, Estimates of Station Usage (2018)
	Average number of selected major road junctions within 30 minutes' drive*	2011 Cambridgeshire and Peterborough – 2.4 junctions	The average number of selected major road junctions within 30 minutes is higher in Cambridgeshire at 2.6 junctions and lower in Peterborough at 2.2 junctions.	Department for Transport, Connectivity travel time indicators for major road junctions (2011)
	Attitudes towards cycling – "I think that cycling on the road is safe"*	Data not available.	-	-
Biodiversity, Flora and Fauna				
Protect and enhance biodiversity (including both habitat and species) and geodiversity at all levels	Number of designated areas (European and National)	Cambridgeshire: • Site of Special Scientific Interest (SSSI) – 87 • Ramsar – 4 • Special Areas of Conservation (SAC) – 8 • Special Protection Areas (SPA) – 2 • National Nature Reserve (NNR) – 6 • Local Nature Reserve (LNR) – 23 Peterborough: • SSSI – 16 • Ramsar – 1 • SAC – 2 • SPA – 1 • NNR – 4 • LNR – 4	The number of SSSIs in Cambridgeshire has stayed the same since 2010 as reported in the previous SEA for the Cambridgeshire LTP. The number of SSSIs in Peterborough has remained the same since the number previously report in previous Cambridgeshire LTP SEA. There has been an increase in the number of LNRs but NNR numbers have remained the same.	Multi-Agency Geographic Information for the Countryside (MAGIC) Interactive Mapping
	Area of Woodland	2008 12,325ha (3.6%) of Cambridgeshire (including Peterborough) area is covered by woodland. This is equivalent to 0.244% of UK's total woodland area.	Between 1980 and 2008 there was an increase in area of woodland cover in Cambridgeshire (including Peterborough). Cambridgeshire is considered one of the least wooded counties in England. Woodland is not evenly spread across the area. There are four major pockets of ancient woodland: to the west of Peterborough, to the north of Huntingdon, between St Neots and west of Cambridge and in the south east of the County.	Local Habitat Action Plan for Cambridgeshire and Peterborough (2008)
	Biodiversity Action Plan (BAP) Habitats	2006/07 Cambridgeshire and Peterborough: Over 200 Priority Species, representing 38.2% of all priority species identified in the UK BAP.	BAP habitats generally regarded as threatened and road building and related infrastructure could result in loss of BAP habitats.	East Cambridgeshire DC Core Strategy SA, 2008 Cambridgeshire LTP3 SEA, Atkins (2013)
	Extent of habitat in good/ favourable condition*	• Ouse Washes SAC, SPA and Ramsar – 15% Favourable, 4% Unfavourable - Recovering, 81% Unfavourable – No Change. • Nene Washes SAC, SPA and Ramsar – 20% Favourable, 80% Unfavourable – Recovering • Orton Pit SAC – 29% Favourable, 71% Unfavourable – Recovering • Fenland SAC – 90% Favourable, 10% Unfavourable – Recovering • Portholme SAC – Unfavourable – Recovering • Devils Dyke SAC – 50% Favourable, 50% Unfavourable Recovering • Eversden and Wimpole Wood SAC – 40% Favourable, 60% Unfavourable Recovering • Barnack Hill and Holes SAC – Favourable • Upper Nene Valley Gravel Pits SPA and Ramsar – 42% Favourable, 58% Unfavourable – Recovering • Wood Walten Fen Ramsar – 53% Favourable, 45% Favourable – Recovering • Chippenham Fen Ramsar – 90% Favourable • Wicken Fen Ramsar – 47% Favourable, 53% Unfavourable – Recovering • Breckland SPA – Favourable	The European sites considered within this study have varying sensitivities based on the features which make up the designation.	Cambridgeshire and Peterborough LTP – Habitats Regulations Assessment: Task 1: Screening (Mott MacDonald, 2019) JNCC, Natural England
Historic Environment				

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
Maintain, protect and enhance the historic environment, including archaeology, and the historic landscape character	Number of listed buildings	2017 Peterborough – 926 total listed buildings of which 68 are Grade I, 43 Grade II* and 815 Grade II Cambridgeshire – 7,335 total listed buildings of which 236 are Grade I, 446 Grade II* and 6,653 Grade II	The total listed buildings have decreased by 12 in Peterborough and increased by 22 in Cambridgeshire. There are six building and structure entries at risk in Cambridgeshire and four in Peterborough.	Historic England, Local Authority Profiles, 2018 and 2017 Historic England, Heritage at Risk - East of England Register (2018)
	Number of scheduled monuments	2017 Peterborough - 70 Cambridgeshire - 265	The number of scheduled moments increased in Peterborough by two between 2017 and 2016 and by six in Cambridgeshire. There are 46 scheduled monuments at risk in Cambridgeshire in 2017 and 19 in Peterborough.	Historic England, Local Authority Profiles, 2018 and 2017 Historic England, Heritage at Risk - East of England Register (2018)
	Number of registered parks and gardens	2017 Peterborough - 4 Cambridgeshire - 34	The number of registered parks and gardens has remained the same between 2016 and 2017 in both Cambridgeshire and Peterborough. There are no registered parks and gardens at risk in Cambridgeshire or Peterborough.	Historic England, Local Authority Profiles, 2018 and 2017 Historic England, Heritage at Risk - East of England Register (2018)
	Number of conservation areas	2018 Peterborough - 29 Cambridgeshire - 200	Conservation area numbers have decreased since 2016 in Peterborough but have increased in Cambridgeshire. The number of conservation areas at risk in Cambridgeshire is 10, there are none at risk in Peterborough.	Historic England, Local Authority Profiles, 2018 and 2017 Historic England, Heritage at Risk - East of England Register (2018)
Landscape				
Maintain, protect and enhance the diversity and distinctiveness of the landscape and townscape character	Number of National Character Areas (NCAs)	There are nine NCAs which cover the CPCA region: • 46: The Fens (NE424) • 75: Kesteven Uplands (NE560) • 85: The Brecks (NE385) • 86: South Suffolk and North Essex Clayland • 87: East Anglian Chalk (NE529) • 88: Bedfordshire and Cambridgeshire Claylands (NE555) • 89: Northamptonshire Vales (NE527) • 90: Bedfordshire Greensand Ridge (NE481) • 92: Rockingham Forest (NE538)	Transport infrastructure and schemes can have negative effects on existing Landscape Character areas.	Natural England, NCAs
	Extent of greenbelt	Designated area of greenbelt (hectares) • Cambridgeshire (March 2018) – Cambridge – 1,000 – East Cambridgeshire – 1,910 – South Cambridgeshire – 23,190 – Huntingdon – data not available – Fenland – data not available	There has been no change in extent of the greenbelt between 2017 and 2018. There has been a decrease in South Cambridgeshire since 2011 and an increase in Cambridge.	Ministry of Housing, Communities and Local Government, Local Authority Green Belt Statistics (2017-2018) Cambridgeshire LTP3 SEA, Atkins (2013)
Soil				
Protect and conserve the quality of soils, minimising the loss of agricultural/greenfield land, and seek to remediate contaminated land	Total area of grade 1, 2, or 3a agricultural land	2016 • Peterborough – 202,240ha 2008 • Cambridgeshire – 75% of land area is farmed	The total area for agriculture has declined by 31% in Peterborough. It is anticipated that this decline will continue into the future with an assumed 47% reduction over a 60-year period (1976 to 2036). It is likely the percentage of agricultural land has remained around the same between 2008. A number of areas in Cambridgeshire (such as Woodwalton and Wicken Fen) have experienced depleting peat and soil levels. Long-term threats to biodiversity have arisen from the intensification of agriculture during the 20th century.	Sustainable Peterborough, Farmland, Farmers and Food Production in Peterborough County (2014) Cambridgeshire LTP3 SEA, Atkins (2013)
	Housing build on previously developed land (PDL)	2018 • Peterborough – 64% 2017 • Cambridge City – 40% • Peterborough – 73% 2016 • South Cambridgeshire – 31% • Peterborough – 65%	Still below target (region target of 60%) but has improved over last 10 years, so it appears that national and local policies to prioritise the re-use of PDL have been effective. Development pressure on greenfield land continues. South Cambridgeshire target of 37% of new housing to be delivered on PDL.	Unlocking Potential: Best Practice for Brownfield Land Registers 2017 South Cambridgeshire Annual Monitoring Report 2014 Cambridge City Council Annual Monitoring Report 2017 Peterborough Authority Monitoring Report 2018
Water				

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
Protect and enhance the quality of the water environment	Percentage of river length assessed as good or fair chemical and biological quality	2014 • Cambridgeshire – Chemical status of The Cam, good. Other surface water, n/a. • Peterborough – no data available	River water quality in Cambridgeshire is generally good and compares favourably with the UK.	Sustainability Appraisal of the Cambridge Local Plan 2014, Volume 1.
	Groundwater source protection zones (SPZ)	There are four groundwater SPZs all of which fall within South Cambridgeshire. There are also several surface water SPZs which cross over into the region, these include the River Nene, River Great Ouse, River Stour, and Abberton.	All of the groundwater source protection zones are within South Cambridgeshire therefore any options within the LTP will need to consider any impacts on these.	Multi-Agency Geographic Information for the Countryside (MAGIC) Interactive Mapping
Reduce the risk of flooding to transport infrastructure and minimise its contribution to flood risk	Area at risk from flooding	Flood Risk baseline is presented in Appendix E, Figure E.6. There are 23,100 homes in Cambridgeshire are at risk of surface water flooding in a rainfall event with a 1 in 200 chance of occurring in any year. During the Scoping Report consultation, the Environmental Agency advised that 34% of the Cambridgeshire and Peterborough area is at high risk of flooding in the absence of flood defences. Over 50% of the land in Cambridgeshire is under sea level.	Flood risk presents a significant risk to the Cambridgeshire and Peterborough region.	Multi-Agency Geographic Information for the Countryside (MAGIC) Interactive Mapping
Air				
Protect and improve local air quality, particularly in the AQMAs	Number of Air Quality Management Areas (AQMAs)	• Peterborough – 1 AQMA • Cambridgeshire – 10 AQMAs – Cambridge - 1 – East Cambridgeshire - 0 – South Cambridgeshire - 1 – Fenland - 4 – Huntingdon – 4	Most of the AQMAs are located within Fenland and Huntingdonshire. East Cambridgeshire is the only District with no AQMAs. Three of the AQMAs in Fenland are in Wisbech. The pollutants of issue in these areas are Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2) and Particulate Matter (PM_{10})	Air Quality Action Plans, Local Authorities
	Levels of main air pollutants	Cambridgeshire • PM_{10} – Impington (one of nine monitoring points in Cambridgeshire) indicated levels above EU threshold of 40ug/m^3 from 2009 onwards, reaching almost 60ug/m^3 annual mean concentration in 2012. • $PM_{2.5}$ – None of the four monitoring points in Cambridgeshire detected levels above EU standards for mean annual concentration of 25ug/m^3. • NO_2 – Eight of the thirteen monitoring sites in Cambridgeshire detected higher annual mean concentrations than the 40u/m^3 EU threshold. Up to 40% of monitoring sites have exceedances to NO_2 standards in Cambridge City from 2012 to 2014, particularly in October to March. This value was of around 10% for the rest of Cambridgeshire. Peterborough • NO_2 – 2 exceedances from 2011 to 2015 from 17 passive monitoring sites. Values of 41.7 and 40.2ug/m^3. • SO_2 – AQMA near Flag Fen in Peterborough exceeding 15-minute mean SO_2 emission due to brickworks.	Air pollution thresholds in Cambridge City are being consistently surpassed, although it appears these exceedance rates are diminishing annually. Exceedances are associated with the increase in traffic in high density areas and heavily utilised roads. No automatic monitoring sites within Peterborough City Council. Peterborough infractions for NO_2 are just above the 40ug/m^3 annual average threshold, though significantly below the 200ug/m^3 maximum hourly mean.	Cambridgeshire transport and health JSNA, Air Pollution Peterborough City Council Air Quality Annual Status Report 2016
	% reduction in NO_x and primary PM_{10} emissions through local authority's estate and operations	Cambridgeshire • NO_2 – maximum proportion of sites with exceedances over 40ug/m^3 in Cambridge City and rest of Cambridgeshire: – 2010 – 90% and 45% – 2011 – 70% and 25% – 2012 – 45% and 20% – 2013 – 30% and 20% – 2014 – 45% and 10% Peterborough – no data available	Exceedance of NO_2 in monitoring sites is reducing, particularly for areas outside Cambridge City. No automatic monitoring sites within Peterborough City Council.	Cambridgeshire transport and health JSNA, Air Pollution
	Trends in NO_2 concentration at a range of monitoring sites*	Data not available.	-	-
	Trends in PM_{10} concentration at a range of monitoring sites*	Data not available.	-	-
Climatic Factors				

SEA Objective	Indicator	Quantified Data for the CPCA region	Issues Identified	Source
Minimise GHG emissions and reduce Cambridgeshire and Peterborough's contribution to climate change	Motor vehicle traffic (miles)	2017 • Cambridgeshire – 5,071 • Peterborough – 1, 248 • Total – 6,319	The miles travelled in motor vehicles is increasing year on year across the CPCA region.	TRA8901: Motor vehicle traffic (vehicle miles) by local authority in Great Britain, Department for Transport (2018)
	Transport related CO_2 emissions (kilo tonnes equivalent ($ktCO_2e$))	2016 • Cambridgeshire - 1,936.1 $ktCO_2e$ • Peterborough - 445.9 $ktCO_2e$ • Total - 2,382.00 $ktCO_2e$	Transport related carbon emissions have remained around the same level between 2006 and 2016.	Local Authority CO2 emissions estimates 2005-2016 ($ktCO_2$), Department for Transport (2018)
	Total CO_2 emissions (kilo tonnes equivalent ($ktCO_2e$))	2016 • Cambridgeshire - 4,614.6 $ktCO_2e$ • Peterborough - 1,019.5 $ktCO_2e$ • Total – 5,634.1 $ktCO_2e$	Total carbon emissions across the CPCA region have decreased by 26% over ten years (2006-2016).	Local Authority CO2 emissions estimates 2005-2016 ($ktCO_2$), Department for Transport (2018)
Reduce vulnerability to climate change by minimising the risk of flooding and effects from other climate hazards	Adapting to Climate Change	2009/10 • Cambridgeshire – Level 2 • Peterborough – Level 1	Level 1: LA has undertaken a comprehensive, local risk-based assessment of current vulnerabilities to weather and climate. Level 2: LA has identified effective adaptation responses to address the risks and opportunities, explicitly related to other council strategies, plans and operations. Cambridgeshire has reported a higher level of adaptation action than Peterborough and has improved since the previous reporting year.	NI 188 – Adapting to climate change, DEFRA
	Flood and coastal erosion risk management	2009/10 • Cambridgeshire – 100% • Peterborough – 100%	The CPCA region has 100% of agreed actions to implement long term flood and coastal erosion risk management plans that are being undertaken satisfactorily.	NI189 - Flood and coastal erosion risk management, DEFRA (2018)
Material Assets				
Maximising the use and lifespan of existing transport infrastructure	Number of new infrastructure schemes*	TBC		
	Number of improvements to existing infrastructure schemes*	TBC		

Source: Adapted from the Cambridgeshire LTP3 SEA (Atkins, 2013)