

# A review of physical activity data and insight in Essex

November 2018

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# Contents

Executive Summary	3
Introduction	4
Methodology	5
Phase One Findings – Systematic Review	6
Essex Physical Activity Profile	9
Basildon Physical Activity Profile	13
Colchester Physical Activity Profile	15
Tendring Physical Activity Profile	17
The Wider Picture	19
Behavioural Insight	24
Phase Two Findings – Focus Groups	25
Target Groups	33
Recommendations	35
Conclusions	37
Appendices	39

Sport England have launched an ambitious new programme aimed at tackling levels of physical inactivity through a 'whole-systems approach'. They have selected 12 pilot areas and challenged each area to create innovative solutions to make it easier for people living in these areas to become more physically active. Essex is as one of the twelve pilot areas. Intelligent Health have been commissioned by the Essex local delivery pilot to review the physical activity data and behaviour insight which is being collected and used to guide decision making in Essex as a whole, and in Tendring, Basildon and Colchester specifically.

## Methodology

There were two phases to the review; during phase one, we conducted a desk-based literature review of all publicly available physical activity data and insight available in Essex. During phase two, we conducted focus groups with Essex Local Delivery Pilot project group members from each priority local area; Basildon, Colchester and Tendring.

## Key Findings

The desk-based research identified strengths and weaknesses of each data source used to profile levels of physical activity in Essex. The Active Lives Survey was the most robust measure used however doesn't provide enough data at a ward level. Other surveys are conducted at a ward level, these however, do not use comparable measures and produce substantial variations in prevalence rates. The desk-based review showed limited data on behavioural insight. This may indicate a lack of data sharing or dissemination rather than a lack of data collection.

The focus groups identified a lack of data sharing between and within county and borough councils. They also highlighted a lack of awareness of what data is available and what outputs could be produced from current data sources. The focus groups culminated with several co-developed recommendations for the Local Delivery Pilot.

## Key Recommendations

There are three key recommendations from this review:

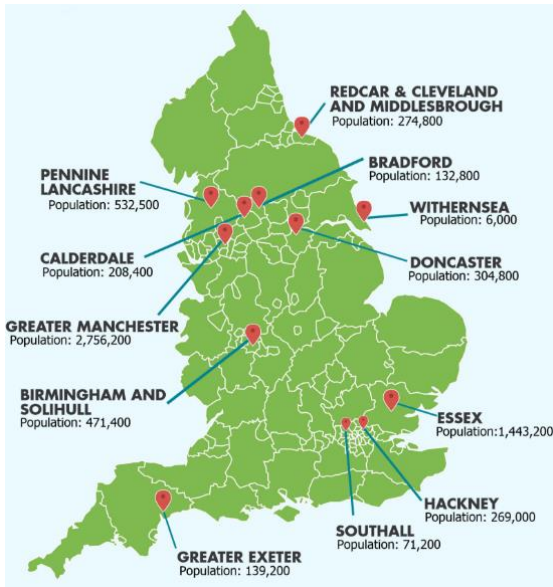
1. The creation and implementation of a standard evaluation framework for physical activity and for measuring the related social and economic benefits (for example, mental wellbeing).
2. The Local Delivery Pilot should maximise which is, or could be collected, within the system.
3. The creation of clearer picture of physical activity patterns and trends in deprived areas, alongside collecting new insight on general lifestyle challenges faced by the target groups.
4. A strong culture of data sharing is created between and within county and borough councils and other key stakeholders.
5. A specific physical activity data and insight resource is created for the duration of the LDP and beyond.

## Acknowledgements

Intelligent Health would like to thank the Essex Local Delivery Pilot project group members for their continued input throughout the research and specifically members of the Essex County Council data and insight team and members of Basildon, Colchester and Tendring District local authorities for their time and valuable insight throughout the project.

Sport England have committed around £100million towards an innovative new approach to tackling levels of physical inactivity through a ‘whole-systems approach’. They have selected 12 pilot areas (below) and challenged each area to create innovative solutions to make it easier for people living in these areas to become more physically active. By focussing intensely on 12 areas and giving local communities the freedom to innovate, Sport England are aiming to learn better ways to break down inequalities and barriers towards living an active lifestyle and test how collaborative approaches between multiple sectors and stakeholders can help those most inactive in society.

## Sport England Local Delivery Pilot Areas



## What is a whole-system approach?

A whole system approach recognises that societal problems (such as physical inactivity) are part of a wider ecosystem of causal factors, which extend far beyond barriers at a personal level (such as cost, time and confidence).

This approach aims to tackle the root causes of inactivity by addressing the predeterminants of inactivity at an Individual (e.g. attitudes, beliefs and needs); social environmental (e.g. families and social networks); institutional (e.g. schools and businesses); physical environmental (e.g. Transport links and access to nature) and policy (e.g. laws, rules and regulations) level.

Whole systems theory proposes that all these causes are interconnected and must be addressed in congruence to bring about sustained behaviour change.

Essex has been chosen as one of the twelve pilot areas to be involved in the innovative new approach. The local pilot includes the wider Essex including Southend and Thurrock. Around 391,000 people are currently undertaking less than 30 minutes of activity per week with 880,000 achieving the recommended level of activity to achieve the most health benefits (Active Lives Survey, 2017). In relation to other areas, Essex is the 21st (out of 48) most inactive county in England and is 15th in terms of likelihood that residents will meet the national recommended guidelines.

The Essex Local Delivery Pilot will be tested in specific disadvantaged areas of Basildon, Colchester and Tendring. Together these three areas represent a range of barriers to physical activity such as post-war urban planning, coastal deprivation and poor social mobility (Active Essex, 2018). Tendring is the most inactive local authority in Essex with a third of residents not undertaking any moderate intensity activity for at least 30 minutes per week (33%), whereas Basildon and Colchester have the 4th (29%) and 10th (25%) highest levels of inactivity respectively. By focussing on these three areas with varied barriers to physical activity, it is expected that the pilot can provide a breadth of knowledge and learning for what works (and what doesn't) in terms of getting people more active.

The aims of the review were to:

1. Assess the quality of current data for assessing levels of physical activity across Essex.
2. Assess current data sharing processes throughout Essex.
3. Analyse current data to check and challenge the LDP target audiences and LDP wider social outcomes.
4. Assess the current behavioural insight pertaining to physical activity for people living in Essex.
5. Revisit the current target groups (families, older people and those with poor mental health and wellbeing) and re-affirm if they are the right target groups for the pilot and if they are specific enough.

To fulfil the above aims there were two phases to the review; during phase 1 we conducted a desk-based literature review of all publicly available physical activity data and insight available in Essex. We analysed this data in reflection to two key criteria;

1. Does it report on and measure physical activity?
2. What is the strength of the measures used and subsequent claims made from the data?

During phase two, we conducted focus groups with Essex Local Delivery Pilot project group members\* from each priority area; Basildon, Colchester and Tendring. The aim of this phase was to feedback the findings of phase one and identify any gaps in physical activity data or insight sources not identified during the literature review. Additionally, to collaboratively develop area specific recommendations of what data and insight is needed to guide future decision making in physical activity policy and implementation and what processes would help facilitate an increased prioritising of physical activity promotion at a local level.\*

## Methodology for reviewing physical activity data and insight in Essex



\*See appendix 1 for job descriptions

# Phase One Findings – Systematic Review



Between May and June 2018, 49 different search terms which related to physical activity, mental health/wellbeing, families and the older population for people living in Essex generally and Basildon, Colchester and Tendring specifically were used to scope publicly available sources of data and insight.

## Literature Review Search Terms

Essex Physical Activity	Essex Physical activity Mental health	Basildon Physical activity Mental wellbeing
Basildon Physical Activity	Basildon Physical activity Mental health	Tendring Physical activity Mental wellbeing
Tendring Physical Activity	Tendring Physical activity Mental health	Colchester Physical Activity Mental wellbeing
Colchester Physical Activity	Colchester Physical activity Mental health	Essex Physical activity Elderly Basildon Physical activity Elderly
Essex Activity	Essex Physical activity Mental wellbeing	Tendring Physical activity Elderly
Basildon Activity	Basildon Physical activity Mental wellbeing	Colchester Physical activity Elderly
Tendring Activity	Tendring Physical activity Mental wellbeing	Essex/Colchester/Basildon/Tendring Older people
Colchester Activity	Colchester Physical Activity Mental wellbeing	Essex Physical activity Family Basildon Physical activity Family
Essex Sport	Essex Physical activity Mental health	Tendring Physical activity Family
Basildon Sport	Basildon Physical activity Mental health	Colchester Physical activity Family
Tendring Sport	Tendring Physical activity Mental health	Essex/Colchester/Basildon/Tendring Families
Colchester Sport	Colchester Physical activity Mental health	
Essex Sport Mental Health	Essex Physical activity Mental wellbeing	

## Other terms explored for potential relevance

Essex/C/B/T Sport Mental Health	Essex/C/B/T Mental well-being
Essex/C/B/T Elderly Activity	Essex/C/B/T Sport Family
Essex/C/B/T Elderly Sport	Essex/C/B/T Physical activity families
Essex/C/B/T Mental Health	Essex/C/B/T Exercise
Essex/C/B/T Mental wellbeing	Essex/C/B/T Physical activity older people

The literature search revealed 22 unique publicly available documents which met the inclusion criteria of relating to physical activity or mental wellbeing for residents living in Essex generally or Basildon, Colchester or Tendring specifically.

# Phase One Findings – Systematic Review

## Physical Activity Data

The 23 documents were divided into 5 categories:

1. Area Profiles (N=5)
2. Policy Documents (N=4)
3. Needs Assessments (N=5)
4. Sport and Physical Activity Profile (N=3)
5. Public Health Profile (N=5)

### Descriptive Findings:

- I. On average, the documents were dated 2015, however this ranged from 2006 to 2017.
- II. 20 of the 22 documents reported on physically activity, however, only 5 reported on physical activity in detail (extending beyond basic prevalence statistics to include costs, demographics and provision).
- III. The physical activity data was not dated in over half of the documents reviewed (59%) and was collected in 2013 (ranging from 2012 to 2015), on average, in the remaining 41% of documents.
- IV. There were 3 sources of data which were used to report on levels of physical activity: 1) Active Peoples Survey (Source: Sport England), Residents Survey (Source: Essex County Council), and 3) School Health and Wellbeing (SHEU) Survey. Almost 30% (N=6) of the documents did not report the source of the physical activity statistics described.
- V. 55% (N=12) of the documents used the Active Peoples Survey to report on physical activity, 22% (N=6) used the Residents Survey, 23% (N=5) used the School Health and Wellbeing Survey and one document referenced an earlier Joint Strategic Needs Assessment to describe physical activity prevalence.



## Strengths and Weaknesses of measures used

### Active Peoples and Active Lives Survey

The new ‘Active Lives Survey’, formally ‘Active Peoples Survey’, is the most valid self-report tool used to measure physical activity levels in Essex. The survey provides a breakdown of the types, intensity and duration of various physical activities using extensively tested survey instruments. Whilst the Active Lives Survey provides strong comparison data at a national and county level it does not collect data on enough people by district (N = 497, 504 and 501 for Basildon, Colchester and Tendring, respectively) to calculate demographic trends.

### Residents Survey

The residents’ survey does provide additional data at ward level (a target of 400 responses per ward) however like the Active Lives Survey these alone are unable to provide further breakdown of activity levels by specific demographics due to the small sample size. Furthermore, this survey does not currently use a valid measurement of physical activity. The current measure:

“Thinking about last week, on how many days did you do 30 minutes of moderate physical activity? By moderate we mean anything that makes you feel warm and breathe harder than normal, such as brisk walking. You can count bursts of 10 minutes or 2 bursts of 15 minutes as long as they are all on the same day”.

Whilst this measure is short it may increase the number of people claiming to be physically active. As such, the residents survey possibly over-represents the number of people who are physically active and potentially misses the true nature and scale of levels of inactivity in Essex. Furthermore, as the measure differs substantially to the instruments deployed by the Active Peoples and Active Lives Survey they cannot be combined or compared. Therefore we are unable to increase the amount of physical activity data collected at ward level to around 900 participants, which would be possible if identical measurement tools were used.

### School Health and Wellbeing Survey

The School Health and Wellbeing Survey provides a breakdown of children’s active travel, school and leisure-time physical activity enjoyment, moderate-vigorous physical activity, physical activity knowledge and barriers to participation. This survey provides rich data across several attitudes and behaviours by school aged children and has a large sample size. In 2018, 16,399 children provided feedback (11,076 in primary school and 5,323 in secondary school). In Basildon, Colchester and Tendring 3,067, 2,222 and 1,795 respectively completed the survey.

### Physical Activity Insight

The literature search did not identify any publicly available sources of physical activity behavioural insight for residents living in Essex generally, or Basildon, Colchester or Tendring specifically.



## Headline Statistics

Chart 1: Sport England’s Active Lives survey data (2016/17) n=391,600 people. ECC=Essex County Council. ECSP=Essex County Sports Partnership. This graph shows 27% of residents living in Greater Essex are physically inactive and 60% are active enough at a level to achieve maximum benefits.

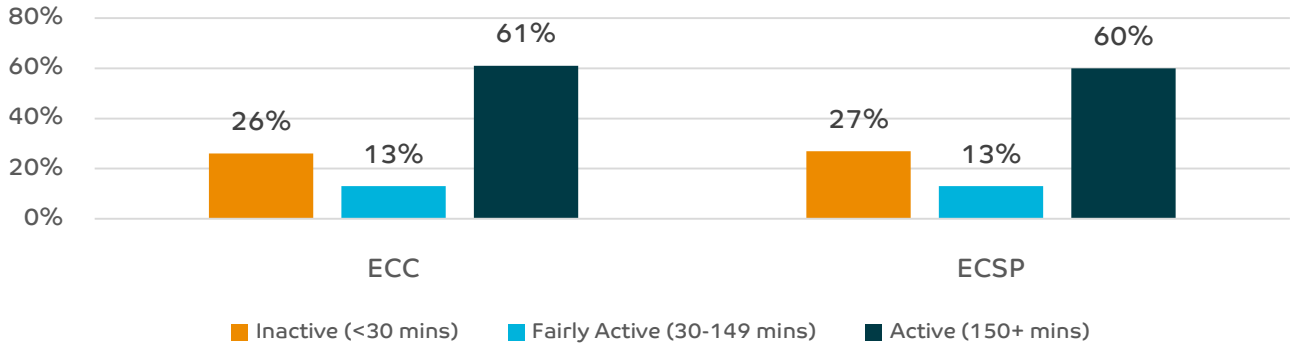
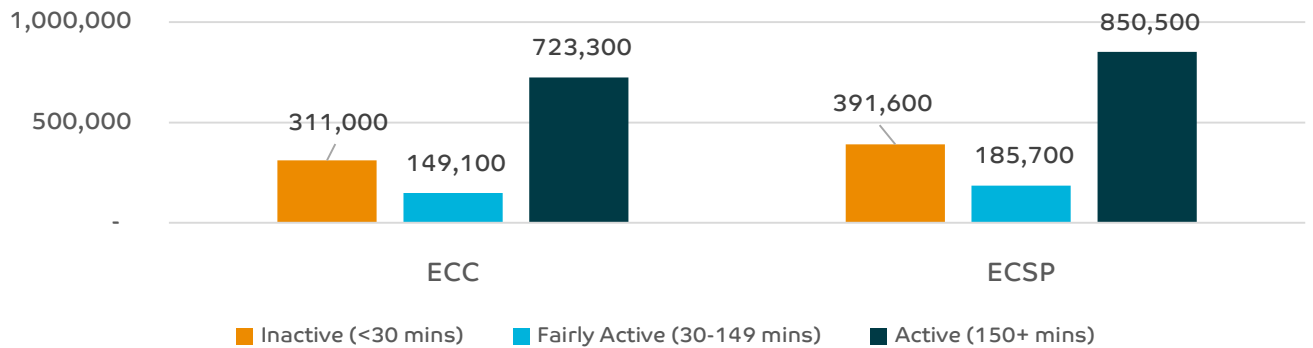
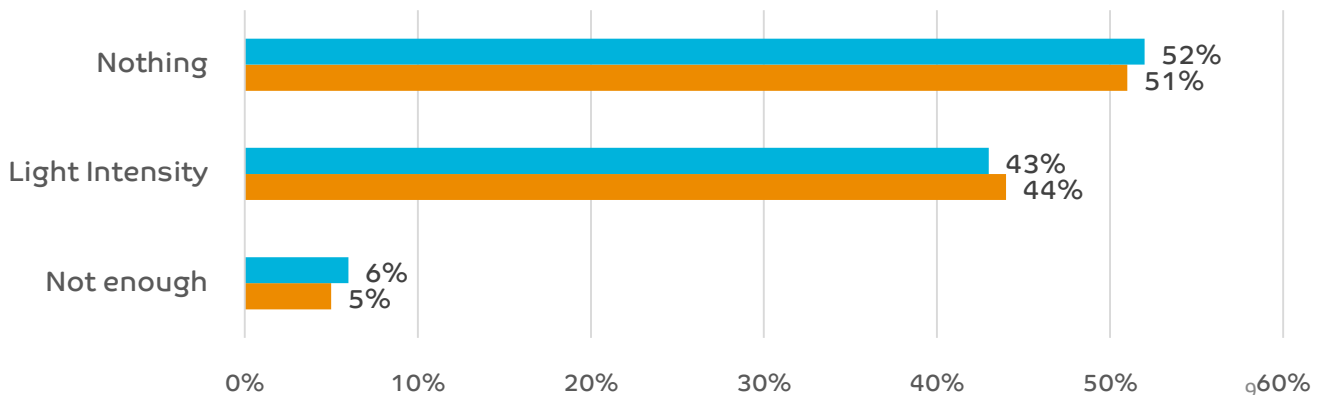


Chart 2: Sport England’s Active Lives survey data 2016/17). This graph shows 391,600 people living in Greater Essex are physically inactive and 850,500 are active at a sufficient level to achieve maximum benefits.



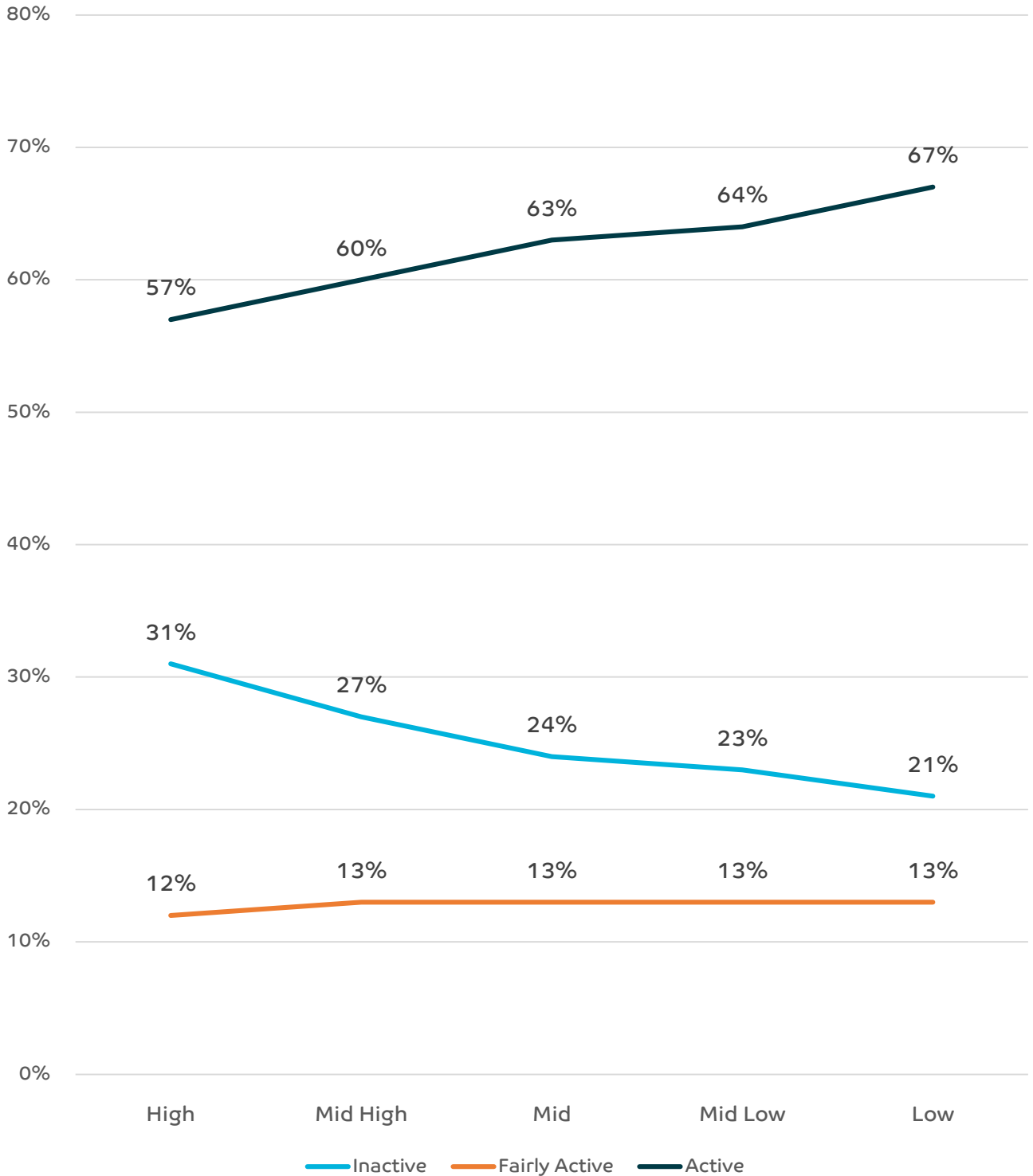
## Chart 3: Type of inactivity by people living in Essex County Council

Chart 3 shows that whilst 52% of physically inactive people living in Essex are completely inactive,(less than 30 mins of moderate physical activity) 43% are active (but not at a sufficient level of intensity which makes them breath harder and faster) and 5% are not active long enough (less than 30 minutes of moderate physical activity in continuous 10 minute bursts )



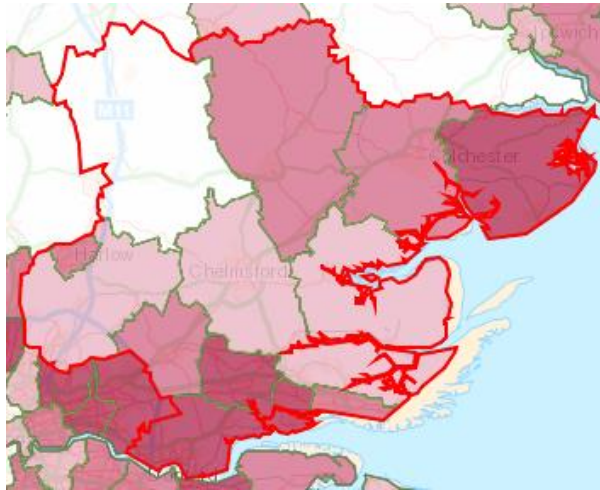
## Activity levels by income deprivation

Chart 4: Sport England’s Active Lives survey data (2016/17) n=391,600 people. This chart shows that levels of inactivity decrease steadily as level of deprivation decreases, with a 10% drop in levels of inactivity between residents living in the 20% most deprived and 20% least deprived communities. Likewise, levels of activity increase steadily as level of deprivation decreases.

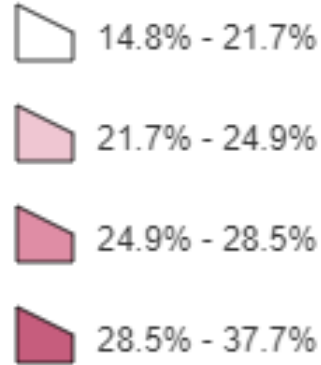


## Levels of inactivity by local authority

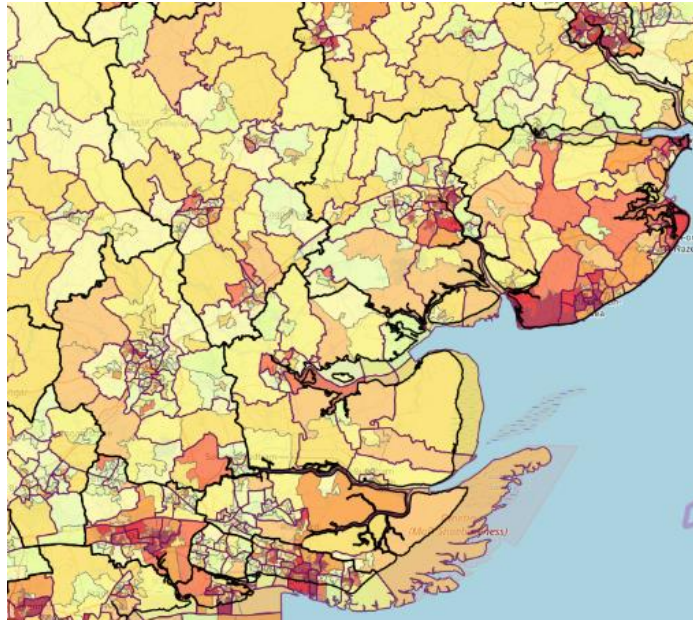
This map shows the levels of inactivity across Essex. Tendring is the most inactive with 33% of the population being inactive and Basildon and Colchester 28% and 25% respectively. Inactivity is directly related to deprivation and an aging population.



### Local Authorities



The map below shows super output areas colour coded according to the Index of multiple deprivation. The darker red areas correspond to the most deprived areas which also show as the least active areas on the above map.



## Who is inactive?

Chart 5: Sport England’s Active Lives survey data (2016/17) n=391,600 people. This chart shows levels of inactivity increase slowly with age until age 75-85 where there is a rapid increase in inactivity. Adults aged 85 and above are more than 3 times more likely to be inactive than adults aged 16-54.

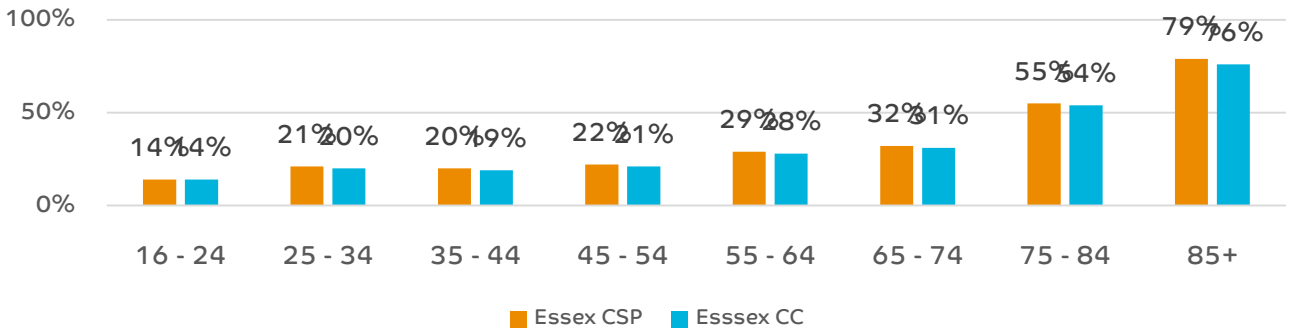
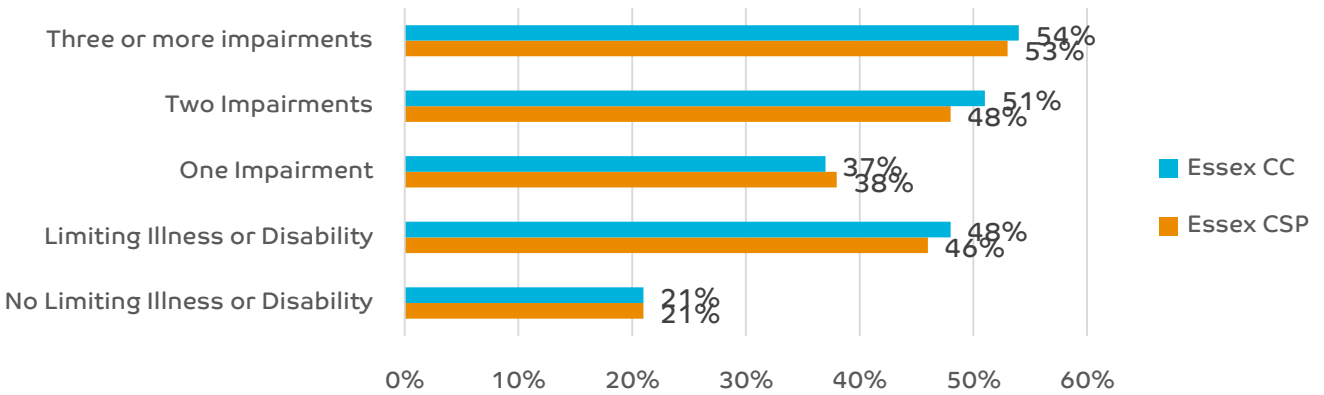
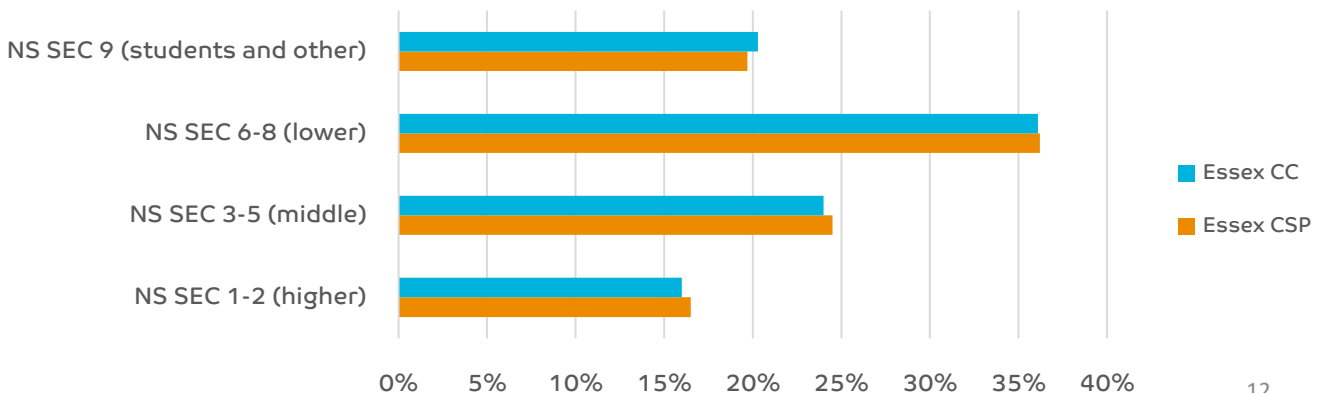


Chart 6: People with a disability are more than twice as likely to be inactive than people without a limiting illness or disability and levels of inactivity increases with the number of impairments a person has.



- Lone parents are more likely to be inactive (30.5%) than single people (26.4%) or those in a couple (24.4%).
- People classified as having a lower socio-economic status are more than twice as likely to be inactive than those classified as having higher socio-economic status.



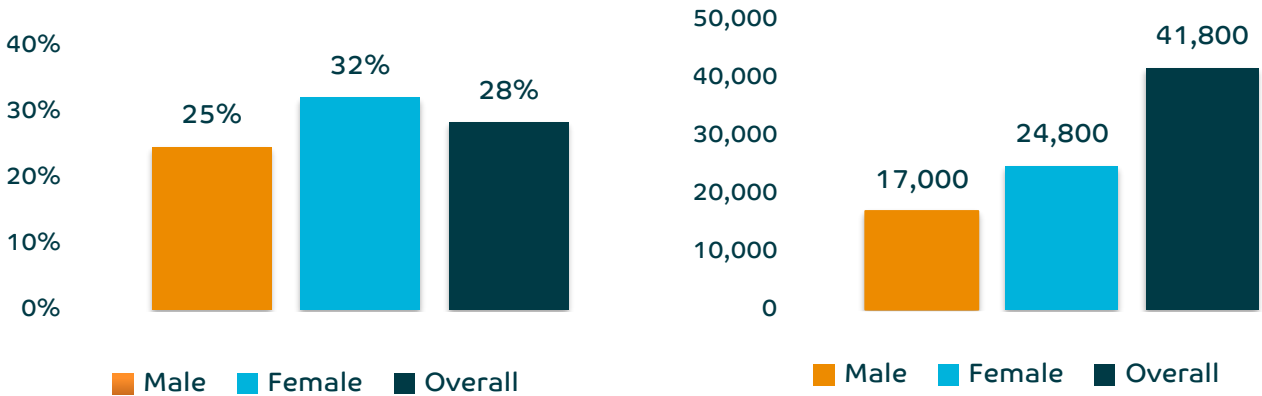
# Basildon Physical Activity Profile

## Introduction

Data was available for 497 adults living in Basildon. Sport England’s active lives data is a useful source for population level physical activity surveillance and whilst the sample size at a local authority of 500 is adequate to provide overall trends, it is too small to provide a detailed breakdown of activity levels by key demographics such as age and by ward etc.

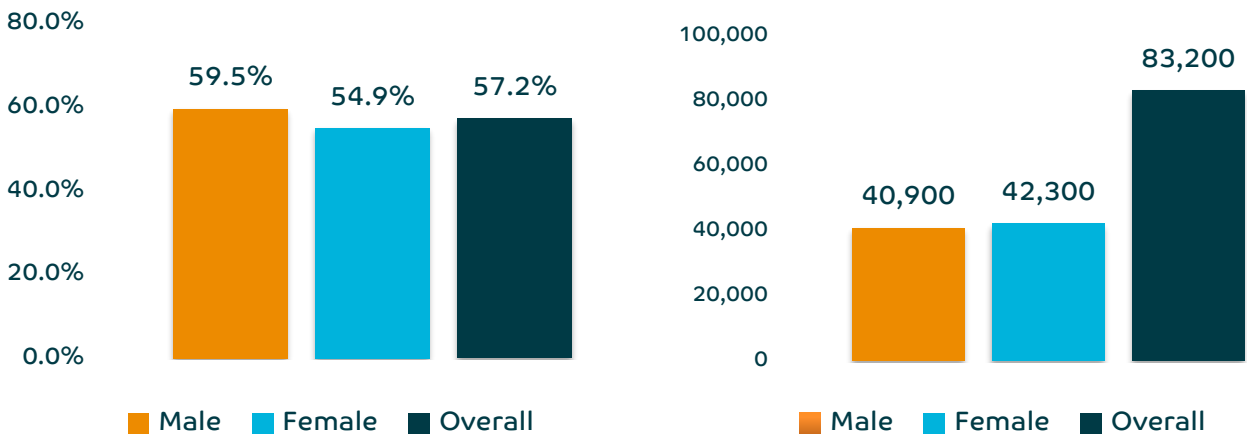
## Headline Statistics

- Women living in Basildon are significantly more likely than men to be inactive (32% vs 25%), compared to no differences between both groups at an Essex level (27% vs 27%)



Proportion & Number (extrapolated) of people physically inactive in Basildon

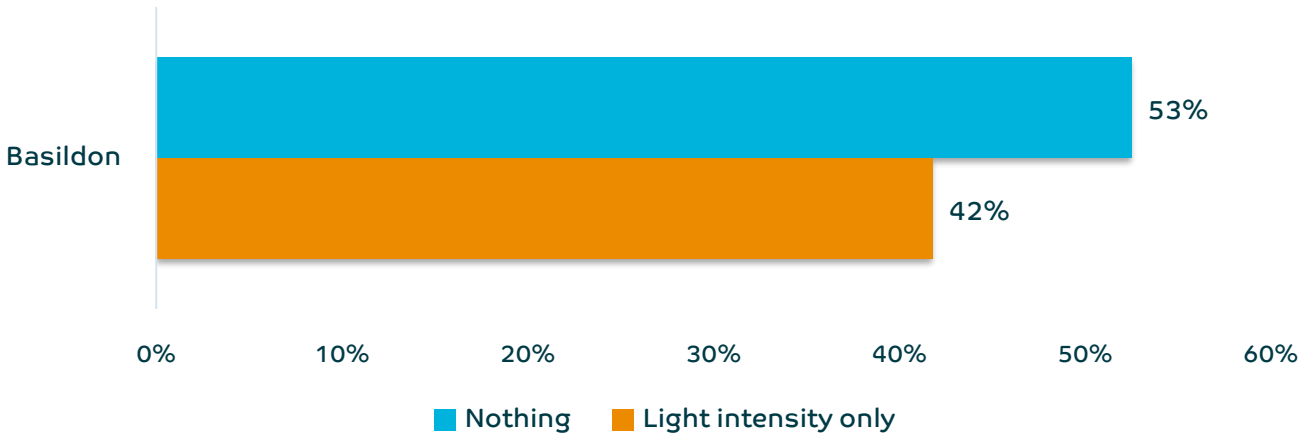
- Women were also less likely than men to be active (achieve 150 mins per week) (55% vs 60%).



Proportion & Number (extrapolated) of people physically active in Basildon

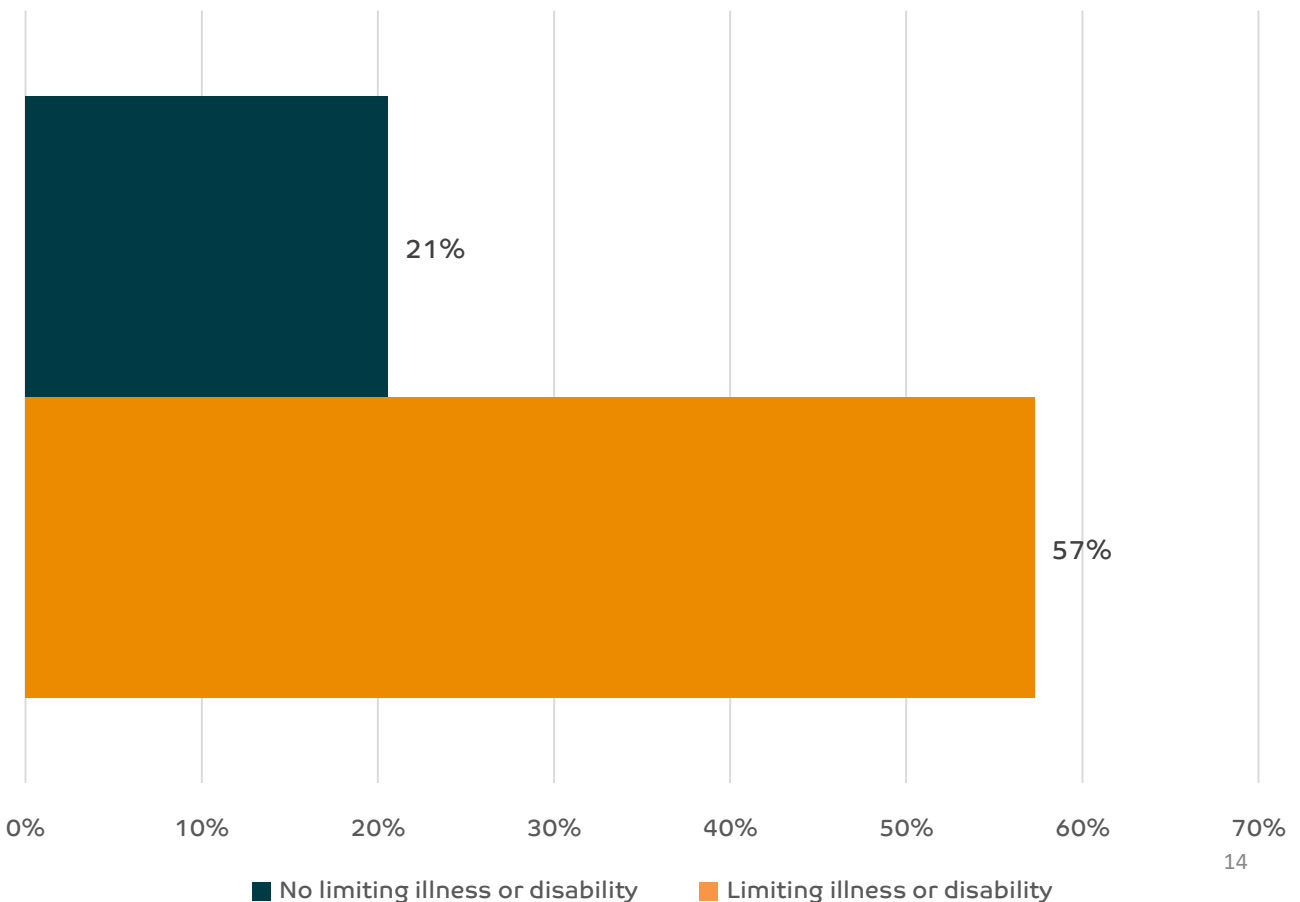
# Basildon Physical Activity Profile

Whilst 53% of physically inactive people living in Basildon are completely inactive, 42% are active but not at a sufficient level of intensity (which makes them breathe harder and faster).



## Who is inactive?

- People with a limiting illness or disability are almost three times more likely to be inactive (57%) than people without a limiting illness or disability (21% inactive)

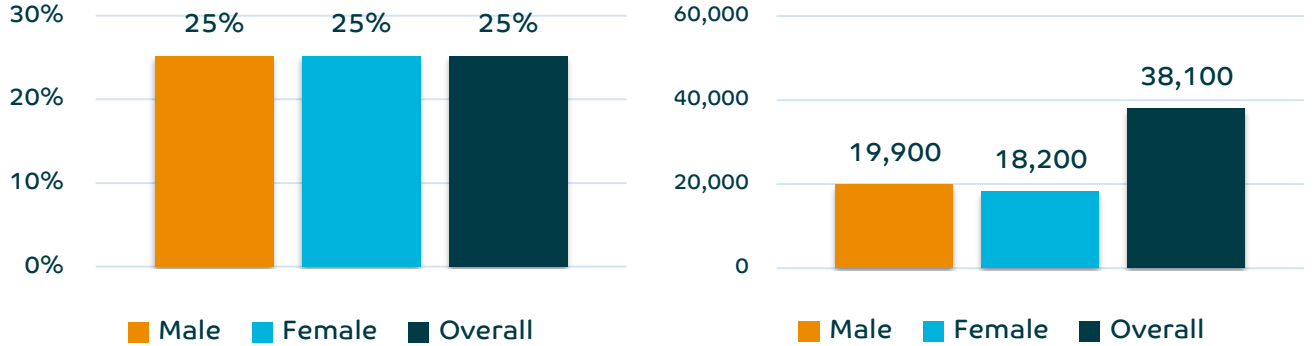


# Colchester Physical Activity Profile



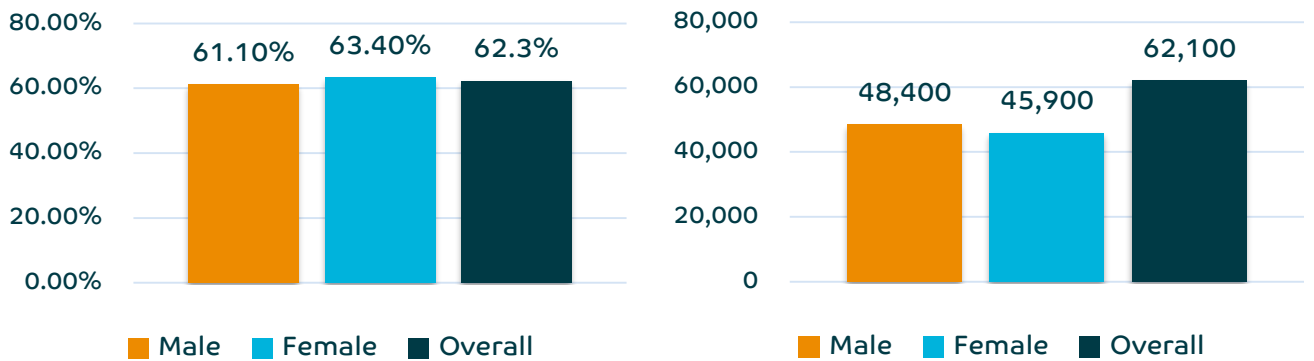
## Headline Statistics

- There were no differences in levels of inactivity between males and females in Colchester, which reflects the pattern at an Essex-wide level.



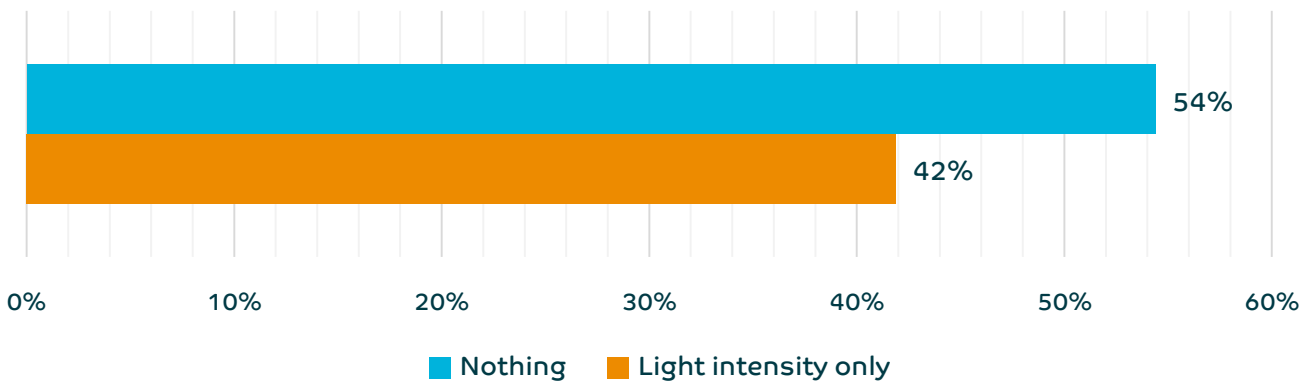
Proportion & Number (extrapolated) of people physically inactive in Colchester

- However, males are less likely to be physically active (150+ minutes per week)



Proportion & Number (extrapolated) of people physically active in Colchester

Whilst 54% of physically inactive people living in Essex are completely inactive, 42% are active but not at a sufficient level of intensity (which makes them breathe harder and faster).



Type of inactivity by people living in Colchester

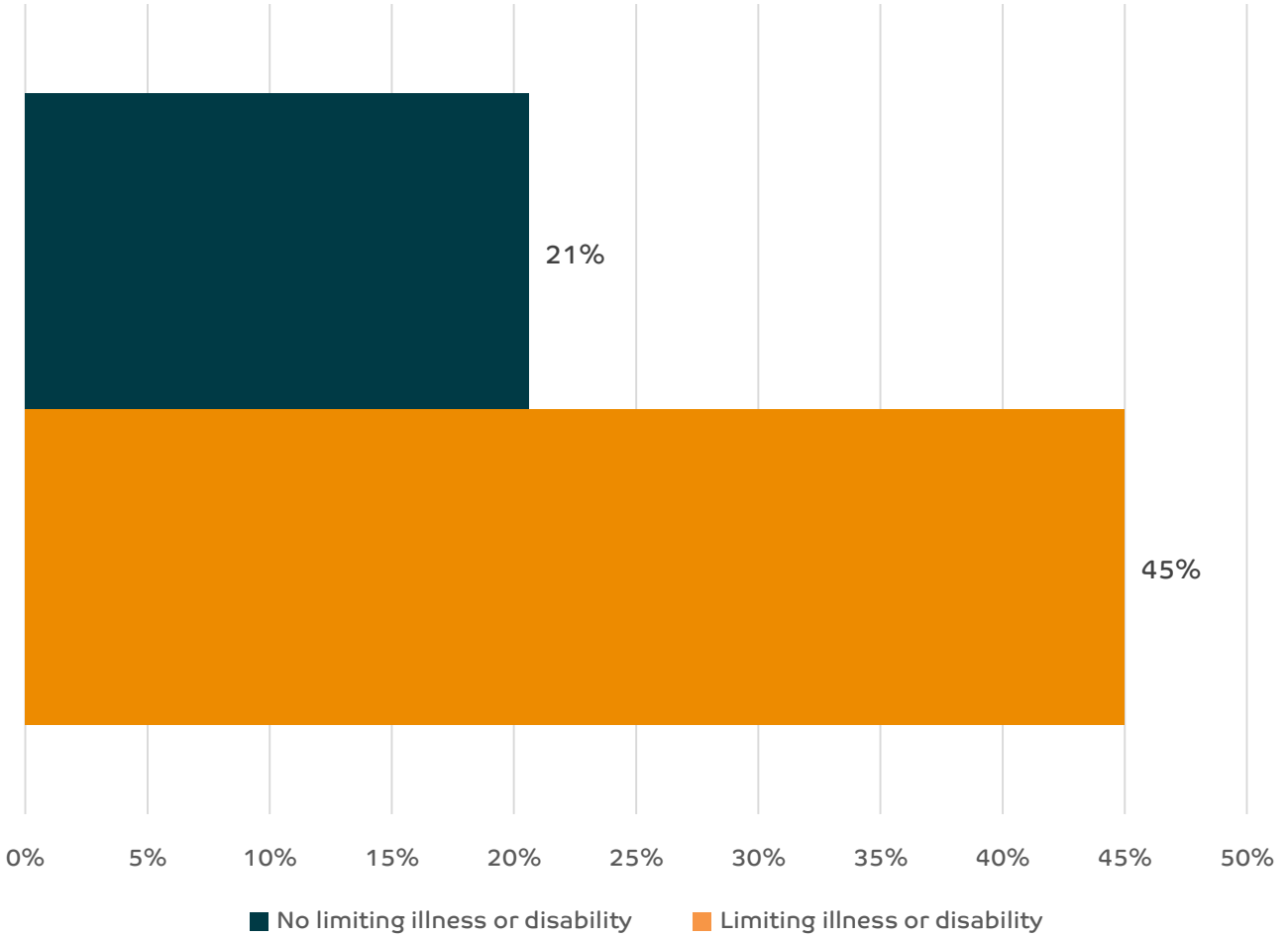


# Colchester Physical Activity Profile



## Who is inactive?

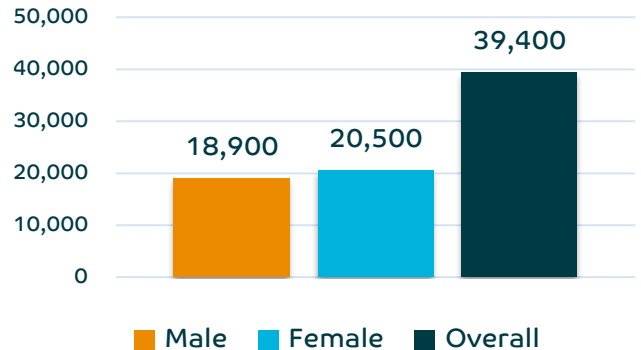
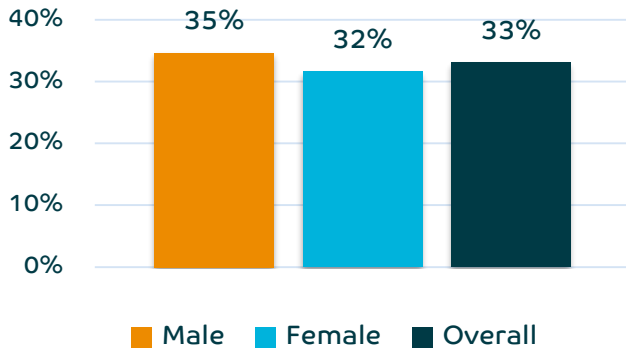
- People with a limiting illness or disability are more than twice as likely to be inactive (45%) than people without a limiting illness or disability (21% inactive).



# Tendring Physical Activity Profile

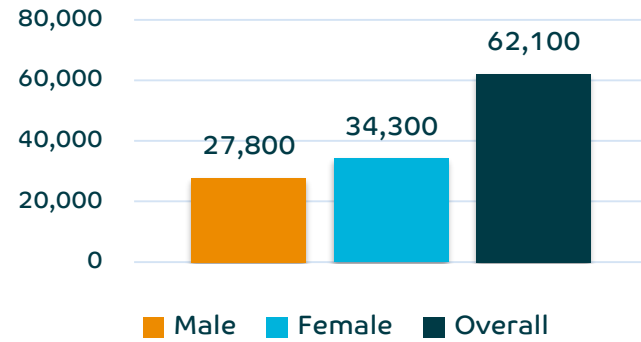
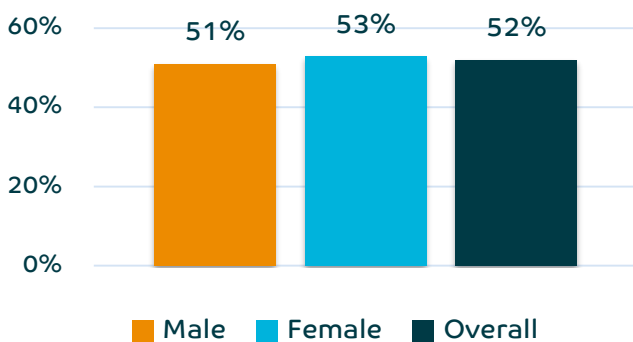
## Headline Statistics

- Males were more likely than females to report being physically inactive, compared to no differences in levels of inactivity between both groups at an Essex-wide level



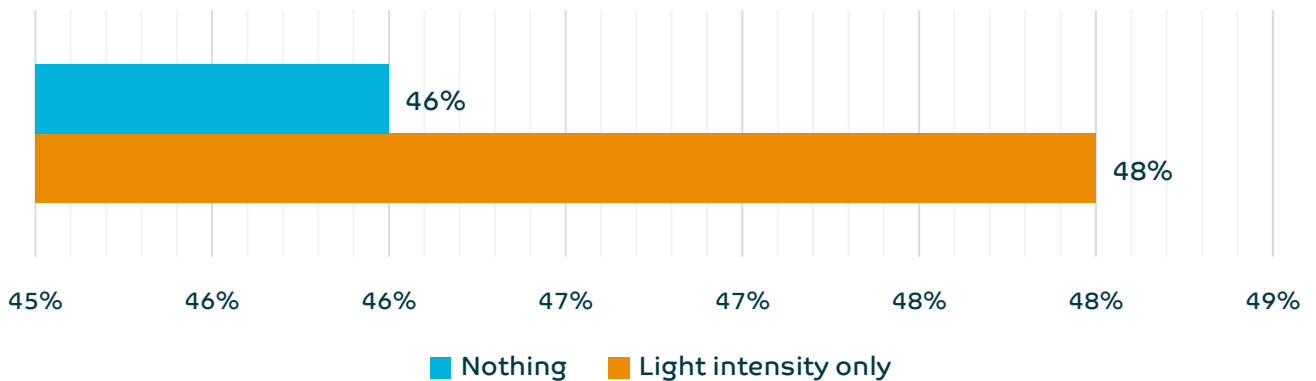
Proportion & Number (extrapolated) of people physically inactive in Tendring

- Females were more like to report being physically active (150+ minutes per week)



Proportion & Number (extrapolated) of people physically active in Tendring

Whilst 46% of physically inactive people living in Essex are completely inactive, 48% are active but not at a sufficient level of intensity (which makes them breath harder and faster).

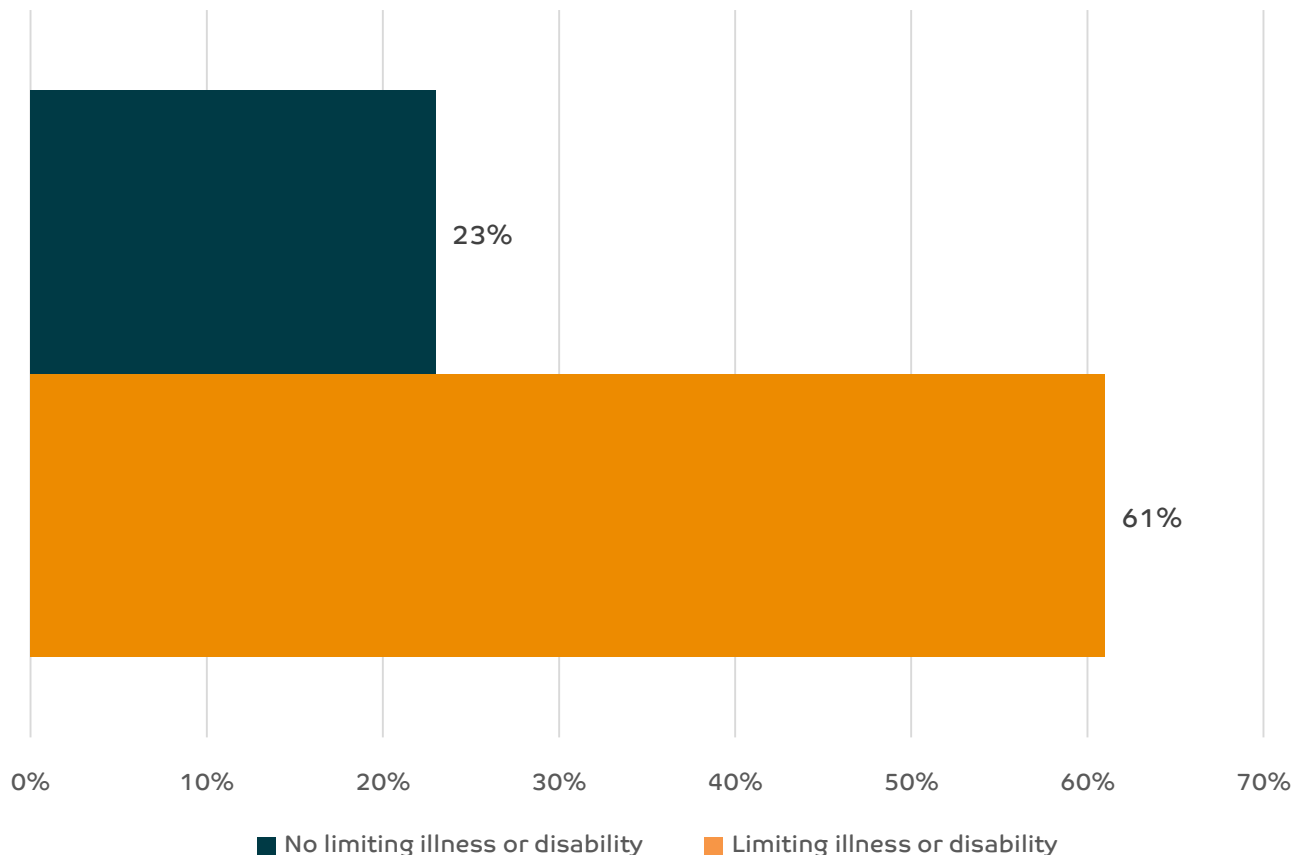


Type of inactivity by people living in Tendring

# Tending Physical Activity Profile

## Who is inactive?

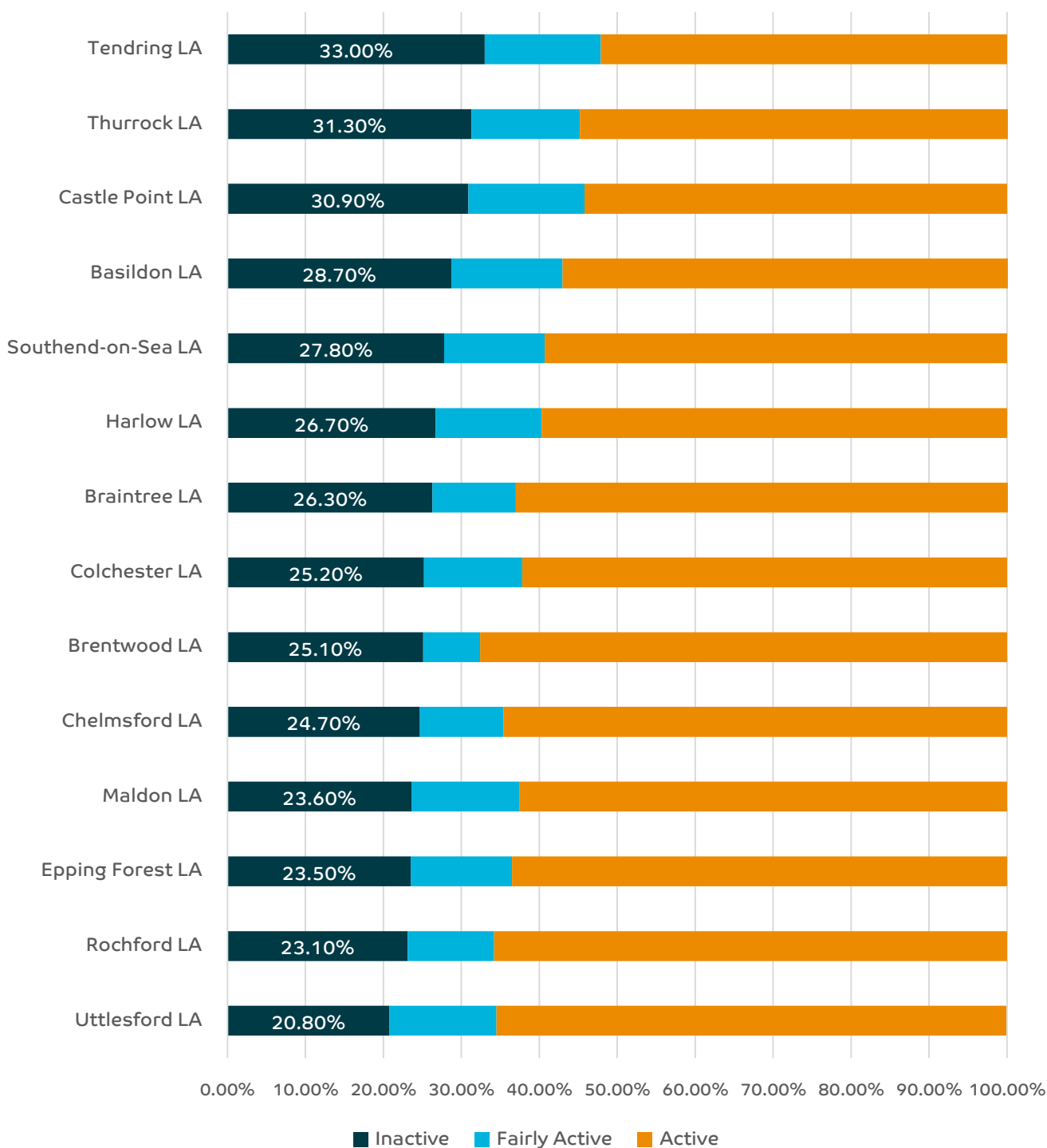
- People with a limiting illness or disability are more than twice as likely to be inactive (61%) than people without a limiting illness or disability (23%).



## Local Authority Level Physical Activity Patterns

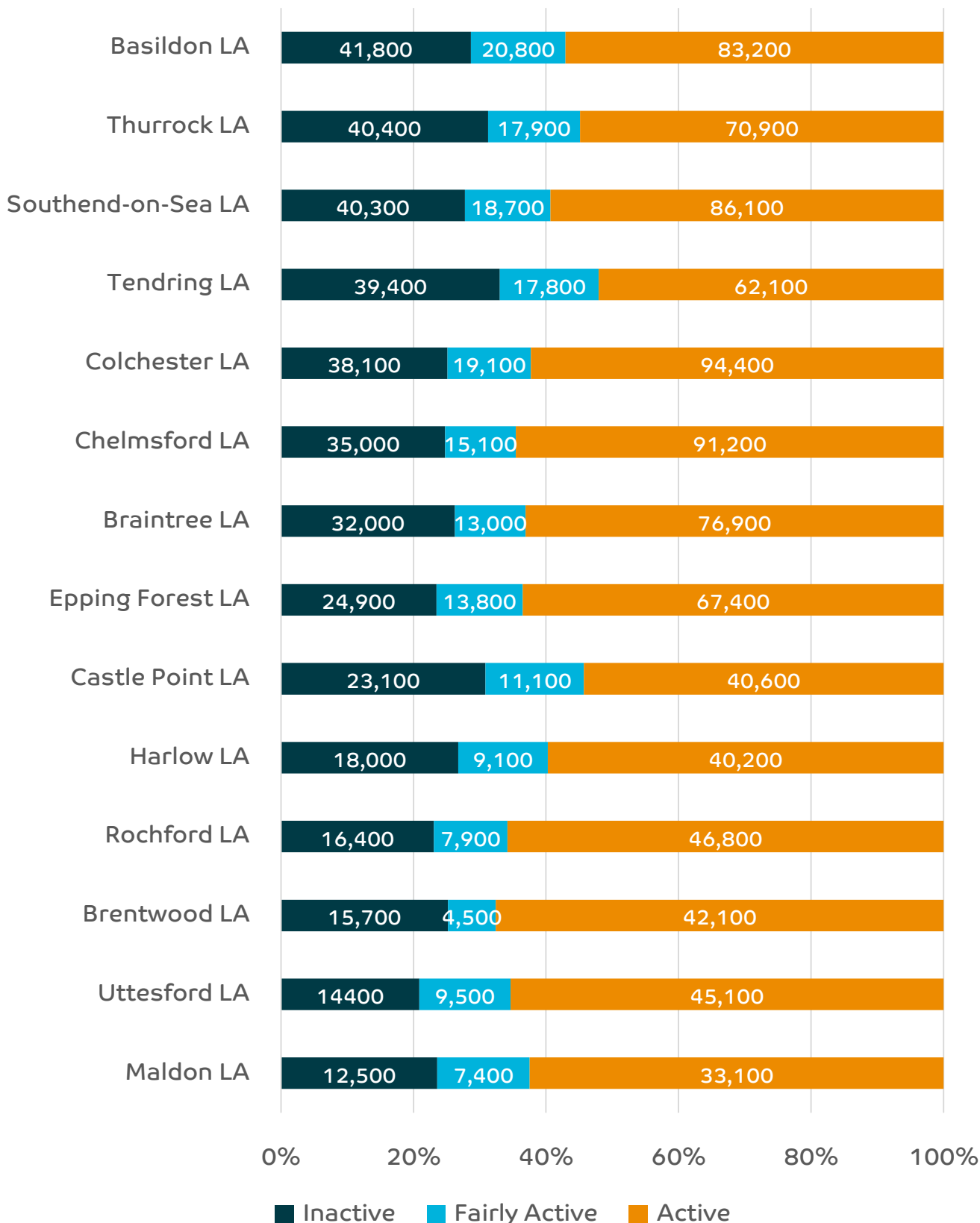
Tendring is the most physically inactive district in Essex, whereas Basildon and Colchester are the fourth and eighth most inactive of all fourteen district within Essex. Active Lives Survey (2016/2017).

### Essex Local Authority Physical Activity Levels (%)



# The Wider Picture

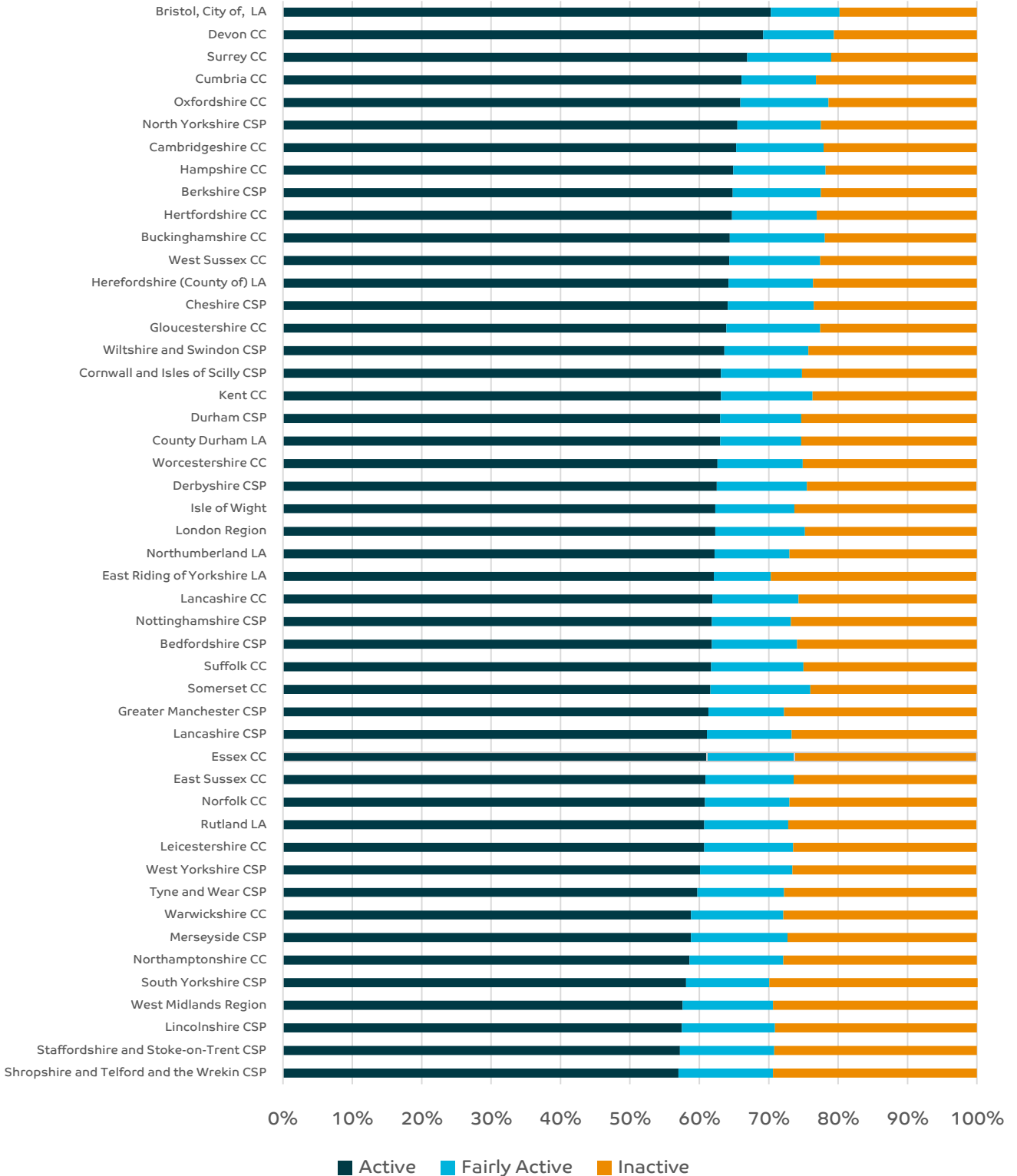
## Essex Local Authority Physical Activity Levels (actual numbers) Active Lives Survey (2016/2017)



# The Wider Picture

Residents living in Essex are the 15<sup>th</sup> (out of 48) least likely to be physical activity when compared to the other counties in England.

## England County Physical Activity Levels (source: Active Lives Survey (2016/17))



## European Physical Activity Levels

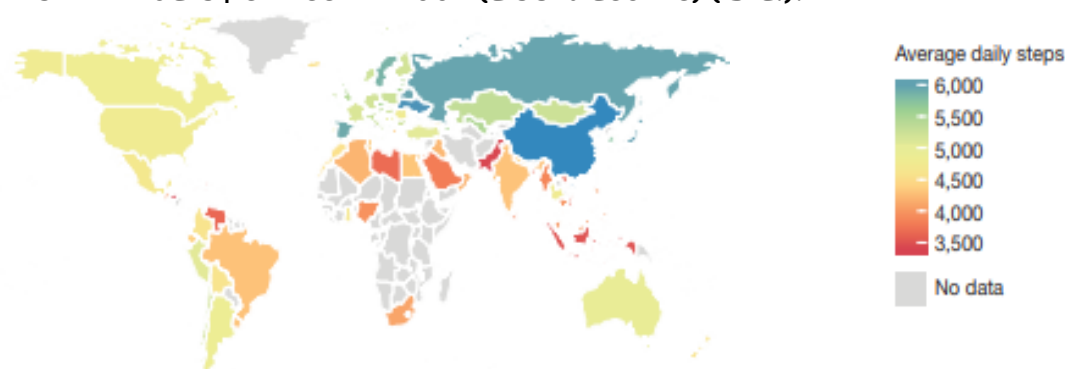
Data from n = 19,978 individuals aged 18–64 years from the 28 EU countries, shows the United Kingdom is the 17th most inactive country in Europe.

Country	Physically inactive	Adequately active	Highly active
	% (95% CI)	% (95% CI)	% (95% CI)
<b>Southern Europe</b>			
Croatia	21.6 (18.7–24.5)	78.4 (75.5–81.3)	67.0 (63.7–70.3)
Cyprus	53.7 (48.3–59.1)	46.3 (40.9–51.7)	37.9 (32.6–43.2)
Greece	38.1 (34.6–41.6)	61.9 (58.4–65.4)	48.5 (44.9–52.2)
Italy	47.4 (43.8–51.0)	52.6 (49.0–56.2)	41.9 (38.3–45.5)
Malta	48.7 (42.4–55.1)	51.3 (44.9–57.6)	41.8 (35.4–48.2)
Portugal	50.6 (46.9–54.4)	49.4 (45.6–53.1)	37.9 (34.3–41.6)
Slovenia	28.5 (25.2–31.8)	71.5 (68.2–74.8)	59.5 (55.9–63.1)
Spain	20.3 (17.4–23.1)	79.7 (76.9–82.6)	68.5 (65.3–71.8)
<b>Western Europe</b>			
Austria	23.6 (20.5–26.7)	76.4 (73.3–79.5)	64.3 (60.8–67.9)
Belgium	32.0 (28.7–35.3)	68.0 (64.7–71.3)	52.3 (48.7–55.9)
France	29.5 (26.0–32.9)	70.5 (67.1–74.0)	57.8 (54.1–61.5)
Germany	16.1 (13.5–18.7)	83.9 (81.3–86.5)	71.5 (68.4–74.7)
Luxembourg	17.8 (13.6–21.9)	82.2 (78.1–86.4)	67.1 (61.8–72.5)
The Netherlands	14.9 (12.1–17.7)	85.1 (82.3–87.9)	71.0 (67.3–74.6)
<b>Nothern Europe</b>			
Denmark	17.6 (14.4–20.7)	82.4 (79.3–85.6)	66.6 (62.6–70.6)
Estonia	20.0 (16.8–23.1)	80.0 (76.9–83.2)	70.6 (67.0–74.2)
Finland	15.9 (12.7–19.1)	84.1 (80.9–87.3)	66.5 (62.3–70.8)
Ireland	24.8 (21.3–28.3)	75.2 (71.7–78.7)	58.5 (54.4–62.5)
Latvia	19.4 (16.6–22.1)	80.6 (77.9–83.4)	71.4 (68.2–74.5)
Lithuania	24.3 (21.2–27.5)	75.7 (72.5–78.8)	63.6 (60.0–67.1)
Sweden	12.4 (9.6–15.3)	87.6 (84.7–90.4)	72.2 (68.2–76.2)
United Kingdom	24.2 (20.8–27.5)	75.8 (72.5–79.1)	64.1 (60.3–67.9)
<b>Eastern Europe</b>			
Bulgaria	33.3 (29.8–36.9)	66.7 (63.1–70.2)	57.4 (53.6–61.3)
Czech Republic	27.2 (24.0–30.3)	72.8 (69.7–76.0)	60.2 (56.7–63.7)
Hungary	32.8 (29.3–36.2)	67.2 (63.8–70.7)	52.7 (49.1–56.4)
Poland	44.0 (40.0–47.9)	56.0 (52.1–60.0)	43.2 (39.2–47.2)
Romania	27.9 (24.3–31.6)	72.1 (68.4–75.7)	59.8 (55.8–63.8)
Slovakia	28.1 (24.9–31.4)	71.9 (68.6–75.1)	57.7 (54.0–61.3)
<b>28 EU countries</b>	<b>28.6 (27.6–29.6)</b>	<b>71.4 (70.4–72.4)</b>	<b>59.1 (58.0–60.2)</b>



## International Physical Activity Levels

Smartphone data on steps taken by users from over 68 million days of activity by 717,527 individuals globally shows the UK demonstrates high levels of activity when compared to other nations, recording an average of around 5,500-6,000 steps per day. However, population physical activity levels are declining rapidly worldwide (NG and Popkin 2012). In the United Kingdom total adult physical activity has fallen from 216 MET hours per week in 1961 to 173 MET hours per week in 2005 (a 20% decline). In the United States total adult physical activity has fallen from 235 MET hours per week in 1965 to 160 MET hours per week in 2009 (a 22% decline). In Brazil total adult physical activity has fallen from 229 MET hours per week in 2002 to 214 MET hours per week in 2008 (a 7% decline) and in China total adult physical activity has fallen from 399 MET hours per week in 1991 to 213 MET hours per week in 2009 (a 38% decline) (Ibid.).



Source: Althoff, T., Hicks, J. L., King, A. C., Delp, S. L., & Leskovec, J. (2017). Large-scale physical activity data reveal worldwide activity inequality. *Nature*, 547(7663), 336.

## Other National Sources of Data

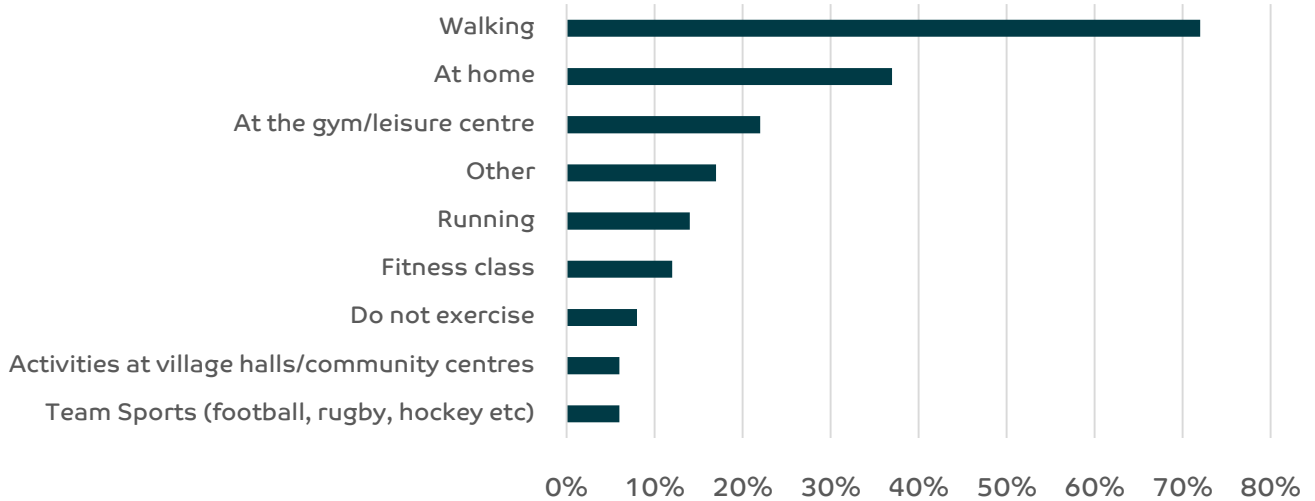
There are 5 other national sources of physical activity data which are still being commissioned, beyond the scope of the current review, which could be used to examine the potential impact of the LDP on levels of activity. However, these sources differ in measures used, frequency of follow-up and sample sizes, therefore are likely to only provide comparison data and a county-wide level.

Source	Sample	Measure
Health Survey for England	8,000 Adults and 2,000 children	Amount of time spent being physically active in the last four weeks (150minutes per week for adults, 60 minutes per day for children aged 5-15 years).
National Travel Survey	9,000 adults and 2,600 children	Average number of trips per year by mode of transport (walking, bike, car/van, bus etc) for adults and mode of travel to school for children
Labour Force Survey	40,000 adults	Questions relate to mode of travel to work.
Taking Part Survey	10,000 adults and a 'representative sample of children'	Collects data on adult and children participation in sport and whether that sport was competitive.
Census for England & Wales	300,000 adults	Mode of travel to work.

The following data was collected via the Essex Residents Survey (2018) which found 18% of adults were inactive, compared to 27% identified by the more comprehensive Active Lives Survey (2018). As such, the following data is likely to include significant over-reporting.

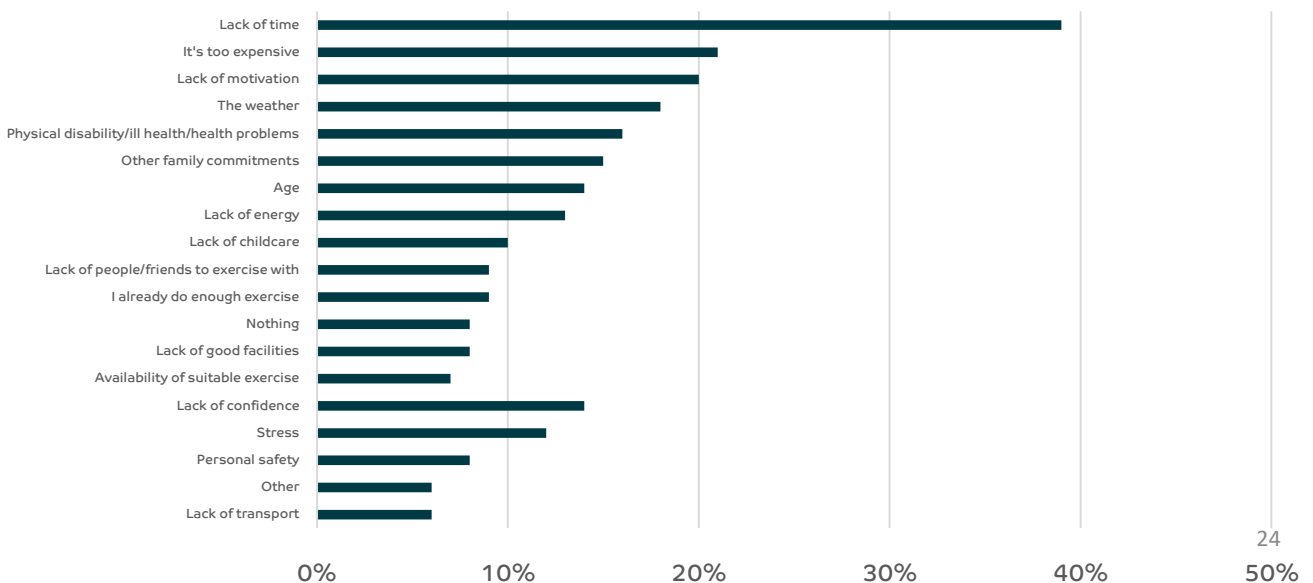
## Types of Physical Activity

72% of residents reported that they currently walk for exercise, with 37% mentioning they exercise at home and 22% exercising at a gym or leisure centre (N=4570). There were no notable differences in Basildon, Colchester or Tendring.



## Barriers to Physical Activity

39% of residents reported that a lack of time prevents them from being active. Furthermore, cost, motivation and weather were also reported as prominent barriers to physical activity. There were no notable differences in Basildon and Colchester, however residents in Tendring reported the weather and ill health as more important barriers than motivation or cost. These barriers are commonly reported in quantitative surveys, however, cannot provide a contextual backdrop which is achievable through qualitative research. As such, these perceived barriers may differ substantially to actual barriers faced by inactive and low active individuals. The data is therefore of limited value unless associated with more in depth questioning.



# Phase Two Findings – Focus Groups

To investigate the findings of the literature review in greater detail, we conducted focus groups with Essex Local Delivery Pilot project group members from each priority area. The focus groups centred on the following questions:

1. What data and insight is being used by each local authority to guide planning and decision making at a local authority level?
2. What is each local authorities assessment of the qualitative of the data and insight available?
3. What is the quality of the relationship between each local authority and the data and insight team working at Essex County Council?
4. What do local authorities find difficult when using the data at their disposal?
5. What data and insight does each local authority need to tackle physical inactivity?
6. What format would make this data and insight most useful?
7. What data and insight is available and being used in other areas of public health?

## Basildon

### Key findings

1. There were key issues with capacity. They felt the data at their disposal was plentiful and fit for purpose however there wasn't capacity at a local level to use it.
2. There are currently weak data sharing practices between county and borough level and currently relationships are based on personal relationships rather than professional relationships.
3. There is currently very limited data at a micro (ward) level
4. The priority should be to look much wider than just physical activity and the emphasis should be on a deeper understanding of people. They felt there was a need to target physically active people but ask them about their life, their social dynamics and their daily struggles.

## Colchester

### Key findings

1. Colchester are uniquely placed with an internal data and insight team which could be better utilised. However, they require a better understanding of what they are able to provide from the data they have available
2. There isn't a joined-up approach to working between county and borough level and individuals at borough level don't know what is available and who to ask for certain pieces of data and insight.
3. Before being able to assess the validity and reliability of the data they felt they first need to get better at using data in the first place and the first step is to get a firm grasp of what is being collected and by whom.
4. They felt insight is routinely collected through engagement activities and programmes although nobody owns and collates this. Whilst an insight depository is needed first, they needed a deeper understanding of people's daily struggles.

## Tendring

### Key findings

1. They trusted the quality of the data produced at county level however had reservations about evaluations completed at a local level, often using difference practices and procedures.
2. They use the current data available at their disposal very generally but admittedly don't use it as much as they could. They know Tendring is a very difficult area and the data is there to support this, but they haven't probed deeper into the data to understand why these trends exist.
3. There is a lack of ward level data available to guide decision making and they struggle to focus on who their target demographic should be. This could be a cause of not knowing how to access this data rather than it not being there.
4. They felt there is culture where organisations are reluctant to share their insight to perceived competitors.

# Phase Two Findings – Focus Groups

## Basildon Focus Group Findings

### Capacity and Expertise:

The participants felt the data hadn't dissipated as there were national sources, however there wasn't anybody at a local level who could do the analysis of the data, if they were given a specific task to do. Basildon had a strong feeling that the public health data currently available is strong enough to guide decision making. They felt they could "build a profile on health based on what we have" and mentioned "We've got data, it's about having the infrastructure in place to do something with it". Whilst the "data is there [and] the will is there" authorisation is needed to do something, which could slow or even restrict creativity, and innovation is currently acted upon in good will rather than spare capacity.

Basildon had only one point of contact at county council level and this was based on personal rather than professional relationships and roles. They felt there was a nervousness about data sharing at county level and that priority wasn't on physical activity. They felt the data at their disposal was robust and trustworthy, however this was an assessment based on 'it's from a trusted source therefore it must be high quality' rather than individual assessment of rigor or validity.

### Perceived Data Quality:

Whilst the data at county level was perceived to be strong, they didn't have any ward level data to guide decisions, explaining;

"The activity data for Basildon isn't very good, but it would be a hell of a lot worse if we could break it down"

### Training and Upskilling:

When asked if training was needed to upskill people to get a better grasp of the data, they felt this should be based on:

- a) Understanding how to interpret data to guide decision making
- b) Knowledge of what data exists
- c) How they can draw upon it
- d) What has been done with it previously

# Phase Two Findings – Focus Groups



## Basildon Focus Group Findings

### **Behavioural Insight:**

They felt physical activity is the output, but it's the lifestyle understanding which comes before physical activity that they need a richer understanding of. For instance, "bob isn't active... what do we know about bob". They need a deeper understanding of what's going on in people's lives, for instance, how much disposable income they have, their attitudes and what motivates them.

There was an immediate need for this wider lifestyle and coping insight but also a better system of sharing insight by various departments. It's likely that this lifestyle insight will be collected in one way, shape or form by various departments and if combined could develop a detailed picture of target groups. There also needs to be a variety of approaches used to collect insight. They know from experience that if they ask residents what they want via telephone and online surveys they get completely different answers. Data collection by every day community engagement may be a viable option to collect insight, using every opportunity when engaging with people to note down anecdotal evidence and share this into a wider knowledge base. Insight should be collected in hair dressers, chip shops, a letter in children's school bags etc to really get to the hard to reach groups.

# Phase Two Findings – Focus Groups

## Colchester Focus Group Findings

### Capacity and Expertise:

Colchester are in a unique position as they have an internal data team who can provide research and evaluation support and guidance. Whilst they recognised this was a limited resource with typically a 2-week delay in queries getting answered, this was a useful resource for getting a better grasp of the data and the team could provide internal courses on understand and utilising data. With this in mind, they felt they don't use this resource as a well as they could and it's key to improve everybody's understanding of what they can do. They acknowledged the data team could be utilised to everybody's understanding of exactly what is possible with the data, as they understood "it's not rocket science", it just may take a little time. There is also a willingness for the research team to upskill wider employees.

As with Basildon, there was a sole point of contact bridging the gap between county and borough level, and that this individual was at working to capacity themselves. As such they expressed "I don't think much filters down from tier 1" or they "Don't hear anything back". But more importantly, they don't know what exactly is there and what to ask. There's a lack of knowledge of what data is available, how it could be utilises and there isn't a culture of sharing.

### Perceived Data Quality:

Colchester had a greater critique of the data at their disposal, highlighting:

"I'd like to think that the public outcomes framework data was robust, but when you then look behind that data by clicking on the source of the data, how reliable and how valid that data is, is more questionable" But admittedly, "it's there, I've got to use it, it's my only option"

Colchester also felt that Active Lives was based on small numbers, Public outcomes data looks robust but was always questionable, they never thought to scrutinise Essex County data and admittedly didn't know a lot about the survey. National data was often out-dated therefore the statistics at their disposal may not be accurate to current trends and prevalence rates. They expressed:

"If we're thinking about IMD data by the time we get to 2021 that well out of date and that whole piece of work that we do would be based on 2015 data, that doesn't feel right"

# Phase Two Findings – Focus Groups

## Data Sharing:

There are also issues with data sharing which could be used to address the weaknesses of the data highlighted above. They drew attention to more robust and accurate data collected on 6000 people via a recent physical activity intervention however that data wasn't made publicly available, so they aren't able to use it for wider planning and activities.

They went on to explain that there is a lot of silo working between the departments and individuals often work with single data sources however if there was a more connected approach to working within the borough people could layer different sources to develop a much richer understanding. They acknowledged “there needs to be a top-level priority that we need to use data to inform what we do” and “Even though we have a data and insight team, doesn't mean everyone engages with that team, and just because we have a whole load more data, doesn't mean that anything will change”

## Capacity and Expertise:

They felt they need to get better at using data in the first place. If they had a firm grasp of what is being collected and by whom (for instance, the internal research and development team do a lot of customer survey data collection and could include a health and wellbeing perspective; park surveys are routinely being collected and Mosaic data was useful for targeting people through different channels), however, at present there isn't a culture of sharing and there isn't a joined up approach linking these different collection methods. They explained;

“We probably need to be better at using data in the first place to point us in the right direction of where we are going. The next step is then the quality of the data. I know there is stuff going on across the organisation but it's not particularly intelligent led, but it could be”.

## Training and Upskilling

They explained two key actions need to be made; 1) They need to know where to go for data and 2) they need to embed a culture of using data. The data needs to be visual and in the form of infographics (as “we're not data people”), a yearly update would be ideal and trends are critical. They felt they definitely need training on how to use the data available, but fundamentally there needs to be a reprioritising and awareness of using data (between county and borough levels but also within each local authority).



# Phase Two Findings – Focus Groups

## Behavioural Insight:

Colchester also felt they miss opportunities during a lot of their engagement work to collect behavioural insight and that any new insight needs to be focussed on targeted at hard-to-reach groups living in Colchester and needs to be “layered up” to produce a richer understanding.

If the issues with the data flow highlighted above were addressed and they had a clear picture of who was inactive and when, they would then need to know:

a. “Do people know what’s available to them (as “we have lot’s going on”)? They may live in an area and be surrounded by opportunities, but do they know about them and how do we link with these people? How do people find out about activities in their area?”

b. “It’s not just what are their barriers are but what is it the motives them to do something, what is their level of activation.”

Colchester thought that insight is collected during engagement activities and interventions between different departments and people share their insight but nothing happens then. Nobody is tasked with owning the insight and feeding into a wider system, therefore it becomes lost over time. They felt there needs to be a lifestyle approach to understanding people living in Colchester, and that future activities and intervention should seek to supports people with their daily struggles first before attempting to increase healthy lifestyle behaviours.

# Phase Two Findings – Focus Groups

## Tending Focus Group Findings

### Perceived Data Quality:

Tending trusted the data which is available to them, mentioning “Nobody questions health profiles, JNSA... all fully trusted” and “Never really doubted anything that has come from county”. However, when asked if they use the data which is produced by county they admitted “not enough, we use it generally”. However, there is less trust of data sources when the evaluation is completed by external organisations and at a local level, however if these programmes or activities were evaluated using a standard practice they would fully trust these.

Whilst they trusted the data, they felt it didn’t have granularity and they “Really struggle to find Ward level data and struggled to narrow down who our target demographic was”.

### Capacity and Expertise:

Crucially, they don’t have the skills, knowledge, time or capacity to be able to use the data effectively and the borough council doesn’t have anybody with the skills to do analysis or the time or resources to do it. They elaborated “but should we have more access to county level, where there’s a group that already do that”. However, felt that the current support wasn’t available, explaining the contact they have with county would reply “look in that place” but they “can’t understand the data”.

They reaffirmed the findings from Basildon and Colchester that there was only one point of contact with county, and went further to admit

“I’m not a data analyst, I just work in public health. When it’s handed to me on a plate and it’s already summarised, I can go off and put something in place. I can get all the right people around the table, we can do something locally. But if I was then required to do all the analysis and put the summary together before hand, I haven’t got the skills to do that and I haven’t got the time or capacity to do that” and “The council doesn’t have anybody with the skills to do that and as our resources have reduced we’ve got less staff trying to do more and to spend time going through that data, we just don’t have the capacity within the organisation to be able to do that”

Therefore, they felt the data is there but they don’t have the resource and capacity (at both county and local level) to maximise its potential. When probed on what additional data they need, they mentioned they needed “more ward level data” and felt they “know the headline stats but does anyone know why that is?”

# Phase Two Findings – Focus Groups

## Data Sharing:

They would also prefer data periodically, and in a concise, summarised and digestible format. They explained that People only read the summary page in the JSNA report because it's colourful and engaging.

This discussion on how data should be presented sparked a wider debate around the culture of understanding and using data at borough level, they mentioned:

“If we're trying to stop silo working then there's a hell of a lot that data can do... it's about having somebody who can present that information.”

## Training and Upskilling:

They felt strongly that somebody who can captivate and motivate others needs to present data to the local authority to get everybody engaged and motivated. They argued that before upskilling individuals to use data more in their roles, they “don't know how we get them to see the value in it” and questioned “How would we sell this data in the first place?”. They summarised that “We've got to get some behaviour change within our own authority, to get people to believe more” and “Once we get this data we've got to do better at getting it out.”

## Behavioural insight:

Tendring admitted that “insight we need to understand a heck of a lot better, what local people are feeling” and they were “Not really aware of much insight”. They went on to provide an example, called ‘sweat too’ and used this to highlight that people do insight however it's not shared and there's a lot of silo working in public health. A key issue they raised was that the voluntary sector sees others as competitors and therefore are reluctant to share their own insight.

They furthered that prior to collecting new insight they “first need to build relationships with people” and that there was “a lot of anecdotal data around but how you would use that I don't know”. Tendring concluded that they need to understand what's happening in peoples lives at a hyperlocal level, expressing “all the standards which say these are the top barriers blah blah blah (sic)... but what are these people's barriers”. They would want to know “Why aren't you physically active? What's stopping you?” “What's in your life at the moment which means it's not something you think about?” and that data across the lifespan is critical which takes into account the constantly changing barriers to participation.

## Target Groups

1. We looked at the wider evidence of the three target groups.
2. We organised a wide group of 30 LDP participants to discuss the Target groups.

The three groups were chosen as part of the submission to Sport England.

## Older People

There is excellent evidence that older people benefit the most from being active. The recommendations are the same as adults but there is increased emphasis on balance and strengthening exercise which help to maintain independence. There are four main benefits in getting older people more active.

- Health
- Social
- Economic

## Health

Like with younger adults physical activity prevents or helps to manage at least 23 long term conditions including dementia, some cancers, diabetes, heart disease and depression. Given that older people have a higher risk of developing these conditions the return on investment in getting an older person more active is more favourable making a strong case of investing in older people. The older person who is inactive is more likely to be isolated and lonely. Being active increases social networks and can reduce loneliness which reduces the risk of depression, heart disease and even depression.

## Social

Older people eventually need help to assist their daily living. The age at which care is required depends on the rate of cognitive decline. The faster the decline the quicker the older person becomes dependent on the state to look after them either in their own home or in residential or nursing homes. Being active reduces this rate of decline and allows an older person to be independent for longer reducing the burden on the state. Being more active also increases the number of contacts an older person has that allows a stronger social network to look after them.

## Economic

Bearing in mind the above benefits it is of no surprise that for every £1 invested there is considerable return on investment. This return benefits the NHS, Social care and therefore the council and Government. It is hard to say what the value of this investment is but social prescribing can offer a £2 return for every £1 but measuring through Quality Adjusted Life Years (QALYs) can give a return of £19.

## Mental Health

There is strong evidence that physical activity improves mental health in children and adults. The reduction in developing depression and anxiety is strong and for those already with poor mental health physical activity provides part of the management by reducing risk factors such as inflammation and blood pressure and increasing the hormone BDNF that helps repair the brain reducing the risk of dementia and Parkinson's. The risk of loneliness is reduced when someone is more active particularly when taking part in group activities. Connections with green space and nature add yet more benefits and there is good evidence that exercise can improve concentration and help motivation.

## Families

The choice of families ensures that every child will have a greater chance of starting life in a culture of activity. The impact of physical activity starts when the potential parents start to exercise before conception. Due to the process of Epigenetics the genes in the sperm and ovum can be switched on or off as a result of as little three months activity in the potential parent. This leads to a favourable genetic profile of the child with increased mental resilience and a reduced risk of diabetes. Even while the mother is pregnant the amount of exercise she does has a strong influence on the child's future. The culture of the family can influence the child for life and the impact on the parents is equally valuable as they enter middle age.

So the benefits of choosing these three groups are clear and they intertwine with each other creating a social matrix of benefit.

On May 1 about 30 participants from Essex County Council, Districts of Basildon, Colchester and Tendring and community groups met to discuss the target groups.

### 1. Older People

It was agreed on the term “healthy aging” and so this includes:

- 1.1. Middle age in which the aging process can be strongly influenced.
- 1.2. All those who are at risk of functional decline (this is not age specific)
- 1.3. Those at transition points (retirement, bereavement, relationship loss, moving to a new house, etc)

### 2. Families

We agreed that it should be broadly defined but include:

- 2.1. All those within any extended family where an individual's activity impacts on another family member. It is therefore not restricted to family-based activities.
- 2.2. This includes children encouraging their siblings, parents and grandparents and vice versa
- 2.3. Any activity that influences the family includes school, community or work-based activities that encourage the child/parent/grandparent to increase activity to the rest of the family.

### 3. Mental Health

- 3.1. We will focus on those with mental ill health and not the in-patient
- 3.2. We will not target the more severe in-patient or highly clinical diseases such as Schizophrenia or severe depression. However, these people will be included as we try to reduce health inequalities.
- 3.3. We will not attempt to lift the wellbeing of the whole of the population as there are many other factors that can influence this including of course physical activity.
- 3.4 We will use physical activity as first line treatment in treating mental health in the NHS.

There are five key recommendations:

1. The creation and implementation of a standard evaluation framework for physical activity and for measuring the related social and economic benefits (for example, mental wellbeing).
2. The Local Delivery Pilot should maximise insight which is, or could be collected, within the system.
3. The creation of a clearer picture of physical activity patterns and trends in deprived areas, alongside collecting new insight on general lifestyle challenges faced by the target groups.
4. A strong culture of data sharing is created between and within county and borough councils and other key stakeholders.
5. A specific physical activity data and insight resource is created for the duration of the LDP and beyond.

## Recommendation 1

**Problem:** Currently substantial amounts of data are being collected from various sources at a borough (via tracker surveys and local engagement activities/interventions) and county level (via resident, school and national surveys i.e Active Lives). However, these sources seldom use comparable measures, physical activity isn't always included as a survey item and the measures which are used may suffer notable methodological flaws.

**Solution:** The Essex Local Delivery Pilot should create and implement a physical activity standard evaluation framework for physical activity and for measuring the related social and economic benefits (for example, mental wellbeing) to be used in all surveys carried out by Essex County and local borough councils. This should seek to align as closely as possible with Sport England's Active Lives Survey and at least provide comparable data on intensity and types of physical activity. The Short Active Lives Survey could be used in the standard evaluation framework.

## Recommendation 2

**Problem:** There is a lack of awareness of, and capacity to, manipulate the available physical activity data at a local level.

**Solution:** An additional resource and capacity needs to be created to collect and analyse physical activity data. We recommend a small team of specialists operating at both Tier 1 and Tier 2 focussed solely on providing physical activity data and insight to Basildon, Colchester and Tendring.

## Recommendation 3

**Problem:** Currently insight from individual interventions and engagement activities isn't recorded.

**Solution:** There is currently very limited public health behavioural insight in general, but before collecting new insight the Essex Local Delivery Pilot should maximise insight which is, or could be collected, within the current system. The physical activity data officer(s) should be tasked with collating, digesting and sharing behavioural insight collected by different public health departments in Basildon, Colchester and Tendring and at County level.

## Recommendation 4

**Problem:** There is a lack of insight on physical activity, but also broader public health and everyday issues (such as money, stressors, coping and motivators).

**Solution:** There are limits to our current understanding of levels of physical inactivity at a micro-level in Basildon, Colchester and Tendring. Attempting to collect new behavioural insight, (other than where opportunities already exist) may not be an efficient use of resource. We recommend that there is a focus on getting a clearer picture of physical activity patterns and trends at a ward level and then understanding what insight could be generated before collecting new insight on general lifestyle challenges faced by the target groups in the priority areas.

## Recommendation 5

**Problem:** There is a lack of data sharing between and within county and borough councils and intervention/engagement activity providers may perceive other providers as competitors and may therefore be reluctant to share their data and insight which could harm future funding opportunities.

**Solution:** A strong culture of data sharing is created between and within county and borough councils and other key stakeholders and (Anonymous) data sharing needs to be hardwired as a prerequisite of any externally commissioned engagement activities or interventions.

The aims of the review were to:

1. Assess the quality of current data for assessing levels of physical activity across Essex,
2. Assess current data sharing processes throughout Essex,
3. Analyse current data to check and challenge the LDP target audiences and LDP wider social outcomes,
4. Assess the current behavioural insight pertaining to physical activity for people living in Essex,
5. Revisit the current target groups (families, older people and those with poor mental health and wellbeing) and re-affirm if they are the right target groups for the pilot and if they are specific enough

This review found

1. There is currently insufficient data collected at a ward level to provide a detailed breakdown of physical activity prevalence beyond an Essex-wide level,
2. There are currently weak data sharing processes between the county and borough level workforce and between intervention or engagement activity providers,
3. There was a lack of data, particularly within the three target areas to check and challenge the LDP target groups, however extensive consultancy with the LDP project group was carried out reaffirm the target groups and LDP wider social outcomes,
4. There is currently very little behaviour insight for physical activity and wider public health issues and the insight which is available is of little novelty.
5. There is a lack of data and insight available to test the target groups however extensive consultancy with the LDP project group reaffirmed the groups and led to more precise and specific target audiences within each group (Outlined in page 17 of Chapter One: Getting ready for system change)



This report shows the levels of activity in Essex as compared to other councils in England and within the county itself. Residents living in Essex are the 15th (out of 48) least likely to be physically active when compared to the other counties in England with 28% who are inactive compared to 20% in Bristol which has the lowest levels of inactivity in England. Tendring has the most inactive population (33%) which reflects it also being the most deprived local authority.

In Essex those over 65yrs have levels of inactivity reaching 56% and over 85yrs old reach 76%. This is not only a reflection of increased disability but also a cultural reason where inactivity becomes accepted in older people. Children reflect activity in families and there is a significant fall in activity levels when children reach secondary school with only 20% of secondary school girls reaching the required level of activity. In Tendring 70% of children are driven to primary school providing the opportunity to increase levels of walking and cycling to school.

The report has highlighted several procedural and structural issues with the current approach to collecting physical activity data and insight in Essex. Currently there is a lack of data sharing between and within county and borough councils, there is a lack of consistency in measures used to assess levels of physical activity and current routinely collected data and insight isn't being used to its potential. It is recommended that the Local Delivery Pilot creates and implements a standard evaluation framework for physical activity and wider outcomes (for example, mental wellbeing), endorses a strong culture of data sharing between and within county and borough councils and creates a specific physical activity data officer role for the duration of the Pilot and beyond.

There are three overarching recommendations from this review:

- 1. The Local Delivery Pilot creates and implements a standard evaluation framework for physical activity and wider outcomes (for example, mental wellbeing).**
- 2. A strong culture of data sharing is created between and within county and borough councils.**
- 3. A specific physical activity data team is created for the duration of the Pilot and beyond.**

# Appendix 1

## Participants in focus groups by job titles

- Basildon:
  - Strategic coordination manager
  - Public Health improvement practitioner
  - Manager of leisure, open spaces and community facilities
- Tendring:
  - Public health, wellbeing and environmental protection manager
  - Public Health improvement coordinator
- Colchester
  - Zones operation manager
  - Community enabling team leader
  - Business development team lead for leisure world
  - Environment health service manager
  - Public Health Improvement Coordinator

## Appendix 2

Document Group	Document Title	Document Year
Area Profile	Colchester Sport England	2016
	LA Portrait Basildon	2016
	LA Portrait Colchester	2016
	LA Portrait Tendring	2016
	Tendring District Profile	2010
Policy Documents	Basildon Health Partnership Commissioning Framework	Not dated
	Colchester Tackling Obesity Draft Paper	2006
	Active Essex Sport & Physical Activity Bulletin June 2017	2017
	Active Essex Strategy 2017-2022	2017
Needs Assessments	Essex Mental Health JSNA	2016
	Basildon District Sports & Physical Activity Profile	Not dated
	Loneliness and Social Isolation JSNA	2015
	Sports & Physical Activity Needs Assessment	2013
S&PA Profile	Sport & Physical Activity Profile Basildon	2015
	Sport & Physical Activity Profile Colchester	2017
	Sport & Physical Activity Profile Tendring	2017
Public Health Profile	Basildon Linking Planning, Health & Wellbeing	2017
	Basildon PHE profile	2017
	Colchester PHE profile	2017
	Tendring District Profile	2017
	Public Health is everyone's business	2012