LIVING
STREETS

IS WALKING A
MIRACLE CURE?

"Walking is… the most common – and cycling the fourth most common – recreational and sporting activity undertaken by adults in Britain. As a result, it is the most likely way all adults can achieve the recommended levels of physical activity."

National Institute for Health and Care Excellence (2012)[2]

SUMMARY

Physical inactivity is a public health crisis. It is linked to over 20 chronic conditions and diseases, and responsible for one in six deaths in the UK. Human beings are designed to be active, but the average UK adult spends around nine hours a day sitting. Increased life expectancy is not matched by the number of healthy life years lived – some of us can expect to live up to two decades in ill health. As our ageing population increases, so too will the burden on our already stretched health services.

The good news is that any physical activity is better than none and walking is the easiest way to get started. Walking is so good for us it has been called a miracle cure. It is time to advertise, promote and prescribe its benefits to everyone. Diagnosing the challenges to walking reveals the in-built car dependency of our villages, towns and cities. The health impact of physical inactivity is exacerbated by poor air quality resulting from our reliance on motorised transport. Walking is undervalued as a form of transport. Just as the impacts of road transport are far reaching, all transport projects should be assessed against their contribution to wider public policy objectives: to improve public health, improve air quality and decarbonise the transport sector.

It is time for Government to 'decide to provide' for more active and sustainable modes of transport. Healthier, accessible streets are safe and welcoming for everyone and help those who are unable to walk to get about more easily. Low traffic neighbourhoods are a great way to re-prioritise walking and cycling journeys – and healthy lifestyles and communities – at everybody's doorstep. The roll out of Local Cycling and Walking Infrastructure Plans provides the opportunity to map walking networks and predict people's propensity to walk.

KEY RECOMMENDATIONS

1. **Adopt a health standard in schools**

- The Government should require schools to adopt the Department for Education's healthy schools rating scheme, with an emphasis on increasing active travel to and from school.

2. **Increase social prescribing**

- General Practitioners (GP) should increase the prescribing of walking to patients, as part of walking groups or for travel. Emphasis should be given to walking in parks and green spaces because of growing evidence of how it improves mental health outcomes.

- NHS institutions including GP and clinical commissioning groups should support the delivery of social prescribing services. The Rotherham CCG Social prescribing model, based on a partnership between professional health advisors, voluntary and community organisations and a grant programme, is a good place to start and could be emulated nationwide.

- The Government should launch a major public information campaign promoting physical activity, homing in on walking as the easiest and most likely way to raise activity levels, and build on current initiatives such as the NHS' Active 10 or Couch to 5K.

3. **Promote walking for people with health conditions**

- Health professionals should make every contact count. For example, GPs could recommend walking as part of health checks for disabled people or those with long-term health conditions.

4. **Build on inclusion**

- Local authorities should build representation of older (and disabled) people into the development, monitoring and evaluation of transport initiatives and public realm improvements. Working with local service providers, councils should also raise awareness of the issues faced by more vulnerable pedestrians (e.g. on pavement parking, mobility scooter etiquette, cycling on pavements).

5. **Apply a housing checklist**

- Planners, developers and residents working on neighbourhood plans should assess all new housing developments against the Transport for New Homes checklist. This is to make sure services, leisure and employment opportunities are within walking distance, the public realm is attractive to pedestrians, and there are frequent public transport connections for longer journeys.

6. **Adopt WHO air quality standards**

- The Government must set stricter air quality targets and commit to meet World Health Organisation guidelines for PM2.5 by 2030 as recommended by clean air coalition of charities, the Healthy Air Campaign.

7. **Align transport valuation with public health**

- The Government should amend transport appraisal tools, such as the Department for Transport's WebTAG, so that all transport schemes are assessed against their contribution to wider public policy goals, such as improving public health, improving air quality and reducing carbon emissions.

8. **Design for walking**

- The Government should extend the Healthy Streets Approach™ beyond London.

- The Government should develop a Walking Infrastructure Design Local Transport Note (LTN) to set the standard and make long-lasting change.

9. **Fund low traffic neighbourhoods**

- The Government, as part of its funding settlement for active travel, should prioritise low traffic neighbourhoods to increase walking and cycling rates and improve public health benefits.

- Local authorities should identify opportunities to create low traffic neighbourhoods and promote walking, cycling and public transport.

10. **Model the demand for walking**

- The Government should adopt a predictive walking tool or use an International Walking Standard to capture where infrastructure requirements are needed to improve accessibility and increase the number of walking journeys.

CONTENTS

1. INTRODUCTION

> "Walking is holistic: every aspect of it aids every aspect of one's being... Walking is so vitally, centrally, important to us, at both individual and collective levels, that it should be reflected in the way we organise our lives and societies."
>
> Professor Shane O'Mara[3]

Science tells us that walking is good for our bodies and minds. Exciting new research is offering a unique insight into the positive effects that physical movement has on our brain health. Regular exercise – such as walking – works muscles across the body generating a type of molecule called a 'skeletal myofiber vascular endothelial growth factor'; once this circulates in the bloodstream, it stimulates the growth of new blood cells which support the growth of new brain cells[4]. The more we learn about the benefits of walking to health and for the environment, the better it sounds.

The aim of this report is to focus on the health benefits of walking, as we continue to make the case and change minds on the importance of this simple act. Why do we live in places that discourage the freedom to move or travel actively in safety and comfort? Why do investment decisions routinely prioritise journey time savings from motorised forms of transport at the expense of cheaper, cleaner and more joined up solutions involving walking, cycling and public transport? The answers to these questions have been discussed at length elsewhere for many years. Yet, there has never been a more important time to talk about walking.

2. THE IMPORTANCE OF MOVEMENT

Physical inactivity as a result of sedentary lifestyles is responsible for one in six deaths in the UK (which is on par with smoking) and is linked to over 20 chronic conditions and diseases. If a person is inactive, walking is a good way to start becoming active. Walking for transport or leisure is not only healthy, but accessible, sociable, free, non-polluting and easily integrated into daily life.

> "For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life. Examples include walking or cycling instead of travelling by car, bus or train."
>
> UK Chief Medical Officers[5]

In stark contrast to the UK Government's Chief Medical Officers' (CMO) recommended physical activity guidelines (see Box 1), the average UK adult spends around nine hours a day sitting[6]. Over a third of adults (36.8%) and almost half of children (46.8% rising to 49% of primary school age children) in England did not meet physical activity guidelines in 2019 (see Boxes 2 and 3) [7][8].

Levels of physical activity among adults and children vary across age, gender, socio-economic status and ethnicity. For example, children from lower socio-economic backgrounds are less physically active than children from affluent families (e.g. participation in organised sports)[9], and black African and Asian adults and black Caribbean women are less likely to achieve the recommendations than the general population[10].

BOX 1: UK CHIEF MEDICAL OFFICERS' (CMO) PHYSICAL ACTIVITY GUIDELINES
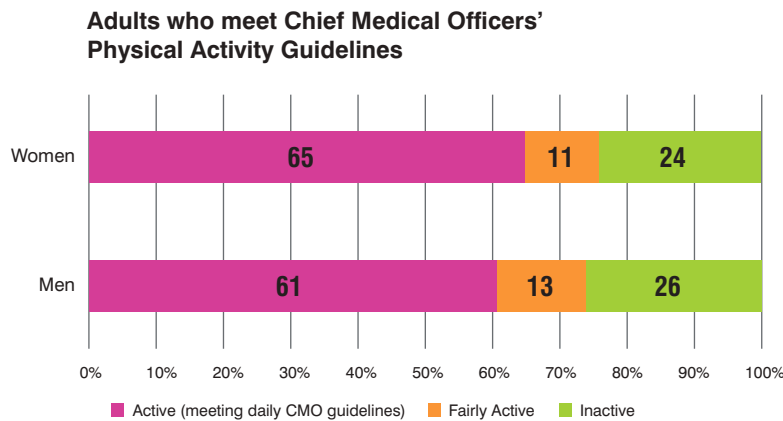
Adults (19 to 64 years)

- Over the week, at least 150 minutes (2½ hours) of moderate intensity exercise, or 75 minutes of vigorous intensity exercise.

- Aim to be physically active every day.

- Any activity is better than none. More is better still.

- Minimise the amount of time spent sedentary for extended periods.

Children and Young People (5 to 18 years)

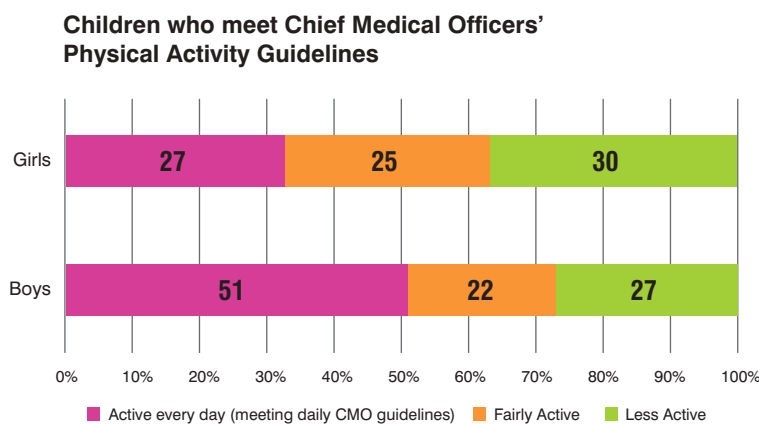- At least 60 minutes a day, across the week, of moderate-to-vigorous physical activity.

Source: Department of Health and Social Care (2019) UK Chief Medical Officers' physical activity guidelines. https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report

BOX 2: ADULTS WHO MEET PHYSICAL ACTIVITY GUIDELINES

**Adults who meet Chief Medical Officers'
Physical Activity Guidelines**

	Active (meeting daily CMO guidelines)	Fairly Active	Inactive
Women	65	11	24
Men	61	13	26

Source: Sport England (2019) Active Lives Adult Survey: May 18/19 Report

BOX 3: CHILDREN WHO MEET PHYSICAL ACTIVITY GUIDELINES

**Children who meet Chief Medical Officers'
Physical Activity Guidelines**

	Active every day (meeting daily CMO guidelines)	Fairly Active	Less Active
Girls	27	25	30
Boys	51	22	27

Source: Sport England (2019) Active Lives Children Survey: Academic year 2018/19

By 2030 we could be 35% less active than we were in the 1960s (see Box 4). When combined with convenient food choices, it is perhaps no surprise that 13 million adults in the UK are now classified as obese. There has been a record rise in the number of Type 2 diabetes cases – in 2018 there were 1.1 million hospital admissions for obesity-related conditions[11].

Fortunately, regular physical activity can significantly reduce these risks (see Box 5). According to the National Institute for Health and Care Excellence (NICE), walking 'is the most likely way all adults can achieve the recommended levels of physical activity'[12].

This is confirmed by Sport England's Active Lives Survey which shows most adults in England achieve 150+ minutes of activity a week by walking for leisure and walking for transport[13].

Most people walk because there is little, or no, cost involved. Investing in walking – by improving streets and spaces or encouraging behaviour change – helps to establish healthy habits for life, can prevent and help to manage health problems, and is a good way to address the inequalities of health identified above. The more 'walkable' a city is, the lower the inequality in physical activity levels because everybody walks more[14].

BOX 4: PHYSICAL ACTIVITY LEVELS 1961 - 2030
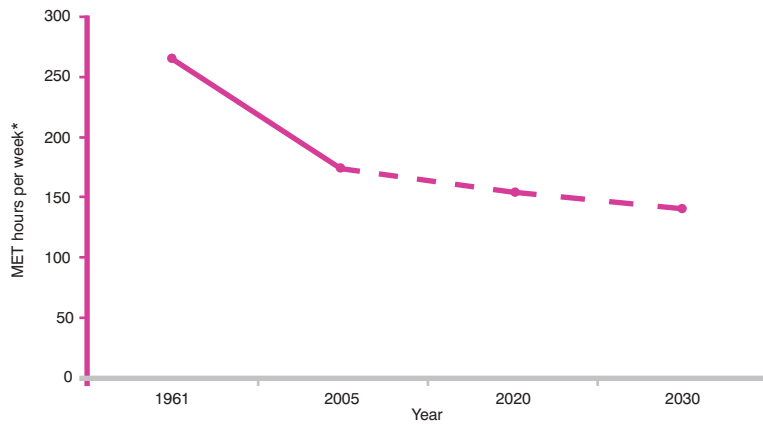
Source: Ng SW, Popkin B (2012) Time Use and Physical Activity: a shift away from movement across the globe. Obesity Review: (8):659-80.

BOX 5: REGULAR PHYSICAL ACTIVITY REDUCES YOUR RISK OF:

- **Dementia,** by up to 30%
- **All-cause mortality,** by 30%
- **Cardiovascular disease,** by up to 35%
- **Type 2 diabetes,** by 40%
- **Colon cancer,** by 30%

- **Breast cancer,** by 20%
- **Depression,** by up to 30%
- **Hip fractures,** by up to 68%

Source: Public Health England (16 October 2019) Physical activity: applying All Our Health

2.1. ESTABLISHING HEALTHY HABITS EARLY

The Department for Education's voluntary healthy schools rating scheme recognises and encourages schools' contributions to pupils' health and wellbeing by focusing on healthy eating, raising physical activity levels and encouraging walking and cycling (active travel)[15]. Alongside schools, parents, carers and other family members have a crucial role in encouraging young children to be physically active and in developing their movement skills, for example, by walking with them to school[16].

Children and young people can benefit from exposure to risks and challenges of (and gain confidence from) navigating the street environment.

Living Streets' flagship WOW – the year-round walk to school challenge – is a behaviour-change initiative, designed to tackle congestion at the school gate and increase physical activity. Pupils record how they get to school each day on the interactive WOW Travel Tracker. Those who walk (skate, scoot, cycle or 'Park and Stride') at least once a week for a month are rewarded with a themed WOW badge. We work with thousands of schools across the country and sometimes the greatest impact we have is in areas of highest deprivation (see Case Study 1, WOW in Oxfordshire).

CASE STUDY 1

WOW IN OXFORDSHIRE

Oxfordshire County Council's Public Health Team (OCC) and Active Oxfordshire worked with Living Streets to deliver WOW – the year-round walk to school challenge. WOW has been beneficial across the county, with walking rates rising from 47% to 61% in 18 months.

A striking benefit of WOW in Oxfordshire is it has been disproportionately beneficial in areas of most need, where physical inactivity and childhood obesity rates are higher. Pegasus Primary in Blackbird Leys recorded the greatest rise in the number of active journeys, going from 56% of journeys being active before WOW to 88% by March 2019. This area

has some of the poorest health and wellbeing outcomes for Oxfordshire, with income deprivation for children ranked in the 10% most deprived nationally[1], and rates of inactivity and obesity significantly above the national average.

This reaffirms walking as the most democratic form of exercise, and supports Sport England's analysis of Active Lives Survey data which shows lower income groups and some ethnic groups, including Black and South Asian, are more dependent on walking and cycling to achieve the Chief Medical Officers' recommended physical activity levels.

(1) Oxford City Council (2019) The English Indices of Deprivation 2019, Oxford City Results

RECOMMENDATION 1.
ADOPT A HEALTH STANDARD IN SCHOOLS

The Government should require schools to adopt the Department for Education's healthy schools rating scheme, with an emphasis on increasing active travel to and from school.

2.2. WALKING FOR MENTAL HEALTH AND WELLBEING

A quarter of adults in the UK will experience at least one diagnosable mental health problem in any given year[17] and one in six will experience common symptoms of a mental health disorder every week[18]. Mental health problems are now one of the leading causes of absence from work – 14.3 million working days are lost every year due to stress, depression and anxiety[19] – costing the UK economy more than £94 billion each year – roughly 4% of its GDP[20]. Loneliness has been recognised as an epidemic, with a fifth of the UK's population feeling lonely almost all or most of the time, rising to two fifths for 16-24 year olds[21 22].

Walking connects us socially, makes us happier and improves mental wellbeing. Physically active people report being happier, less anxious and have a stronger sense of social integration[23 24]. It can be as effective as antidepressants in treating mild depression, has been found to improve mood and sleep and alleviate symptoms commonly associated with poor mental health such as stress, low self-esteem and social withdrawal[25].

Frequent news stories cite health authorities as saying that a daily 20-minute walk is so beneficial it is like 'a magic pill'[27] or even a 'super-power'[28]. Walking offers people the opportunity to take part in exercise, spend time outdoors and in nature, keep up with friends or meet new people; all of which improves mental wellbeing and helps to overcome feelings of loneliness[29] – see Lynne's story in Case Study 2. One in four people say they would be more active if advised by a healthcare professional (for example, by referring patients to support in the community; called social prescribing), offering an important opportunity to manage and improve our mental health[30]. Rotherham's Social Prescribing Service[i] is a good example of providing support in the community at a borough-wide scale. Based on a partnership between healthcare professionals and voluntary and community organisations, it helps to reduce demand on public services further down the line.

> **"If physical activity were a drug, we'd talk about it as a miracle cure."**
>
> Professor Dame Sally Davies,
> Chief Medical Officer for England and Chief Medical Adviser to the UK Government (2017)[26]

CASE STUDY 2

SMALL STEPS TOWARDS A BRIGHTER, HEALTHIER FUTURE

Lynne McDonald, 54 from West Sussex had suffered a breakdown and was living with depression, diabetes, carpal tunnel and asthma. She was overweight and unhappy with how she looked and the effect her weight was having on her health. On receiving a leaflet from Living Streets about the benefits of walking, she began taking small steps.

She says: "It's very relaxing walking in nature, breathing fresh air and was a chance to get out of the office and away from work issues, even for 30 minutes. It (walking) really helped my breathing and improved my lung capacity, so I didn't have to use my inhaler as often."

As Lynne got fitter, healthier and started losing weight, she felt motivated to take on more exercise and make other healthy changes to her lifestyle. She continues: "One of the biggest benefits is to my mental health, as being fitter and healthier has helped me not only in body, but in mind. We have so much thrown at us each day to deal with, we have stressful lives, and when you have the chance to turn your health around and get out in nature to benefit mindfully, it makes you stronger."

RECOMMENDATION 2.
INCREASE SOCIAL PRESCRIBING

■ General Practitioners (GP) should increase the prescribing of walking to patients, as part of walking groups or for travel. Emphasis should be given to walking in parks and green spaces because of growing evidence of how it improves mental health outcomes.

■ NHS institutions including GP and clinical commissioning groups should support the delivery of social prescribing services. The Rotherham CCG Social prescribing model, based on a partnership between professional health advisors, voluntary and community organisations and a grant programme, is a good place to start and could be emulated nationwide.

■ The Government should launch a major public information campaign promoting physical activity, homing in on walking as the easiest and most likely way to raise activity levels, and build on current initiatives such as the NHS' Active 10 or Couch to 5K.

2.3. WALKING FOR DISABLED PEOPLE

Living Streets' 2016 report 'Overcoming barriers and identifying opportunities for everyday walking for disabled people'[31] adopted a social model of disability which allows the identification of common physical, organisational and attitudinal constraints to walking trips and suggested ways to overcome them. It concluded that engaging disabled people, including those who are not able to go out (and whose opinions are therefore "hard to reach"), is essential when planning new developments and prioritising improvements to the built environment.

Changes in the organisational approach to highways management, public transport and public health delivery need to go hand in hand with a "can do" attitude that raises expectations of disabled people and sees them as independent, active individuals choosing to walk local journeys.

9% of all adults (over the age of 16) in England report having a mobility difficulty[32]. Across the life course mobility difficulties increase with age, and significantly over the age of 70 years old. However, nationally, disabled people represent over a fifth of the English population[33]. People with sensory impairments, such as hearing loss and blindness, or with learning difficulties or mental health conditions may be capable of functional walking yet, nevertheless, be prevented from walking outside.

72% of disabled people take part in no sport or physical activity[34]. This hints at the scale of the challenge and the importance of helping disabled people to walk more. Even if a person is unable to walk, being more physically active (e.g. using a wheelchair) is particularly important because it can improve quality of life and health outcomes related to existing conditions as well as reduce the risk of secondary health conditions.

RECOMMENDATION 3.
PROMOTE WALKING FOR PEOPLE WITH HEALTH CONDITIONS

Health professionals should make every contact count. For example, GPs could recommend walking as part of health checks for disabled people or those with long-term health conditions.

2.4. WALKING FOR ACTIVE AGEING

> **"Long-term conditions such as diabetes, cardiovascular and respiratory disease lead to greater dependency on home, residential and ultimately nursing care. This drain on resources is avoidable, as is the personal strain it puts on families and individuals."**
>
> Public Health England[35]

The UK is rapidly ageing and people are living longer[36]. By 2030, one in five people in the UK (21.8%) will be aged 65 or over. The fastest growing age group will be 85+ years and is expected to treble by 2066, to 5.1 million people (7% of the UK's population)[37]. In response, the Government has made meeting the needs of an Ageing Society the subject of one of its four Grand Challenges[38], placing emphasis on new demands for technologies, products and services.

However, the real challenge is that life expectancy has increased much faster than healthy life expectancy (the number of 'healthy life years' lived)[39]. In the UK, life expectancy for women is 83 years, and for men is 79 years – yet the number of healthy life years lived is estimated to be just 63 years[40]. Some of us can expect to live two decades in poor health.

We all change as we get older but what matters is how well we age. Loss of muscle mass through inactivity affects strength and balance. A third of people aged 65 and over and half of people aged 80 suffer from trips and falls at least once a year, costing the NHS billions[41].

In 2019, Living Streets and other charities signed up to the Government's 'A consensus on healthy ageing'[42]. One of its key objectives is to ensure good homes and communities and to narrow inequalities. Accessible and inclusive pedestrian environments, accessible transport links, good quality green spaces, services and facilities close to people's homes, and community-centred approaches have a vital role to play in ensuring older adults remain connected as they age.

By keeping physically active, we can help to 'reduce the risk of illness in both the short and long-term, preserve memory and cognitive ability and reduce the risk of falls', all of which lead to a healthier old age, improved wellbeing and quality of life[43]. Case study 3, Redbridge Streets Apart, shows how the social aspect of walking is particularly beneficial because social isolation and loneliness among older adults can be as damaging to health as smoking and obesity[44].

By 2030, one in five people in the UK (21.8%) will be aged 65 or over.

> **"Physical and social environments are key determinants of whether people can remain healthy, independent and autonomous long into their old age."**
>
> World Health Organisation[45]

The Chief Medical Officer guidelines tell us that any physical activity is better than none and that walking is also good for adults at risk from low activity levels.

Case study 4, Walking Connects, demonstrates how making sure pavements are well maintained and free of obstructions, providing places to sit and adjusting crossing times are just some of the actions that can positively influence an older person's decision to go out.

CASE STUDY 3

REDBRIDGE STREETS APART

Living Streets' Streets Apart project in Redbridge, East London aimed to reduce social isolation and improve mental wellbeing amongst older adults. Delivery was focused in four wards identified as priority areas for inactivity and deprivation.

All participants (369) reported becoming more active through the led walks, and marked improvements in their mental health and better connections with their local community.

Victoria, 72 who lives in Tiptree – a large council estate with one of the highest rates of obesity in Redbridge – began

taking part in the led walks. With her artificial knee and walking stick, Victoria could initially manage only one circuit of the park, but was determined to walk, to keep her weight down and maintain the active, independent lifestyle she'd had as a midwife. By the end of the led walks programme, Victoria could walk three times round the park. Victoria is still walking as part of the group formed by Living Streets, to maintain her fitness and get her out of the house. She said "It's nice to speak to different people on the walks… I like to keep busy and have things to do rather than sit at home."

WALKING CONNECTS

Everyday walking helps people stay connected, increases independence, reduces isolation and improves health. Living Streets' Walking Connects project helped a group of older adults living at the Kirk Loan sheltered housing facility in Edinburgh audit their local walking environment. After contacting the council, they secured a commitment for pavement maintenance and enforcement of parking restrictions, to make local shops, bus stops, and services easier and safer to access.

Footway resurfacing, dropped kerbs, tactile crossing surfaces and a new handrail adjacent to the development were secured. Later in the year, residents said, "It's a lot safer to walk on" and "I'm thinking about going back to my roller skates!"

Residents established strong relationships with their ward councillor, Community Council and local community centre. Plus, the project has given residents more confidence to work with the council on local issues to improve the walking environment for the whole community.

RECOMMENDATION 4.
BUILD ON INCLUSION

Local authorities should build representation of older (and disabled) people into the development, monitoring and evaluation of transport initiatives and public realm improvements. Working with local service providers, councils should also raise awareness of the issues faced by more vulnerable pedestrians (e.g. on pavement parking, mobility scooter etiquette, cycling on pavements).

3. DIAGNOSING THE CHALLENGES TO WALKING

Our willingness to ditch the car to walk more has remained broadly the same in the last thirty years – 80% of us say we are willing to walk short journeys (less than a mile) and 38% of us agree we would be willing to reduce the amount we travel by car[46]. Public awareness surrounding the negative impacts of car travel is also growing – 74% and 76% of respondents surveyed by the Department for Transport agreed that for the sake of our health and the environment, respectively, we should reduce our car use[47] (see Box 6).

Nevertheless, there are barriers (habitual and physical) which prevent people from walking more. In-built car dependency and hostile walking environments can make walking feel less convenient, less pleasant and less safe.

BOX 6: NATIONAL TRAVEL ATTITUDES SURVEY

74% agreed that **"everyone should reduce how much they use their motor vehicles in urban areas like cities or towns, for the sake of public health"**.

Source: Department for Transport (January 2020), National Travel Attitudes Study: Wave 2

3.1. IN-BUILT CAR DEPENDENCY

Since 1965, the average distance travelled per person per year has increased by 71% in England[48]. The destinations we want to reach, for work, shopping, education and leisure are now further apart. Our built environment and transportation system – and the resulting urban sprawl which accommodates and encourages the widespread use of cars – is largely to blame. It has been estimated that the most affluent 10% of the population receive almost four times as much public spending on their road transport needs as the poorest 10%[50]. This discriminates against the 20% of households in England (excluding London) who have no access to a car (or who for other reasons are unable to drive e.g. age, health or disability) and rely on walking, cycling or public transport instead[51]. The proportion of people who walk once a week remains roughly the same across income groups (including those not in employment, see Box 7)[52].

> **"Retail parks, leisure provision, eateries, new homes and even residential homes for the elderly are orientated around large car parks, connected by fast roads… even if developers talk about garden villages and local communities, the context of new homes is car-based. Subsequent development will replicate this rather than a more walkable pattern of development."**
>
> Transport for New Homes[49]

BOX 7: WALKING LEVELS AND CAR USE BY INCOME GROUP

Measured by trips per person per year. **Walking levels remain relatively consistent across all income groups, whereas car use drops with lower income.**

Source: Department for Transport (2019) National Travel Survey 2018, Table NTS705
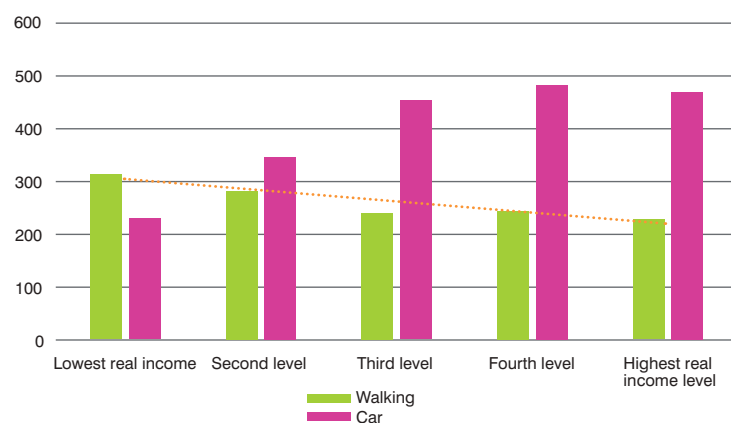
Changing travel patterns show that fewer young people are choosing to drive, and car traffic growth has slowed in recent years[53] [54] [55]. The proportion of car-free households and levels of transport inequality increase to nearly 50% in the lowest income quintile[56]. People living in deprived areas are either disproportionately affected by the cost of car dependence and by the impacts of having to live, work and walk next to busy, dangerous, noisy and polluted streets. In rural areas, transport poverty is experienced through poor access to public transport services.

> **"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that... opportunities to promote walking, cycling and public transport use are identified and pursued..."**
>
> National Planning Policy Framework, paragraph 102 [57]

Land-use planning has a key role to play in influencing people's transport decisions because it determines the location of new developments, building density, the mix of uses (e.g. housing, workplaces, education, shops and services) and the design of the street network. For example, residential housing densities of more than 40 dwellings per hectare can cut driving by a factor of three[58]. Living close to public transport increases transport choice and the likelihood of public transport trips[59].

The National Institute for Health and Care Excellence (NICE) guidelines (see Box 8) and the National Policy Planning Framework (NPPF) stress the importance of creating places which promote healthy lifestyles and encourage active travel[60]. This can be achieved by providing amenities within walking (and cycling) distance and good public transport links.

However, the reality is that new housing estates are still failing to deliver connectivity for people who want to make healthy, sustainable transport choices[61]. The Place Alliance[62] assessed 140 new housing developments around England and noted items such as:

■ the poor integration of storage, bins and parking;

■ public, open and play spaces are poorly designed and located for social interaction;

■ failure to ensure developments are pedestrian, cycle and public transport friendly and conveniently served by local facilities and amenities;

■ all of which were likely to reduce walkability with 'likely negative health, social and environmental implications[63]'.

The report concluded that over a fifth of the developments surveyed should have been refused planning permission. Transport for New Homes has developed a checklist for new housing developments to help to identify how such plans can be improved, or why they should be rejected altogether (see Box 9)[64].

BOX 8: NICE GUIDELINES

Public health guidelines published by the National Institute of Health and Care Excellence (NICE) show how local authorities can:

- Promote and create built environments that support increased levels of physical activity (NG90);

- Encourage physical activity for pre-school and school-age children in family community settings (PH17);

- Encourage walking and cycling as forms of travel or recreation (PH41);

- Encourage employees to be physically active (PH13).

BOX 9: TRANSPORT FOR NEW HOMES CHECKLIST FOR NEW HOUSING DEVELOPMENTS

Location and Context

1. The location avoids car dependency;

2. Walking, cycling and public transport to the wider area and key destinations are well planned.

Design & Layout

3. Attractive and healthy place to be in;

4. Density of homes (i.e. at least 35-50 dwellings per hectare, gross);

5. Mix of uses;

6. Local facilities and employment.

Transport Provision

7. Pavements and paths;

8. Cycle routes and cycle storage;

9. Public transport services at the development.

Source: Transport for New Homes (October 2019) Checklist for New Housing Developments. See full version at: http://www.transportfornewhomes.org.uk/wp-content/uploads/2019/10/checklist.pdf

RECOMMENDATION 5.
APPLY A HOUSING CHECKLIST

Planners, developers and residents working on neighbourhood plans should assess all new housing developments against the Transport for New Homes checklist. This is to make sure services, leisure and employment opportunities are within walking distance, the public realm is attractive to pedestrians, and there are frequent public transport connections for longer journeys.

3.2 POLLUTED WALKING ENVIRONMENTS

"Long-term exposure to air pollution is estimated to cause 29,000 premature deaths each year in the UK at an average loss of life of 11.5 years. This makes poor air quality one of the most serious public health risks facing us today."

Healthy Air Campaign

When considering the impact of private motorised transport on pedestrians, the issue most likely to arise is concern over safety (e.g. speed limits, safe places to cross, pavement parking). We might also talk about how big roads and road traffic separates communities, reducing pedestrian accessibility, mobility and social interactions – a phenomenon known as 'community severance'[65]. However, the biggest health impact of road transport is its contribution to poor air quality.

The two pollutants of most concern are microscopic airborne particles (from brakes, tyres and tailpipes) known as particulate matter and nitrogen dioxide. Diesel engines are among the worst culprits[66]. Particulate Matter (PM10 and PM2.5) is made up of tiny particles thousandths of a millimetre in diameter suspended in the air. Exposure to particulate matter and NO2 is linked with adverse health effects such as heart disease and stroke, respiratory disease and lung cancer[67].

People who walk or cycle do not contribute to poor air quality but are unfairly exposed

to it. In 2013, the Government estimated that particulate air pollution alone reduces life expectancy of people in the UK by six months on average, imposing an estimated cost of around £16 billion per year[68]. Air pollution concentrations, especially NO2, are worst in the most deprived areas amplifying existing health inequalities[69]. Children living in highly polluted areas are four times more likely to have reduced lung function in adulthood, creating a legacy of ill-health and affecting their future opportunities.[70]

Children, older adults and people with lung conditions are particularly vulnerable. Children in pushchairs sit even lower to the ground and closer to the source of the problem. A European study suggested that living near busy roads could be responsible for some 15-30% of all new cases of asthma in children and of chronic obstructive pulmonary disease and coronary heart disease in adults 65 years of age and older[71]. Older adults are thought to be more vulnerable to air pollution because they have a higher incidence of pre-existing health problems, such as respiratory and heart disease[72][73].

Although poor air quality can put people off walking, it is important to remember that drivers and passengers inside vehicles can be exposed to much higher levels of air pollution. A study of London taxi drivers in

2019 observed a rapid accumulation of air pollutants within the vehicle as drivers moved across London, with levels of pollution often exceeding 100 μg/m^3 [74]. Moreover, the health benefits of physical activity from walking (and cycling) overall outweighs the risk from breathing in poor air quality[75].

Road transport is responsible for 96% of air quality breaches declared for NO2 and 79% for PM10[76][77]. Of the 43 air quality management zones, 36 (essentially 83% of the UK) are still in breach of international safety limits for pollutants[78]. Electrification of the vehicle fleet will not reduce PM emissions since *non*-exhaust PM2.5 and PM10 emissions from brake, tyre and road-surface wear now collectively exceed that of exhaust emissions from diesel and petrol cars[79]. It's essential to raise awareness of car-free alternatives (see Case Study 5 - World Car Free Day) and to invest in the most democratic form of transport, walking.

CASE STUDY 5

RECLAIMING OUR STREETS: WORLD CAR-FREE DAY

Car-free day, celebrated annually, helps to generate the right atmosphere in which to reimagine our public realm without cars, by making walking a priority and demonstrating how street space can effectively be reclaimed for people. It encourages people to give up their cars for a day so they can see how easy and enjoyable walking to get around can be.

In Cardiff, for example, a city which is usually dominated by traffic and congestion, Park Place was closed off to traffic all day and people were encouraged to socialise, play and walk instead of drive.

One person who attended said: "There was a wonderful community atmosphere". While a local councillor said it, "gives us all a glimpse of how things could be if we relied a little less on cars."
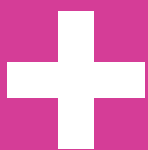
RECOMMENDATION 6.
ADOPT WHO AIR QUALITY STANDARDS

The Government must set stricter air quality targets and commit to meet World Health Organisation guidelines for PM2.5 by 2030 as recommended by clean air coalition of charities, the Healthy Air Campaign[ii].

[ii] Living Streets is a member of the Healthy Air Campaign.

3.3 WALKING IS TAKEN FOR GRANTED AND UNDERVALUED

Walking is often taken for granted. The NICE Programme Development Group preparing the public health guidelines on walking and cycling, noted that when people make transport choices, habit is important for most people, most of the time (PH41, 3.42). Changing individual travel behaviour requires some planning and preparation, as well as a conscious effort to stop old habits, such as using the car for short trips (PH41, 3.43). Marketing and awareness-raising campaigns can target whole communities at a local (e.g. Living Streets' Walk to School campaign), regional and even national level (e.g. Change4Life). The more people walk, the more 'normal' and normalised it becomes.

> **"In many situations the best way to improve urban transport is to improve walking and cycling conditions and restrict automobile travel. Although this does not increase travel speeds it improves the overall convenience, comfort and affordability of access to destinations."**
>
> Todd Litman, Director of Victoria Transport Institute

> **"[Walking]…is a habitual activity, almost as unnoticed as breathing."**
>
> Professor Colin Pooley[80]

Because walking (and by extension walkability) is taken for granted, it is also frequently undervalued in transport economics, relative to other modes[81]. Conventional transport planning practices treat walking as a minor transport mode and recognise only modest benefits from improved walkability and increased walking activity. This is because walking is more difficult to measure, it is low cost (and, therefore, lower status) and it is assumed that it will take care of itself[82].

Although physical activity impacts (e.g. the value of gaining life years or of improved health reducing absenteeism) form a significant proportion of benefits for active mode schemes[83], travel time savings (VTTS) are central to the Department for Transport's (DfT) web-based transport analysis guidance (WebTAG) on modelling and appraising transport schemes[84].

WelTAG in Wales widens the scope of appraisal by ensuring public funds contribute to future wellbeing[85]; in Scotland STAG criteria include environment, safety, accessibility and social inclusion[86]. Our view is that all transport schemes should be assessed against their contribution to wider public policy goals, such as improving public health, improving air quality and reducing

carbon emissions[87], to reflect a broader definition of value for money. It is high time road transport policies moved beyond predicting and providing capacity for private motorised vehicles, to "decide to provide" the road space and investment for active travel[88] (see, for example, our calls for active travel investment in Box 10).

Box 11 shows current strategic spending on active travel (walking and cycling), rail and roads. The DfT has projected £385.5 million for investment in active travel by 2020/21[89]. By comparison, spending on rail and roads amounts to billions of pounds, over longer-term five-year planning cycles. The Road Investment Strategy for the period 2015/6 to 2019/20 allocated £15 billion for 127 major road schemes[90]; a further £25 billion was committed from April 2020 for the next five years[91].

BOX 10: THE WALKING AND CYCLING ALLIANCE

Living Streets is part of the Walking and Cycling Alliance[iii]. We believe that everybody should be able to live, work and play in places that are healthy, vibrant and that make walking and cycling the natural choice for short journeys – now and for future generations. As well as focusing investment on towns and cities, a fundamental requirement is the reallocation of road space away from private vehicles and towards walking and cycling.

Together we are calling for:

- A five-year Cycling and Walking Investment Strategy (CWIS) in order to put an end to 'stop-start' funding;

- Sustained investment of £6-8 billion, equivalent to a minimum of £26 per head outside of London;

- New high-quality design guidance including a Local Transport Note for walking (see section 4.1) and green infrastructure standards;

- High quality infrastructure, such as low traffic neighbourhoods (see section 4.2);

- Dedicated revenue funding (as well as capital programmes) so all primary and secondary school children have access to walking and cycling programmes;

- Capacity building in local authorities to ensure that this investment can be spent well;

- A new agency – Walking and Cycling England – to allocate funds, enforce quality standards.

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iii The Walking and Cycling Alliance (WACA) is made up of six organisations: British Cycling, Cycling UK, Living Streets, Sustrans, The Bicycle Association and The Ramblers.
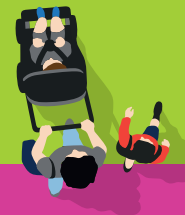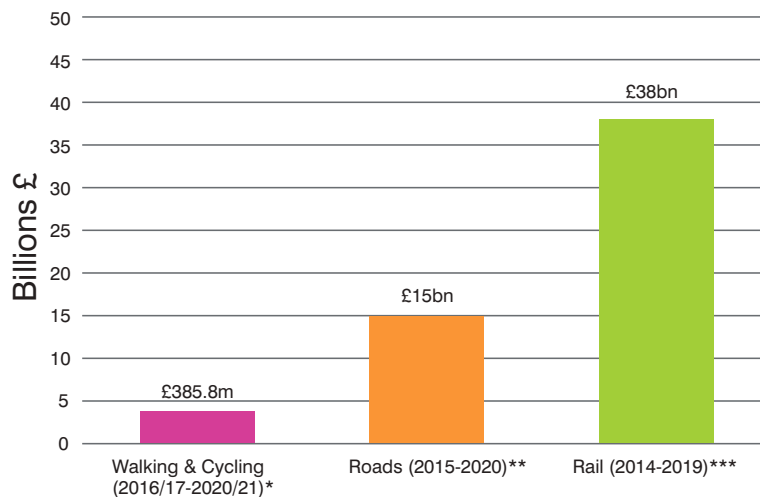
BOX 11: GOVERNMENT SPENDING ON TRANSPORT

* Department for Transport (February 2020), Cycling and Walking Investment Strategy: Report to Parliament

** Department for Transport and Highways Agency (2015), Road Investment Strategy: 2015 to 2020

*** House of Commons Committee of Public Accounts (20 November 2015) Network Rail's 2014-2019 investment programme, Ninth Report of Session (2015-16)

Bar chart — Billions £ (y-axis, 0 to 50):
- Walking & Cycling (2016/17-2020/21)*: £385.8m
- Roads (2015-2020)**: £15bn
- Rail (2014-2019)***: £38bn

RECOMMENDATION 7.
ALIGN TRANSPORT VALUATION WITH PUBLIC HEALTH

The Government should amend transport appraisal tools, such as the Department for Transport's WebTAG, so that all transport schemes are assessed against their contribution to wider public policy goals, such as improving public health, improving air quality and reducing carbon emissions.

4. WHAT DOES A HEALTHY ENVIRONMENT LOOK LIKE?

Better walking environments – in residential neighbourhoods, around schools and workplaces, health centres, high streets etc. – encourage walking when destinations are within a convenient walking distance. Most people will walk journeys of less than a mile, and 42% of respondents in the British Social Attitudes survey either agreed or strongly agreed that they could walk journeys of up to two miles that they would otherwise make by car[92].

Ideally there should be a legible and coherent walking network with good access to public transport. Footways should be kept in good repair, free from litter and obstructions (e.g. advertising boards, wheelie bins, overhanging branches and parked cars).

People with young children, walking or visual impairments or neuro-diverse conditions (e.g. autism) need safe places to cross the road. Signalised crossings and more time to cross the road (during the clearance period) could be very important.

Slower speeds (20mph) and less traffic create safer and more attractive walking routes. See Case Study 6, which shows the reduction in the frequency and severity of road traffic collisions in Edinburgh.

Providing seating, public toilets and shelter along walking routes can make the difference between someone having the confidence to walk outside or not. Access to green spaces, parks, and street trees improves the street scene, benefits mental health and provides shade and shelter.

CASE STUDY 6

SLOWER SPEEDS TO SUPPORT A WALKING NATION

Research shows that the risk of fatality is about five times higher when a pedestrian is hit by a car travelling at 30mph, compared to 20mph[1].

Edinburgh City Council introduced a city-wide 20mph speed limit, to reduce the risk and severity of collisions, and encourage more people to walk and cycle. The council's aim was to improve the way the city's residents 'can move about, enjoy spaces and places.'

Driver speeds have dropped by 1.34mph on average, the largest decrease being -2.41mph in one area and there has been a substantial reduction (-38%) in traffic collisions, when compared to three years prior. Although it is too early to confirm whether 20mph is responsible for reduced casualties beyond what is expected, the results are encouraging[2].

Support for the scheme has increased since the rollout, with public perceptions of street safety for children improving, and over a third of people stating the scheme has positively impacted 'the quality of life in their neighbourhood.' Edinburgh City Council is hoping to widen the scheme to incorporate more roads. David Spaven, Convener of Living Streets' Edinburgh Group said: "20mph for the city centre is a crucial first step towards civilising the streets for pedestrians right across Edinburgh."

(1) The Royal Society for the Prevention of Accidents (November 2017), Road Safety Factsheet: 20mph Zones and Speed Limits Factsheet

(2) Transport and Environment Committee, The City of Edinburgh Council (11 October 2019), Evaluation of the 20mph Speed Limit Roll Out.

4.1. ACCESSIBLE STREETS AND SPACES

Measures to promote walking and better walking environments address the social inequalities of health because they benefit everyone equally. Since April 2013 upper tier and unitary local authorities have become responsible for public health. The Public Health Outcomes Framework (PHOF) highlights the influence the quality of a place has on maintaining good health; and walking as part of the transport agenda can help deliver more than 40 of the 75 high level indicators in the PHOF[93].

Lucy Saunders developed the Healthy Streets Approach™ iv while at Transport for London and Greater London Authority. It is a unique evidence-based framework adopted by Transport for London to embed public health into the city's transport, public realm and planning[94]. Ten indicators are used to measure what makes streets attractive places and identify where there is room for improvement.

iv https://healthystreets.com/

HEALTHY STREETS SHOULD...

1   Be for pedestrians of all walks of life;

2   be easy to cross;

3   provide shade and shelter;

4   provide places to stop and rest;

5   not be too noisy;

6   encourage people to walk, cycle or choose public transport;

7   feel safe;

8   provide things to see and do;

9   allow people to feel relaxed;

10 have clean air to breathe.

This is an approach which should be adopted nationally.

Healthy Streets Indicators™, Lucy Saunders

TOP THREE THINGS PREVENTING PEOPLE AGED 65+ FROM WALKING MORE

31%

CRACKED PAVEMENTS

24%

PAVEMENT OBSTRUCTIONS

22%

SPEEDING CARS
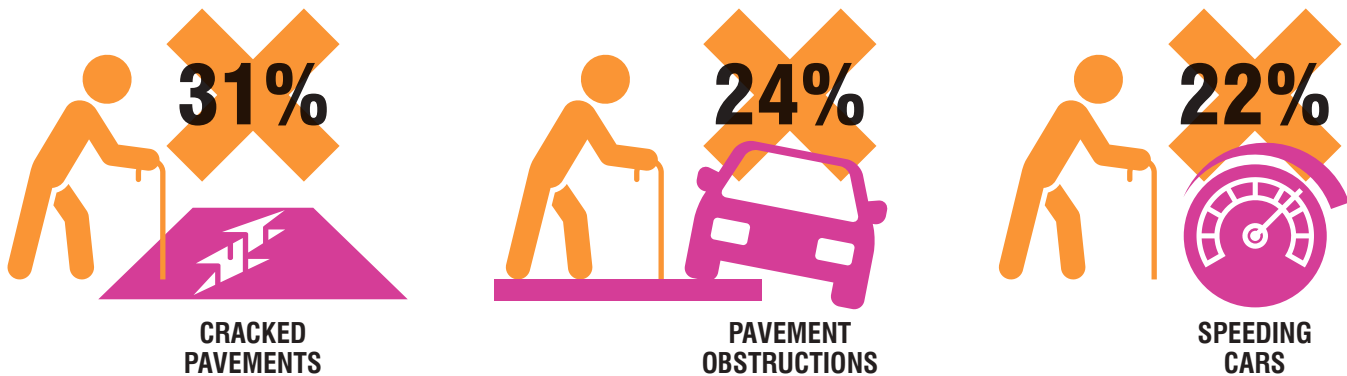
Accessible pedestrian environments allow younger, older and less able pedestrians (including people in wheelchairs or using other mobility aids) to travel from home to their chosen destination without risk or worry. They enable functional mobility, boost confidence and continued independence (and social interaction) as people get older and reduce the need for health interventions. Something as cheap as a handrail can make a world of difference. Consideration also needs to be given to the door-to-door journey and the links between buildings, streets and public transport services. Access to public transport (especially buses) is particularly important for rural areas and when people are no longer able to drive.

A YouGov survey commissioned by Living Streets for National Walking Month (May 2019) found that cracked and uneven pavements (31%), obstructions on pavements including pavement parking (24%) and people driving too quickly (22%) were the top three things preventing people aged 65+ from walking more or at all. The same survey also revealed that half of older adults (48%) would walk more if their pavements were well-maintained, there were lower speed limits (28%) or more places to rest (25%).

A more detailed study by Living Streets in 2015[95] found that the most common barrier to walking for disabled people was crossing the road – for example, having enough time to cross the road, not finding a safe place to cross the road, signalised crossings that do not work and the absence of dropped kerbs were all mentioned. Case Study 7 highlights Living Streets' Time to Cross campaign, which culminated in chapter 6 of the Traffic Signs manual providing updated guidance on increasing the clearance time for pedestrians at signalised crossings.

Unfortunately, there is no single up to date government design standard for walking which meets the needs of all pedestrians, regardless of age or ability. There are currently several Local Transport Notes (LTNs; dated 2007-2012) addressing the design of the pedestrian environment (e.g. on guardrail, shared use routes and traffic calming) but they are not up to date and in some cases predate the introduction of the Equality Act 2010[v].

Conflict between different road users can be both a physical and an attitudinal barrier for people with walking impairments. For example, cycling on the pavement is an annoyance for many older adults because bikes can be hard to hear and move fast[96]. Safer roads (e.g. lower speed limits) could help to overcome these barriers by enabling cyclists to use them, but the only long-term solution to encourage more people to walk *and* cycle is to transform our streets and neighbourhoods by taking space away

v LTN 1/11 'Using shared space to improve high streets for pedestrians' was withdrawn in 2018

CASE STUDY 7

CHALLENGING THE OWNERSHIP OF THE ROAD: PUTTING THE PARK IN PARKING

In Hackney, as in much of inner London, there are more than twice as many households that do not own a car as ones that do. Yet nearly all our kerbside space is devoted to car parking.

Brenda, from the Hackney Living Streets Group, saw this as a waste of public resource. Challenging what she saw as an inefficient allocation of road space, Brenda tried to pay for an annual permit for the parking space outside her home. She wanted to turn the bay – otherwise unused – into a 'parklet', a communal space which could be used for seating, planters and cycle stands.

However, she was told she could not have a permit for anything that does not have an engine.

She decided to go ahead anyway, to show how the space could be used for something other than a car. The results were extremely positive, with hundreds of people stopping to sit and chat in the bay in just the first weekend. Brenda said it "Makes people smile and laugh and brings people together."

She hopes it will inspire other residents to do the same: "The possibilities are limited only by our imagination and our willingness to confront cars."

Following the success of Brenda's idea, Hackney council decided to launch a programme allowing residents to apply to build community parklets on their streets. There are now six different parklets in Hackney which are managed by the residents.

from private vehicles. Case Study 7, Putting The Park Into Parklet, is a great example of challenging public attitudes towards parking private property in public spaces.

Walkable cities restrict vehicles and make it easier to walk, cycle or take public transport. In Oslo, for example, more people now use public transport than travel by car[97]. In the past ten years, the number of trips made by public transport in the city has increased by 63%, from 228 million to 371 million journeys. As well as predictable long-term investment in safe, affordable public transport, the city authority has reduced the speed limit for cars, limited parking opportunities in the city centre, introduced traffic calming, closed

certain streets to car traffic and rolled out car-free zones around schools.

Like Oslo, Birmingham City Council is considering plans to restrict vehicular movements through the city centre to improve air quality[98]. Across the UK, cities (such as Manchester, Cardiff, Edinburgh, Leicester and Cambridge) are introducing measures such as low emission zones, workplace parking levies and pedestrianised streets – which restrict traffic – to address a range of measures such as improving air quality, reducing congestion and promoting active travel. These are steps in the right direction, but more vision and ambition for walking cities is needed.

RECOMMENDATION 8.
DESIGN FOR WALKING

■ The Government should extend the Healthy Streets Approach™ beyond London.

■ The Government should develop a Walking Infrastructure Design Local Transport Note (LTN) to set the standard and make long-lasting change.

LIVING STREETS: TIME TO CROSS

Researchers from University College London found that the majority of older adults cannot walk fast enough to use pedestrian crossings safely in the UK. The assumed universal walking speed adopted at crossings is 1.2m/s. However, after looking at Health Survey for England data, it was found that for men aged 65 years and older, the average walking speed was 0.9m/s. For women it was 0.8m/s. Furthermore, 84% of men and 93% of women over 65 have a walking impairment.

As a result, Living Streets initiated the Time to Cross campaign, calling on the Government to review its guidance (Traffic Advisory Leaflet 5/05) to give pedestrians an extra three seconds to cross the road. More than 8,000 people supported the campaign, which focused on the impact that unfair, unrealistic crossing times had on older adults and people with a disability. As a result, new guidance saying "a lower design speed of 1.0m/s may be used" was brought into chapter 6 of the Traffic Signs Manual – a step in the right direction for prioritising the needs of those on foot.

Since then, the London Living Streets Group (LLSG) has worked with Transport for London (TfL) to reduce wait times at signalised crossings, on the basis that it would improve the safety and accessibility of crossings for pedestrians. Early analysis of the results by LLSG and TfL show that where reductions of up to 30 seconds or more were made, pedestrians' rating of the crossing improved correspondingly.

Living Streets hopes changes like this will encourage people to walk more, in the knowledge that crossing the road has been made safer and more accessible.

4.2 LOW TRAFFIC NEIGHBOURHOODS

Living Streets and the London Cycling Campaign have produced 'a guide to low traffic neighbourhoods'[99] to create attractive, safe and healthy places for people, not cars. A 'low traffic neighbourhood' is a cell of residential streets, bordered by main or distributor roads (where buses, lorries, non-local traffic should be), where heavy through-traffic is discouraged or removed.

Restricting through-traffic using barriers like bollards or planters, providing generous pavements and seating, providing safe space for cycling and connecting quiet streets with safe crossings across main roads, establishes a network of direct routes for walking and cycling that everyone of any age or ability can use. Time-limited filters can also be used on streets with schools, to prevent through-traffic and overcrowding when parents drop off. Case Study 9 shows how the creation of a low traffic neighbourhood has increased walking in Walthamstow.

Active travel increases in low traffic neighbourhoods by reducing the convenience of using a car. If it's too easy, people will drive. By making some driving journeys less convenient (while making walking and cycling feel safe and comfortable), people are encouraged to switch modes. The infrastructure costs are very low – meaning that schemes can also adapt and respond to the local situation. More walking and cycling-friendly neighbourhoods are good for local businesses and can help local high streets thrive too.

CASE STUDY 9

LOW TRAFFIC NEIGHBOURHOOD: WALTHAMSTOW

In an effort to tackle high levels of physical inactivity and low active travel rates in outer-London boroughs, in 2015 Waltham Forest won Mini-Holland funding of £27 million from Transport for London, to invest in the road network and make it an ideal place to walk and cycle. Modal filters to curb traffic, temporary road closures, protected cycle lanes, improved pedestrian crossings, reduced speed limits and pocket parks were all part of substantial changes introduced.

Research[1] found that just one year after the implementation of the scheme, residents were walking 32 minutes and cycling nine minutes more per week. Motor traffic fell by 16% in Walthamstow, and in 12 key roads dropped even further by 56%. Some streets observed 90%+ reductions.

King's College London research[2] linked this reduction in traffic, shift to active travel (particularly on the school run) and the resulting air quality improvements, to an increase in life expectancy for Walthamstow's residents. It also found that over 50,000 households were no longer living in areas with dangerously high levels of air pollution, compared to a decade prior.

Children play out more, neighbours catch up, road safety has improved, and walking and cycling has been made easier. Emma Griffin from London Living Streets Group said, "There's more of a community feel in the area and more people visit the area because it's easier to get around."

(1) R. Aldred, J. Croft & A. Goodman (May 2019) Impacts of an active travel intervention with a cycling focus in a suburban context: One-year findings from an evaluation of London's in-progress mini-Hollands programme

(2) D. Dajnak & H. Walton (2018) Waltham Forest study of life expectancy benefits of increased physical activity from walking and cycling, Environmental Research Group, Kings College London

RECOMMENDATION 9.
FUND LOW TRAFFIC NEIGHBOURHOODS

- The Government, as part of its funding settlement for active travel, should prioritise low traffic neighbourhoods to increase walking and cycling rates and improve public health benefits.

- Local authorities should identify opportunities to create low traffic neighbourhoods and promote walking, cycling and public transport.

4.3. LOCAL WALKING AND CYCLING INFRASTRUCTURE PLANS (LCWIPS)

In order to treat walking as a serious transport mode, it is essential to address the barriers that people perceive to walking, to identify gaps in walking infrastructure and to include walking stages as part of longer journeys by public transport. This can be achieved by mapping walking networks (e.g. the output of a walkability model, discussed below) onto public transport network maps. The advantage is, these can capture where infrastructure requirements are needed to improve accessibility.

In practice, local authorities are not used to thinking of walking in network terms. The preparation of LCWIPs relies on identifying Core Walking Zones (CWZs) and major trip generators within a 400m radius. The danger is this can lead to piecemeal walking networks.

Research by Dr. Ashley Dhanani from University College London in collaboration with Transport for London showed that it is possible to develop a Geographic Information System (GIS) tool to "estimat[e] pedestrian demand based on modelling features of the built environment – such as the network structure of streets, population distribution, transport accessibility and land-use characteristics[100][101]". Additional GIS layers could include air quality hotspots or areas with significant congestion.

In 2019, Living Streets was a key partner in a project funded by the Department for Transport (DfT) to trial a prototype national walkability model in six local authorities (Greater Manchester, Liverpool, Tees Valley, Essex, Plymouth and Leicester). The advantage of the model is that it provides a robust, data-led approach to mapping people's propensity to walk. Initial results are promising – the data modelling corroborates local expert knowledge – but the future of the model is uncertain.

Guidance from the DfT for LCWIPs has been deliberately structured to allow for regional variation. The walking element of the guidance is weaker than the cycling portion, in part because of a lack of predictive, location-based tools for walking and a lack of walking data. The Government's Walking Route Audit Tool looks at infrastructure that is already there. A predictive walking tool or the use of an International Walking Standard[102], would allow local authorities to assess where there is potential to increase the number of walking journeys – and reinforce thinking of walking as a form of transport.

RECOMMENDATION 10.
MODEL THE DEMAND FOR WALKING

The Government should adopt a predictive walking tool or use an International Walking Standard to capture where infrastructure requirements are needed to improve accessibility and increase the number of walking journeys.

Walking has been likened to a wonder drug because of its many health benefits and its relatively low cost. In 2012, a report commissioned by the DfT and written by Dr. Adrian Davis found that the average benefit-to-cost-ratio for walking and cycling schemes in the UK is more than £5 for every pound invested (DfT values very highly any scheme with a cost-ratio of more than 4:1)[103]. There is strong evidence for the positive impact of interventions – such as: city and town wide; building or improving routes or networks; social marketing; workplace and other institution-based interventions; interpersonal interventions and school-based interventions – to increase active travel[104]. This in turn increases levels of physical activity. Most of the walking infrastructure we need is already in place – almost every built-up road has a pavement – so it makes absolute sense to invest in walking.

5.1 PUT WALKING AT THE FOREFRONT OF PUBLIC HEALTH

People are made for walking. It makes us feel better physically and mentally, and it keeps us healthy and active as we age. A healthy place is one which supports and promotes healthy behaviours and environments, promotes inclusion and reduces health inequalities for people of all ages[105]. It will provide everyone with opportunities to improve their physical and mental health, community engagement and wellbeing – enabling children and young people to grow and develop, but still adaptable to the needs of an ageing population and those with other mobility or sensory impairments.

1. Adopt a health standard in schools

- The Government should require schools to adopt the Department for Education's healthy schools rating scheme, with an emphasis on increasing active travel to and from school.

2. Increase social prescribing

- General Practitioners (GP) should increase the prescribing of walking to patients, as part of walking groups or for travel. Emphasis should be given to walking in parks and green spaces because of growing evidence of how it improves mental health outcomes.

- NHS institutions including GP and clinical commissioning groups should support the delivery of social prescribing services. The Rotherham CCG Social prescribing model, based on a partnership between professional health advisors, voluntary and community organisations and a grant programme, is a good place to start and could be emulated nationwide.

- The Government should launch a major public information campaign promoting physical activity, homing in on walking as the easiest and most likely way to raise activity levels, and build on current initiatives such as the NHS' Active 10 or Couch to 5K.

3. Promote walking for people with health conditions

- Health professionals should make every contact count. For example, GPs could recommend walking as part of health checks for disabled people or those with long-term health conditions.

4. Build on inclusion

- Local authorities should build representation of older (and disabled) people into the development, monitoring and evaluation of transport initiatives and public realm improvements. Working with local service providers, councils should also raise awareness of the issues faced by more vulnerable pedestrians (e.g. on pavement parking, mobility scooter etiquette, cycling on pavements).

5.2 DECIDE TO PROVIDE FOR WALKING, CYCLING AND PUBLIC TRANSPORT

Transport affects where people live and how they go about their daily lives – enabling access for employment, education, health, retail and leisure. Individual motorised transport is convenient for some and creates inequalities for households without access to private vehicles. Vehicle emissions from exhausts, brakes and tyres pollute the air and contribute to reduced life expectancy for everyone. It's time for the Government to 'decide and provide' for walking.

Current cost-benefit analyses have a built-in bias towards road schemes. Appraisal tools should be adjusted to include transport projects' contributions to improving public health, reducing air pollution and cutting carbon emissions. To limit a global temperature rise of 1.5°C requires deep emission cuts from all sectors as soon as possible; all new road construction projects should be cancelled and funds reinvested in sustainable transport infrastructure and services until transport carbon emissions are in line with carbon budgets[106].

5. Apply a housing checklist

- Planners, developers and residents working on neighbourhood plans should assess all new housing developments against the Transport for New Homes checklist. This is to make sure services, leisure and employment opportunities are within walking distance, the public realm is attractive to pedestrians, and there are frequent public transport connections for longer journeys.

6. Adopt WHO air quality standards

- The Government must set stricter air quality targets and commit to meet World Health Organisation guidelines for PM2.5 by 2030 as recommended by clean air coalition of charities, the Healthy Air Campaign.

7. Align transport valuation with public health

- The Government should amend transport appraisal tools, such as the Department for Transport's WebTAG, so that all transport schemes are assessed against their contribution to wider public policy goals, such as improving public health, improving air quality and reducing carbon emissions.

5.3 PUTTING PUBLIC HEALTH AND WALKING FIRST

Walking is valuable because it improves public health, it's clean, it's green and it benefits everyone equally. Embedding public health into transport and land use planning is essential to delivering healthy places. The Healthy Streets Approach provides a useful benchmark to measure a street's attractiveness for walking. A single design standard for walking infrastructure would ensure consistency and quality of investment in streets and public spaces. There is best practice out there. We know that neighbourhoods that restrict vehicular movements increase walking levels. Modelling streets and walking journeys is a logical next step in gathering data to plan for more walking journeys.

8. Design for walking

■ The Government should extend the Healthy Streets Approach™ beyond London.

■ The Government should develop a Walking Infrastructure Design Local Transport Note (LTN) to set the standard and make long-lasting change.

9. Fund low traffic neighbourhoods

■ The Government, as part of its funding settlement for active travel, should prioritise low traffic neighbourhoods to increase walking and cycling rates and improve public health benefits.

■ Local authorities should identify opportunities to create low traffic neighbourhoods and promote walking, cycling and public transport.

10. Model the demand for walking

■ The Government should adopt a predictive walking tool or use an International Walking Standard to capture where infrastructure requirements are needed to improve accessibility and increase the number of walking journeys.

WHAT CAN YOU DO?

1. National Government

Prioritise Low Traffic Neighbourhoods as part of the funding settlement for the next Walking and Cycling Investment Strategy.

Building on current Public Health initiatives, launch a major public awareness campaign promoting walking as the easiest way to increase physical activity levels.

Amend transport appraisal tools so that all transport schemes are assessed against their contribution to public health, improving air quality and reducing carbon emissions.

Adopt the WHO guidelines for PM2.5 now and reach them by 2030.

Extend the Healthy Streets Approach™ nationwide.

Develop a Local Transport Note for Walking.

Roll out the Department for Education's healthy schools rating system to encourage active travel to and from school.

2. Local authorities

Identify opportunities to create low traffic neighbourhoods and promote walking, cycling and public transport.

Apply the Transport for New Homes checklist to all proposed new housing developments. **www.tps.org.uk/ news/transport-for-new-homes-checklist**

Build representation from older and less able pedestrians into the development, monitoring and evaluation of all transport and public realm initiatives.

3. Health practitioners

Prescribe walking to patients as part of walking groups or for travel and support the delivery of social prescribing services.

Recommend walking as part of health checks to make every contact with patients count.

4. Employers

Work with health practitioners, local authorities and organisations like Living Streets to promote walking during the working day, or to and from the workplace. For example, see **www.livingstreets.org.uk/products-and-services/projects/walking-works**

5. Members of the public

Keep up to date with Living Streets – make sure you're signed up to receive our news or become a member. **www.livingstreets.org.uk/join**

For a better walking environment, get involved with Living Streets and campaign for a better walking environment in your area. You can join or set up a local group at **www.livingstreets.org.uk/localgroups**

Swap the car for a walk for short journeys! The school run is a good place to start. See **www.livingstreets.org.uk/ walk-to-school**

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