

Local government public health briefings

Local government public health briefing on walking and cycling

<http://publications.nice.org.uk/phb8>

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Introduction

This briefing summarises NICE's recommendations for local authorities and partner organisations on walking and cycling. It is relevant to many areas of local authority work, including the development of local plans, core strategies and joint health and wellbeing strategies, including several areas highlighted in the Public Health Outcomes Framework.

Increasing the number of people who regularly walk or cycle can help meet many of the key aims of local authorities, from reducing air pollution and carbon emissions to addressing congestion and helping people live active, healthy lives.

Conditions that encourage walking and cycling can also help create an environment that supports the local economy, providing a vibrant and attractive setting for all. Green space can also help support social inclusion and community cohesion ([Social interaction, inclusion and community cohesion](#)).

The role of planning in facilitating social interaction and creating healthy, inclusive communities is outlined in the Town and Country Planning Association (TCPA) handbook [Reuniting health with planning](#) and the [National Planning Policy Framework](#). This includes measures to improve physical activity, air quality and promoting sustainable transport.



Department for Transport

This briefing has been endorsed by the Department for Transport.

The National Institute for Health and Clinical Excellence (NICE) is an independent organisation providing guidance on the promotion of good health and the prevention and treatment of ill health.

For further information on how to use this briefing and how it was developed, see [About this briefing](#).

What can local authorities achieve by encouraging walking and cycling?

Reduce congestion, air pollution and carbon emissions

Improve environmental conditions

Air pollution (including particulate matter and nitrogen oxides) is known to be damaging to health. Levels of nitrogen oxides and particulates in parts of England exceeded EU limits in 2010 and addressing this is a growing public health priority ([Air pollution in the UK](#)). The Committee on the medical effects of air pollution (COMEAP) estimates that around 29,000 deaths a year are related to air pollution, representing a loss of life expectancy from birth of about 6 months ([The mortality effects of long-term exposure to particulate air pollution in the United Kingdom](#)). Local authorities have a duty to work towards improved air quality, and the [Environmental Audit Committee ninth report](#) notes that EU fines from failure to comply with air quality targets could be passed on from central government to local authorities. The EAC report notes that 'Transport caused the most exposure to harmful air pollutants, and air quality targets would never be met without a significant shift in transport policy.'

Short journeys play a significant part in the pollution from motor vehicles: 20% of all car-related carbon dioxide emissions are from journeys of less than 5 miles ([Low carbon transport: a](#)

[greener future](#)). Helping people to change to walking and cycling for some of these trips is important in reducing the exposure of the whole population to the effects of air pollution.

Promote a vibrant local economy

The cost of congestion to the economy of England is estimated by the transport select committee's [Transport and the economy third report](#) to reach £22 billion a year by 2025. Switching journeys away from private motor vehicles to other modes (including walking and cycling) is the best long term way to reduce congestion. Cyclists, pedestrians and public transport users provide a substantial economic boost to local shopping streets, which can easily be underestimated. A Living Streets survey ([Making the case for investment in the walking environment](#)) noted that in a study in Bristol only 22% of shoppers arrived by car – about half the proportion that retailers estimated (41%). [Transport for London's Town Centres Survey 2011](#) found that people walking to a town centre spent an average of £93 per week in the area, compared with £56 for car drivers or passengers. Bus users spent £70 per week. Schemes that encourage walking and cycling are also likely to produce an environment that is highly valued. Improvements to the pedestrian environment can increase residential prices and retail rents ([Paved with gold, the real value of street design](#)).

Improve health and wellbeing

Encouraging physical activity

Being inactive is a major health risk, and around 65% of men and 75% of women in England do not achieve the level of physical activity recommended by the Chief Medical Officer (at least 150 minutes of moderate intensity activity a week, [Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers](#)). Inactivity is associated with an increased risk of many diseases and conditions, including coronary heart disease, diabetes, obesity and some cancers. Being active can also help maintain mental wellbeing and muscle strength. Physical activity doesn't need to be vigorous to promote health (although vigorous activity is also beneficial). Moderate activity such as brisk walking or cycling is effective. Walking and cycling can fit into daily life to provide regular exercise as well as being a predictable and cheap form of transport for short trips. Being active in older life helps people maintain independence by retaining the ability to carry out activities of daily life, reducing the risk of falling and improving mood and cognitive function.

Changes to transport patterns can also affect health through reductions in air pollution (see the [Improve environmental conditions](#) section)

What NICE says

NICE guidance offers:

- recommendations based on the best available evidence to help you plan, deliver and evaluate successful programmes
- an objective and authoritative summary of the research and evidence, reviewed by independent experts from a range of backgrounds and disciplines
- an assessment of the effectiveness and cost effectiveness of public health interventions.

Following all of NICE's recommendations on walking and cycling will help you make the best and most efficient use of resources to improve the health of people in your area. Details of new guidance that NICE is developing are on our [website](#).

Basic principles

A wide-ranging programme of initiatives, involving all local authority departments, will help local communities to walk and cycle more. Initiatives should address the main barriers to walking or cycling as well as offering ways in which people can start walking or cycling. Among the key actions are:

- ensuring there is a network of paths for walking and cycling between places locally
- reducing road danger and perception of danger
- ensuring other policies support walking and cycling
- using local data, communication and evaluation to develop programmes
- including practical support, information about options (including public transport links to support longer journeys), routes, cycle parking and individual support
- focus on key settings

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- recognising the health benefits.

Many professionals will need to be involved in these actions.

Although often discussed together, walking and cycling are different activities and need to be considered separately. Some actions support both walking and cycling.

It is important to pay particular attention to the needs of people whose mobility is impaired, such as people with physical disabilities, frail older people and parents or carers with small children. This will both ensure these groups benefit directly, and achieve a greater increase in walking and cycling across the population as a whole. Programmes to support cycling should include people who use adapted cycles (including tandems, trikes and quads as well as hand-cranked cycles).

Making changes

Walking and cycling networks and infrastructure

- Ensure the needs of pedestrians and cyclists are considered before those of other road users when developing or maintaining streets and roads.
- Plan and provide a comprehensive network of routes for walking and cycling to help people get to their destinations safely and directly. These should be built and maintained to a high standard.
- Ensure new workplaces are linked to walking and cycling networks. Where possible, these links should improve the existing walking and cycling infrastructure by creating new through routes (not just links to the new workplace).

For details see [Walking and cycling networks and infrastructure](#) on NICE's 'Walking and cycling' pathway.

Address key barriers to walking and cycling – road safety

Reducing road danger and the perception of road danger is an important first step in encouraging walking and cycling, although it may not be enough on its own.

For details see [Preventing unintentional injuries on the road among pedestrians and cyclists](#) on NICE's 'Walking and cycling' pathway.

Develop road safety partnerships and strategies

- Maintain or establish road safety partnerships.
- Carry out local child road safety reviews and consultations.
- Align local child road safety policies.

Address motor vehicle speed

- Use road design and engineering measures to reduce motor vehicle speed as well as changes to speed limits with signs only.
- Work with police to educate drivers about and, where necessary, enforce speed limits.
- Develop measures to reduce speed as part of a broad strategy to prevent injury and the risk of injury.

Introduce engineering measures

- Consider engineering measures to make routes commonly used by children and young people safer.

Ensure local strategy, policy and planning support walking and cycling

Strategic or policy decisions can sometimes make walking and cycling more difficult, rather than easier. Difficulties may be an unintended consequence, or arise because actions to promote walking and cycling are not fully considered during policy or strategy development.

- Ensure local, high-level strategic policies and plans (including the core strategy, local plans and health and wellbeing strategy) support and encourage both walking and cycling. Plans should include a commitment to invest sufficient resources.
- Ensure planning applications for new developments always prioritise the need for people to be physically active as a routine part of their daily life. Ensure local facilities and services are easily accessible on foot and by cycle.
- Assess in advance what impact (intended and unintended) any proposals are likely to have on physical activity levels.

For details see [Ensuring all relevant policies and plans consider walking and cycling](#) on NICE's 'Walking and cycling' pathway.

Local programmes to support walking and cycling – use local data, communication and evaluation

- Ensure programmes address the behavioural and environmental factors that encourage or discourage walking and cycling.
- Develop coordinated, cross-sector programmes to promote walking and cycling. Incorporate public health goals to increase the number of people walking and cycling as well as the distance they cover. Ensure programmes comprise an integrated package of measures, rather than isolated small-scale activities, and do not focus only on individual risk factors.
- Draw on data to ensure programmes are based on an understanding of:
 - the local population and the journeys people take
 - the needs of people with impairments
 - factors influencing people's behaviour (for example attitudes, existing habits, what motivates them and their barriers to change).
- Include communications strategies to publicise the available facilities (such as walking or cycle routes) and to motivate people to use them.
- Evaluate programmes using tools to consider effectiveness and cost effectiveness. (See, for example, the [National Obesity Observatory standard evaluation framework for physical interventions](#) and the World Health Organization's [Health economic assessment tool \(HEAT\) for cycling and walking](#).)

For details see [General principles](#) on NICE's 'Walking and cycling' pathway.

Programme content

Programmes should cover several issues. These include:

- helping people change their travel behaviour (personalised travel planning)
- town-wide cycling programmes

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- community-wide walking programmes
 - individual support for walkers
 - action for specific groups (for instance older people).

Personalised travel planning

- Help those interested in changing their travel behaviour to make small, daily changes by commissioning personalised travel planning programmes.

For details see [Personalised travel planning](#) on NICE's 'Walking and cycling' pathway.

Cycle programmes

- Implement town-wide programmes to promote cycling such as:
 - providing information, including maps and route signing
 - fun rides, recreational and sponsored group rides and school sports promotions
 - cycle hire schemes
 - intensive sessions in particular settings or aimed at particular groups, such as 'Bike to work' weeks, workplace challenges, activities aimed at children and families
 - activities and campaigns to emphasise the benefits of cycling.

For details see [Cycling programmes](#) on NICE's 'Walking and cycling' pathway.

Walking programmes

Community wide

- Develop walking programmes, based on an accepted theoretical framework for behaviour change and taking into account NICE's guidance on [Behaviour change](#) (see also the local government briefing on [behaviour change](#)). Programmes could include:
 - community-wide events, such as mass participation walking groups, community challenges and 'walkathons'

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- walks led by suitably trained walk leaders (paid or voluntary) and aimed at people who are currently inactive.
 - Ensure programmes offer a variety of routes, paces and distances at different times of the day.

For details see [Community-wide walking programmes](#) on NICE's 'Walking and cycling' pathway.

Individual support

- Ensure additional, 1-to-1 support is offered at regular intervals. It could include:
 - individual, targeted information, including printed material
 - goal-setting, monitoring and feedback.
- Provide general information including:
 - maps, signs and other details about walking routes
 - how to get to shops, schools and other places on foot
 - details of surface quality and accessibility.
- Use pedometers only as part of a package that includes support to set realistic goals (whereby the number of steps taken is gradually increased), monitoring and feedback.

For details see [Providing individual support](#) on NICE's 'Walking and cycling' pathway.

Older people and mental wellbeing

- Work with partners to provide walking schemes at a range of intensities suitable for older people with different abilities.

For details see [Walking programmes for older people](#) on NICE's 'Walking and cycling' pathway.

Action in specific settings – schools and workplaces

Schools

- Develop and implement school travel plans that encourage children to walk or cycle all or part of the way to school, such as:
 - addressing issues in the local environment
 - introducing 'walking buses' and 'Bikeability' training
 - setting performance targets for school travel plans
 - developing parents and carers' awareness of the wider benefits of walking and cycling.

For details see [Schools](#) on NICE's 'Walking and cycling' pathway.

Workplaces

- Develop strategies to promote walking and cycling in and around the workplace, such as joint working between local authority transport departments, neighbouring businesses and other partners to improve walking and cycling access to workplace sites
- Offer support to employers who want to encourage their employees to be more physically active by implementing the NICE guidance by, for instance developing workplace travel plans to address issues such as cycle parking, showers and storage.

For details see [Workplaces](#) on NICE's 'Walking and cycling' pathway.

Recognise the health benefits

- Ensure there is a senior public health position leading on, and responsible for, the health sector's involvement in injury prevention and risk reduction and for promoting both walking and cycling. Include walking and cycling when considering programmes to address specific health conditions or outcomes (such as coronary heart disease or mental wellbeing).
- Ensure the health sector plays an active role in the partnership (local road safety partnerships).

- Incorporate information on walking and cycling into all physical activity advice given by health professionals.

For details see [NHS](#) on NICE's 'Walking and cycling' pathway.

Examples of good practice

Examples of how NICE's advice on walking and cycling has been put into practice can be found in our [shared learning database](#). These include:

- [Promoting physical activity in the built or natural environments through applying NICE guidance](#).

Note that the examples of practice included in this database aim to share learning among NHS and partner organisations, and do not replace the guidance.

Developing an action plan

The table below poses a range of questions that could be asked when developing a comprehensive plan to help your local population walk and cycle more. The recommendations summarised in the 'What NICE says' section will help you identify effective actions to take.

Questions	Link to NICE recommendations in walking and cycling pathway
Is there a comprehensive network of local walking and cycling routes? Is there a plan to address gaps in the network?	Walking and cycling networks and infrastructure
Is road danger (and perception of road danger) being addressed systematically (traffic speed/volume)?	Preventing unintentional injuries on the road among pedestrians and cyclists

<p>Is there a mechanism to ensure all policy areas support walking and cycling? Is support for walking and cycling adequately reflected in the core strategy, local plan and health and wellbeing strategy?</p>	<p><u>Ensuring all relevant policies and plans consider walking and cycling</u></p>
<p>Is there a comprehensive approach across the area to supporting walking and cycling?</p>	<p><u>Setting up and managing cross-sector walking and cycling programmes</u></p>
<p>Are there comprehensive local programmes on the following:</p> <ul style="list-style-type: none"> • Supporting people wanting to change their travel habits? • Area-wide support for cycling? • Area-wide support for walking? • Individual support for walking? • Addressing the needs of specific groups (such as older people)? 	<p><u>Walking and cycling programmes</u></p>
<p>Are there programmes to support walking and cycling for specific settings such as:</p> <ul style="list-style-type: none"> • schools • workplaces (including local authority and NHS workplaces)? 	<p><u>Schools</u> <u>Workplaces</u></p>
<p>Is there a clear position in the public health team with responsibility for ensuring health input to support walking and cycling?</p>	<p><u>NHS</u></p>
<p>Is there a mechanism to ensure that all groups can increase their walking and cycling levels and so avoid inadvertently increasing inequalities</p>	<p><u>Evaluation including cost effectiveness</u></p>

Costs and savings

Increasing walking and cycling can help make savings in the following areas:

- Costs of air pollution. The main cost of air pollution comes from the impact on health. The health impact of man-made particulate air pollution is estimated in [The wider costs of transport in urban areas](#) to be between £8.5 billion and £20.2 billion a year, based on people's willingness to pay for avoiding the adverse health effects of air pollution. Air pollution also causes significant damage to the environment. Ozone reduces the yield of wheat grown in southern Britain by 5–15% and 60% of sensitive habitats exceed the critical load for nitrogen, of which atmospheric pollution is a major cause.
- Wider costs of transport. The cost of transport in English urban areas was estimated for a number of outcomes in [The wider costs of transport in English urban areas in 2009](#). The estimates were that it cost (in 2009 prices and values) £10.9 billion per year for excess delays, £1.2–£3.7 billion in greenhouse gas emissions and £3–£5 billion in noise and amenity losses.
- Costs associated with inactivity. Direct costs of inactivity to the NHS (from coronary heart disease, stroke, diabetes, and colorectal and breast cancer) in the UK is estimated to be around £1.06 billion a year, the wider costs of lost productivity in England to be £5.5 billion a year, and death of people of working age around £1 billion a year ([Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers](#)).
- Transport interventions are judged in value for money terms using calculation of benefit-cost ratios. Evidence submitted to the [Third report– transport and the economy](#) (by Professor Phil Goodwin) notes that the schemes that give best value for money are relatively low budget items such as local safety schemes, smarter choices, and cycling schemes. Much poorer returns are given by Highways Agency and Local Roads schemes (even for the best examples). Value for money could be increased by increasing the expenditure on the first group and reducing expenditure elsewhere.

Facts and figures

Below are other facts and figures on walking and cycling and physical activity.

- Department for Transport figures ([National travel survey 2010](#)) for Great Britain show that more than half (56%) of car journeys are less than 5 miles, and 20% of all trips in 2009 covered less than 1 mile. Transport for London's analysis of cycling potential ([Cycling revolution](#)) estimates that on an average day around 4.3 million trips in London are 'potentially cyclable'.

- Bicycles are used for around 2% of journeys in Britain – compared with about 26% in the Netherlands, 19% in Denmark and 5% in France ([Cycling in the Netherlands](#)). Cycling as a share of all trips in Freiburg rose from 15% in 1982 to 27% in 2007 ([Cycling in the city regions](#)).
- The number of cyclists in different local authority areas varies across England ([Local area walking and cycling in England, 2010/11](#)). In 10% of areas (32) at least 15% of adults cycle at least once per week. In 30 local authorities (9%), this figure is 5% or less.
- There is far less variation in walking than in cycling. The proportion of adults who walk at least once a month ranges from 84 to 96%.
- Walking is reported by the [ONS sport and leisure report](#) to be the most common – and cycling the 4th most common – recreational and sporting activity undertaken by adults in Britain. Walking (for any purpose) accounted for between 37 and 45% of the time that women of all ages spent doing moderate or vigorous physical activity, and between 26 and 42% of the time devoted to such activities by men of all ages ([Age-related differences in physical activity profiles of English adults](#)). The majority (85.8%) of adults claim they can ride a bicycle (around 92.9% of men and 79% of women, [Taking part 2011/12 quarter 2: statistical release](#)). However, the average time spent travelling on foot or by bicycle in Britain decreased from 12.9 minutes per day in 1995–97 to 11 minutes per day in 2007 ([National travel survey 2010](#)).
- Based on self-reporting, 61% of men and 71% of women in England aged 16 and over did not meet the national recommended levels of physical activity^[1], although there are variations with age, gender and ethnicity ([Health Survey for England – 2008: physical activity and fitness](#)). According to the [Health Survey for England 2006: CVD and risk factors adults, obesity and risk factors children](#), 63% of girls and 72% of boys aged between 2 and 15 report being physically active for 60 minutes or more on 7 days a week (girls' activity declines after the age of 10). However, objective data from [Health Survey for England – 2008: physical activity and fitness](#) suggest this self-reported data is an overestimate. According to the same survey, and based on accelerometry, only 6% of men and 4% of women achieved at least 30 minutes of moderate or vigorous activity on at least 5 days. Only 2.5% (5.1% of boys and 0.4% of girls) did more than 60 minutes of moderate-to-vigorous physical activity daily ([Objective measurement of levels and patterns of physical activity](#)).

^[1] These figures refer to the pre-2011 guidelines for physical activity (that is: adults should be active for at least 30 minutes at least 5 times a week at moderate intensity or greater).

Support for planning, review and scrutiny

A range of support tools are available via [Into practice](#) on our website. They can help you identify local needs. They can also help with planning and scrutiny activities.

Other useful resources and advice

The following resources produced by other organisations may also be useful:

- [Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers](#). This report sets out the evidence relating to the impact of physical activity on health. It gives guidance on the volume, duration, frequency and type of physical activity needed across the life course to achieve general health benefits.
- [Manual for streets](#) and [Manual for streets 2](#). The 'Manual for streets' emphasises that streets should be places in which people want to live and spend time, and are not just transport corridors. In particular, the manual aims to reduce the impact of vehicles on residential streets by asking practitioners to plan street design intelligently and proactively, and gives a high priority to the needs of pedestrians, cyclists and users of public transport. 'Manual for streets 2' expands this beyond residential streets.
- [Making the case for investing in the walking environment](#). This report from Living Streets presents evidence on the multiple health, economic, social and environmental benefits of investment in walking friendly public spaces.
- [Health economic assessment tool \(HEAT\) for cycling and walking](#). This online resource from the World Health Organization can be used to estimate the economic savings from regular walking and cycling. Online training to use the tool is [available](#).

About this briefing

This briefing is based on 6 pieces of NICE guidance published up to October 2012 that include recommendations on walking and cycling. It was written with advice from NICE's Local Government Reference Group, and using feedback from council officers and councillors.

It is for local authorities and their partner organisations in the health and voluntary sectors, in particular, those involved with health and wellbeing boards. This includes local authority officers and councillors, directors of public health, and commissioners and directors of adult social care and children's services. It will also be relevant to members of local authority scrutiny committees.

This briefing may be used alongside the local joint strategic needs assessment to support the development of the joint health and wellbeing strategy.

This briefing is intended to be used online and it includes hyperlinks to sources of data and further information.

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