

The case for action by the

Active Transport for Healthy Living Coalition























The case for action by the Active Transport for Healthy Living Coalition

"Commitment is needed now to secure cities and towns where walking and cycling are primary transport options"

CIWEM, 2013

ACTIVE TRANSPORT FOR HEALTHY LIVING is a collaboration of Professional Institutions and other partner organisations drawn from the spheres of health, engineering, environment, architecture, planning and transport.

Our members all consider that there is clear and extensive national benefit in a significantly increased level of priority to be attached to modes of active transport at all levels of government policy, planning and delivery.

Key messages and recommendations

The case is made but active transport needs more champions

The evidence base and policy case for active transport already exist. It is recognised as a means to deliver essential health, sustainable growth and environment objectives. The need is not to make the case for action; the need is to deliver action and to do so in a manner which will ensure widespread successes.

Measures to enable more walking and cycling deliver very high benefit to cost ratios. Because they are individually small, they may be less attractive to politicians looking to make statements. Yet in combination, as integrated packages of measures on a regional scale they can be politically significant, popular with the electorate and better value for money than single large infrastructure schemes.

Turning theory and policy into reality

The Local Sustainable Transport Fund (LSTF) has been a great example and a successful approach to funding sustainable and active transport modes. It ends in 2016 and as yet a successor investment plan has not been identified.

Three things are required to build on the current strong evidence and policy and translate them into a widespread reality:

- 1. Top level political leadership, with a cross-governmental Action Plan for the expansion of active transport, growth targets and objectives in all the relevant departments, and investment programmes;
- 2. Secure, long-term dedicated capital funding streams, top-sliced from allocations to local areas such as the Local Growth Fund, to re-shape our urban realm and allow active transport to become the mode of choice for shorter journeys; and
- 3. A secure, long-term revenue funding programme, similar to the successful LSTF, enabling major travel behaviour programmes, widespread training and professional development across all the relevant disciplines. This, together with the capital programme, allows for a

comprehensive, integrated multi-year work programme to change social norms and individual behaviour

This activity will deliver extensive wins

The prize for action on active transport is a genuine legacy to society, providing:

- 1. A healthier population, with less incidence of non-communicable disease, where activity has become a natural part of people's everyday lives;
- 2. Less congested, more attractive and safer urban environments which are valued more by their communities, who are in turn more socially engaged;
- 3. Stronger local economies where communities work more efficiently and spend more locally; and
- 4. Cost effective investment for society, delivering pronounced benefit to cost ratios on schemes on a wide scale.

We can help

As professional institutions, associations, and education and delivery organisations, our members are able to assist with necessary training and capacity building to develop the indispensable pool of expertise to ensure that the required initiatives can be delivered on a wide scale.

These recommendations and benefits are recognised and endorsed by the following organisations. We call on all parties to recognise the clear case in their General Election Manifestos and to work together to deliver the benefits of active transport in the next Parliament and beyond:



















Chartered Institute of Environmental Health

June 2014

Contents

2
5
7
7
8
9
9
9
10
10
12
. 12
12
12
14
. 14
15
17
18
19
19
20
20
21
21
23

Introduction

"When our streets are transformed into welcoming public spaces, local communities thrive, neighbourhoods become safer, and we all become fitter and healthier."

Living Streets, 2012

The evidence base for increasing the uptake of active transport is extensive. The costs to the wider UK economy from traffic congestion, inactivity, carbon emissions and vehicle-derived local air pollution run into tens of billions of pounds every year. Many of the solutions to these problems have some kind of transport-related component. These challenges often require coordinated work between various players, as at their heart lie habitual factors, such as the steady trend towards sedentary lifestyles and a heavy reliance on the private car as a mode of transportation.

Measures to improve uptake of active transport are very often highly cost effective. The economic benefits to society are extensive, with diverse associated benefits to health and wellbeing, environment and local economies. We now need to adequately reflect these benefits in the form of policy priorities and effective delivery mechanisms for active transport.

High-level Government policies do say the right things on this issue: The need for a collaborative approach; cross-

Government working and support; local emphasis on sustainable transport modes; a long-term, behavioural shift to address the looming crises of inactivity and obesity and all their associated social fallout.

Health, transport, environment, engineering, planning, architectural and cultural sectors, including their respective Government departments, user groups, NGOs and now Professional Institutions have all championed a more overt emphasis and support for schemes to increase the take-up of active transport for shorter journeys.

Active transport investment can be shown to contribute to economic growth, that fundamental bedrock for all current Government policy, as is demonstrated in the *Economy* section of this report.

The potential and opportunities are recognised. So what is not happening and why are we an increasingly inactive and obese society still addicted to non-essential use of our cars?

As over 100 PUBLIC HEALTH, TRANSPORT AND ENVIRONMENT ORGANISATIONS have said,

"The evidence is strong; existing policies are clear; the need is demonstrated and the potential to benefit public health is immense. Nothing here is radical or new, except the call to implement in practice what policies already say."

We consider that this assertion remains true. Progress on implementing what is clearly recognised has been slow and there is no long-term certainty attached to funding streams, despite the obvious benefits of active travel.

Case studies from mainland Europe are commonly used to showcase what can be achieved and the economic, social and environmental benefits which may be attained when the public realm is developed around active transport. In many cases this has required decades of investment and commitment, which in turn foster deep appreciation, understanding and expertise amongst those involved with delivery as well as for the end user.

That such cases are upheld as exemplars underlines the validity of a long-term

approach and commitment by the governments and authorities involved. The UK needs ambitious and visionary central and local government, willing to implement the change we know to be necessary.

We welcome and support the findings of the ALL-PARTY COMMISSION ON PHYSICAL ACTIVITY, in particular its call for continuity of investment. We are moving in the right direction. We must ensure we actively build, not lose, momentum on this journey.







Active transport for health

Increasing levels of physical activity

There are many reasons for policies to focus on active transport, but arguably most commonly cited is the growing challenge of inactivity across the UK population, largely based on our reliance on the private car for even short journeys. A physically active lifestyle offers important protection against cardio-vascular diseases, many forms of cancer, type 2 diabetes, obesity and mental ill-health. It helps to maintain bone strength and avoid falls, improving quality of life into later years.

The **DEPARTMENT OF HEALTH**^{3,4} has recognised the nature and scale of the health challenges:

- The UK obesity rate, at 61%, is higher than in almost any other developed country.
- Between 1/4 and 1/3 of 4-11 year olds are overweight or obese.
- These rates have tripled since the 1980s.
- Income, ethnicity and social deprivation are key associative factors in obesity⁵.
- Inactivity is the fourth leading global risk factor for mortality.
- Each year, around 29,000 deaths are attributable to anthropogenic particulate matter (PM) in the UK⁶, at a cost to the economy of up to £16 billion a year⁷.

It states that "For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life"8.

Regular moderate-intensity activity helps manage over 20 chronic conditions including coronary heart disease, stroke, type 2 diabetes, cancer, obesity, mental health and musculoskeletal conditions. Yet across the UK, nearly one quarter of car journeys are within one mile, and over 40 per cent are within two miles - many of these trips could be walked, or made by bike or other forms of active transport^{9,10,11}.

The ALL PARTY COMMISSION ON PHYSICAL ACTIVITY underlines the scale of this health crisis, stating: "The cost and consequences of physical inactivity have been underestimated and we believe that the financial implications alone have the potential to bankrupt economies." 12

The term "crisis" adds an emotive tone to discussions but at the same time underlines the gravity of the challenge faced in relation to inactivity and obesity in the UK. This is not a challenge for medical intervention only. It requires a genuinely cross-cutting and comprehensive package of measures which result in a more attractive lifestyle offer to society the present sedentary status quo.

THE FACULTY FOR PUBLIC HEALTH - 12 STEPS TO BETTER PUBLIC HEALTH: A MANIFESTO13

"There is an urgent need to increase physical activity levels in the UK":

- Over two thirds of adults and children are taking less than the recommended levels of physical activity.
- Societal costs of inactivity were estimated in 2008 at £8.2bn per year including costs to NHS, sickness absence and premature death.
- An additional £2.5bn of costs relate to inactivity-related obesity.

Key opportunities for meeting this challenge arise in promoting and facilitating active transport to regular destinations such as school, work and shops¹⁴.

This message is underlined by the **DEPARTMENT OF HEALTH.** Start active stay active ¹⁵ highlights the need for action at multiple levels, but cautions that efforts in one area can be undermined by aspects in another.

In this context, it is appropriate to consider a life course approach to the health impacts of policies to improve active transport take-up. Measures will have different benefits for different age groups and will assist in shaping future healthy behaviour for younger generations.

ASSOCIATION OF DIRECTORS OF PUBLIC HEALTH, CHARTERED INSTITUTE OF ENVIRONMENTAL HEALTH, FACULTY OF PUBLIC HEALTH, SUSTRANS AND OTHERS - TAKE ACTION ON ACTIVE TRAVEL¹⁶

Unless we act decisively and immediately, by 2050 almost 60% of the UK population could be obese, with the economic cost of overweight and obesity reaching £49.9 billion at today's prices.

Obesity alone justifies our call to shift transport policy from sedentary to active travel, but the benefits of physical activity go much wider. People who are active have significantly lower risk of heart disease and stroke, many types of cancer, non-insulin-dependent diabetes, depression and other mental illnesses, osteoporosis and falls in later life.

Their recommendations include:

- allocate 10% of transport budgets immediately to walking and cycling.
- make 20mph or lower the normal speed limit for residential streets
- 'health check' every transport and land use decision

Improving air quality

There is growing appreciation of the impact of (particularly diesel) vehicle-derived pollutants on urban air quality and health and whilst electrification of the vehicle fleet in coming decades will play a key role in improving this picture, it will not happen quickly and other transport measures are required to address inactivity.

Pedestrians are often funnelled along major roads, where the concentration of air pollution is highest. Air quality on London greenways is significantly better than on adjacent busy roads¹⁷. Green corridors across cities can reduce pedestrian exposure to pollution by providing alternative routes¹⁸.

CIWEM - CLEARING THE AIR¹⁹

The main cause of poor air quality in the UK is road transport²⁰ with health impacts including cardiovascular and respiratory diseases. Air pollution from man-made fine particulate matter is estimated to cut life expectancy by 6 months with health costs as high as £19 billion per year²¹. Car occupants are typically exposed to higher levels of air pollution than cyclists or pedestrians^{22,23}.

The UK is failing to meet European standards for nitrogen dioxide (NO_2); concentrations are greatest close to busy roads and can be attributed to HGVs, buses and cars. The increasingly stringent emission limits for new vehicles have not delivered the expected benefits in the real world.

With only 20% of vehicle emissions arising from the tailpipe, achieving the cuts in emissions required is likely to require a significant reduction in traffic and a switch to active transport modes.

Active transport for the economy

The cost to the economy of inactivity and congestion

"Excess delay is costing our urban economies £11 billion per annum, and carbon emissions impose a cost to society equivalent to up to £4 billion per annum. The costs to the health of our communities are even greater – up to £25 billion per year on the costs of physical inactivity, air quality and noise, and £9 billion on road traffic accidents." DFT²⁴

According to PUBLIC HEALTH ENGLAND, "a physically active individual on average earns £6,500 more each year"25

The messages associated with these numbers are clear: They are large, they are unacceptable and they are avoidable. Fundamentally, they clearly underline the economic case for measures to improve activity levels, improve the quality of the built environment and reduce traffic congestion levels.

THE BRITISH MEDICAL ASSOCIATION²⁶ note that economic considerations have typically been prioritised over health considerations in transport planning. However these two factors cannot be readily separated and the short, medium and long-term benefits of a modal shift towards more public and active transport on health would have profound economic benefits.

Investment in active transport

In recent years there has been a positive trend: Investment in active transport modes has been growing, with specific funding available in the form of the Local Sustainable Transport Fund (at around 9.8% of local transport funding)²⁷. This fund is open to all local transport authorities outside London and is intended to "promote walking and cycling, encourage modal shift, manage effectively demands on the network, secure better traffic management and improve access and mobility for people in local communities"²⁸

Funding grew from £80m in 2010/11 to £180m in 2014/15 but beyond 2015/16 the fund is not guaranteed. A similar, dedicated, long-term funding commitment is needed to run throughout the next parliament.

From 2015 the Single Local Growth Fund will provide the source of a large proportion of local transport funding derived from central Government with Local Enterprise Partnerships (LEPs) playing a key role in determining priorities for how this is distributed to transport schemes. LEPs are tasked to develop Strategic Economic Plans (SEPs) and it will be important to influence this process, so that the SEPs identify the benefits achievable and the value for money obtainable, from investment in active travel.

There is thus a real need to drive appreciation and understanding of the benefits of investment in active transport to the economy within LEPs, otherwise positive investment momentum of recent years could falter.

Community Infrastructure Levy monies should be available and widely utilised for use on the development of appropriate measures such as safeguarded routes. Priority should be given to walking and cycling so that these modes may be encouraged.



Value for money

LIVING STREETS emphasise the value for money which may be delivered by active transport schemes: "The highest value for money transport projects are smarter choices, pedestrian and cycle schemes, local safety schemes and some bus schemes." 29

Investments in the walking environment are considered to deliver³⁰:

- 1. Improved user experience (often referred to as 'journey ambience')
- 2. Reduced road collisions
- 3. Reduced congestion, fuel and other costs
- 4. Reduced noise and air pollution
- 5. Reduced carbon dioxide emissions
- 6. Health benefits from a more physically active population
- 7. Greater accessibility to facilities and services
- 8. Increased social capital
- 9. Increased economic activity
- 10. Reduced public costs of providing transport infrastructure and services

The same may be said for investments to increase cycling uptake.

There are significant benefits to be achieved from greater emphasis on walking and cycling; the benefit: cost ratio observed in the UK has been (variously) placed at 19:1³¹ and between 14.9 and 37.6:1, with the majority arising from health benefits³².

The **DEPARTMENT FOR TRANSPORT** note the benefits of reducing unnecessary travel, as well as the need to travel more generally: "Alternative methods of working include working remotely or staggering office hours. These methods reduce congestion and overcrowding during peak times, make better use of our transport infrastructure throughout the working day, and reduce transport emissions.

Giving people the option to work closer to where they live also creates stronger local communities and is better for businesses. This leads to increased staff productivity, reduced travel and office costs, improved staff retention and reduced absenteeism."³³

Economic benefits from greater activity and active transport modes in particular may be derived from far more than simply avoiding the incumbent costs of the UK's inactive lifestyle. There is a growing body of evidence to demonstrate that more active travel plays a valuable role in strengthening the economies of local communities and high streets.

A clear message is that people who travel to the shops on foot, by cycle or by public transport spend as much, if not more than those who travel by car^{34,35}. There is therefore a clear business case for increasing the priority attached to walking and cycling in the public realm. As active transport schemes can often incorporate or be incorporated into programmes which may increase green infrastructure, it is also worth recognising the links between enhancements in green infrastructure and improved economic growth³⁶.

SUSTRANS³⁷ identify ways in which sustainable transport modes enhance local economies:

- Reducing congestion
- Creating more pleasant townscapes which encourages inward investment
- Increasing workforce productivity and health and reducing costs
- Creating vibrant places which attract more skilled labour

The cycling economy

The LONDON SCHOOL OF ECONOMICS AND SKY state that accessories, sales, infrastructure, health savings, absenteeism, employment associated with cycling in the UK combined to create a £2.9bn annual contribution to the UK economy (£230 / cyclist/year)³⁸.

LIVING STREETS note that "since the recession in 2008, footfall – a common measure of business performance - has

decreased by 10%... well-planned improvements to public spaces within town and city centres have been shown to boost commercial trading by up to 40 per

cent."³⁹ And walking and other non-motorised transport projects typically increase retails sales by 30%⁴⁰.



Active transport for the environment

If we make more journeys on foot or by bicycle and design our local environments to facilitate this, we deliver a more attractive public realm and a raft of associated environmental benefits:

Climate change mitigation

The INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE findings demonstrate the urgency of cutting our carbon emissions. Domestic transport produces 21% of the UK's total CO₂ emissions (more than half of which is from private cars)⁴¹.

The Climate Change Act⁴² targets (80% reduction in CO₂ emissions by 2050) mean road transport will have to be largely decarbonised by 2050. This is not progressing at any meaningful rate⁴³ so we will have to consider alternatives.

The DEPARTMENT FOR ENERGY AND CLIMATE CHANGE states that "One third of emissions are generated by trips under ten miles, where there should be considerable opportunity in the shorter term to offer more sustainable choices"44. This provides significant potential to reduce travelling by motorised transport which is largely dependent on fossil fuels.

- The congestion charging zone in London had a positive impact on reducing carbon emissions; after 3 years CO₂ emissions fell by 19%⁴⁵.
- For every young person walking one mile to school and back, instead of being driven in a car, there is a saving of 57kg of carbon per year⁴⁶.

Increasing resilience

Greening local transport corridors to encourage active transport can reduce the urban heat island effect in towns and cities, improve air quality, provide valuable space for sustainable drainage and increase biodiversity⁴⁷. This can address several policy objectives in a more integrated way⁴⁸.

Resilience to extreme weather in the context of climate change is also important. The economic and social costs of disruption are of the order of £1 billion for just an average winter⁴⁹. Flooding in urban areas is estimated to cost a minimum of £270 million per year in England and Wales⁵⁰. Water sensitive urban design can be incorporated into transport corridors to integrate the water cycle more effectively into the urban setting.

- In Australia, neighbourhoods with a high presence of pavements, shops and trees, less traffic and access to attractive open space were more than twice as likely to achieve the recommended levels of walking⁵¹.
- In the US, vegetation has been associated with greater levels of walking⁵² and frequency of walking trips to local parks^{53, 54}
- Hamburg has devised a Green Network that will cover some 40% of the city's entire area and will connect parks, recreational areas and gardens with a comprehensive network of green paths. In 15 to 20 years it will be possible to explore the city exclusively by bike or on foot.⁵⁵

These are concepts and principles that we should be embracing on a widespread scale in the UK.

Social benefits

Walking is associated with a number of social benefits, including increased social interaction, the development of social capital and increased safety^{56,57}.

- People are more active when they can easily access key destinations,
- such as parks, workplaces and shops^{58,59}.
- A lack of accessible transport can restrict accessibility to jobs, education, services and increase social exclusion^{60,61}.

- Motorised transport contributes to noise pollution which adversely impacts the cardiovascular system (including increasing blood pressure), mental health and school performance in children⁶².
- Those living in walkable neighbourhoods have higher levels of social capital than those living in caroriented suburbs, with residents more

likely to know and trust neighbours and be socially and politically engaged; fundamental factors for a healthy society⁶³.







Planning for active transport

Land use planning plays a defining role in how communities function. It should not be viewed in isolation and is closely integrated with requirements for appropriate transport planning, architectural design and engineering capability.

Urban planning to encourage active transport

The decline in active transport has resulted from the dominance of mobility over accessibility in planning decisions that prioritises personal car use⁶⁴. Levels of walking and cycling are inversely proportionate to the speeds and volume of motor traffic⁶⁵; busy roads and poor infrastructure can lead to community severance. Thus travelling by car has often become the easiest and safest option for accessing services, irrespective of journey length⁶⁶.

People walk and cycle more if their experience is pleasant, relaxed, convenient and time efficient. The likelihood of a pedestrian walking for nonwork purposes increases proportionately to the level of street connectivity where they live⁶⁷.

Planning for active transport therefore has a central role in delivering well connected communities. Having said this, it should be recognised that improvements may be constrained where developments are poorly located in the first instance and in such cases it may be difficult to achieve significant gains in walking and cycling levels. Connectivity should always be a consideration when planning new developments.

Utilising the planning system, professionals can deliver:

- Provision for more active travel modes
- Better integration of transport modes, active transport routes and facilities
- Paths and parks that contribute to community safety
- Safer roads with reduced traffic and speed

ROYAL INSTITUTE OF BRITISH ARCHITECTS – CITY HEALTH CHECK⁶⁸

RIBA has found that some Local Plans already include good aims and objectives for public health, but "more can be done to ensure local authorities work together, especially at city level and ensure private developments achieve excellent standards" 69.

It recommends:

- Local authorities that are comprised of less than 50% green space and/or have a housing density of over 5% should produce a Healthy Infrastructure Action Plan as part of their Local Plan in conjunction with their Health and Wellbeing Boards.
- Local authorities can lead change through a Healthy Infrastructure Action Plan within their Local Plans and in conjunction with their Health and Wellbeing Boards. It should conform to Recommendations 1, 2 and 3 from the National Institute for Health and Clinical Excellence (NICE) Public Health Guidance 41: Walking and Cycling
- Local authorities that are comprised of less than 50% green space and/or have a housing density of over 5% should redirect a proportion of their Community Infrastructure Levy to fund their Healthy Infrastructure Action Plan.

Opportunities within the planning system to deliver more active transport

Recent reform of planning and health and social care frameworks allows professionals in health and planning to work collaboratively to deliver active transport. The changes include the introduction of the NATIONAL PLANNING POLICY FRAMEWORK¹ (NPPF) and associated guidance, the LOCALISM ACT 2011 and the **HEALTH AND SOCIAL CARE ACT 2012². Local** authorities are also measured against 68 Public Health Outcome Measures to assess how they are improving the health of their population⁷⁰. These closer linkages are necessary and welcome, but will take time to bear fruit.

There are useful policy directions in the NPPF for active transport. One of its Core Planning Principles is to "actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable."

Local authorities are able to focus their planning policies towards active transport in their Local Plans⁷¹. Local authorities are also required to produce a local transport plan⁷². The Government has committed to the Healthy Places Planning Resource, which help local authorities promote active travel (regulating it through local byelaws and car-free developments)73.

As these changes are relatively recent, many local authorities have not yet adopted their Local Plans, so there is limited evidence on levels of success, but equally opportunities remain to underpin and emphasise active transport measures.

Many of these principles are emphasised

that action is required, to maximise the potential for physical activity, by those responsible for "all strategies, policies and plans involving changes to the physical environment" including "development, modification and maintenance of towns. urban extensions, major regeneration projects and the Transport Infrastructure" and places emphasis on walking, cycling and other modes of travel which involve physical activity.74

Public health professionals can work with urban planners to modify the design of the built environment to be conducive to greater physical activity and active transport⁷⁵.



by the **NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE (NICE)** which states

¹ In England there is the National Planning Policy Framework (NPPF), below this the Local Plan and in some cases a Neighbourhood Plan. In Wales there is a national Spatial Plan and below this a Local Development Plan. In 2013 The Active Travel (Wales) Act 2013 was passed. In Northern Ireland there is a Regional Development Plan and each

² The Health and Social Care Act gives upper tier local authorities and unitary authorities a duty to improve public health. Health and Wellbeing Boards in local authorities are tasked with joining up health and wellbeing strategies at a local level, and Clinical Commissioning Groups have a statutory role in the planning system.

Professional planning organisations recognise the importance of planning in delivering active transport measures and the opportunities at planning authorities' disposal:

ROYAL TOWN PLANNING INSTITUTE⁷⁶

The RTPI supports the proposition, within the 2013 consultation on THE ACTIVE TRAVEL (WALES) ACT 2013, of Local Authorities publishing designated maps to identify existing and potential active transport routes and encouraging their use. Success will be dependent on the ability of Local Authorities to ensure that mapping and planning of active transport routes is done in conjunction both with other neighbouring authorities and with the development of wider Regional Transport Plans (RTPs) in Wales.

TOWN AND COUNTRY PLANNING ASSOCIATION - PLANNING FOR HEALTHIER PLACES⁷⁷:

The localism agenda means that communities and organisations have greater statutory support to take positive action to improve health and wellbeing.

The Community Infrastructure Levy (CIL) and Section 106 planning obligations, together with use of planning conditions, offer opportunities for Local Planning Authorities (LPAs) to work with public health to bring forward health-promoting new developments.

The CIL can be used to fund wider infrastructure that could improve health or reduce health inequalities, such as green infrastructure or cycle paths – providing local need has been demonstrated.

It is vital that public health practitioners provide costed evidence of infrastructure needs and gaps when planners prepare a CIL Regulation 123 list, and that this is aligned with the LPA's infrastructure planning process and local plan-making.



Architectural design for active transport

The **DESIGN COUNCIL** / **CABE** note that architects and high standards of architectural design of the built environment are fundamental to the creation of places where communities actively want to walk or cycle and feel safe and secure in doing so⁷⁸.

Architectural design adds the detail essential in realising the desired outcomes of planning measures, so is a crucial component of delivering an environment which facilitates active transport.

SPORT ENGLAND'S⁷⁹ Design Guidance identifies three key objectives for promotion in designs:

- Improving accessibility
- Enhancing amenity
- Increasing awareness

It applies them to three activity settings:

- Everyday activity destinations shops, homes, workplaces etc
- Informal activity and recreation play areas, parks and gardens etc
- Formal sport and leisure activities sports pitched, swimming pools etc

Whilst this guidance relates primarily to masterplanning, these considerations should be central to the thinking of architects.

ROYAL INSTITUTE OF BRITISH ARCHITECTS – CITY HEALTH CHECK

RIBA⁸⁰ highlight the importance of design in delivering effective solutions:

Key principles for improving the attractiveness of activity and active transport as:

- Quality not quantity of facilities provision is only one component; neglect and/or poor design undermines potential
- Design places people want to use physical design can either support or inhibit active transport
- Good design can revitalise spaces and communities
- Key aspects are functional balance, visual appeal, local character and context, and connection with other areas
- User perception is key and focuses on a small number of concerns:
 - Safety
 - Quality and attractiveness
 - Variety
- Design of city

"The type of space, where it is, the scale of it and how it looks and feels all have a role in whether people use it."

FACULTY OF PUBLIC HEALTH - BRIEFING DOCUMENT ON THE BUILT ENVIRONMENT AND PHYSICAL ACTIVITY

There is supportive evidence that physical activity levels are related to the built environment and urban structure, and that altering the environment can encourage greater activity.⁸¹

Once again there is a good economic justification for taking measures which can provide for active transport. The **DEPARTMENT FOR TRANSPORT** state that improvements to the public realm increase business turnover by between 5 and 15%⁸².

Commonly identified challenges to be overcome to rectify poor activity levels and health outcomes include:

- High housing density poorly integrated with open space and transport routes
- Total land area available to local authorities
- Lower levels of green space provision

Optimising potential of the public realm DESIGN FOR LONDON, a previous Mayoral advisory body, underline the value of public spaces, which are ideally suited to wider use for active transport, to urban centres stating: "Public space is the glue that holds a city together... quality of public space is often a key factor in people's decisions to live, visit and invest in an area. It is central to a good quality of life"83.

CABE echo this sentiment, stating: "The way we design and construct our buildings

and public spaces - and the way we maintain and mange them - can have a huge impact on promoting greater physical activity. There are three areas where specific approaches to design in the built environment can have a direct impact on physical activity: building design, streets and neighbourhoods, and parks and green space"84 and expands on these components:

- Building design: showers and bike stores in buildings
- Street design: rebalancing street design to meet all user needs, not just those of drivers
- Green space design: Motivates visits but connectivity is the key factor in terms of active transport

The CABE Design Review⁸⁵ process can assist in ensuring a good quality of design for developments. It is a network of local and regional design review panels which covers the whole of the country to provide independent appraisal of designs for major planning developments and is a resource for planning authorities, developers, design teams and community groups.

LIVING STREETS⁸⁶:

Interventions in the walking environment can take many forms and include:

- Speed limits
- Safe routes to schools
- Traffic calming
- Public realm improvements
- Mixed priority routes

- Shared use paths
- Reallocation of space
- Shared spaces
- Mixed measures



Active transport within transport policy

Policies on transport investment and planning have in recent years come to recognise the importance of the active modes in addressing the challenges discussed in this report and this is a welcome move; in particular that 55% of car journeys are less than 5 miles.⁸⁷

After a long-term decline in cycling rates from the 1950s, policies to reverse the trend and place greater importance on walking and cycling were developed in the 1998 Transport White Paper⁸⁸. During the 2000s the Commission for Integrated Transport provided policy advice to Government on the interactions between

transport policy, environment and health, although it was abolished in 2010.

Whilst active transport measures are now considered by Department for Transport, other departments and agencies are equally relevant from a policy perspective. The cross-cutting nature of the benefits of active transport means that Government departments need to work closely together; policy measures and investment programmes should deliver cumulative benefit rather than compromise each other. In recent years policy has sometimes been produced jointly (e.g. the 2010 Active Travel Strategy⁸⁹) and this approach is to be welcomed.

The **CHARTERED INSTITUTION OF HIGHWAYS AND TRANSPORTATION** manifesto⁹⁰ calls for policies to reduce the amount of traffic in urban centres and a modal switch towards walking and cycling, for the reasons of health as well as a reduction in carbon emissions from transport.

The LOCAL TRANSPORT WHITE PAPER 91

identifies short trips as the biggest opportunity for people to make sustainable travel choices. This "requires immediate action" and highlights three key prerequisites for delivery as (1) investment, (2) help for people to make the transport choices that are good for society as a whole and (3) a coherent plan to reduce carbon. The white paper emphasises the need for community and local authority empowerment to deliver these changes, particularly in relation to the shorter journeys and it notes the value for money of smaller schemes which target these.

However, long-term frameworks which will facilitate the kind of approaches seen internationally are not yet in place and there is little long-term certainty attached to any dedicated funding streams.

Under the Local Sustainable Transport Fund, the Government is providing around £1 billion for 96 projects across England between 2011 and 2016 and this has been of significant value to active transport schemes. After 2016 however this fund will cease to exist and available budget is to be allocated via Local Enterprise Partnerships, which to date have not shown an understanding of the importance of active travel.

SUSTRANS AND OTHERS⁹² state that nothing here is new – policies already say all the right things but what is missing is the necessary political will and drive, and investment, to put this policy into practice.

Transport planning

As with land use planning and architectural design, transport planning is a crucial factor in how towns and cities

function and how resources move around within them.

Design guidance

There is a growing range of design guidance produced on how to make streets safer and more attractive to walkers, cyclists (in particular) and other active users 93,94. SUSTRANS state: "The design and development of high quality infrastructure to support healthy cleaner travel requires engineers and planners to have a good understanding of, and access to, current design guidance and examples of best practice, including the latest innovative and experimental schemes." This underlines the message that good quality design is key to the effective delivery of active transport.

Knowledge and awareness

The clear potential for a significant modal shift towards more active transport modes for shorter journeys is underpinned by a recognised public appreciation of the associated health benefits, and when the right conditions are created, a willingness by many people to make this change. A key barrier is knowledge and awareness of the local opportunities to walk or cycle, and proven Personalised Travel Planning techniques exist to remove this barrier 95. This must therefore be a core component of measures to promote active transport.

The NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE⁹⁶ has produced clear guidance on the promotion of active travel, to help local authorities achieve the health dividends brought by more walking and cycling. The recommendations include:

- Pedestrians, cyclists and users of other modes of transport that involve physical activity
 should be given the highest priority when developing or maintaining streets and roads
 through reallocation of road space, restricting motor vehicle access, road-user charging
 schemes, traffic calming schemes, and safer routes to schools.
- Ensure local, high-level strategic policies and plans support and encourage both walking and cycling. This includes a commitment to invest sufficient resources to ensure more walking and cycling and recognition that this will benefit individuals and the wider community.

It has also produced guidance on walking and cycling⁹⁷ with a different focus; that of how to encourage people to walk and cycle more through policy, programmes, planning and other non-physical measures which will encourage behaviour change. It calls for:

- High level support from the health sector
- All relevant policies and plans to consider walking and cycling
- Development of specific programmes to encourage more walking and cycling
- Development of personalised travel planning
- Assistance for individuals, schools, workplaces, the NHS and other places of engagement







Engineering for active transport

Much road transport infrastructure is designed and constructed with the motor vehicle in mind and active modes have little choice but to share this space, potentially bringing cyclists and pedestrians into conflict with motorised traffic. The need to cater for the requirements of these more vulnerable modes is increasingly recognised and cycle safety is rising up the agenda, particularly in light of a number of recent cases of injury or fatality involving collisions between construction vehicles and cyclists.

Engineers play a key role in designing and constructing a safer and more attractive urban realm for active transport. Factors such as junction and hazard site treatment, reallocation of carriageway space, reducing conflict between cyclists and pedestrians, improved facilities for cycle parking and the creation of entirely separate walking and cycling routes are essential components of this. In addition they can assist in improving the safety associated with construction site traffic.

The INSTITUTION OF CIVIL ENGINEERS 98 calls for

"Clear national objectives and targets need to be established and backed with appropriate resources, leadership and will, so that local interpretation and implementation is effective", and:

- National level policy to require metropolitan roads authorities to promote high quality cycle networks
- More segregated space where there is potential for conflict between cyclists and motorised traffic
- Greater use of traffic calming including 20mph zones
- A range of measures to improve cycle safety and in particular relating to construction HGV safety, with construction companies being required to adopt the same health and safety practices off site as they do on site
- Improved enforcement of traffic regulations to combat both irresponsible or incompetent driving as well as transgressions by cyclists

Cycle safety

Safety is a key consideration when seeking to encourage and facilitate wider uptake of regular cycling. In dense urban areas in particular there have been a number of cyclist fatalities involving construction vehicles - these have received particularly high profile in London. This is resulting in improved training of HGV drivers as well as better equipped vehicles; a practice which should be mainstreamed as widely as possible.

The **INSTITUTION OF CIVIL ENGINEERS**⁹⁹ has highlighted construction logistics and cycle safety as an important issue for transport policy in the context of walking and cycling. Its Manual of Health and

Safety in Construction¹⁰⁰ contains guidance on how construction vehicle and traffic movement may be planned and managed to minimise risk to other street users.

In addition, barriers which create hazardous pinch points at junction corners are increasingly being removed to afford cyclists a means of escape if trapped by a turning vehicle.

Ideally in such hazardous cases, cycle traffic should as far as possible be segregated from vehicles. This may be challenging in many cases without quite fundamental reconstruction of the

streetscape but typically physical segregation using raised kerbs or other barriers is preferable to the use only of specifically coloured cycle lanes, which represents a quite widely employed solution at present.

As discussed elsewhere in this report there is a raft of design guidance both from the

UK and internationally^{101'102}, which demonstrates how to design safer highways which cater appropriately for different transport modes. This should be followed as widely as possible.



References

- 1 Living Streets. The state of our streets report. 2012
- 2 Sustrans et al. Take Action on Active Travel, 2008
- 3 Department of Health, Healthy lives, Healthy People: A call to action on obesity in England, 2011
- 4 Department of Health. Start Active, Stay Active. 2011
- $\bar{\text{5}}$ Institute of Health Equity. Fair Society, Healthy Lives. The Marmot Review. 2010
- 6 Committee on the Medical Effects of Air Pollution (COMEAP). 2010. The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom.
- 7 Defra. 2010, Valuing the Overall Impacts of Air Pollution.
- 8 Department of Health. Start Active, Stay Active. 2011
- 9 National Audit Office. 2009. Improving road safety for pedestrians and cyclists in Great Britain
- 10 Department for Transport. 2012. Improving Local Transport https://www.gov.uk/government/policies/improving-local-transport
- 11 Public Health England. Obesity and the environment: increasing physical activity and active travel. Healthy people, healthy places briefing, November 2013.
- 12 http://activitycommission.com/about/terms-of-reference/
- 13 Faculty of Public Health. Built environment and physical activity: A briefing statement. 2013
- 14 CEDAR. Walking and Cycling for Transport. Evidence brief, March 2013
- 15 Department of Health. Start Active, Stay Active. 2011
- 16 Association of directors of public health take action on active travel http://www.adph.org.uk/wp
 - content/uploads/2013/08/Take_action_on_active_travel_progress_review_2012.pdf
- 17 Sustrans. 2012. Greenways to cleaner air
- 18 Postnote. 2013. Green Infrastructure
- 19 CIWEM. 2013. Clearing the Air
- 20 It is the main source of pollution in 92% of Air Quality Management Areas. Defra. 2010. Review of local air quality management 21 Department for Transport. Cutting carbon creating growth: Making sustainable local transport happen. White Paper 2011
- 22 Taylor D and Fergusson M. 1997. Road user exposure to air pollution a literature review by the Institute for European Environmental Policy Environmental Transport Association in TEL
- 23 World Health Organization. 2005. Health effects of transport related air pollution
- 24 Department for Transport. Creating Growth, cutting carbon: making sustainable local transport happen white paper. January
- 25 Public Health England. Developing a national physical activity approach. March 2014
- 26 British Medical Association. Healthy Transport = Healthy Lives. July 2012
- 27 Department for Transport. Creating Growth, cutting carbon: making sustainable local transport happen white paper. January 2011
- 28 Department for Transport. Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen. 2013
- 29 Living Streets. Making the Case for Investment in the Walking Environment. UWE and Cavill Associates. 2011
- 30 Living Streets. Making the Case for Investment in the Walking Environment. UWE and Cavill Associates. 2011
 31 Government Office for the South West, Department for Transport. Value for Money: An Economic Assessment of Investment in
- Walking and Cycling. 2010
- 32 Living Streets. Making the Case for Investment in the Walking Environment. UWE and Cavill Associates. 2011
- 33 Department for Transport. Improving Local Transport. October 2012.
- 34 Department for Transport. Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen. January 2011
- 35 City of Copenhagen. Are cyclists good customers? June 2013
- 36 Gore et al. Sheffield Hallam University and Effec report for Defra and Natural England. Green Infratsructure's contribution to economic growth: a review. 2014
- ³⁷ Sustrans. Growth market: The role of sustainable transport in boosting local economies. Downloaded 2014
- 38 London School of Economics. The British Cycling Economy. Gross Cycling Product Report. 2011
- 39 Living Streets. The pedestrian pound: The business case for better streets and places
- 40 ibid
- 41 DECC. 2010. UK Climate change sustainable development indicator 2008 greenhouse gas emissions
- 42 HM Government. 2008. Climate Change Act
- 43 EC. 2012. Low carbon transport in Europe
- 44 DECC. 2008 figs
- 45 Banister, D. 2008. The sustainable mobility paradigm. Transport Policy, Volume 15, Issue 2.
- 46 http://www.erpho.org.uk/Download/Public/21632/1/Soft%20measures%20-%20hard%20facts_2011_final.pdf
- 47 DFT. 2011. Creating growth, cutting carbon
- 48 TCPA. 2010. Spatial planning for health
- 49 Quarmby et al. 2010. The Winter Resilience Review in DFT. 2011. Creating growth, cutting carbon
- 50 Reacher, M. et al. 2004. Communicable Disease and Public Health, 7, 39-46; Sunderland, T. 2012. Microeconomic benefits of investment in the environment, Natural England; Tunstall, S., et al. 2006. Journal of Water Health, 4, 365-380
- 51 Giles-Corti, B., Donovan, R.J. 2003. Relative influences of individual, social environmental and physical environmental correlate of walking. American Journal of Public Health 93(9): 1583-1589 in Living Streets, making the case
- 52 Forsyth, A, et al. 2008. Design and destinations: Factors influencing walking and total physical activity. Urban Studies 45: 1973-1996 in Living streets. 2011. Making the case for investment in the walking environment
- 53 Giles-Corti, B., Donovan, R.J. 2003. Relative influences of individual, social environmental and physical environmental correlate of walking. American Journal of Public Health 93(9): 1583-1589 in Living streets. 2011. Making the case for investment in the walking environment
- 54 Living Streets. 2011. Making the case for investment in the walking environment
- 55 Independent. 2014. Auto ban how Hamburg is taking cars off the road
- http://www.independent.co.uk/news/world/europe/auto-ban-how-hamburg-is-taking-cars-off-the-road-9062461.html
- 56 Living Streets. 2011. Making the case for investment in the walking environment
- 57 Marmot, M. 2010. Fair society healthy lives strategic review of health inequalities in England post 2010
- 58 BMA. 2012. Healthy transport, healthy lives
- 59 Active Living Research. 2005. Designing for active transportation
- 60 Department for Transport. Creating growth, cutting carbon Making sustainable local transport happen. White paper, 2011
- 61 BMA. 2012. Healthy transport, healthy lives

```
62 BMA, 2012. Healthy transport, healthy lives
```

63 Sustrans. Information sheet FH09: Creating the environment for active travel. February 2007

64 BMA. 2012. Healthy transport, healthy lives

65 Jacobsen, P.L. et al. 2009. 'Who owns the roads? How motorised traffic discourages walking and bicycling'. Injury Prevention 15 in TFL Improving the health of Londoners

66 BMA. 2012. Healthy transport, healthy lives

67 Active Living Research. 2005. Designing for active transportation.

68 RIBA. 2013. City health check

69 RIBA. 2013. City health check

70 The Public Health Outcomes Framework for England, 2013-2016

71 RIBA. 2013. City Health Check

72 HM Government. Transport Act. 2000

73 TCPA. 2013. Planning for healthier places

74 National Institute for Clinical Excellence. Promoting and creating built or natural environments that encourage and support physical activity. 2008

75 Faculty of Public Health. Built environment and physical activity: A briefing statement. 2013

76 RTPI Cymru. 2013. Response to Active Travel (Wales) Bill

77 TCPA. 2013. Planning healthier places – report from the reuniting health with planning project

 $^{78} www. cabe. org. uk/sustainable-places/public-transport-walking-cycling$

79 Sport England. Active Design: Promoting opportunities for sport and physical activity through good design.

80 RIBA. City health check: How design can save lives and money

81 Faculty of Public Health. Built environment and physical activity: A briefing statement. 2013

82 Department for Transport, Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, January 2011

83 Design for London. The Mayor's Great Spaces. June 2009

84 Harvey, A. Building a healthier future: the built environment and public health. CABE, November 2004

85 Design Council, Principles and Practice, 2013

86 Living Streets. Making the case for investment in the walking environment, 2011

87 Department for Transport. Improving Local Transport. October 2012

88 The Chartered Institution of Highways and Transportation. Climate Change and Sustainable Transport – The Challenge for Transport Professionals. 2008

 89 Department of Health, Department for Transport. Active Travel Strategy. 2010

90 Chartered Institution of Highways and Transportation. The Future for Highways and Transportation: A Manifesto for Transport Infrastructure, 2012

91 Department for Transport. Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen. January 2011

92 Sustrans. Take Action on Active Travel.

93 Department for Transport. Cycle Infrastructure Design. October 2008

 94 Sustrans. Handbook for cycle-friendly design. April 2014

95 http://www.sustrans.org.uk/blog/keeping-people-and-business-moving

96 National Institute for Clinical Excellence. Promoting and creating built or natural environments that encourage and support physical activity. 2008

97 National Institute for Clinical Excellence. Public Health Guidance 41. Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation. November 2012

98 Institution of Civil Engineers. The State of the Nation Transport. 2013

99 http://www.ice.org.uk/topics/transport/ICE-Transport-Policy/Cycling-and-Walking/Construction-Logistics-and-Cycle-Safety 100 ICE. ICE Manual of Health and Safety in Construction – extract on transportation and vehicle movement. http://www.ice.org.uk/ICE_Web_Portal/media/new-ecomms/ICE-MOHS---Traffic-construction-extract.pdf

101 http://www.ice.org.uk/topics/transport/ICE-Transport-Policy/Cycling-and-Walking/International-Cycling-Walking-infrastructure 102 http://www.ice.org.uk/topics/transport/ICE-Transport-Policy/Cycling-and-Walking/Cycle-infrastructure-design-guidance



















