Handbook of good practice case studies for promotion of walking and cycling
About the PASTA project

These days we Europeans are moving less, and not surprisingly it comes at a great cost to our health and the public purse. But building in those 20 minutes of recommended physical activity every day isn’t always easy. One way to change this would be to make physical activity part of our daily routine. This is where the PASTA project comes in.

The EU-funded project PASTA - Physical Activity Through Sustainable Transport Approaches - aimed to connect transport and health by promoting active mobility in cities (i.e. walking and cycling) including in combination with public transport use as an innovative way of integrating physical activity into our everyday lives.

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PASTA Handbook of good practice case studies for promotion of walking and cycling

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There exist numerous handbooks and good practice collections which illustrate success stories from cities all over the world which have become leaders in active mobility promotion and public space design for people. They provide excellent recommendations to planners and urban designers about how to create healthy places through active mobility, and build more inclusive communities for walking and cycling.

The innovation of the PASTA Handbook of good practice case studies for promotion of walking and cycling lies in its original approach for identifying successful measures across the transport planning and public health domains that had a health dimension embedded.

PASTA defined an active mobility measure as:
An action which is undertaken in order to increase the level of active mobility, i.e. walking, cycling, and the use of public transport, in a city.

We looked at measures which have a clear objective to reduce the impact of non-communicable disease (NCD) due to sedentary lifestyles and lack of physical activity, by increasing the number of adults and children incorporating physical activity into their daily routines.

PASTA good practice case studies

PASTA looked at active mobility measures covering four domains:

- **Strategic policy**, comprising strategies, masterplans and programmes as key instruments for setting the urban agenda of a city’s development.
- **Social environment**, comprising measures aimed to change behaviour, encourage a shift in mobility culture and raise awareness for benefits of active mobility.
- **Physical environment and Infrastructure.** This category includes all kinds of built structures for walking, cycling, and cycling parking.
- **Regulation and legislation.**

Each good practice describes a specific active mobility measure for an expert audience of practitioners and decision makers working in transport and health. All measures were implemented in cities across Europe, some are completed or are still ongoing. Facts and figures illustrate in greater detail how each measure has been implemented and how much has contributed to increase levels of active mobility.

Good practice measures were selected for their specific characteristics:

- **Innovation aspects**: A measure which applies an approach beyond the common practice or exploits existing conditions to maximum effect on active travel in a new way.
- **Potential for enhancing physical activity and promote active mobility**: The measure has led to an increase of active travel which was measured; or direct recipients have perceived positive effects on their own health condition.
- **Cross-sectoral and institutional cooperation**: The measure design and implementation is the product of new forms of collaboration and joint work with partners across sectors in the public and private sphere (transport, environment, urban planning, land use, health administration, care and promotion, education, private, academic).
- **Brings additional added value** (social aspects, sustainability, health, economic added value) and meets new challenges (demographic changes, environmental issues etc.).

These eight good practice have specific characteristics of active mobility measures that can effectively support decision makers in a greater uptake of innovative approaches to promote walking and cycling in daily life.

NOTE TO THE READER: The terms ‘active mobility’ and ‘active travel’ are used interchangeably throughout the PASTA Handbook.
In mainland Europe, environmental factors have been for long of primary concern in driving a change in traditional planning practice, such as improving air quality by reducing private car use in cities, whereas in the U.K. public health benefits relating to increased levels of physical activity are seen as a lead factor in taking action to encouraging active travel as a mode of transport. This may explain why a larger number of measures we have documented are coming from the U.K.

Secondly, as the literature review conducted by the PASTA Consortium has pointed out, a greater number of scientific publications exist in English, and access to material produced in other idioms is often hampered by language barriers.

A mind shift has occurred in recent years in the way urban and transport planners are (re-) designing roads and public spaces to better cater for pedestrians and cyclists, and limit access of motorised transport to city centres. We are witness to a slow change happening in large metropolitan, but also in medium-sized cities and towns which are implementing mobility measures designed around people by developing a new generation of sustainable urban mobility plans (SUMPs).

**Sustainable Urban Mobility Planning** is a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles. This transport planning practice has been at the core of the European Union’s urban mobility policy in the past decade and is gradually taking ground around the World. It offers excellent opportunities for integration of key policies such as decarbonisation, energy efficiency, economic development, road safety and social inclusion.

### Drivers for change

In mainland Europe, environmental factors have been for long of primary concern in driving a change in traditional planning practice, such as improving air quality by reducing private car use in cities, whereas in the U.K. public health benefits relating to increased levels of physical activity are seen as a lead factor in taking action to encouraging active travel as a mode of transport. This may explain why a larger number of measures we have documented are coming from the U.K.

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Some examples of the most recent initiatives: Paris is taking away space from cars and giving it back to people in the form of new public space along the Sein river; Brussels has closed to private car traffic the largest pedestrian zone in Europe; electric bikes have integrated public bike share services in Milan and Madrid to appeal to all users.

Street life is thriving again though car traffic and congestion are still a main concern in all European cities as they are coping with high concentrations of harmful air emissions from road transport. Better air quality and accessible public space are key if we want to see grow the number of people moving in cities on foot and by bicycle, and have a more liveable city environment. The health, social and environmental benefits of increased active mobility have been documented and explained by PASTA and we invite you to consult the fact sheets and infographics which go together with this Handbook.

Urban and transport planning play a major role in securing the health benefits of Europeans. The link between health and transport has progressively found its way through traditional planning practice and is being widely understood across European countries, thanks to projects like PASTA but also to wide spread of Sustainable Urban Mobility Planning, and the advocacy work led by city and region networks, and international organisations such the World Health Organisation to develop guidelines and promote the use of the Health Economic Assessment Tool (HEAT) for walking and cycling among local authorities.

The PASTA Handbook of good practice case studies for promotion of walking and cycling aims to offer an overview on a number of good practice examples in promoting walking and cycling, with a clear focus on health. These examples are meant to inspire decision makers and practitioners to take action.

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1 Guidelines can be found on the European Platform on Sustainable Urban Mobility Plans www.eltis.org/mobility-plans

2 WHO/Europe Health Economic Assessment Tool (HEAT) www.heatwalkingcycling.org
The Healthy Streets Approach
London, United Kingdom

In brief
In response to public health challenges facing the city, London introduced a Transport Action Plan in 2014. Developed by a Public Health Consultant working in Transport for London (TfL), the city’s transport authority, it outlines transport-related measures for improving the health of Londoners. The Plan sets out 10 action points related to TfL’s ‘business as usual’ processes that, if undertaken, should help TfL respond to public health challenges. By making the links between transport and health explicit, the Plan makes a clear contribution to public health. The Healthy Streets Approach contained within the Plan is crucial: this seeks to increase active mobility levels and in turn reduce the incidence of diseases and conditions linked to or exacerbated by physical inactivity, such as Type 2 Diabetes.

Aims of measure & policy context
Like other big European cities, London’s population is growing and it urgently needs to reduce emissions and manage congestion and traffic levels. Policies and measures to alleviate these problems are of vital importance to the city and its citizens’ health. In England, the National Health Service was responsible for public health until 2013. However, it was then ‘devolved’ to local government, which restored the link between planning and public health. Whilst TfL has no direct responsibility for public health, it recognises its major role in improving the health of Londoners. The Plan was first adopted in 2014 and is being implemented until the end of 2017.

Implementation
TfL has been implementing the Plan in partnership with Greater London’s 32 boroughs (local authority districts) and the departments in London’s city authorities responsible for urban planning and health. It provides a strategic approach to active travel promotion through the Healthy Streets Approach, which itself is based on 10 Healthy Street Indicators.

Aside from the Approach, the Plan also looks at:

- Improving air quality
- The merits of 20mph (30 km/h) traffic zones
- Reducing the impact of road traffic collisions

Products were created to support TfL in mainstreaming health into its decision-making processes, including a Healthy Streets Survey to engage the public in making changes to their streets; a Healthy Streets Check to ensure traffic planners integrate health considerations into new street designs; and a local manual for implementing the World Health Organisation’s Health Economic Assessment Tool, which monetises health impacts in business cases for projects and policies.

TfL also published annual reports that demonstrate the progress made in acting upon the 10 action points, the plan’s overall implementation, and how health is being mainstreamed into TfL’s planning and operational processes.

Outcomes
The Plan has helped drive a shift towards active transport modes, especially in planning and policy. In this way, it has provided a framework for considering ways to increase everyday physical activity levels amongst London’s population, a large proportion of whom are inactive (27%).

This is illustrated most clearly by the fact that the Healthy Streets Approach has become the overarching framework for the city’s new 25-year transport strategy. The strategy predicts that 80% of trips in London in 2041 will be made on foot, by bike, or using public transport, their current combined
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modal share is 64%. This should deliver a radical shift in transport planning and investment that will finally see active mobility prioritised over private vehicles.

Over the next five years, £2.1bn will be spent on creating healthy streets designed for walking, cycling, and public transport. Furthermore, the Approach is being incorporated into all of the Mayor of London’s statutory strategies. This will help ensure that the many stakeholders involved in delivering the outcomes outlined in the Indicators work together, including planners, designers and public health professionals.

The Plan has also been received well by the wider stakeholder group, including the Department for Transport and Public Health England. Both have been influenced by ideas developed in London.

Challenges, transferability and opportunities
The Healthy Streets Approach is applicable to any village, town or city, whilst the Plan’s 10 action points can be applied at no additional cost by any transport or planning authority. Should an authority wish to implement them, then employing a public health expert is advised. Their technical expertise helps deliver the desired systems-change, whilst their presence helps combat any related scepticism.

Adopting the Healthy Streets Approach has led to TfL considering transport through a health ‘lens’ that is relatively well understood by transport professionals. However, establishing transport as a factor for consideration in the public health field still poses a significant challenge. Promoting active travel and its benefits might be a way to achieve this. Such plans also provide an opportunity to increase collaboration between the two sectors.

TfL learnt that activities should be selected based on regular stakeholders assessments: those that stakeholders are most receptive to participating in should be prioritised. In addition, if politicians and senior management do not initially commit to the required organisational change, then the focus should be on building the capacity of advocates within and outside the organisation and a coalition of support amongst wider stakeholder networks.

A clear plan with reported actions, which integrates the development of a range of policies, activities, and concepts, would be of great value across Europe. As well as providing a framework for action and collaboration, it offers practical tools to address and solutions for complex public health and transport issues.

For more information: www.london.gov.uk/what-we-do/health/transport-and-health/healthy-streets-london
How public health specialists can change transport planning
Bristol, United Kingdom

In brief
To improve the health of its residents and initiate the changes required to do so, NHS Bristol employed a number of public health experts and developed the influencing skills of such staff at various levels of local government through co-located posts.

Since their appointment in 2008 by NHS Bristol and Bristol City Council’s (BCC) Director of Public Health, the expert in public health and transport planning has helped ingrain a public health perspective into urban transport planning, leading to substantial positive health impacts.

Strong cooperation between the transport and health teams has also led to the development of programmes promoting walking and cycling and integrated strategies for physical activity.

Aims of measure & policy context
Bristol City Council (BCC) has a long-standing commitment to promoting walking and cycling: the extent to which these activities form part of people’s everyday routines is vital to judging whether the desired transport and health outcomes have been achieved.

Before public health became the responsibility of local authorities in England (2013), BCC recruited public health specialists in an attempt to embed a health perspective into its organisational structure and policy development processes to address aspects of the built environment. The ultimate aim was to improve public health outcomes.

Transport was one of many areas in which a specialist was placed. Others were posted in teams working on other aspects related to the built environment, including town planning and more recently climate change resilience, whilst another worked in a team investigating the determinants of physical activity.

Implementation
Since their appointment, the specialist has spent time in various teams in the transport department. They are currently based in transport policy. The specialist has built close relationships with colleagues and regularly liaises with senior transport officers and the Councillor responsible for transport planning.

Three areas in which they have had a significant influence are:

- Implementing 20mph (30 km/h) speed limits;
- Increasing road safety;
- Information materials explaining the relationship between health and transport.

When working on the promotion and evaluation of 20mph (30 km/h) policies and speed limits, the specialist secured the support of key decision makers, including senior council officials and politicians. They then served as the transport lead for the council’s workstream on enhancing road safety; a plan based on the ‘Safe Systems’ approach was devised to achieve this.

They also developed easily understandable, evidence-based materials for transport and urban planning professionals outlining the health impacts of road transport. The short reports have increased understanding of the value of integrating a health outlook into transport planning and policy.

The use of the WHO’s Health Economic Assessment Tool is standard practice when developing new pedestrian and cycle schemes. Another initiative saw a Local Sustainable Transport Fund (LSTF) programme guided by the specialist. A significant part of this was devoted to a ‘life course’ approach, which was based on the best available peer-reviewed evidence at the time. The project set out to help people be physically active as they progressed through the course: those participating had often broken exercise-related habits moving school, house, or job.
Increasing recognition of active mobility’s importance can also be seen on a wider scale, with walking and cycling promotion integrated into broader local policy initiatives. For instance, the Active Bristol Strategy 2011 – 2016 (the result of a partnership between BCC and local health services) tested ways of increasing physical activity amongst harder to reach communities. In addition, Bristol adopted a walking strategy in 2011 and a cycling strategy in 2015.

Outcomes
The positive outcomes resulting from the city’s initiatives are clear. Between 2001-2011, the amount of people cycling for their commute increased by 94%, with 40% more people walking to work.

In 2015, the roll-out of 20mph speed limits (30 km/h) continued across Bristol, with the limit introduced in an eighth area. According to a 2015 report from Sustrans, an active mobility charity, 80% of Bristol’s streets either had the limit or were traffic calmed.

Following the LTSF initiative in 2013, a survey was conducted amongst those assisted by a travel adviser: 26% of respondents had altered their travel habits as a result. The two most pronounced changes were the increase in cycling and reduction in car use.

Cross-sectoral collaboration and health’s inclusion in integrated planning processes is evidenced in the creation of the Supporting Healthy Inclusive Neighbourhood Environments Team Health Integration Team (SHINE HIT). The team, which includes the public health and transport specialist, seeks to ensure that local environments are improved to make clear to all sectors that they can benefit from engaging with their environment. Walking has been a key focus of SHINE’s work.

Challenges, transferability and opportunities
Bristol’s ambition is to become a world-leading city for active travel, where 80% of journeys covering five miles (8 km) or less are made by bike, on foot, or with public transport. The Bristol Method, a knowledge-transfer programme, was launched in 2015 following the city’s stint as European Green Capital. This was designed to help other cities understand and apply the lessons that Bristol learned in becoming a more sustainable city.

The BCC health and transport specialist post remains unique in the UK. Yet the disease burden for low levels of physical activity remains significant. 39% of adults in Bristol engage in too little physical activity. In Bristol, it is estimated that the National Health Service spends £3.2m annually treating people for illnesses and conditions arising from physical inactivity (figures from 2016).

An analysis conducted using the WHO’s Health Economic Assessment Tool showed a 4:1 benefit-cost ratio for walking and cycling schemes, which represents good value for money. The Director of Public Health Annual Report 2016 for the City of Bristol estimated that investing £1 now would return £54 in five years, a figure based on 348 adults from a group of 987 inactive adults becoming more active.

For more information: https://travelwest.info/essentialevidence
In brief

Cycling is a popular means of transportation in Copenhagen. To further promote this healthy alternative to car use and public transport, Copenhagen is developing a network of 28 Cycle Superhighways. The routes offer fast, comfortable and safe service, and connect residential areas with places of work or study. A group of 23 municipalities work with the Capital Region to increase the number of commuters on two wheels across municipal boundaries. Car drivers who opted to use the Cycle Superhighways and take the bike instead experienced health benefits associated with a decrease in body fat of between 0.6 to 2%.

Aims of measure & policy context

The purpose of developing a strong network of Cycle Superhighways is to create a competitive transportation alternative to cars and public transport that can help bring more bike commuters to the Capital Region. With a population of 1.8 million in the Capital Region, one in four trips are currently made by bike (24%). In 2016, Capital Region residents cycled a total of approx. 3.6 million km per day on average. However, there is a clear connection between distance and modal share for cycling. On trips over five kilometers, the car still has a great share of trips. On distances 5-20 kilometers, the potential for cycling is high but somewhat unused. Copenhagen plans to increase its modal share for bicycles a further 30% by boosting capacity of the cycle tracks into the city centre, in order to accommodate an additional 60,000 cyclists by 2025.

Implementation

In 2009, Copenhagen contacted the surrounding municipalities to see if they would be interested in co-operating in the creation of a network of Cycle Superhighways. To date 23 municipalities are part of the co-operation. The first Cycle Superhighway Albertslundruten was opened in 2012, and today the network is made up of eight new routes with another five routes under construction. On completion, the network will consist of 28 routes in 2025.

The total investment for the first 206 km of the grid was 400 millions Danish Krone (54 million EUR). The state financed 44% of the routes up to the end of 2016. Of the total socio-economic gains on an expanded routes, 70% of the profits accrue to the state, while 30% accrue to the municipalities.

The total cost of the planned 28 routes, approximately 500 km route net, is estimated at 1 billion to 2 billion Danish Krone.

A joint Secretariat in charge of route identity, communication, application for funding, overall management and evaluation, and employs five people. The Secretariat is funded 75% of the Capital Region and 25% of the municipalities.

Outcomes

When the grid was launched, an average increase of 30% more cyclists was recorded. After opening the first two routes in 2012 and 2013, there have been an increase of 34% cyclists on the Albertslund route and 61% on the Farum route. Evaluations also show that cyclists taking the routes take for long trips, with an average trip on the Farum route of 14.7 km. The number of bike commuters in the 23 municipalities involved have risen with an average of 6% since 2012.

The total socio-economic return was estimated in 2013 at 19% compared to the cost of the investment which is higher than other road, rail, or bridge projects, as contrasted to 3.1% of the Danish Metro Cityring.
Challenges, transferability and opportunities

In an attempt to convince some of the more skeptical mayors in the outlying municipalities, seven of them were invited to switch to the bike for their transport needs for one month. Their health was measured before and after and, based on existing cost-benefit models, the result was clear. On average they were 11 years younger, based on their improved health.

Co-operational success: An evaluation carried out with the involved municipalities showed that they considered having an independent secretariat taking care of communication, application for funding and overall management to be extremely important. A lot of cities around the world are embarking similar concepts where one single actor cannot carry through the project alone. In this perspective, the co-operative model in Greater Copenhagen can be a role model.

A success factor for investment has been a common view of the quality of the infrastructure, mapping of bottlenecks and a common ambition level for the communities within the secretariat.

The funds made available by the Danish state, pointed out to increase cycling, have been important. When the concept was presented to both national and local politicians, emphasis was put on the relatively low cost compared to building a vehicle highway or subway system, as well as the benefits in terms of reducing traffic congestion (720,000 fewer car trips annually) and the improvements possible in terms of individual and environmental health (25% of the new cyclists are previous car drivers, an annual reduction of approximately 856 ton of CO$_2$).

For more information: www.supercykelstier.dk/

The benefits of making a network of Cycle Superhighways are estimated to be:

- An annual reduction of approximately 856 ton of CO$_2$
- A socio-economic surplus of DKK 7.3bn = €1bn
- 3 million more bike trips annually
- 720,000 fewer car trips annually
- Reduction of 34,000 days in sick leave annually

This can all be achieved for a mere investment of DKK 0.9 – 2 billion
The Walking Cities programme
United Kingdom

In brief
With a view to encouraging residents living in the most inactive parts of the country to change travel behaviour, and get more activity into their complex lives, the UK charity Living Streets launched the Walking Cities programme. In February 2014, the programme had a clear focus on public health and was delivered through a range of actions across England designed to support residents build walking into their day-to-day lives through led walks, personal walking pledges and small grants to community organisations. 7,000 people took part in a walking activity, and 49% reported they were now more likely to choose walking over other modes of transport.

Aims of measure & policy context
The Walking Cities programme was designed to encourage and enable residents in the most deprived and least active areas of five city regions in England to view walking as a form of transport, to walk more, and thus be more physically active. The programme was delivered by Living Streets, a UK charity, in partnership with city authorities and partner organisations in Birmingham, Leeds and Bradford (a joint project), and Norwich.

The target population included the least active people in the cities’ most deprived neighbourhoods. Geographic areas of intervention were characterised by high levels of childhood obesity and measures of social deprivation, poor quality living environments, and high ethnic minority populations.

While local walking behaviour was relatively similar in all three cities with an average 12% mode share, for journeys under two miles there were big differences in the type of travel mode used and in for journeys to and from work, car use in Birmingham was at 38% compared to 16% in Norwich.

Engagement at a community level was intended to improve understanding of the barriers to walking, beliefs and attitudes of target groups. Resulting interventions aimed to strengthen the intention to start walking in these least active groups.
Implementation

The Walking Cities Programme ran from February 2014 until June 2015 and received funding from the Department of Health to complement the Department of Transport’s Cycle City Ambition Grant. Walking Cities was the overarching programme, each city delivered a different scheme: Birmingham Walking Revolution (£425,000), Leeds/Bradford City Connect Walking (£560,000), and Walk Norwich (£240,000). A mixture of revenue and capital match-funding was also contributed by the city authorities.

A total of £1,225,000 was spent to employ a ‘Walk To’ coordinator, and to give small grants to community organisations for walking activities or improvements to the walking environment delivered by the city’s highways authority.

A range of sectors in local government were involved in delivering Walking Cities, public health, clinical commissioning, transportation (in particular highways) and sustainability, leisure and sport. In addition, local partnerships were created with health care providers, residents’ groups, schools, social enterprises and transport providers.

Elected members (cabinet level) and senior local government officials were involved in the strategic development and oversight of each Walking Cities project. Project management involved the cooperation of local government officers, district authorities, delivery partners (Living Streets and others) and supporting organisations. An evaluation of Walking Cities was provided to the Department of Health, which funded the programme.

Outcomes

The project reached more than 13,000 people with a message to increase the amount of time spent walking, and over 7,000 people took part in a walking activity. Retrospective surveys showed that 49% reported they were now more likely to choose walking over other modes of transport, and 56% that they were more likely to go walking for pleasure or recreation. Taking an average response for these two walking questions shows 50% of people who answered are walking more. This average was slightly higher in Birmingham (53%) and Leeds (51%), and slightly lower in Norwich (46%).

Perception about one’s own personal physical activity levels was measured: 51% said they felt fitter and healthier. This was slightly higher in Birmingham and Norwich (both 54%), and slightly lower in Leeds (47%). It was particularly high amongst those who attended or led health walks (69%).

Additional health outcomes included, for example, developing an insight into the pathway from inactivity to walking (and cycling), improved physical activity in preschool and primary school children (measured in an annual school census), and improving mental health and community cohesion in target areas.

Challenges, transferability and opportunities

The economic case for the programme is boosted by the health costs of inactivity, which in Leeds and Bradford was estimated at over £17.5 million (2006-7) with the estimated health benefits calculated using the Health Economic Assessment Tool (HEAT).

From an institutional perspective, the projects contributed to meeting targets outlined in their respective Joint Strategic Needs Assessment (e.g. to tackle childhood obesity) and Health and Wellbeing Strategies. The projects also offered valuable opportunities for health, planning and transport teams to work together to create environments to support health and wellbeing.

Factors contributing to success included embedding Living Streets’ staff in local authorities, building on existing programs, linking complementing capital programmes and the social element of walking interventions.

The project’s interventions were sufficiently flexible to respond to the issues found in each of the neighbourhoods in the three cities, although there were lengthy and complicated procurement processes, and funding was cut off at the end of the funding period. A longer delivery period and extensions to funding would have enabled further success.

For more information: www.livingstreets.org.uk
Improving accessibility to transport
Gothenburg, Sweden

In brief
Gothenburg has worked systematically to improve accessibility of public transport for people with reduced mobility in the frame of the KOLLA project ("Public transport for all"). This includes: adaptation of the vehicles (buses and trams), improving accessibility to walking paths leading to public transport stops and areas in direct connection to the stops. Over the course of the five-year project, 6,500 obstacles to accessibility were inventoried to enable systematic removal by 2018. After introducing the Flexline bus service for people with reduced mobility, the number of special transport services dropped by 180,000 trips. The KOLLA project was the winner of the European Access City Award 2014.

Aims of measure & policy context
In 2000, the Swedish Parliament (‘From Patient to Citizen: A national Action Plan for Disability Policy’ plan) decided on an accessible society, which also includes public transport. The target was originally to adjust all public transport by 2010, which was not achieved and a new target was set for 2020.

Gothenburg is one of the pioneering cities in Sweden which is implementing the national legislation on making all public transport stops and stations accessible by 2020. The local authority in collaboration with the regional public transport authority (Västrafik) ran a project between 2005 and 2010 called KOLLA, which kick-started the work on improving accessibility in public transport.

By adapting public transport infrastructure to make it more accessible to people with reduced mobility it was expected that the impact would be two-fold: there would be a shift away from the use of costly special transport services (publicly provided private transport for people with reduced mobility or non-emergency health reasons); and that this more integrated approach would also allow more freedom of movement and remove the boundary between special transport services and public transport.

Implementation
Project KOLLA was a collaboration between the regional public transport authority (Västrafik), and the departments covering special transport services (Färdtjänstförvaltningen) and traffic and roads (Trafikkontoret) in the City of Gothenburg. The project involved close cooperation with a reference group - a User Council formed specifically for the KOLLA project. The User Council consisted of thirteen representatives from seven different user organisations representing people with different types of reduced mobility (seeing, hearing, function, elderly etc).

KOLLA consisted of a variety of sub-projects, adapting tram and main bus stops, and the vehicles; removal of obstacles and barriers on streets and public areas; and expanding the network of the Flexline bus.

Partners invested approx. €135m between 2005 and 2011, of which €13m was allocated for project budget, €40m for adjusting stops and connecting streets (City and Public Transport Authority), and €80m for new trams (PTA, 25% of the investment with funds from the state). Following the successful implementation and results from the project, the work was integrated into the normal working processes of the organisations involved in KOLLA.

Main objective areas for the continued work to make public transport more accessible:
- Developed plan management, with routines created for how the city’s administrators should consider accessibility issues.
- Further development of design principles in the city’s manual for monitoring technology development.
- Developed dialogue. Cooperation with disability organizations and other consulting partners.
- Routine document departure from current guidelines so that follow-up can be done against set operational requirements. Issues identified.
An ‘obstacle inventory’ was taken to identify areas of poor accessibility by selecting at least one pedestrian path in each residential area that would lead to adapted bus stop. The pedestrian paths were photographed, measured and added to mapping software in a hand-held computer. About 6,500 ‘easily remedied’ obstacles were identified for removal at a later date the work for improvement of the urban realm.

The new Flexline, a special bus service for people with reduced mobility which served specially identified areas, and with specially designed vehicles, was perceived as a stepping stone in providing accessibility to certain groups of people before the whole public transport network has been improved.

Outcomes
KOLLA has improved the accessibility of public transport and encouraged a shift from special transport services to public transport. Nearly 180,000 trips on special transport services have now shifted to public transport. Beyond this, the certain groups’ mobility has also increased resulting in more physical activity (e.g. for the older people).

83% of tram and tram/bus stops (210 and 104, respectively) and 100% (195) of special bus stops (stops with longer platforms to accommodate longer buses) are now accessible. Just over 40% of ordinary bus stops (1,654) have been made fully accessible. In total, Gothenburg hopes to transform 2,163 stops, found across 824 different locations. 6,500 obstacles have been identified. Exact number of actions performed is not compiled. In one neighbourhood alone, Majorna, around 800 obstacles were addressed to the cost of €200,000.

Gothenburg calculated that KOLLA would pay for itself as the improvements to the public transport infrastructure would lessen the need for people with reduced mobility to use special transport services, thus decreasing the associated operational costs. Over the course of the five-year project, the number of special transport services dropped by 180,000 trips – an equivalent saving of about 35m Swedish krona (€3.8m). Since 2010, the number of special transport service licenses has increased, as well as the trips on both special transport and the Flexline. This is in large a result of a growing and aging population in Gothenburg.

Challenges, transferability and opportunities
An effective collaboration with a number of different stakeholders, and the holistic approach to improve accessibility in the city are KOLLA’s major achievements. Political support and clear and ambitious goals on how accessibility for people with reduced mobility should further be improved have been pivotal in the success of KOLLA. By 2018 the local authority aims to remove easily remedied obstacles in all municipal public buildings and public places, so to improve people’s ability to participate in the ordinary labour market.

Despite the good results, changing travel behaviour to public transport takes time. However, since KOLLA ended in 2010, the accessible city project has been carried on by all involved organisations as ordinary activities.

The city of Gothenburg’s transport strategy “Göteborg 2035 Trafikstrategi För En Nära Storstad” approved in February 2014, lists creating an easily accessible regional centre as one of the core strategy’s objectives. The social aspect is important and the freedom of movement for all, irrespective of their conditions, without thereby reducing total accessibility.

For more information: www.eltis.org/discover/case-studies/improving-accessibility-transport-goteborg-sweden

Public transport more accessible:

- **Educational and information activities** aimed at new employees in the cities technical office.
- Investments for a **continued rebuilding of stops**.
- **Continued action of “easily remedied obstacles”**, carried out strategically along priority paths and targets.

[Main objective areas for the continued work to make public transport more accessible:](#)
Cycling on referral scheme
London Borough of Kingston-upon-Thames, United Kingdom

In brief
As part of the local Go Cycle programme, in September 2016 the London Borough of Kingston-upon-Thames piloted a new cycling on referral scheme to encourage those who live, work and study in Kingston to take up cycling to improve their health. Doctors and a range of specialist health professionals could refer patients suffering from health problems connected to lack of physical activity to professional cycling trainers to help them better manage and improve their health. The 12-week programme is free of charge and includes a number of fixed appointments with professional cycle coaches.

Aims of measure & policy context
By 2050 the population of the London Borough of Kingston-upon-Thames is expected to grow by 30%. This equates to over 50,000 more people, than there were in 2015. Sustainable travel is key to accommodating this growth and ensuring the continued success of the borough whilst enhancing Kingston’s public spaces.

Launched in the scope of the Borough’s Get Active exercise referral programme (running since 2008) and funded through the Go Cycle initiative (2014), the patient referral scheme is designed to encourage more people to cycle and become more physically active.

Funding was secured as Kingston was one of just three local authorities, to win a bid a total budget of over £30 million of funding from the Mayor of London and Transport for London under the Mini-Holland Programme designed to encourage more people to cycle and improve safety in the borough.
Implementation

Kingston’s public health department joined forces with the Go Cycle Sustainable Transport Team to develop and implement the Cycling on Referral Programme. Referrals are accepted from doctors and a range of specialist health professionals, including physiotherapists, mental health professionals, dieticians and allied health professionals. The programme offers a number of opportunities to patients who have been referred for a variety of health conditions, including inactive lifestyles, to increase their physical activity levels as a way of managing and improving their health. This is the first time that cycling has been provided as an option for referral as part of the programme.

The 12-week programme is free of charge and includes a number of fixed appointments with professional cycle coaches and qualified instructors from the referral scheme. The key aspects of the programme include pre-activity consultations, possibility of free use of bikes during the first 4 weeks of training, group cycle rides, gym exercise programmes as an alternative and post-programme assessment. To support sustainability, weekly group cycle rides are offered to enable further development of cycling skills and encourage the use of bikes as a mode of travel for routine daily journeys. The first trial was rolled out in September 2016 for 12 weeks, a second trial took place in March 2017.

Outcomes

During the pilot, 10 patients successfully took part in this scheme. Evaluation data shows: 4 of these participants completed the cycling programme, 3 of which have purchased bikes and 1 intends to purchase a bike.

Challenges, transferability and opportunities

A key innovative aspect of this scheme was that it was funded with a transport budget, thus strengthening the link between the health benefits that can be achieved through active forms of travel like cycling. Furthermore, the combined expertise and resources from Kingston’s public health department and sustainable travel teams meant patients felt confident and safe in making this transition in their travel patterns. While the effectiveness of referral schemes on health still needs to be fully evaluated, studies show that this targeted approach to specific at-risk groups is likely to be more effective than implementation within a general population group.

Another London Borough, Lambeth council has successfully incorporated cycle training into its Exercise on Referral scheme and more Boroughs have expressed their interest in doing the same.

For more information: www.kingston.gov.uk/info/200382/go_programme/1258/about_the_go_programme
The scheme is voluntary for the private sector and entitles employees to an annual allowance of up to €200, exempt from taxes and charges. Each recipient’s allowance is calculated using the most direct route from their home to their workplace. As part of this, intermodality with public transport is supported: employees are reimbursed both for public transport season tickets and single journeys if their commute involves cycling to a public transport stop.

A national observatory (L’Observatoire de l’indemnité kilométrique vélo) was established to collect data, support the implementation of and follow-up activities relating to the scheme, and share good practices with companies involved. The observatory is led by the Club des villes et territoires cyclables.

A public sector trial is also taking place; officials at two government ministries are participating in a two-year pilot ending in August 2018.

**In brief**

In 2017, France launched a new action plan dedicated to active travel (walking and cycling). Part of this was a Cycling Kilometric Allowance for commuters cycling to work. Those using their own bike receive €0.25 per kilometre cycled and up to €200 annually. This amount is exempt from both companies’ social security contributions and taxes (the allowance was first trialled with private companies). Results from the pilot phase, in which 18 companies were involved, showed a 50% increase in the number of active cyclists. The programme has since been rolled out beyond private companies to the public sector as well.

**Evolution of physical activity among new users benefitting from the allowance**

<table>
<thead>
<tr>
<th>Before:</th>
<th>After:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient level of physical activity</td>
<td>34%</td>
</tr>
<tr>
<td>Insufficient level of physical activity</td>
<td>66%</td>
</tr>
</tbody>
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**Aims of measure & policy context**

A few years ago, the French Ministry of the Environment adopted an ambitious roadmap for sustainable development and growth that culminated in 2015 with the United Nations Climate Change Conference in Paris. As part of this, numerous transport initiatives were undertaken to improve air quality and reduce private car use in cities. These included the promotion of active travel, bike rental schemes for businesses, financial incentives for bike purchases, and secure bike storage facilities at public transport stations.

The Cycling Kilometric Allowance is the newest addition to the Plan de Déplacements Entreprise, a package of measures encouraging the use of alternative mobility solutions among private businesses. It is one of a variety of incentives designed to position bikes as clear alternatives to cars and induce a shift towards sustainable transport modes.

**Implementation**

The Cycling Kilometric Allowance was introduced by the French Ministry of Environment and promoted by the Club des villes et territoires cyclable, a French network of bike-friendly cities. Following a year-long pilot phase in 2014-15, implementation began in early 2016 at a rate of €0.25 per kilometre. ADEME, the French Environment and Energy Management Agency, monitored the first six months of the pilot. During this time, 18 private businesses from across France took part in the scheme. Of these businesses’ 10,600 employees, 380 benefitted from the allowance.
Outcomes

During the initial months of the scheme’s trial phase, cycling experienced a 50% increase in its modal share among employees. This rose to 125% after a year. A greater number of people now use their bike 3-4 times a week, whilst the amount doing so daily has doubled. People recorded as being ‘new cyclists’ had mostly switched from public transport; 20% were former car users; and 9% previously drove mopeds or motorcycles. The number of inactive people halved, whilst over 80% of participants reported engaging in extra physical activity. This mainly took the form of cycling trips additional to those between home and work.

Over the winter period in which the allowance was introduced, companies participating in the scheme reported a cycling rate double that of those not involved. Most employers and employees had a positive perception of the initiative, which served to foster sociability within the company.

There were also clear environmental benefits. Data gathered by ADEME during its six month monitoring period estimated a 2.7 ton reduction in CO₂ emissions, which works out at an average of 0.03 tons per new cyclist per year. Two reports from ADEME outline the results from the two pilot phases in greater detail, including the health impacts.

Challenges, transferability and opportunities

The scheme’s evaluation clearly demonstrates its positive impact on travel behaviour. Businesses continue to sign up to the cycling allowance, with at least 76 having done so as of mid-August 2017 (the amount may have been higher). These 76 businesses account for 57,442 employees, 2,000 of whom are recipients of the allowance. Two cities, La Rochelle and Orvault, have even decided to adopt the scheme for their public officials, despite it still being in its trial phase.

Pedelecs and e-bikes are also included in the scheme. As they cover greater distances - an average of 7.4 km per trip compared with 3.8 km on conventional bikes - it is being considered whether to raise the allowance’s upper limit to €385 per year. This would also make the scheme more appealing to employees.

Other cycling-related fiscal incentives exist in France. For businesses who make bicycles available to their employees for free, a tax exemption of up to 25% is available on the cost of acquiring and maintaining the bicycles used. There is also a national subsidy of €200 on all electric bike purchases.

Aside from France, very few other countries have yet to introduce a tax-free cycling mileage allowance. Employers should design incentives to encourage active travel and promote the reimbursements of costs associated with it in such a way that sustainable transport modes represent strong and attractive alternatives to the use of (company) cars. Complementary measures might include the installation of locker rooms in the workplace, offering secure bike parking, and organising bike repair workshops.

For more information: www.villes-cyclables.org/?mode=observatoire-indemnite-kilometrique-velo
The Active Travel Act
Wales, United Kingdom

In brief
The Active Travel (Wales) Act 2013 makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel, and to build and improve every year their infrastructure for walking and cycling as a mode of transport. The health dimension in transport planning is a driving force of the Act to achieve wider national objectives related to well-being, physical activity, behaviour change and road safety. The Act makes explicit the essential role of good quality and integrated infrastructure networks to encourage active travel, and the need to incorporate the health dimension in legislation, standards and tools of governing bodies beyond the transport sphere.

Aims of measure & policy context
Wales, like other countries, faces major challenges in securing the nation’s physical and mental well-being, now and the future generations. Increasing levels of walking and cycling is perceived as a very straightforward way of achieving multiple benefits by connecting key sites and raise the level of physical activity among 1/3 of the adult population who do not make any active travel journeys.

The Act requires local authorities to continuously improve routes for walking and cycling, and to prepare maps identifying current and future routes, and gives Welsh Ministers the power to issue guidance on the location, nature and condition that routes must meet before they can be considered as active travel routes.

The Act aims to enable more people to choose active travel as an alternative to motorised travel by receiving better information provision on appropriate routes to walk and cycle, meaning that more people are able to make informed decisions about the most appropriate route for their needs and abilities.

Implementation
The Active Travel (Wales) Act 2013 came into force in September 2014 after it was submitted to public consultations. Lead responsibility for active travel in the Welsh Government sits with the Minister for Economy, Science and Transport whose leadership has been instrumental in delivering the Act into legislation after receiving strong support across the political spectrum. The Act requires local authorities to prepare and publish maps of, initially, existing active travel routes, and then of integrated networks for specified settlements linking services and residential areas so that active travel journeys are an attractive transport option for shorter journeys. The mapping exercise was supported by a national fund of £300,000 across all local authorities. The integrated network map sets out the plans of the local authority for the next 15 years, Design Guidance and Delivery Guidance for local authorities are provided for all practitioners involved in the planning, design, approval, construction and maintenance of active travel networks and infrastructure. New and improved routes and facilities will be funded by directing current walking and cycling spend at making improvements to the routes identified on the integrated network maps, and by sponsorships with the private sector. Local authorities publish annual reports on the extent to which walkers and cyclists make active travel journeys to show the progress against the original objectives.

A cross-departmental Active Travel Board was established in 2014 and is made up of representatives of the main government departments and agencies, the voluntary sector and local authorities who are overseeing the Act’s implementation.

Situation in Wales at the time of the ACT adoption:

- Only 1% of journeys to work are by bike
- 49% of trips under 3 miles (5 km)
- At morning peak, 25% of cars on the road are taking children to school
- 18% of trips under 1 mile (1.6 km) by car
Outcomes

The active travel routes mapping exercise was applied to 142 localities which have been identified largely on basis of size, with a population threshold of 2000 which was applied to built-up areas. The Active Travel Designated Localities can be found in a nationally available data management system online.

Existing Routes Maps have been approved in 2016, and a campaign was launched to encourage people to get involved in helping to plan the new Integrated Network Maps where 600 individuals got involved.

Integrated Network Maps were submitted by local authorities in 2017 for approval by the Welsh Government before being funded.

Challenges, transferability and opportunities

The Active Travel Act provides for local authorities to prepare an integrated network of walking and cycling routes showing existing routes, existing route improvements and new routes, the key characteristic is continuity of route. But there is need to integrate with public transport to generate additional movement, and enable multi modal mobility. Increased walking and cycling provides benefits across a wide range of policy areas, not least public health (e.g. tackling obesity). To ensure these objective can be met, there needs to be greater coordination across Government and local authority departments to support and promote active travel.

Expenditure levels on active travel show significant differences across European countries: in 2015 Wales spent an estimated £5 per head (£15m), other parts of the UK are spending £10 per head, whereas the Netherlands spends £20 per head.

For more information: [http://gov.wales/topics/transport/walking-cycling/activetravelact/?lang=en](http://gov.wales/topics/transport/walking-cycling/activetravelact/?lang=en)

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National Health System NHS in Wales spends £1.4m a week (£73m a year) on treating diseases resulting from obesity, (2011)

£1 = £2.50 benefit

In the case of the cycle demonstration towns, the reduced mortality rates alone accounted for £2.50 of benefit for every £1 spent on the scheme, (2010)

£4.9 million

Fifteen of the successful schemes under the Local Transport Fund (LTF) in the year 2015/2016 were for Active Travel at an allocation of £4.9m

In 2015/16 over £14 million across the transport portfolio was allocated to improve safe walking and cycling infrastructure.
PASTA policy recommendations

Recommendations for local authorities

Build strong and long-term political consensus and create cooperation at all levels and across a range of sectors to support active mobility policies

Implementing active mobility measures in a city or region requires strong and continuous political commitment and social advocacy. To affect change from car centred policies to more sustainable and healthy modes of travel, there needs to be joint cooperation between the general public and policy makers in regard to sustainable mobility – one that includes a range of stakeholders including citizens, city departments, districts and interested groups.

A lack of cross-sectoral cooperation between the various sectors, be it transport and health, political and technical or between local and regional/ national bodies – can lead to a challenging climate and hamper the progress and efforts undertaken to promote active mobility. This can result in a “silo vision”, which translates into limited sharing of information and tools and missed opportunities in creating common goals and priorities. Furthermore, following a single sector’s priorities without attempting to co-produce and coordinate active mobility measures, often results in dispersed responsibilities, interests and budgets among city officials – and ultimately reduced efficiency and effectiveness across the sectors. Cooperation across sectors enables people from different sectors to understand better each others constraints, decision making processes, understanding of health, understanding and use of evidence.

Co-planning and joint cooperation across sectors and between cities and regions in the development of active mobility policies can ensure that the contributions of stakeholders across various aspects of society are taken into consideration during the implementation process.

While political support is crucial for successfully implementing active mobility measures, this also depends on good coordination between the city council and the neighbourhoods that implement individual measures. Neglecting this important connection between policy prioritization and thoughtful urban planning might result in lesser impact and slower progress.

Health in all policies!

“Health in All Policies” is based on the cognition that health in population can only be achieved by bundled efforts and consideration in all policy fields (WHO, 2015). According to the approach of “Health in all Policies” it is crucial to start thinking and acting cross-sectoral.

Health and well-being must be at the core of urban development if we want to increase active mobility. One of the obstacles to cooperation among stakeholders is the lack of health-mobility literacy among the public, but also urban planners and decision makers. There exists a limited understanding of the health effects of the transport system and the fact that the co-benefits of active mobility often cannot be effectively communicated, presents an obstacle to successful implementation of active mobility measures.

A public health expert working in close contact with various teams in all policy areas can help to bridge this gap and ensure that health outcomes are taken into consideration in all major city projects and plans, but also making reaching health objectives as a policy requirement. For example including health impact assessment in policy evaluations and proposing health goals to be reached in all planning and transport policies.

Develop a vision for sustainable urban mobility integrating walking and cycling as part of your SUMP

Promoting active mobility requires strategic planning, continuous investment and a long-term vision, yet many cities resort to a set of activities and actions which are implemented unsystematically. When it comes to planning sustainable urban mobility, both walking and cycling require highly specialised plans, with clear and time-bound targets and dedicated budgets for specific infrastructure, as opposed to a series of stand-alone measures simply incorporated into the overall transport strategy. This will not only help to communicate the benefits of linking sustainable transport and health, but will also help to achieve agreed urban mobility goals and a higher mode share for active modes.

Developing specialised plans for different sustainable transport modes which are fully part of a city’s Sustainable Urban Mobility Plan shows continuity in planning for active mobility. Cities who fail to implement a SUMP risk ending up with an incoherent strategy which may not be able to secure the consistent investment for the improvement and maintenance of the infrastructure which is required.

Leverage your data to increase investment in active mobility

To encourage physical activity, cities need to create a safe and high-quality environment for active mobility modes, and continuously finance maintenance and improvements to the existing infrastructure. However, it is difficult to justify budgets for innovative policies if there is no available data to provide an evidence base to support the case for investment, especially considering that urban and transport planning often follow precedents or rules which are not regularly challenged. It is crucial to encourage better integration of evidence based policies in decision making.

Better use of active mobility-relevant data (number of cyclists and pedestrians, origin-destination points, air-quality monitoring, statistics on accidents, etc.) can lead to increased effectiveness of the implemented measures, be this a new bicycle lane, green-wave for cyclists, or a new pedestrian area. Data collection is crucial and numbers matter. By counting pedestrians and cyclists a city or region is in a stronger position to secure a sufficient and adequate budget for maintaining the existing infrastructure and implementing new measures.
Increasing the synergy and exchange of ideas between the public health and transport sectors in terms of active mobility planning is crucial for overcoming any barriers to exploiting the full potential of the two sectors. When active mobility measures include the joint approach to addressing the reduction of health inequalities and integration of health benefits – the local costs are immediate, while the health gains and healthcare savings are long term. It is important to encourage a culture of evidence based policies, based on sound robust evidence.

Promote active mobility among diverse populations
Active mobility should be promoted among all the demographic groups in the society by raising the awareness on the individual health benefits of increased physical activity, and conversely, the societal burden and costs in the long term if there is no change.

An important basis for successfully communicating the benefits of active mobility is the monitoring of air pollution, mortality/morbidity rates and health issues due to traditional urban transport. Increased awareness among the population can result in a modal shift towards cycling and walking, especially when combined with meaningful tangible measures like discouraging car ownership in districts while systematically enlarging the cycling network.

Make walking and cycling easy to public transport stations
Another important component of promoting physical activity is offering easy access to public transport. Local authorities face big challenges in providing affordable, convenient and attractive public transport compared to private car use, while ensuring multi-modal mobility options to their citizens. Good quality and well-maintained access routes to public transport stops and transport hubs encourage people to "walk or cycle the last mile", thus contributing to reaching those minimum levels of physical activity per day, reducing car traffic congestion and harmful pollutants emission.

Good city planning and urban design enabling people to walk and cycle to and from public transport stations increases active mobility, especially walking. There is a need for a clear strategy on improving the interconnectivity of the transport system and designing physical infrastructure to prioritise and promote active mobility in combination with public transport.

Use the Health economic assessment tool (HEAT) to make the case for investment in walking and cycling
Health impact assessment is a useful tool to assess the health impact of active mobility, and comply with "health in all policies." The Health economic assessment tool (HEAT) for walking and cycling is intended for a wide variety of professionals working in the field of transport, walking, cycling or the environment. It facilitates population-wide assessment, translating the effects of active mobility measures into a quantitative evidence-based, evaluation.

HEAT can be used in a number of different situations, for example: when planning a new piece of cycling or walking infrastructure; to value the reduced mortality from past and/or current levels of cycling or walking; and to provide input into more comprehensive economic appraisal exercises, or prospective health impact assessments.

PASTA project has further updated HEAT. For more information, visit http://pastaproject.eu/heat-tool/.

Integration and coordination between transport and health policy at European level

Although the health benefits of active mobility are clear and well accepted, this is not always translated into concrete actions and funding on the local or national levels for active mobility.

Overall, a shift in mind sets is needed to help promote and secure the health benefits of active mobility. It is important to make full use of existing and new platforms and networks to disseminate tools and share knowledge.

In October 2015 EU transport ministers in the Declaration of Luxembourg committed to promoting cycling as a climate friendly and efficient transport mode. To help facilitate interactions with networks and stakeholders, the European Commission Directorate General MOVE has appointed its very first "Cycling focal point", who shall also act as a leader for the work on active mobility and health in the European Commission.

The following lines of action can contribute to achieving the goal.

- Establishing mechanism to internalise external costs in transport including physical inactivity, and promote the use of the Health Economic Assessment Tool (HEAT) for walking and cycling for the appraisal of health benefits in transport projects.
- Take into consideration the potential of the economic dimension of active mobility, long-term savings in healthcare costs, environmental benefits, and creation of green and healthy jobs when appraising new land use and transport projects.
- Encourage suitable policy frameworks to design inclusive neighbourhoods for liveable communities where active mobility modes are prioritised.
- Exploiting new and existing platforms and networks for the dissemination of methods and tools (i.e. ELTIS, Covenant of Mayors, city networks, Healthy Cities network), and enabling knowledge exchange and training opportunities among peers, including across continents (U.S.).
- Enhanced collaboration with pan-European policy platforms, such as the Transport, Health and Environment Pan-European Programme (THE PEP), through which Member States in the WHO European Region have pledged to take action to support, among other things, active mobility and public transport.

References in European policy documents to improving health through active mobility should form the basis of shared objectives, policies, work programmes and investment to increase levels of walking and cycling.

Outlining Health Impact Assessment (HIA) methods to integrate health indicators into land use plans, and encouraging local and regional authorities to change appraisal guidance to move away from a focus on the journey time benefits and instead include HIA and health factors from increasing walking of cycling.
EXISTING RESOURCES, TOOLS AND COMPILATIONS
OF GOOD PRACTICES

Active Access project, Encouraging Active Travel for Short Trips to Improve Health and Local and the Local Economy (2008). Best practice case studies of walking & cycling. The brochure outlines the tailor-made local campaigns to promote walking and cycling in 12 demonstration sites in 10 European countries, and lessons learned. www.active-access.eu

Active Living Research translates and disseminates evidence to advocates, policy-makers and practitioners aimed at preventing childhood obesity and promoting active communities. http://activelivingresearch.org

Centre for Liveable Cities Singapore. URBAN SOLUTIONS, Issue 6, Active Mobility, February 2015. This issue is rich with experiences of cities which are progressing away from automobile-centred transport systems and towards more active modes of transport. http://bit.ly/2ify8pW

Centre for Liveable Cities and Urban Land Institute (2014). Creating Healthy Places through ACTIVE MOBILITY. This book discusses infrastructure design and policies of cities such as Amsterdam, Copenhagen, New York, Seoul and Taipei which have adopted active mobility as central to their transformative strategies for building healthy, vibrant, and liveable cities. http://bit.ly/2zhiGEI

Christian Schweizer, Francesca Racioppi and Leda Nemer (2014). Developing national action plans on transport, health and environment. A step-by-step manual for policy-makers and planners. A national transport, health and environment action plan (NTHEAP) is a key tool and mechanism for developing sustainable and healthy transport in a country. NTHEAPs provide a comprehensive and intersectoral way of planning and implementing transport, environment and health action at the national level. This manual was developed to guide NTHEAP development at the country level. http://bit.ly/2yniMM1

Cities changing diabetes is a partnership programme initiated in response to the urgent challenge caused by the dramatic rise of urban diabetes. The Urban Diabetes Toolbox enables city and health leaders around the world to create their own action plan for tackling diabetes in their city. http://bit.ly/2zTKH2m

Cycle BOOM project, Design for lifelong health and wellbeing (2017). A suite of Briefing Notes for Health Promoters, for Planners, Engineers and Designers and for the Cycle Industry on promoting and planning age friendly cycling. https://www.cycleboom.org/briefing-notes/

ELTIS The urban mobility observatory. http://www.eltis.org/discover/case-studies

Sustrans (2017). Active Travel Toolbox. The Sustrans Active Travel Toolbox provides guides, resources, tools and case studies to help local authorities and their partners make the case for and improve walking and cycling schemes. The toolbox is also designed to help practitioners plan and deliver walking and cycling schemes in a local area. https://www.sustrans.org.uk/active-travel-toolbox

Sustrans (2016). Fit for Life. Independent research into the public health benefits of new walking and cycling routes. The report illustrates the importance of investment in infrastructure for walking and cycling, and the role of research in helping us understand these interventions and learn for future schemes. http://bit.ly/2xDuQnJ

Sustrans, Active Living Research, and Nike (2015). Designed to move active cities. The Active Cities Report includes practical guidance, sample metrics and inspirational examples - as well as a summary of the evidence that proves an active city is a competitive city. http://www.designedtomove.org/resources/active-cities

THE PEP Transport, Health and Environment Pan-European Programme - Clearing House. This web-based Clearing House aims at providing a cost-effective tool for user-friendly access to information on transport, health and environment covering scientific, legal and policy aspects. It aims also at providing an inter-active tool for the exchange of information and good practices among its users. https://thepep.unece.org/pep-clearing-house


U.S. Department of Transport. Federal Highway Administration. Health in Transportation. This webpage is designed to be a comprehensive resource on the linkages between transport and health in U.S. transport planning. https://www.fhwa.dot.gov/planning/health_in_transportation/

U.S. Transport Research Board. TR News Public Health and Transportation, September-October 2015 issue. This edition explores the interrelationships of public health and transportation. Articles cover health impact assessments and analyses, incorporating health into transportation planning and decision making, modeling the risk of infectious disease spread through the transportation system, measuring the health impacts of walking and bicycling, innovative practices and research to assess active transportation and health, health-related findings from TRB-managed research projects, and more. http://bit.ly/2z7ncpl
REFERENCES

The Healthy Streets Approach. London, United Kingdom


How public health specialists can change transport planning. Bristol, United Kingdom


Key evidence from peer-reviewed literature is being used to strengthen the case for current transport policies and practice. Webpage: https://travelwest.info/essential evidence

Cycle Superhighways. Copenhagen, Denmark


The Walking Cities programme. United Kingdom


Improving accessibility to transport. Gothenburg, Sweden


Cycling on referral scheme. London Borough of Kingston-upon-Thames, United Kingdom


Cycling kilometric allowance. France


The Active Travel (Wales) Act 2013. Wales, United Kingdom


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