

Pan-European Master Plan on Walking



THE PEP

Transport, Health
and Environment
Pan-European Programme



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Expression of Acknowledgement:
Pan-European Master Plan on Walking

This document represents a significant milestone as it marks the first-ever pan-European Master Plan dedicated to walking. The draft, formal, UN document will be submitted to the High-level Meeting on Transport, Health and Environment for approval in October 2024.

The development of a pan-European Master Plan on Walking is embedded in the Vienna Declaration to put the promotion of walking, due to its numerous benefits for health, environment, local economy, and social inclusiveness, at the forefront of mobility policies.

The Ministers responsible for transport, health, and environment of the countries in the pan-European region met at the Fifth High-level Ministerial Meeting on Transport, Health, and Environment in Vienna in May 2021. They adopted the 'Vienna Declaration: Building forward better by transforming to new, clean, safe, healthy and inclusive mobility and transport' with the ambitious vision of 'clean, safe, healthy, active and inclusive mobility and transport for happiness and prosperity for all.'

The Master Plan on Walking was developed under **THE PEP** (Transport, Health and Environment Pan-European Programme) and **EHP** (European Environment and Health Process) collectively '**THE PEP/EHP Partnership on Healthy Active Mobility**'¹. The Partnership is led by Austria, France and the Netherlands, with support from Walk21, while UNECE and WHO provide support and secretariat services. Along with the pan-European Master Plan on Cycling Promotion (May 2021), the two documents will form the pan-European Master Plan on Active Mobility.

The process brought together the experience and expertise of walking experts from 22 countries² from across the pan-European region, for which valuable insights and contribution we are sincerely grateful.

¹ Partnership on Healthy Active Mobility | UNECE (unece.org/thepep/pam)

² Albania, Armenia, Austria, Azerbaijan, Czech Republic, UK (England, Scotland), France, Germany, Greece, Ireland, Israel, Lithuania, Malta, Netherlands, Norway, Portugal, Serbia, Slovenia, Spain, Switzerland, Tajikistan, Turkey

Foreword

Walking is the first thing an infant wants to do and the last thing an old person wants to give up. Walking is the exercise that does not need a gym. It is the prescription without medicine, the weight control without diet, and the cosmetic that can't be found in a chemist. It is the tranquilliser without a pill, the therapy without a psychoanalyst, and the holiday that does not cost a penny. What's more, it does not pollute, consumes few natural resources and is highly efficient. Walking is convenient, it needs no special equipment, is self-regulating and inherently safe. Walking is as natural as breathing. – International Charter for Walking (Walk21)

Walking is the most environmentally friendly and healthy transport modes. With no emissions, it is essential for the quality of life of our cities and citizens, with positive effects on individual wellbeing (physical and mental health) and good for the environment and societal cohesion. Walking is simple, free, does not need any special equipment and one of the easiest ways for most people to be more active.

The initiative to develop a **pan-European Master Plan for Active Mobility** was a commitment undertaken in the Vienna Declaration to “extend the focus of the Partnership on Cycling Promotion to walking and other forms of active mobility”, Ministers mandated THE PEP/EHP Partnership on Healthy Active Mobility with the task to prioritise and integrate walking as an essential element of active mobility.

Complementing the existing pan-European Master Plan on Cycling Promotion adopted in 2021, the two documents will together form the pan-European Master Plan on Active Mobility, aimed at fostering active mobility throughout the pan-European region.

Intrinsic to the sustainability of towns and cities, and the quality of life they offer, is how people move around within them. For much of the last century, spatial and land-use planning has focused on motorised vehicles. In contrast, in this century a growing number of countries are embracing a new vision of the liveable city, in which all residents have access to open space and parks, health and community services and leisure and culture activities. In this support document for the Master Plan, we are making the case for policies that encourage walking to be at the heart of all decisions and investments into the built environment and wider rural connections. Walkable towns, cities and communities are better places for everyone.

Many countries now realise that walking (including those who use mobility aids) is vital for the wellbeing of their population and environment. A growing number have developed a national walking strategy or policy. Others are considering how to prioritise and deliver better walking environments. Many cities and regional authorities have also developed a walking plan as part of wider mobility planning. They are integrating walking and public transport for more cohesive and inclusive opportunities for people to choose to be active, through walking, in their daily life – for school, work, running errands or leisure.

The core target groups of the pan-European Master Plan on Walking are:

- National, regional, and local authorities with responsibility for agreeing and delivering policies related to active mobility.
- Policymakers, lawmakers, and technical experts at the local, regional, national, and international levels responsible for developing and implementing policies related to active mobility.

Some of the actions address international, regional, and supranational organisations, such as UNECE, the European Union, WHO/Europe, and the international financial institutions, in the aim to support national authorities in delivering change. As members of these organisations and institutions, Member States have a powerful voice to advocate for walking at an international level.

Table of Contents

- Expression of Acknowledgement: Pan-European Master Plan on Walking.....3**
- Foreword5**
- Executive Summary.....8**
- 1 Introduction9**
 - Mandate 9
 - Target Audience 10
- 2 Walking in the Pan-European region 12**
 - Characteristics of walking..... 13
 - Benefits of walking 13
 - Monetary benefits of walking 20
 - Climate, noise and emissions 28
- 3 Vision and Objectives 30**
 - Objective 1: Develop and implement National Walking Policies and Plans 32
 - Objective 2: Integrate Walking into National Policies and Promote Implementation at Subnational Levels..... 35
 - Objective 3: Increase Walking Activity 37
 - Objective 4: Enhance Safety and Security of Pedestrians..... 41
 - Objective 5: Extend and Improve the Infrastructure for Walking 45
- 4 Action recommendations 51**
 - Addressing People 52
 - Spatial, Land-use and Urban Planning..... 55
 - Public Transport Integration 57
 - Infrastructure 58
 - Capacity Building 59
- 5 Actions of the Partnership on Healthy Active Mobility 61**
- Table of Tables..... 64**
- Table of Figures..... 65**

Executive Summary

In the Vienna Declaration, Ministers made a commitment to reach a set of objectives by 2030. Stemming from this commitment, the pan-European Master Plan on Walking strives to realise five objectives. They are:

- Objective 1: Develop and Implement National Walking Policies and Plans
- Objective 2: Integrate Walking into National Policies and Promote Implementation at Subnational Levels
- Objective 3: Increase Walking Activity
- Objective 4: Enhance Safety and Security of Pedestrians
- Objective 5: Extend and Improve the Infrastructure for Walking

The master plan is following the vision of ‘enabling everyone in the pan-European region to have safe, accessible, comfortable, and enjoyable walking experiences to benefit public health and well-being, mitigate climate change, support public transport, reduce noise and pollution, and create vibrant and inclusive societies.’

The suggested action recommendations in Chapter 5 are strongly linked to the five objectives (further described in Chapter 4).

A total of five themes for action (addressing people, infrastructure, spatial planning, public transport integration, and capacity building.) include with 20 key actions. Within the 20 key actions and a sample of measures, that together form strong recommendations for the improvement of walking conditions in all countries of the pan-European region, including environment, health, mobility, social and economic aspects - acknowledging that every Member State of the pan-European region has unique circumstances and starting point.

The Objectives and Action recommendations of this Master Plan sets the framework for planning, development, implementation, and promotion related to walking at the local, national and international levels.

1 Introduction

Mandate

1. The Transport, Health, and Environment pan-European Programme (THE PEP) provides a unique intersectoral policy platform for Member States and other stakeholders in the pan-European region³ to collaborate, develop shared policy approaches, and work towards achieving healthy, green and sustainable transport and mobility.
2. The Vienna Declaration⁴ is a commitment by the Partnership to achieving the following objectives by 2030:
 - a) Significantly increase cycling and walking in every country and contribute to the overall target of doubling cycling in the region as a whole.
 - b) Extend and improve infrastructure for safe cycling and walking in every country in the region, including safe mobility for children and youth to kindergartens, schools and in neighbourhoods.
 - c) Develop and implement national cycling and walking policies, supported by national cycling, and walking plans, strategies, and programmes, including the setting of national targets, in every country in the region, and promote their implementation in relevant subnational plans and policies.
 - d) Significantly improve the safety of cyclists and pedestrians in every country in the region and significantly reduce the number of fatalities and serious injuries amongst these road users in the region as a whole.
 - (e) Integrate cycling and walking into health policies, as well as transport infrastructure and land-use planning.

³ The countries considered in the pan-European Master Plan on Walking are the Member States of the United Nations Economic Commission for Europe (ECE). For a complete list, see unece.org/member-states-and-member-states-representatives.

⁴ Vienna Declaration and its annexes (ECE/AC.21/2021/2/Add.1–EUCHP2018924/4.3.2/Add.1).

3. The information provided in this document is based on the available evidence and good practices from the pan-European region. Countries may choose the actions most applicable to their needs and their country-specific circumstances such as administrative systems, geographical and climatic conditions, as well as objectives for walking.

Target Audience

4. There are four stakeholder groups that will need to collaborate closely to implement the pan-European Master Plan on Walking:
 - a) National, regional, and local authorities responsible for agreeing and delivering policies and plans related to active mobility.
 - b) Policymakers, lawmakers, and technical experts at the local, regional, national, and international levels responsible for developing policies related to active mobility.
 - c) Civil society organisations and advocacy groups.
 - d) Researchers and practitioners in the fields of active mobility, physical activity, walking and walkability, and their relationship to public health, transportation, spatial and land use planning, climate change and spatial justice⁵ who are responsible for ensuring an evidence-based approach to effective policy development and evaluation.
5. National authorities, as strategic programme leads, together with other authorities and stakeholders, are the main target group of this Master Plan.
6. Prioritizing and integrating walking will require the cooperation of all stakeholders and a “whole society approach”. In many countries, responsibility for delivering on walking has been devolved or decentralized to the subnational level. Regional and local authorities can be highly effective as engines and catalysts to improve conditions for pedestrians.

⁵ Spatial justice relates to transportation poverty and to how decisions on policy and resource distribution are made.

7. Some of the actions also address international, regional and supranational organizations, such as the United Nations Economic Commission for Europe (ECE), the European Union, the World Health Organization (WHO) in the WHO European Region (WHO/Europe), and international financial institutions, in order to enable them to support national authorities in delivering change. As members of these organizations and institutions, Member States can advocate for walking at an international level. They are both target groups and direct beneficiaries of activities under this Master Plan.

2 Walking in the Pan-European region

If you plan cities for cars and traffic, you get cars and traffic. If you plan for people and places, you get people and places. – Fred Kent, Project for Public Spaces

8. Walking is both a simple, cost-effective way of staying active and an essential part of all journeys. It is accessible, affordable and socially equitable and has multiple economic, social, environmental and health benefits.
9. Walking can reduce physical inactivity, which is responsible for approximately 1 million deaths per year in the WHO Europe Region. Walking can also help to reduce air pollution, noise and greenhouse gas emissions, thereby significantly contributing to decarbonizing transport. Investments in policy actions that promote walking can contribute directly to implementing the 2030 Agenda for Sustainable Development and its Sustainable Development Goals. In addition, actions to promote walking have many co-benefits, such as promoting urban green spaces (thereby increasing resilience to climate change), improving equity in access to goods and services, or strengthening the social fabric of neighbourhoods.
10. Walking and cycling are now recognized as being fully equal to other urban transport modes, integrated into planning frameworks, and adopted worldwide. Significant research underpins the benefits that society can reap from active travel (transport, health, social, economic and environmental). There are many planning measures that can be used for inspiration, adaptation, and possible application in every city. (WHO, 2022)⁶

⁶ Walking and cycling latest evidence to support policymaking and practice, June 2022
Publisher: Copenhagen: World Health Organization, Regional Office for Europe
ISBN: 9789289057882

Characteristics of walking

In a quality city, a person should be able to live their entire life without a car, and not feel deprived – Paul Bedford, City of Toronto

11. From early childhood, walking evolves into a crucial part of everyday life. Walking is available to nearly everybody, does not require any special equipment or – in most cases – any technical aids, and includes all age groups and genders, a wide range of physical and mental abilities, income levels and ethnic origins.
12. Good infrastructure for walking, wheeling (mobility aids/wheelchairs) and cycling is essential. People also need viable alternatives, encouragement, support and guidance to change their behaviour and shift their travel habits from private motorized vehicles to more sustainable modes.
13. Walking opportunities are required for a variety of activities, enabling people to be mobile, physically active and sociable. Planning for walking and sustainable mobility should not be seen only as a transport development, but also as a key to creating healthy, equitable, efficient and sustainable communities in which people choose to walk and have convenient access to public transport.

Everyone is a pedestrian at some point!

Benefits of walking

The sum of the whole is this: walk and be happy; walk and be healthy. The best way to lengthen out our days is to walk steadily and with a purpose. – Charles Dickens

14. Many benefits are inherent to walking (see figure 1). Walkable towns and cities are socially, environmentally and economically vibrant because they put people first and at the heart of each design and infrastructure. Providing infrastructure that helps citizens to choose walking and cycling over other options necessitates a long-term vision.

15. Walkability refers to the ease of safe walking in towns and cities. The capacity to create a pedestrian-friendly space improves the liveability of a given city and supports the well-being and happiness of its residents. With improved social interaction, walkable cities also report falls in crime rates. This does not mean eliminating cars from cities but rather creating a perfect balance between pedestrians, cyclists, public transport and private motorized vehicles. Walkable towns and cities encourage inhabitants to travel on foot. Working, learning, shopping, and relaxing can all be done on foot in a walkable town or city. It necessitates a long-term vision to provide infrastructure facilitating those citizens to prefer walking and cycling to using their cars.

Figure 1 Mapping out the benefits of walking and cycling (WHO)



Source: World Health Organization (WHO), Walking and Cycling: Latest Evidence to Support Policymaking and Practice (Copenhagen, 2022).

A healthy society

Walking is man's best medicine – Hippocrates.

16. Human health has three dimensions – physical, mental and social – and being physically active, including by walking, has a significant positive impact on all three of those dimensions. Walking plays an important role in curbing the incidence and effects of non-communicable diseases, such as obesity, type-2 diabetes, dementia and several types of cancer and cardiovascular conditions. Walking also contributes to better sleep and mental health, including the prevention and treatment of depression and anxiety. Walking has been shown to provide increased blood flow and oxygen to the brain, which improves concentration and memory and fosters cognitive function and independence in older age. (see figure 2). In addition, it positively affects overall quality of life.

Figure 2 The benefits of walking to health



Source: WHO, Walking and Cycling.

17. Positive impacts on physical and mental health are directly linked to the time walked. A recent meta study showed that, for every extra 1,000 steps taken daily, premature mortality is reduced by 15 per cent.⁷
18. Walking 30 minutes or cycling 20 minutes on most days reduces mortality risk by at least 10 per cent.⁸ Active commuting is also associated with approximately a 10 per cent decrease in risk for cardiovascular disease.⁹ WHO estimates that failure to follow its guidelines for physical activity results in around 1 million deaths each year in the WHO European Region.¹⁰ The annual number of premature deaths prevented by sufficient physical activity globally was estimated at four million¹¹.
19. People living in walkable urban neighbourhoods¹² also benefit from better environmental quality, such as lower air pollution or less noise. This is also associated with good quality green spaces, where people can get closer to nature, also boosting mental health and well-being. This underlines the importance of providing walking-friendly environments for everyone. People living in walkable urban neighbourhoods practice more physical activity and have more social interactions. The best way of connecting with our surroundings is by going for a walk.

⁷ Maciej Banach and others, “The association between daily step count and all-cause and cardiovascular mortality: a meta-analysis”, *European Journal of Preventive Cardiology*, vol. 30, No. 18 (December 2023), pp. 1975–1985. Available at academic.oup.com/eurjpc/article/30/18/1975/7226309.

⁸ Paul Kelly and others, “Systematic review and meta-analysis of reduction in all-cause mortality from walking and cycling and shape of dose response relationship”, *International Journal of Behavioural Nutrition and Physical Activity*, vol. 11, art. No. 132 (2014). Available at: ijbnpa.biomedcentral.com/articles/10.1186/s12966-014-0132-x.

⁹ Monica Dinu and others, “Active commuting and multiple health outcomes: A systematic review and meta-analysis”, *Sports Medicine*, vol. 49, No. 3 (2019), pp. 437–452. Available at europepmc.org/article/MED/30446905.

¹⁰ Medical Research Council Epidemiology Unit, “Physical activity prevents almost four million early deaths worldwide each year”, University of Cambridge, United Kingdom of Great Britain and Northern Ireland, 18 June 2020. Available at mrc-epid.cam.ac.uk/blog/2020/06/18/physical-activity-prevents-four-million-early-deaths-worldwide/.

¹¹ Physical activity prevents almost four million early deaths worldwide each year. Strain et al. 2020 mrc-epid.cam.ac.uk/blog/2020/06/18/physical-activity-prevents-four-million-early-deaths-worldwide/

¹² World Health Organization (2019): Healthy, prosperous lives for all: the European Health Equity Status Report. Copenhagen: WHO Regional Office for Europe; 2019. Licence: CC BY-NC-SA 3.0 IGO. who.int/publications/i/item/9789289054256.

An inclusive society

We want to transform our sidewalks not only into places where you can walk, but where you can live. – Jeniffer Heeman, Curativos Urbano

20. Prioritizing walking in policies (i.e., transport, planning, health) helps establish secure, safe and comfortable public spaces for everyone and fosters social interaction, inclusion and diversity. More social interaction can help communities develop a collective memory and a strong cultural identity, strengthening ties among neighbours. Residents of streets with light, slow vehicular traffic have approximately three times more friends among their neighbours than residents living on busy roads.
21. Walking and playing outside on the street provide children and youth with opportunities to interact face-to-face, fostering social skills and providing a healthy break from digital screens, promoting physical activity and engagement with the natural environment. More social interaction builds a sense of place and ownership. It can help communities develop a collective memory and a strong cultural identity. Shared street networks and public spaces allow children to play outside and support neighbourhood interaction. This helps reduce discrimination and inequalities based on sexual, racial identity, age, social class, physical ability, or attributes, religious or ethical values, national origin, and political beliefs. Safe and comfortable walking conditions allow children earlier, and older persons longer, independent mobility. That raises their quality of life and reduces the number of drop-off and pick-up trips.

Safer and more secure mobility

22. Walking offers an affordable and equitable expansion of mobility choices. Communities that prioritize walking (along with cycling) are better equipped to navigate disruption to regular transport systems, providing viable options during situations such as pandemics, natural emergencies or security alerts.
23. It is estimated that over 450,000 pedestrians were killed globally in 2019.¹³ People killed while walking represents 23 per cent of all road casualties globally. More than 90 per cent of pedestrian deaths occur in low- and middle-income countries. At the neighbourhood level, persons living on a low income, persons with disabilities,

¹³ Institute for Health Metrics and Evaluation, “Global Health Data Exchange”, available at ghdx.healthdata.org/

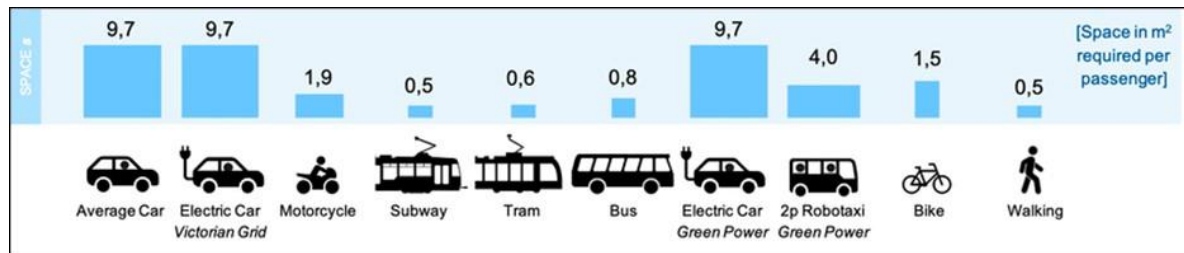
children and youth, elderly persons and women are more exposed to and suffer disproportionately from health issues and psychological and financial costs arising from road crash injuries.

24. A shift toward walking, along with integrating walking into public transport, helps to reduce the global burden of road casualties and contributes to a safer transport system. More people walking leads to safer and more secure roads and public spaces. Investing in walking infrastructure provides easy access to nearby areas on foot, reducing car use. As the number of vehicles on the roads decreases, so does the rate of road accidents. This includes the construction of well-lit, tree-lined walkways and safe pedestrian crossings.
25. In addition, improving security in public spaces is fundamental to encourage freedom of movement. Enabling all people, particularly women and elderly persons, to walk safely and comfortably to any destination, including at night, is a contribution to equity in society, helps prevent isolation and is an asset for social cohesion.
26. Many people prefer not to walk due to traffic volume and the high speeds of vehicles on the road. Speed limits can be introduced, with the closure of roads to vehicular traffic near to schools and hospitals. To control vehicle speeds, traffic-calming measures, narrower lanes, and other features can be incorporated into road design. Speed limits will help cultivate a safer and more comfortable environment.

Space efficiency and accessibility to a city of proximity

27. Improving walkability throughout a given city is influenced by how well walkable spaces are linked with other sustainable transportation modes. The public transit system should be well-integrated, connected to all major city neighbourhoods and safe.
28. Compared to other transport modes, walking takes up less space. (see figure 3)

Figure 3 Mobility example, space consumption and emission production of different modes of transport



Source: Bogenberger et al 2021¹⁴

29. Density, proximity and ease of access have a significant impact on the extent of walking, along with the presence of attractive, convenient and safe infrastructure and facilities.
30. In more densely populated communities where destinations including workplaces, schools, shops and parks are closer together, people are more likely to choose walking. Planning concepts such as the 15-minute city, superblocks and similar approaches are increasingly being implemented in cities. The aim of policies and planning should therefore be to design communities in such a way that driving a motorized vehicle is rendered unnecessary for most short trips, especially those under 3 km in length. This proximity makes walking a more convenient and attractive option compared to driving or using other modes of transport to get to e.g. kindergarten, school, post office shops etc.
31. High-quality walking infrastructure and efficient road space allocation within the different modes of transport are key for planning and designing pedestrian-friendly communities.

¹⁴ Fischer, M., Bogenberger, K., Elias, J., & Schram, S. (2021). EVALUATION OF CHARGING CONCEPTS FOR HIGH DENSITY URBAN AREAS BASED ON REAL MOBILITY AND CHARGING PROFILES OF BEV. In IET Conference Proceedings (6 ed., Vol. 2021, pp. 2979-2983). Institution of Engineering and Technology. doi.org/10.1049/icp.2021.1886

32. Reducing the number of private vehicles is even more achievable when more people travel by public transport to places not within walking distance. To attract residents, public transport must be affordable, accessible and convenient.

Monetary benefits of walking

The economic value of walking has been described as the walking economy. There is a direct link between the city's economic prosperity and the safety and convenience of the pedestrian experience. – City of Melbourne

33. Walkable cities can attract people of all ages, encouraging interaction – a key component of the economy driving innovation and accessibility. With motorized vehicles often being the second largest household expense, many people would prefer to live where a motorized vehicle is not needed, reducing the corresponding financial burden on the household.
34. Economic benefits from walking are found in many sectors, including retail, tourism and health; however, these benefits require investment from the transport and spatial planning sectors to create walkable areas in neighbourhoods and cities. While investments in walking are usually not as costly as other forms of infrastructure, the benefits and returns may be substantial and often outstrip those of roads and other large infrastructure projects. Walking therefore, has an excellent cost-benefit ratio, especially if consideration is given to unquantifiable social benefits, as stated before (see table 1).

Table 1 Estimated benefits of walking and cycling per year in the European Union

Benefit	Estimated Value Walking [Bill. EUR]	Estimated Value Cycling [Bill. EUR]
CO2 emissions savings	0.75	0.6 – 5.6
Reduction of air pollution	0.57	0.43
Reduction of noise pollution	0.39	0.3
Fuel savings	5.28	4.0
Longer and healthier lives	96	73
Less sickness absence at the workplace	6.6	5
Bicycle market	0	13.2
Tourism	132	44
Easing of road congestion	9.2	6.8
Saving on construction and maintenance costs for road infrastructure for motorized vehicles	3.8	2.9
Total	254.59	150-155

Source: Based on European Cyclists' Federation (ECF), "The benefits of cycling: Unlocking their potential for Europe", (n.p., ECF, December 2018); and Jim Walker, "Raise your voice for walking: Public consultation on the European Strategy for Sustainable and Smart Mobility (SSSM)", Walk21, 21 September 2020.

Saving in health costs

Walking has been described as ‘A best buy for public and planetary health’
– Professor Fiona Bull (WHO)¹⁵

35. A systematic review showed that regular walking strengthens a healthy society and is associated with significantly lower health-care costs.¹⁶
36. There is a clear call to action for policymakers to build on healthy habits to improve individual and collective health outcomes. Successful habit-based interventions can lengthen life expectancy, entail considerable savings for public health services, improve productivity, and help address the significant long-term challenges posed by mental health issues and social isolation.
37. Most health systems predominantly intervene only when individuals are already ill. Such systems are increasingly unsustainable. Instead, there is a need to move towards a system that focuses more on preventing negative outcomes – a well-being-promoting system that is based on prevention and preventative spend and that sees health as an investment, rather than as a cost. Social prescribing, where doctors prescribe regular walks rather than drugs, can be a part of this approach, with resources given to community interventions promoting physical, mental and social health.

¹⁵ Fiona C Bull, Adrienne E Hardman: “Walking: a best buy for public and planetary health”. Correspondence to Professor Fiona C Bull, Surveillance and Population based Prevention, Prevention of Non communicable Disease, World Health Organization, Geneve 1211, Switzerland. bjsm.bmj.com/content/52/12/755

¹⁶ Martin Wohlrab and others, “The value of walking: A systematic review on mobility and health-care costs”, *European Review of Ageing and Physical Activity*, vol. 19, No. 1 (December 2022).

The Health Economic Assessment Tool (HEAT)¹⁷ for walking and cycling is an online tool designed to facilitate evidence-based decision-making towards promoting walking and cycling. Its estimates help to assess existing situations, planned projects or past investments in terms of associated health and economic impacts. HEAT estimates the value of reduced mortality that results from regular walking (or cycling) by answering the following main question: If “x” people regularly walk an amount of “y”, what is the economic value of the health impacts resulting from the reduction in mortality caused by their physical activity? HEAT also considers effects of air pollution (for cyclists and pedestrians) and of traffic crashes, and it allows calculating carbon impacts from mode switch.

Saving on external costs

38. The Vienna Declaration remarks that the external costs of road transport are not reflected in current market prices, stating that: “The total bill for traffic congestion, pollution and accidents, for example, has been estimated at €502 billion per year for States members of the European Union alone. The benefits of a shift towards more active mobility and public transport arise mainly from increased life expectancy, increased productivity and lower health-care costs related to non-communicable diseases.”¹⁸
39. The Government of Switzerland, for example, concluded that the total external costs of car traffic amount to €7 billion, which is €0.074 per km travelled.¹⁹ In comparison, cycling generates external costs of only €0.04 per km, while using a tram incurs external costs of €0.01 per km.

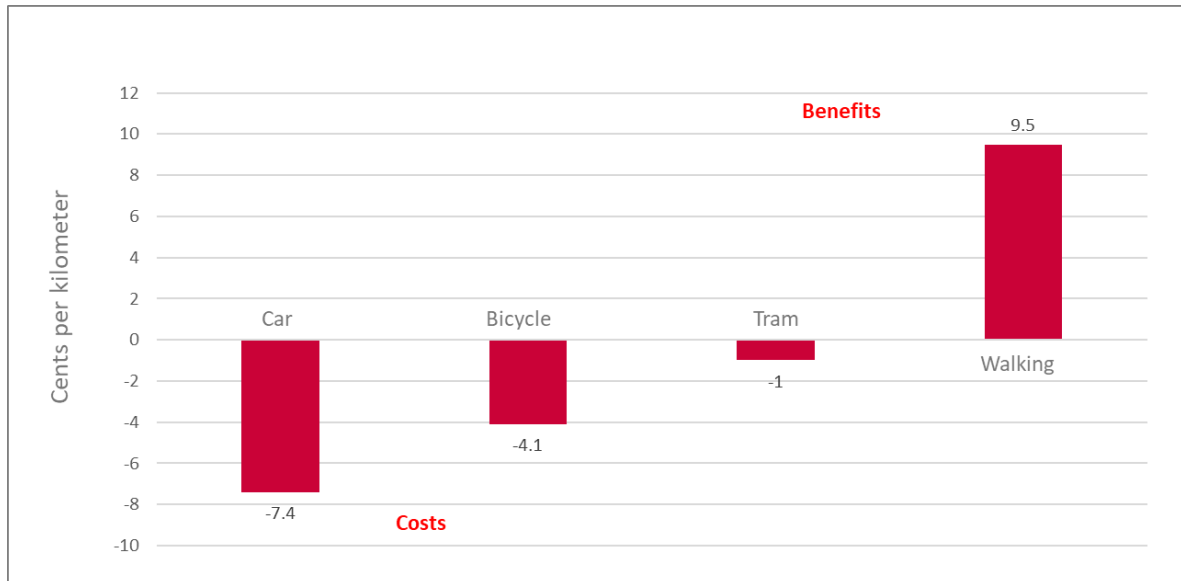
¹⁷ Health Economic Assessment Tool (HEAT) for walking and cycling; [HEAT for walking and cycling \(who.int\)](https://www.who.int/teams/health-economics-and-policy/health-economic-assessment-tool)

¹⁸ ECE/WHO Regional Office for Europe, *Vienna Declaration: Building Forward Better by Transforming to New, Clean, Safe, Healthy and Inclusive Mobility and Transport* (n.p., 2022), para. 12.

¹⁹ Federal Office for Spatial Development ARE of Switzerland, “External costs and benefits of transport”, available at [are.admin.ch/are/en/home/mobility/data/costs-and-benefits-of-transport.html](https://www.are.admin.ch/are/en/home/mobility/data/costs-and-benefits-of-transport.html).

40. In contrast, walking is associated with a benefit of €0.095 per km walked. This means that, for each km walked instead of driving, a saving of €0.17 could be generated. Supporting walking means saving money on a significant scale (see figure 4).

Figure 4 External effects (costs or benefits) of different modes (Euro cents per km travelled)



Source: Federal Office for Spatial Development ARE, 2019²⁰

41. Road crashes result in economic costs. The economic consequences of road crashes are estimated globally to exceed \$2 trillion a year.²¹ The International Road Assessment Programme has calculated the cost effectiveness of road improvements for pedestrians (see table 2).

²⁰ Bundesamt für Raumentwicklung 2019: "Externe Kosten und Nutzen des Verkehrs in der Schweiz. Strassen-, Schienen-, Luft- und Schiffsverkehr 2019" (German only).

²¹ International Road Assessment Programme (iRAP), Road Safety Toolkit, Crash Costing, available at toolkit.irap.org/management/crash-costing.

Table 2 Direct cost effectiveness of road improvements on reducing pedestrian fatalities (percentage)

Intervention	Cost rating	Effectiveness
Pedestrian footpath	Low to medium	40-60%
Pedestrian refuge island	Low to medium	40-60%
Traffic calming	Medium to high	25-40%
Signalised pedestrian crossing	Medium	25-40%
Signalised intersection	Medium	25-40%
Paved shoulder	Medium	25-40%
Speed management	Medium	25-40%
Obstruction removal	Low to medium	25-40%
Un signalised pedestrian crossing	Low	25-40%
Regulate roadside commercial activity	Low to medium	10-25%
Street lighting	Medium	10-25%
School zones	Low to medium	10-25%

Source: International Road Assessment Programme (iRAP), Road Safety Toolkit, Pedestrian²²
 (NOTE: Indirect effects of safer walking are, more walking, more health, less lifestyle related deaths etc. are not part of the calculation).

²² IRAP (2024b). Road Safety Toolkit. Pedestrians. toolkit.irap.org/road-users/pedestrians/

42. Measures facilitating walking and cycling can also reduce traffic congestion. Several case studies in the FLOW project²³ show how overall transport efficiency can be improved when measures for walking and cycling are implemented.²⁴ The potential savings are huge: “Inefficiencies in urban mobility, and road congestion in particular, cost [the European Union] an estimated €110 billion per year.”²⁵ Savings of congestion avoidance is more than 1% of the EU’s Gross Domestic Product (GDP)” (European Court of Auditors, 2019)²⁶. For the global scale, one of the most comprehensive datasets is available on the INRIX²⁷ website with dataset and interactive graphs on the cost of traffic congestion, crashes, and pollution

Contributing to a resilient and sustainable economy

43. Studies show that pedestrians spend in total more in shops than drivers.²⁸ A study in Berlin showed that people on foot spent more than three times the amount spent by people travelling with any other mode.²⁹ Pedestrians spend more money³⁰ locally and often in small businesses instead of in out-of-town shopping malls. Shop keepers usually overestimate the share of people coming by car and significantly underestimate that of those coming on foot (see table 3).

²³ Bonnie Fenton and Andrew Nash, *Walking and Cycling: A Multimodal Approach to Congestion Management – FLOW project summary and recommendations* (Brussels, CIVITAS, 2018). Available at civitas.eu/resources/flow-project-summary-and-recommendations-a-multimodal-approach-to-congestion-management; and CIVITAS, “FLOW developed transport planning tools to encourage active transport modes and tackle road congestion”, available at civitas.eu/projects/flow.

²⁴ CIVITAS, “Walking, cycling and congestion: 15 quick facts for cities” (2017), available at civitas.eu/resources/walking-cycling-and-congestion-15-quick-facts-for-cities.

²⁵ European Court of Auditors, *Audit Preview: Information on an Upcoming Audit: Urban mobility in the EU* (n.p., European Union, 2019), available at: eca.europa.eu/lists/ecadocuments/ap19_07/ap_urban_mobility_en.pdf.

²⁶ Urban mobility in the EU eca.europa.eu/lists/ecadocuments/ap19_07/ap_urban_mobility_en.pdf

²⁷ Global Traffic Scorecard | INRIX Global Traffic Rankings. inrix.com/scorecard/

²⁸ Carlton Reid, “People walking and cycling spend more In London’s shops than motorists”, *Forbes*, 16 November 2018. Available at forbes.com/sites/carltonreid/2018/11/16/cyclists-spend-40-more-in-londons-shops-than-motorists/

²⁹ Dirk von Schneidemesser and Jody Betzien, “Local business perception vs. mobility behaviour of shoppers: A survey from Berlin”, *Findings*, 8 June 2021.

³⁰ Living Streets, “The pedestrian pound: The business case for better streets and places” (n.p., n.d.). Available at livingstreets.org.uk/media/2t0hyzcm/pedestrian-pound-2018.pdf.

Table 3 Shopper-reported mobility behaviour and trader perception of customer mobility behaviour by distance, together with spend on two Berlin shopping streets.

	Modal share (per cent)	Average No. of visits per week	Actual average spend per visit (Euros)	Perceived average spend per week (Euros)	Perceived total weekly spend (Euros)	Proportion of total weekly spend (per cent)
Transit	26.06	2.86	10.87	31.11	16.43	16.5
Car	6.58	2.8	23.45	65.60	8.66	8.7
Bicycle	14.64	3.78	11.98	45.35	13.38	13.5
Foot	52.08	4.97	11.63	57.82	60.65	61.0
Other	0.59	3.35	8.33	27.95	335	0.3

Source: Dirk von Schneidmesser and Jody Betzien, “Local business perception vs. mobility behaviour of shoppers: A survey from Berlin”, Findings, 8 June 2021.

44. Transportation (reliability of public transit system, proximity to economic and leisure opportunities and public amenities) is a key factor in choosing home location, workplace, and services. Well-developed walking infrastructure raises the value of real estate³¹ in nearby areas, which is why planners and policymakers should consider concerns about gentrification and inequality.
45. Pedestrian-friendly environments generate revenue through tourism, in and around the city.³² Overall economic benefits of recreational and leisure walking for tourism destinations and of hiking tourism are essential for many regions. In Switzerland, the revenue generated from hiking was about €3.6 billion in 2019.³³ An earlier study in

³¹ Kwangyul Choi, Han John Park and Jim Dewald, “The impact of mixes of transportation options on residential property values: Synergistic effects of walkability”, *Cities*, vol. 111 (April 2021).

³² Ching-Fu Chen and Chi-Yi Huang, “Investigating the effects of a shared bike for tourism use on the tourist experience and its consequences”, *Current Issues in Tourism*, vol. 24, No. 1 (2021), pp. 134–148.

³³ Adrian Fischer and others, *Wandern in der Schweiz 2020: Sekundäranalyse von ‘Sport Schweiz 2020’ und Befragung von Wandernden in verschiedenen Wandergebieten – Materialien Langsamverkehr Nr. 148* (Bern, Hrsg. Bundesamt für Strassen ASTRA und Schweizer Wanderwege, 2021).

2011 estimated the overall economic effects of hiking trails to be around €1.2 billion.³⁴ It can be assumed that this figure has increased substantially.

46. The United Nations World Tourism Organization³⁵ suggests that, on average, every €1.38 invested in the development of walking tourism yields almost €18.
47. Walking to work (and when at the workplace) is linked to better self-reported work performance compared to public transport or car use, a phenomenon attributed to the impact of physical activity on brain function.³⁶ Conversely, low levels of physical activity contribute to obesity, related chronic illnesses and increasing absenteeism. Commuting-related mental stress can have further impact on work performance.³⁷

Climate, noise and emissions

48. Concern for the environment may be one of the earliest and most straightforward motivations for increased walking. While individuals cannot directly influence many broader environmental factors, they can have a tangible impact, starting with their mobility choices. From climate change to air pollution, loss of biodiversity to green infrastructure, walking provides an active means for people to get involved and mitigate and address local and global environmental concerns.
49. The negative effects of carbon dioxide (CO₂) emissions, air pollution, noise, congestion and habitat damage affect cities and their neighbourhoods. Motorized vehicle traffic is a major source of CO₂ emissions (see figure 5). However, electrifying the car fleet will not address issues of traffic congestion or the efficient use of public

³⁴ Heini Sommer, Matthias Amacher and Marcel Buffat, *Ökonomische Grundlagen der Wanderwege in der Schweiz: Methodik, Datengrundlagen und Ergebnisse – Materialien Langsamverkehr Nr. 124* (Bern, Hrsg. Bundesamt für Strassen und Schweizer Wanderwege, 2011).

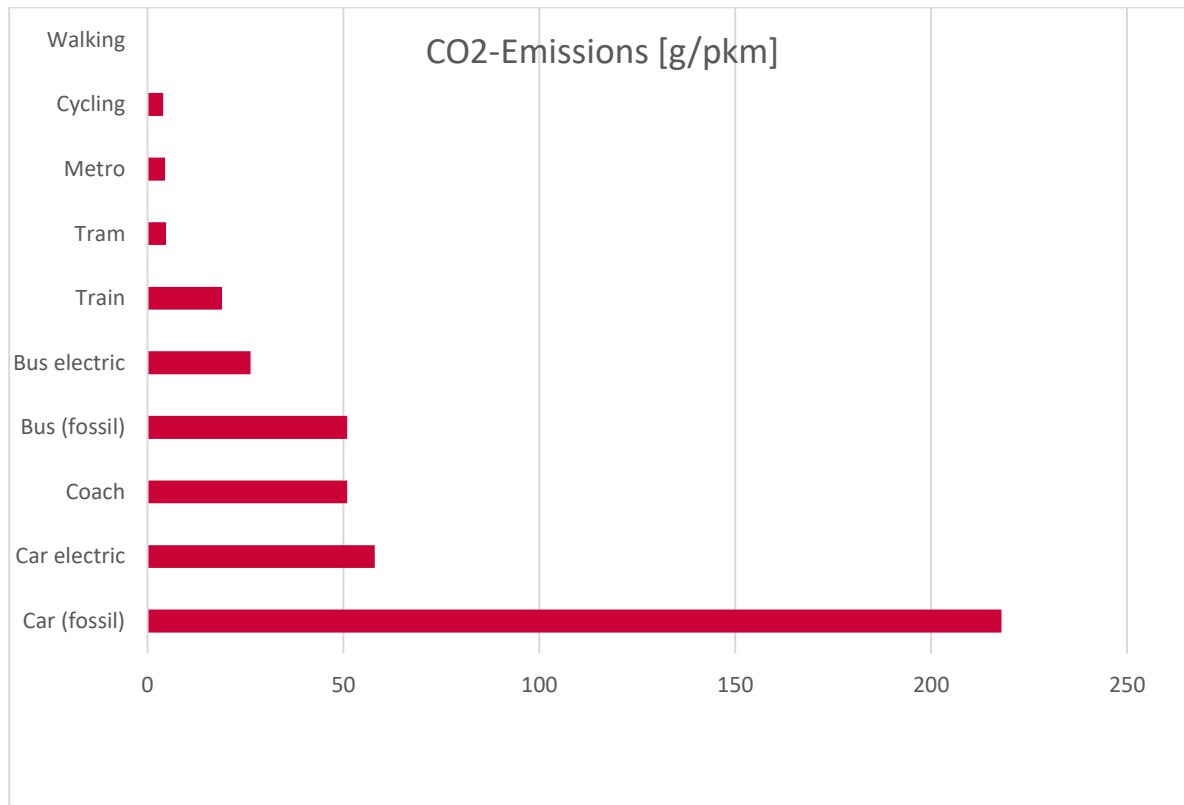
³⁵ United Nations World Tourism Organization (UNWTO), *Walking Tourism: Promoting Regional Development* (Madrid, UNWTO, 2019).

³⁶ Charles H. Hillman, Kirk I. Erickson and Arthur F. Kramer, “Be smart, exercise your heart: Exercise effects on brain and cognition”, *Nature Reviews Neuroscience*, vol. 9, (2008), pp. 58–65; and Paths for all, “Workplace Walking”, 2024, available at pathsforall.org.uk/walking-for-health/workplacewalking.

³⁷ Liang Ma and Runing Ye, “Does daily commuting behaviour matter to employee productivity?”, *Journal of Transport Geography*, vol. 76 (April 2019), pp. 130–141; Liang Ma and Runing Ye, “Walking and cycling to work makes commuters happier and more productive”, *The Conversation*, 4 July 2019. Available at <http://theconversation.com/walking-and-cycling-to-work-makes-commuters-happier-and-more-productive-117819>; and Werken Beweging, “Wandelen op en naar het werk”, available at werkenbeweging.nl/thema/wandelen/ (Dutch only).

space. There is a substantial amount of air pollution from tyres, there will still be pedestrian accidents and deaths, and electrification will not reduce physical inactivity. In addition, electric vehicles produce the same amount of noise as non-electric vehicles above 30 km/h.³⁸

Figure 5 Carbon dioxide emissions of modes of transport (Grams/km)



Source: Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology of Austria³⁹

³⁸Jasper Jolly, "Do electric cars have an air pollution problem?", *The Guardian*, 26 February 2024. Available at theguardian.com/business/2024/feb/26/electric-cars-air-pollution-problem-brakes-tyres.

³⁹Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology of Austria, *Besser Gehen in Österreich! Masterplan Gehen 2030: Strategie zur Förderung des Fußverkehrs in Österreich Ein Beitrag zur Umsetzung des Mobilitätsmasterplans 2030*, (Vienna, 2022).

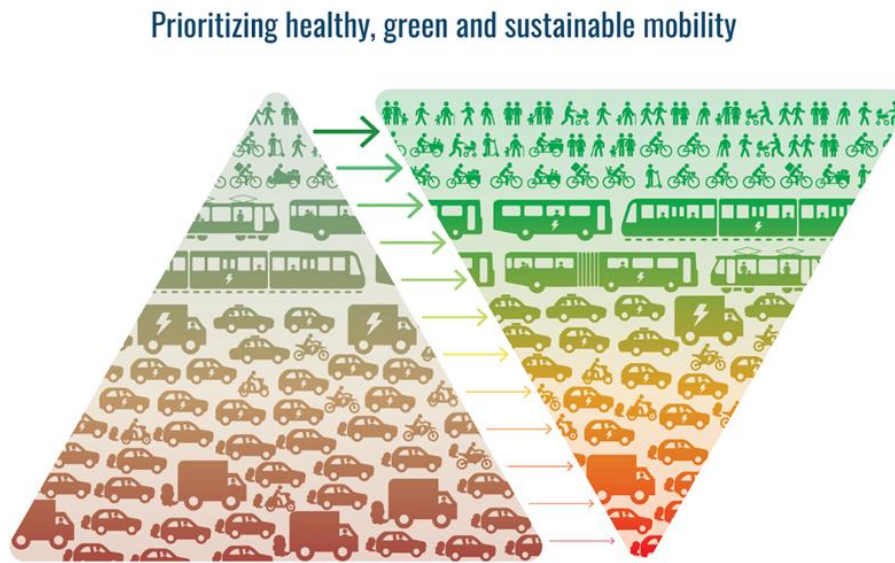
3 Vision and Objectives

50. The vision of the Pan-European Master Plan on Walking is **to enable everyone in the region to have safe, accessible, comfortable, and enjoyable walking experiences, in order to improve public health and well-being, mitigate climate change impacts, support public transport, reduce pollution, and create vibrant and inclusive societies.**

51. To achieve the above, mobility planning must put walking first.⁴⁰ Figure 6 shows the rationalization of means of transport prioritizing the healthier and climate-friendly means. The more polluting forms of transport (e.g., private motorised vehicles, shared cars, and shared rides) should be given lower priority. Traditional transport planning emphasises car traffic as the main mode of transport, while walking, cycling and public transport are seen as travel alternatives. Integrated, sustainable transport planning turns it around. Walking and cycling may be seen as the main transport modes. In most European cities, most trips are shorter than 5 kilometres and active transport modes are very suitable for this distance.

⁴⁰ Marek Ogryzek, Daria Adamska-Kmieć and Anna Klimach, (2020) "Sustainable transport: An efficient transportation network – Case study", *Sustainability*, vol. 12, No. 19 (2020).

Figure 6 Sustainable mobility pyramid: prioritizing healthy, green and sustainable mobility



Source: WHO Regional Office for Europe, Walking and Cycling: Latest Evidence to Support Policymaking and Practice (Copenhagen, 2022), p. 9.

52. The Vienna Declaration sets the basis for the objectives of this Master Plan:

- Objective 1: Develop and implement national walking policies, supported by walking plans, strategies, and programmes, including the setting of national targets, in every country in the region, and promote their effective implementation at the subnational levels.
- Objective 2: Integrate walking into relevant national transport, health, and environment policies, as well as transport infrastructure and spatial planning (land-use or urban planning). Promote their effective implementation at the subnational levels.
- Objective 3: Significantly increase the amount of time walked in every country. (measured as the time walking by 2035, compared to the baseline (2030)).
- Objective 4: Significantly improve the safety and security of pedestrians in every country in the region and significantly reduce the number of fatalities and serious injuries amongst these road users in the region, striving for Vision Zero⁴¹ by 2050.

⁴¹ See visionzeronetwork.org/about/what-is-vision-zero

- Objective 5: Extend and improve the infrastructure for walking in every country in the region, including improvement of the walking networks, improving accessibility, comfort, attractiveness, and safety, including safe mobility for children and youth to kindergartens and schools and in neighbourhoods.
53. The objectives are relevant and applicable to all countries in the region. Regardless of the prominence of walking and the aim to maintain ambition and motivate Member States to promote walking, the objectives are relevant and applicable in all countries in the region. They aim is to keep the ambition of more advanced Member States alongside motivating countries just starting the process of promoting walking. To keeping track of progress in achieving the objectives, this Master Plan defines more detailed goals, background information, targets, and measurable indicators.

Objective 1: Develop and implement National Walking Policies and Plans

54. Objective 1 is supported by plans, strategies and programmes, including the setting of national targets, in every country in the region, and promotion of their implementation at subnational levels. Adequate funding should be allocated within the constraints of available budgets.

Rationale

55. National walking policies that include ambitious targets in terms of walking and wheeling activity (mobility aids such as wheelchairs), pedestrian safety, public transport and comfort levels will create a basis and momentum to achieve the commitments and related targets of the Sustainable Development Goals⁴². To maintain existing walking levels and achieve modal shift towards walking, investment in infrastructure, promotion and awareness-raising is needed. However, walking is rarely included in national investment plans. Ensuring the allocation of clear responsibilities and sufficient budgetary resources should be an integral part of the development of national walking plans.

⁴² [THE 17 GOALS | Sustainable Development \(un.org\)](#)

Key facts

- 76.8 % of the countries in the UNECE Pan-European region⁴³ have a policy addressing walking. 14.3 % have a specific National Walking Policy, 53.6 % have a similar policy in place – e.g., a physical activity or active transport policy that mentions walking, and 8.9 % have an outdated policy.
- Over half of walking policies (55.8 %) are led by transport ministries, 23.3 % by cross sectoral departments or whole governments, and 16.3 per cent by environment and/or climate ministries.
- The average period for the delivery of walking policies is 8.5 years. although this ranges from 2 to 30 years amongst different countries.
- Improving road safety is the most common objective (69.8 %). Over half of the countries in the Pan-European region include objectives to increase walking levels or modal share and climate change mitigation (both with 55.8 %).
- Almost all policies include commitments to actions (95.3 %). The most frequent policies include land-use planning to ensure proximity and quality of access to everyday services on foot (60.5 %), followed by improving infrastructure, integration with public transport and capacity building (all with 55.8 %).
- Only a quarter of countries with a walking policy have committed funding to policy implementation (27.9 %).
- Almost half of countries with a walking policy have published an indicator framework to evaluate the effectiveness of the plans (48.8 %).

⁴³ PATH country data: pathforwalkingcycling.com 2024. pathforwalkingcycling.com/wp-content/uploads/PATH-Regional-Fact-Sheets-Complete-Document_FA.pdf

Targets and outcomes

56. By the end of 2027, the Partnership on Healthy Active Mobility⁴⁴ has established a set of information material, documentation and capacity-building activities⁴⁵ to support Member States in drawing up or revising a walking policy. The essential aspects to be considered in national targets, action plans and monitoring systems will be further defined⁴⁶.
57. By 2030, each member State is in the process of establishing a comprehensive walking policy. To this effect, Member States may organize policy forums and conferences, create steering committees or cross-departmental teams, and offer capacity-building programmes. They will also have established a framework for baseline data-collection aligned with formulated policy goals and timelines.
58. By 2035, each country has developed and begun implementing national policies on walking, action plans, strategies, programmes and data platforms. Countries with pre-existing walking policies may wish to revise and update them before 2035.

Main Indicator to measure the achievement

59. National policy on supporting and encouraging walking is established, complemented by an action plan, targets and a coordination mechanism. National design standards for roads and public spaces related to walking are developed or reviewed and a national data platform is established to assess the baseline and to monitor progress in policy implementation.

⁴⁴ The Partnership is under THE PEP and the European Environment and Health Process. More information on THE PEP Partnership is available at unece.org/thepep/partnerships.

⁴⁵ Walk21, "The 8 Steps", available at walk21.com/work/training/the-8-steps/.

⁴⁶ Policy approaches to physical activity promotion who-sandbox.squiz.cloud/en/health-topics/disease-prevention/physical-activity/activities/hepa-europe-projects-and-working-groups/policy-approaches-to-physical-activity-promotion

Objective 2: Integrate Walking into National Policies and Promote Implementation at Subnational Levels

60. Objective 2 is to integrate walking into: national transport, health and environment policies; planning for transport infrastructure; and spatial, land-use or urban planning. Additionally, the objective is to promote the implementation of such policies and planning at the subnational levels.

Rationale

61. Walking is multifaceted, thus only an integrated approach can satisfy pedestrians' needs, and achieve the goals set in international agreements and national targets. Table 4 shows the objectives of current national walking policies.

Key facts

Of the 56 countries in the pan-European region with an objective concerning walking, 66% have an ambition for at least one of the objectives in Table 4 (Note multiple responses possible so any given country could be committed to more than one objective.)

Table 4 Ambitions in existing national walking policies in the pan-European region 2023

Objective	Number (out of 56)	Percentage
Increase walking activity	24	43
Road safety	30	54
Accessibility	17	30
Comfort	13	23
Climate change mitigation	24	43
Other	11	20
None	6	11

Source: Partnership on Healthy Active Mobility. Note: Table created using data from the 56 ECE Member States

62. A holistic, multisectoral and interdepartmental approach – from the local to the regional and national levels – is the most practical and effective basis for delivery.
63. International agreements, such as the Paris Agreement on climate change and the Nationally Determined Contributions (NDCs), the WHO Global Plan for the Decade of Action for Road Safety 2021–2030, the WHO Guidelines on Physical Activity and Sedentary Behaviour or the New Urban Agenda of the United Nations Human Settlements Programme (UN-Habitat), could be used as inspiration for the policy areas mentioned. This means that walking is integrated into policies on transport, health, environment, infrastructure, spatial, land-use or urban planning. This can also include public transport, energy, tourism and recreation, sports, climate, air quality, nature conservation, biodiversity, social inclusion, gender, education, community life and the relevant legal and financial frameworks. For this approach to be successful, broad participation and transparent decision-making processes at all levels are needed.

Targets and outcomes

64. By the end of 2027, the Partnership provides Member States with an overview of policies and targets for the implementation of the Master Plan. This may include the Sustainable Development Goals, the NDCs, WHO goals and actions regarding non-communicable diseases, road safety and air quality, as well as other intergovernmental targets, for example, on public transport access, gender equality and equity.
65. By 2030, each country has a mechanism in place to ensure integrated policies for walking. This can mean setting up interdepartmental policy forums, steering committees, conferences, or similar ways to integrate holistic walking policies and strategies within national and global goals and actions.
66. By 2035, each country has integrated its walking policies into overarching national policies and has a process in place to continuously coordinate and monitor them. National Governments promote the implementation of these policies in subnational plans and programmes and promote these policies within international institutions and organizations.

Main indicator to measure achievement

67. Walking is integrated into all relevant national and subnational policies. A process is in place to coordinate and monitor these efforts. Departments within the national administration and at all levels (local, regional, provincial and national or federal) are included, reflecting the structure of the member State concerned.

Objective 3: Increase Walking Activity

68. Objective 3 is to significantly increase the amount of time walked in every country.

Rationale

69. Over the past few decades, the average walking time has decreased, particularly in high-income countries, and has also partly shifted from door-to-door trips to trips where some parts are walked and others are made with a different means of transport, in particular public transport. Increasing walking activity can also contribute to the achievement of several targets of the Sustainable Development Goals such as mitigating climate change and improving the environment and health (see sect. 2.B).

Key facts

- Many countries already have national travel surveys. However, they often do not include or consider walking appropriately. For instance, it is not recommended to use modal share as reference for walking levels due to the significant differences in methodology between national travel surveys and the fact that most walking trips are short and thus modal share is not a good representation of its importance⁴⁷.

⁴⁷ Armoogum Jimmy, Bonsall Peter, Browne Michael, Christensen Linda (2014): Survey Harmonisation with New Technologies Improvement –SHANTI Cost Action TU0804, published by Les collections de l'INRETS. [researchgate.net/publication/312171413_Survey_harmonisation_with_new_technologies_improvement_SHANTI](https://www.researchgate.net/publication/312171413_Survey_harmonisation_with_new_technologies_improvement_SHANTI)

- There is also some data on physical activity in the Pan-European region based on tracking by smartphone applications with built-in accelerometry⁴⁸. The authors studied physical activity in 111 countries across the globe. They found that “in more walkable cities, activity is greater throughout the day and throughout the week, across age, gender, and body mass index groups, with the greatest increases in activity found in females”. They found that the countries with the greatest activity inequality – the gap between people with low physical activity and those with high levels of activity – also had the greatest obesity problems⁴⁹.

Targets and outcomes

70. By the end of 2027, the Partnership will have established and agreed on a methodology for measuring time spent walking. Additionally, it is recommended to establish a methodology for measuring time spent in public space (sojourning). Sojourning is an integral part of walking, with implications, for example, for infrastructure provisions (benches, greenery), the local economy and social interactions. The local economy can be impacted by “sticky streets”⁵⁰ and with impact on health through social interaction which will help combat isolation and loneliness.
71. By 2030, each country in the region has the amount of time spent walking as a baseline measure, calculated according to the established methodology to enable cross-country comparison.
72. By 2035, in each country of the region, the time spent walking has increased compared to the country-specific baseline established in 2030.

⁴⁸ Accelerometry is based on continuous and real-time measurement and recording of movement-induced raw acceleration signals over a specific period of time. Accelerometers register intensity and duration of single- or multi-axial accelerations and convert this raw data into manufacturer- and model-specific outcome metrics.

⁴⁹ Althoff, T., Sosič, R., Hicks, J. et al. (2017): Large-scale physical activity data reveal worldwide activity inequality. *Nature* 547, 336–339 (2017). doi.org/10.1038/nature23018

⁵⁰ Sticky Streets: Enhancing Urban Spaces with Street Lights leadsun-us.com/how-street-lights-are-making-streets-sticky/

Indicators to measure achievement

73. The following indicators are suggested to measure achievement of the targets. The first, main indicator refers to the target. The additional indicators are meant for those national and local governments wishing to measure walking more comprehensively. The additional indicators are based on existing data measures suggested by, for example, global institutions such as the WHO, practised by several national governments or agreed upon by science.
74. The main indicator is the average number of minutes spent walking per day and per inhabitant, for transport and leisure, disaggregated by age and gender, ideally also according to geographical terms (urban or rural). It is important to include leisure (relevant for health and tourism).
75. Additional indicators are:
- a) Minutes spent per day in public space sojourning.
 - b) Share of people not walking during an average day (level of participation).
 - c) Share of children and adolescents aged 11-17 years and adults (over 18 years) not meeting WHO physical activity guidelines (WHO).
 - d) Share of children aged 7-11 years walking to school; and among them, share of those walking to school unaccompanied by an adult. Optionally include the ages 12 to 17 years.

Background information regarding data sources

The WHO Global Physical Activity Questionnaire (GPAQ) can give a first indication about the time walked as it is used globally. Further improvements to the questionnaire are desirable: e.g. measure walking and cycling separately; include leisure walking besides utilitarian walking (all forms not only brisk walking); also include walking times of below 10 minutes.

National and city travel survey: Existing national and city travel surveys can be used as a basis to provide the information on the minutes walked (and sojourned) and the other indicators list above. It is recommended to define a raw baseline as a first step, with unadjusted data and, for more advanced countries, a more elaborate framework. For this purpose, it is important to consider the following elements in particular:

- a) all purposes including leisure trips (not just some trips, e.g., commuting),
- b) all days of the week and all seasons (not only selected days, weeks, months)
- c) distance threshold of 50 metres (or lower, otherwise walking is underestimated) and
- d) minimum age of 5 years (or, better, no minimum or maximum ages)

To use national or aggregated city data it is suggested to do a post-survey harmonisation⁵¹ and the International Walking Data Standard⁵²

Modal share is often used to assess walking. However, modal share is often based on main mode trips or on distances travelled. As some travel surveys record only trips longer than 500 or 1,000 metres, walking is heavily underestimated. It is, therefore, not recommended to use modal share as reference except if it is based on time.

⁵¹ [Armoogum Jimmy, Bonsall Peter, Browne Michael, Christensen Linda \(2014\): Survey Harmonisation with New Technologies Improvement –SHANTI Cost Action TU0804, published by Les collections de l'INRETS. researchgate.net/publication/312171413](https://www.researchgate.net/publication/312171413) Survey harmonisation with new technologies improvement SHANTI

⁵² [MW: Data Standard \(measuring-walking.org\)](http://measuring-walking.org)

Objective 4: Enhance Safety and Security of Pedestrians

76. Objective 4 is to significantly improve pedestrian safety and security in every country in the region and reduce the number of fatalities and serious injuries amongst such road users in the whole region, striving for Vision Zero⁵³ by 2050.

Rationale

77. Pedestrian road deaths and serious injuries are still a major problem in all countries of the region. Speed is one of the factors in reducing road danger and it is important when assessing pedestrian safety. For people walking it is crucial their trip is safe, secure, and comfortable. That is why speed (signalled and user driven speed) is important to be considered when assessing pedestrian safety.

78. In addition to speed, good urban design and infrastructure for safe walking (pavement widths, physical separation between roads, cycle lanes and pedestrian lanes) are also important elements, as are increasing vehicle sizes and designs.⁵⁴ Improving pedestrian safety⁵⁵ also means reducing slips, trips and falls,⁵⁶ keeping pedestrian areas, footpaths and crossings in good condition and obstacle- and snow-free.

79. The subjective perception of safety and security⁵⁷ is often just as relevant as its objective counterpart when deciding whether to make a trip on foot (based on Sustainable Development Goal indicator 16.1.4 – proportion of the population that feels safe walking around alone in the area they live in after dark).⁵⁸

⁵³ Vision Zero is a road safety initiative aimed at eliminating all traffic-related deaths and serious injuries. The goal is to create a road transport system where no one is killed or seriously harmed. [Both the European Union and Australia have committed to achieving this vision by 2050](#)

⁵⁴ Tyndall, J. (2024): The effect of front-end vehicle height on pedestrian death risk; Economics of Transportation 37 (2024) 100342. doi.org/10.1016/j.ecotra.2024.100342

⁵⁵ Exposure-Adjusted Road Fatality Rates for Cycling and Walking in European Countries itf-oecd.org/sites/default/files/docs/exposure-adjusted-road-fatality-rates-cycling-walking-europe.pdf

⁵⁶ Rachel Lee and others, "Pedestrian slips, trips and falls: An evaluation of their causes, impact, scale and costs" (n.p., Living Streets, 2023). livingstreets.org.uk/media/33ajm1zm/pedestrian-slips-trips-and-falls.pdf

⁵⁷ United Nations Department of Economic and Social Affairs, Statistics Division, "SDG indicator metadata" (31 March 2023), available at unstats.un.org/sdgs/metadata/files/Metadata-16-01-04.pdf.

⁵⁸ SDG Hub, "SDG 16 Indicators", available at sdg16hub.org/landing-page/sdg-16-indicators

Key Facts

- According to 2019 data, 35,100 people were killed in the Pan-European region while walking (see Global Health Data Exchange 2024)⁵⁹. Data from the same year shows that pedestrian deaths account for 27 % of all road deaths (4% higher than the global average). However, there are large variations by country. If the number of pedestrians killed per 1 million inhabitants is considered, the ratio ranges from 2.2 to 49.8 (measured as yearly average between 2015 and 2019). Additional factors such as the number and relative importance of motorised vehicles to individuals, or the time walking should be taken into consideration as well.
- Security is difficult to measure with objective figures as the crime rate depends on many external factors such as the definition of a crime, and the work of police and judicial systems. Therefore, security is usually measured in terms of subjective perceptions. The most common indicator used is the one defined by the SDG indicator 16.1.4 “Proportion of population that feel safe walking alone around the area they live after dark”. UNSTATS (Department of Economic and Social Affairs, SDG Indicators Database, accessed February 2024) holds data for some countries.

Targets and outcomes

80. By the end of 2027, the Partnership has established and agreed on a methodology to improve and standardize the quality of crash data collection regarding injured pedestrians. Also, a common procedure to collect the number of pedestrian injuries and deaths following trips, slips and falls needs to be established internationally.
81. By 2030, the number of pedestrians killed or seriously injured is reduced in every country in the region and halved in the region compared to the baseline. The baseline in 2020 (based on the Valetta Declaration on Road Safety by the Transport Ministers of the Member States of the European Union, Malta 2017)⁶⁰. In terms of security, a baseline regarding the share of the population feeling safe while walking alone after dark in the neighbourhood they live in will be established.

⁵⁹ Global Health Data Exchange (2024). ghdx.healthdata.org/

⁶⁰ [Valletta Declaration on Road Safety \(europa.eu\)](https://europa.eu)

82. By 2035, the number of pedestrians killed or seriously injured will have been further reduced from 2030, striving for Vision Zero in 2050,⁶¹ and the feeling of security will have increased compared to the established baseline.

Indicators to measure achievement

83. The two main indicators refer to the two targets. The additional indicators refine the main indicators and are meant for those national and local governments that wish to measure walking more comprehensively. Data for the security indicator can and should be collected with other subjective data in an overall survey, as outlined for objective 5. In the interests of efficiency, all data to be collected by survey should be dealt with in one tool.

84. The main indicators are:

- a) Number of pedestrians killed or seriously injured per million inhabitants by age and gender,⁶² with a special focus on children and older persons.
- b) Proportion of the population that feel safe walking around alone in the area they live in after dark.

85. Additional indicators are:

- a) Ratio of pedestrians killed or seriously injured per million minutes walked, or number of hours walked per person without getting injured or killed.
- b) Share of streets in residential areas with a speed limit of 30 km/h or lower⁶³
- c) Number of trips, falls and slips by age and gender per million inhabitants

⁶¹ Stockholm Declaration: Third Global Ministerial Conference on Road Safety Achieving Global Goals, Stockholm, 19–20 February 2020. Available at roadsafetysweden.com/contentassets/b37f0951c837443eb9661668d5be439e/stockholm-declaration-english.pdf.

⁶² WHO, *Global Status Report on Road Safety 2023* (Geneva, 2023).

iris.who.int/bitstream/handle/10665/375016/9789240086517-eng.pdf?sequence=1

⁶³ WHO, “Decade of Action for Road Safety 2021–2030”, available at who.int/teams/social-determinants-of-health/safety-and-mobility/decade-of-action-for-road-safety-2021-2030.

Background information regarding data sources and tools

- The risk of being a crash victim is linked to exposure. The higher the overall level of walking the lower the fatality rates for walking. The more pedestrians using public spaces regularly will influence the way drivers behave. The risk is usually measured against the number of inhabitants or against distance travelled. For walking, the best reference for exposure is the time spent walking. This is reflected in the suggested indicator c.
- Infrastructure and traffic regulations are among the most influential contributors to road danger reduction. According to UN-Habitat the share of streets in built-up areas with a speed limit of 30 km/h (20m/h) or less is a good proxy for road safety. Studies from many countries in the Pan-European region show that, after the establishment of speed limits of 30km/h or less, the casualties have decreased sharply (Jepson et al. 2022⁶⁴; ETSC 27 January 2023⁶⁵; TfL, 13 February 2023⁶⁶; BFU, Switzerland, 2023;⁶⁷ Tennøy et al., 2024⁶⁸).

⁶⁴ Jepson R, Baker G, Cleland C, Cope A, Craig N, Foster C, Hunter R, Kee F, Kelly MP, Kelly P, Milton K, Nightingale G, Turner K, Williams AJ, Woodcock J. (2022): Developing and implementing 20-mph speed limits in Edinburgh and Belfast: mixed-methods study. Southampton (UK): National Institute for Health and Care Research; 2022 Sep. PMID: 36173872. pubmed.ncbi.nlm.nih.gov/36173872/

⁶⁵ European Transport Safety Council; [Brussels 30 km/h limit has led to long-term reductions in speed](#)

⁶⁶ New data shows significant improvements in road safety in London since introduction of 20mph speed limits - Transport for London tfl.gov.uk/info-for/media/press-releases/2023/february/new-data-shows-significant-improvements-in-road-safety-in-london-since-introduction-of-20mph-speed-limits

⁶⁷ Better road accident prevention called for in built-up areas swissinfo.ch/eng/business/better-road-accident-prevention-called-for-in-built-up-areas/48586638

⁶⁸ Tennøy, A. & George, C. (2024): Introduction of 30 km/h as general speed limit in European cities. What effects can be documented? Summary, TØI Report 2009/2024 Oslo. toi.no/getfile.php/1377100-1704282975/Publikasjoner/T%C3%98I%20rapporter/2024/2009-2024/2009-2024_Summary.pdf

Objective 5: Extend and Improve the Infrastructure for Walking

86. Objective 5 is to extend and improve the infrastructure for walking in every country in the region, including improvement of walking networks, accessibility, comfort, attractiveness and safety for elderly persons and persons with mobility issues, as well as safe mobility for children and youth.

Rationale

87. Short and convenient distances to everyday destinations (e.g. kindergartens, schools, shops, doctor) and good accessibility are important prerequisites for walking. These destinations include, for example, public transport stops, educational institutions, places of employment, health-care facilities, commercial centres and recreational areas. If a destination is too far away, or the route is unsafe, unattractive, or uncomfortable, the trip is likely not to be made on foot if there is a viable and affordable alternative.

Key facts

- In the 56 countries of the pan-European region most policies include commitments to walking actions (93.3 %). The predominant policy commitment was found to be related to spatial planning, emphasising proximity and quality of access to essential everyday services on foot (60.5 %).
- The challenge for the available baseline data at Pan-European level is that it is mostly collected on the street, neighbourhood, or city level, which cannot be easily aggregated to a national level. In the past few years, however, some national data on accessibility has been produced. For example, in Switzerland, nationwide the distances to schools for the compulsory school years (usually for the ages between 6 and 15 years) have been collected. In addition, ideally this information would be available as average time walked. In the Netherlands, an engineering company has created a geo-based map calculating the time needed to walk to destinations in different municipalities which could be aggregated to a national level (Movares 2024⁶⁹).

⁶⁹ Movares (2024): Towards a tailor-made 15-minute city. [movares.nl/diensten/15-minutenstad/](https://www.movares.nl/diensten/15-minutenstad/)

Targets and outcomes

88. The quality of the walking environment should be assessed objectively. However, it is still difficult to measure walkability on the national level, as walking infrastructure comes with a large variety of types and qualities of spaces between streets, neighbourhoods, smaller towns and cities. It may be possible to get more nationally collated information on objectively measured walkability in the future.
89. A national survey could measure the perceived quality of the walking environment. This subjectively assessed quality of the infrastructure is the best approximation at this stage.
90. By the end of 2027, the Partnership will have established and agreed on a methodology to measure the following three aspects:
- a) Satisfaction: one or more tools developed to measure people’s level of satisfaction with the walking environment in their neighbourhood, village and possibly their city (national survey, smartphone application, or other methods) to inform investments in and improvements to the walking infrastructure.
 - b) Accessibility: distances on foot to everyday destinations based on geo-referenced data guided by work done by UN-Habitat, the Global Observatory of Healthy and Sustainable Cities⁷⁰ and the International Transport Forum (ITF);⁷¹
 - c) Walkability – objective assessments of the walking environment: support countries with design standards (see objective 1 and action 8) and identify objective indicators to measure the quality of the infrastructure at the national level. Initially, pilot projects will measure walkability at the street, neighbourhood and city levels inspired by the methods and indicators suggested, for example, by iRAP).⁷²

By 2030, establish a baseline regarding:

- a) The level of people’s satisfaction with the walking environment in their neighbourhood, village or city (national survey data)
- b) Accessibility, (geo-referenced data)

⁷⁰ See healthysustainablecities.org/about/.

⁷¹ International Transport Forum (ITF), “Benchmark Accessibility in Cities: Measuring the Impact of Proximity and Transport Performance”, ITF Policy Papers, No. 68 (Paris, OECD Publishing, 2019).

⁷² See irap.org/.

c) Walkability (Objective infrastructure assessments on the street, neighbourhood, city and ideally, also national level).

92. All three elements contribute to the main objective of extending and improving walking infrastructure.

93. By 2035, each country will:

- a) Increase the level of people's satisfaction with the walking environment in their neighbourhood, village or city (by 10 per cent) (national survey);
- b) Improve accessibility by ensuring that the majority of people have walkable access to everyday amenities (see, e.g., Scotland's Greenspace map);⁷³
- c) Increase walkability as defined and conceptualized by 2030, ensure adequate amenities, for example, number of benches per km of footpath. Amenities can also include mesh or grid size of walking network or network density, sufficient sidewalk width etc.

Indicators to measure achievement

94. The main indicators are:

- a) Satisfaction: Level of a given population's satisfaction with the walking environment in its neighbourhood, village, or city according to age, gender, level of mobility, income and spatial typology (city, peri-urban or rural area). Data gathered through a comprehensive national survey⁷⁴ or by applications such as the Walkability App by Walk21⁷⁵ with aggregation of the data to a national level. The indicator could be further split into satisfaction levels regarding pavement quality, route directness, crossings, barriers, traffic, security (day/night), inclusive design, street furniture, greenery, visual interest, street life, pollution (noise and air pollution), exposure to weather, wayfinding, drainage, toilets, sitting, drinking water fountains, maintenance, etc.;

⁷³ Greenspace Scotland, *The Third State of Scotland's Greenspace Report* (n.p., Greenspace Scotland, 2018). greenspacescotland.org.uk/statistics

⁷⁴ National Opinion Survey on Walking and Wheeling 2023: Final Report (n.p., Paths for All/Living Streets Scotland, 2023). Available at pathsforall.org.uk/resource/national-opinion-survey-on-walking--wheeling-2023.

⁷⁵ See walk21.com/resources/walkability-app/

b) Accessibility: Share of the population that has convenient pedestrian access to everyday destinations. Indicators 11.2.1 and 11.7.1 of the Sustainable Development Goals suggest a walking distance of 500 m to public transport stops and of 400 m to open public spaces, respectively. It should be possible to reach compulsory education institutions, health-care facilities and basic retail premises within 15 minutes of walking or 30 minutes of walking combined with public transport. The indicator should be measured for each destination separately, distinguishing by age and gender. Ideally, the quality of service, for example, with regards to public transport, should also be considered.

95. Additional indicators are the:

- a) Walkability-Index, which assesses various factors affecting the ease and safety of walking in an urban environment, such as⁷⁶ measures for pavements, crossings, barriers, street furniture, traffic, pollution, greenery, lighting, drainage, air quality, traffic speed, signage, etc.
- b) Proportion of urban roads rated three-star or better for pedestrians (iRAP);⁷⁷
- c) Grid size of walking network or network density to be defined. This is an additional indicator of accessibility and permeability (ease of movement across the network).
- d) Percentage of the population experiencing ambient air quality that does not meet the WHO annual guideline for fine particulate matter (PM2.5).⁷⁸

96. As the indicators referred to in paragraph 95 (a)–(b) can only be measured for the street, neighbourhood and possibly city level, it is suggested that measuring be initiated with pilot projects on these levels. In the coming years, some local data might be aggregated to a national level with the proper methodology.

⁷⁶ Alexandros Bartzokas-Tsiompras, Efthimios Bakogiannis and Alexandros Nikitas, “Global microscale walkability ratings and rankings: A novel composite indicator for 59 European city centres”, *Journal of Transport Geography*, vol. 111 (July 2023).

⁷⁷ iRAP, “Are our roads 3-star or better?”, available at irap.org/safety-insights/how-safe-are-our-roads/.

⁷⁸ WHO, *WHO Global Air Quality Guidelines: Particulate Matter (PM2.5 and PM10), Ozone, Nitrogen Dioxide, Sulfur Dioxide and Carbon Monoxide – Executive Summary* (Geneva, 2021).

Background information regarding data sources and tools

- Satisfaction: Walk21 Walkability App e.g., collects the walking experience of citizens and, thus, gives a subjective assessment of the walking environment. It allows to differentiate between many different features and can also support surveys
- Subjective Assessment: The Walkability App could be used to measure perception of walkability. Individual assessments can be spatially aggregated (e.g., by street, district, city) or filtered (e.g., by gender, age, ability) to calculate an overall score of perceived walkability. Data collection, analysis and representation are based on systematic subjective Likert scales, in which pedestrians can rate their walking experiences as "very negative", "negative", "neutral", "positive", and "very positive". These experiences can be specifically related to safety, accessibility, comfort, and overall satisfaction.
- Accessibility: UN Habitat provides a methodology and data concerning the average share of the built-up area of cities that is open space for public use for all and the percentage of the population having convenient access to public transport (SDG 11, "Sustainable Cities and Communities" and SDG 11.7 and 11.2)⁷⁹.

The International Transport Forum also offers an analysis tool to measure accessibility called Urban Access Framework (see ITF 2019)⁸⁰.

- Walkability: The International Road Assessment Programme (IRAP) has partnerships with 104 countries and provides measures for road design with a rating of stars, 1-star being the lowest and 5-star the highest. The 3-star score ensures that the roads have sidewalks, pedestrian refuge, street lighting and 50km/h traffic. It is considered the minimum acceptable standard for pedestrians.

The Global Observatory of Healthy and Sustainable Cities provides two tools: one to measure Accessibility and another one to measure Walkability. Methodology and results are open source. All data is collected locally, i.e., on the neighbourhood and city level.

- Environmental Quality: The UN Environmental Program (UNEP) has a global Air Quality Monitoring Platform⁸¹ which collects and publishes systematically data on the share of the population experiencing ambient air quality not meeting WHO PM2.5 guidelines. The data is collected on city level but aggregated to a national average. The Global Observatory of Healthy and Sustainable Cities provides two tools: one to measure Accessibility and another one to measure Walkability. It is open source in

⁷⁹ [SDG 11 Sustainable cities and communities - Open Development Mekong](#)

⁸⁰ [How accessible is your city? | ITF \(itf-oecd.org\)](#)

⁸¹ [Monitoring air quality | UNEP - UN Environment Programme](#)

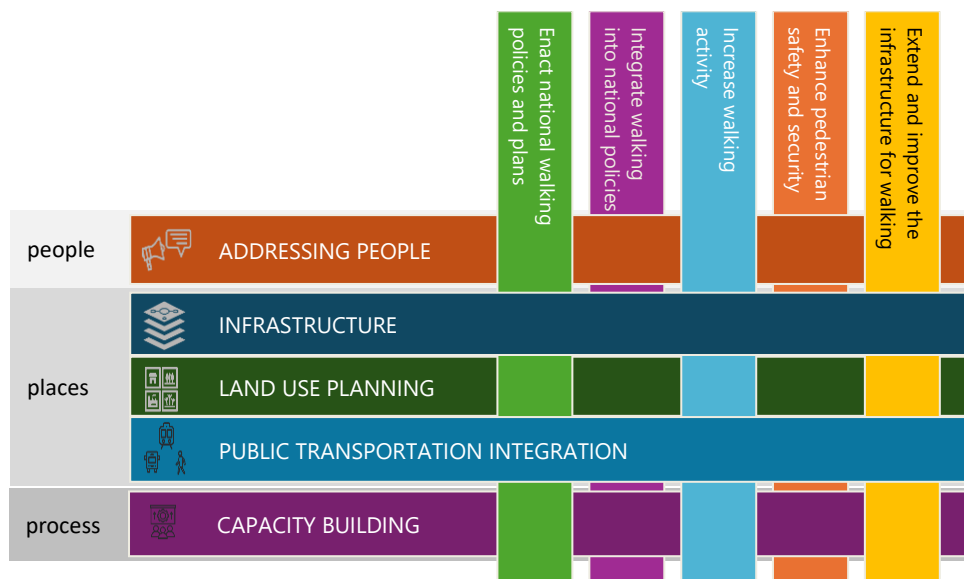
terms of methodology and results. All data is collected locally, i.e., on the neighbourhood and city level. In an additional step, which needs to be developed, the data could be aggregated to a national level.

The International Transport Forum also offers an analysis tool to measure accessibility called Urban Access Framework (ITF 2019).

4 Action recommendations

97. The following recommendations for action are linked to the five objectives, according to the strategic framework for the Master Plan (see figure 7), including five objectives (vertical) and five action areas (horizontal). The suggested action recommendations are intrinsically linked to the five Objectives described in Chapter 3. The Objectives and Action recommendations of the 'Pan-European Master Plan on Walking' sets the framework for walking planning, development, implementation, and promotion at the national and international levels.

Figure 7 Strategic framework for the Pan-European Master Plan on Walking



98. Five themes for action – addressing people, land-use planning, public transport integration, infrastructure and capacity-building – are necessary and encompass 20 key actions (see figure 8). This set of key themes and actions can be seen in the context of:

- People being prioritized in all planning, developments and implementation;
- Places being designed and managed for people to be able to walk easily;
- Processes ensuring that walking, pedestrians and people are prioritized.

Figure 8 Key actions grouped vertically by themes

PEOPLE	PLACES			PROCESS
Addressing people	Land Use Planning	Public Transport Integration	Infrastructure	Capacity Building
1. Promote and Inform	6. Think Pedestrian	11. Design Principles for Transport Network	13. Protect People	15. Value Knowledge
2. Target People	7. Publish Design Guidelines	12. Facilitate Multimodality	14. Create Walking Networks	16. Lead Coordination
3. Programs and Events	8. Value Walking in Urban Development			17. Elaborate an Action Plan
4. Cross-sectoral Cooperation	9. Link Walking to Economic Growth			18. Check Financing Options
5. Connecting with Health Care	10. Integrate Walking to the Tourism Sector			19. Monitor and Evaluate
				20. Set the Regulatory Framework

99. The 20 key actions and accompanying measures collectively address various aspects such as environment, health, mobility, social and economic factors.

100. Recognizing that each member State has a different starting point, the five themes for action and the 20 key actions are presented as good practices for consideration. These recommendations are based on extensive reviews of national, regional and local walking policies, as well as global policy actions promoting healthy and active mobility.

Addressing People

101. **(1) In order to promote walking and inform the public of its benefits, it is recommended to:**

- Optimize the use of individual motorized transport by encouraging drivers to reconsider their mode of travel;
- Aim to reduce speed, prioritize pedestrians, especially at crossings and when parking, and improve access for walking;
- Promote space-efficient transport options for daily journeys and provide information to help people choose sustainable transportation modes;

- Promote safe and healthy journeys that include walking (e.g., to school for every child as a priority and to workplaces, supported by employer incentive schemes);
- Encourage play in public spaces and exercise, and attempt to increase the number of people using public spaces and the length of time they spend in such spaces, in order to support public life and economic vitality;
- Celebrate walking, for example, by organizing national walking days;
- Include, as a cross-cutting approach⁸² to delivery, linking aspects related to transport, environment and health, with a greater focus on active mobility;
- Use the “health-promoting schools”⁸³ approach to encourage and promote walking and active mobility to, from and within school;
- Prioritize walking in information linked to directions and access information for all public institutions. Let the public know how to reach such institutions by foot – place walking directions first on the list ahead of cycling, public transport, etc.

102. (2) To target people, it is recommended to:

- Communicate the benefits of walking and explain why walking is good for the individual, society and the environment;
- Target the least physically active groups and those experiencing transport poverty. Support schemes that enable all members of the community to walk whenever they can, facilitate healthy and sustainable behaviour, and develop creative, innovative ways of providing information and motivation that resonate with diverse community members;
- Target specific groups within the community by providing them with tailor-made information (e.g., employers, hospitals, schools, conference centres, sports clubs, hotels);
- Promote reduction of private motorized vehicle use in high-density urban areas and beyond, and, in parallel, support accessible, safe and easy-to-use walking, cycling and public transport.

103. (3) To organize programmes and events, it is recommended to:

⁸² Cross-cutting approach: linking traditionally separate or independent parties or interests: a multi-agency approach.

⁸³ See who.int/health-topics/health-promoting-schools#tab=tab_1.

- Coordinate free mass-participation walking events to encourage and celebrate participation, for example, car-free days, no-parking day, national walking day, national walk-to-school day;
- Support the implementation of regular walking programmes and healthy routes in public spaces, to workplaces, community centres, recreation and sports facilities, in order to encourage people of all ages and abilities to walk regularly, prioritizing the least active and most disadvantaged communities;
- Advocate for the importance of walking in national and community-based programmes, highlighting its social, economic and environmental benefits;
- Celebrate individual and group successes through awards and articles in the press and social media. Encourage national champions for walking, including influential public figures such as actors or politicians.

104. (4) To strengthen cross-sectoral cooperation, it is recommended to:

- Strengthen cooperation between public and private mobility and transport service providers to enable convenient and walkable hubs and networks;
- Strengthen awareness and cooperation with businesses, especially with sectors that are important for walking, such as retail and various service sectors, in order to raise the profile of walking and emphasize its importance for the local economy;
- Involve government (national or regional), organizations, business representatives, etc., in order to cooperate directly with companies from sectors such as retail to promote shopping streets, shared space and pedestrian zones;
- Strengthen cooperation with tourism associations for the establishment of tourism activity (city and hiking tourism), especially with joint projects and partnerships (see THE PEP Partnership on Sustainable Tourism Mobility and forthcoming ECE document for Sustainable Tourism Mobility);⁸⁴
- Strengthen cooperation with the WHO Europe Healthy Cities Network;
- Develop cross-sectoral campaigns to welcome walkers and support the development of campaigns in a range of settings and geographic areas.

105. (5) To connect with healthcare, it is recommended to:

⁸⁴ See unece.org/thepep/tourism.

- Facilitate the integration of walking promotion into primary and secondary health-care services; enable a range of medical professionals to use social prescribing to prescribe walking to address non-communicable diseases, mental health issues, healthy ageing, child health and wider promotion of community health and well-being;
- Use the Health Equity Assessment Toolkit (HEAT).⁸⁵

Spatial, Land-use and Urban Planning

106. (6) In terms of considering pedestrians in spatial, land-use and urban planning, it is recommended to:

- Create designated pedestrian zones in urban areas, where vehicles are restricted, allowing pedestrians to move safely;
- Implement mixed-use zoning that encourages walkable neighbourhoods with easy access to shops, services and public spaces;
- Strengthen integration of spatial, land-use, urban and transport planning to support local walking- and cycling-friendly and transit-oriented developments that are accessible to all, and enhance connectivity between urban, peri-urban and rural areas;
- Promote a polycentric approach – work within “communities of short distances” with mixed-use development, decentralized services and comprehensive transportation services.

107. (7) With regards to publishing design guidelines, it is recommended to:

- Establish design guidelines for public spaces, including reallocating road space, and short block lengths, reducing parking availability for motorized vehicles and implementing pedestrian priority areas, establishing school streets, superblocks, establishing a high-quality walking city-scale network and creating car-free environments supporting social interaction;
- Support retention in walking levels and ensure that people continue to walk as part of their daily routines or transportation choices.

⁸⁵ WHO, “Health Equity Assessment Toolkit”, available at [who.int/data/inequality-monitor/assessment_toolkit](https://www.who.int/data/inequality-monitor/assessment_toolkit).

- Spatial, urban and transport planning should promote a network of short distances to allow the efficient and pedestrian-friendly combination of errands, caregiving trips, educational institutions, leisure facilities and shopping and for work.

108. (8) In order to properly benefit from walking in spatial development, it is recommended to:

- Promote the value of putting pedestrians first⁸⁶ in all urban development areas;
- Encourage consideration for walking demand and supply impacts in all transport projects and the establishment of new or upgrading of pre-existing urban developments.

109. (9) To link walking to economic growth, it is recommended to:

- Decouple economic growth from private car use, with tailored educational, policy and funding measures that make walking reliable, convenient, cost-effective, attractive and accessible to all. This should include a high-standard public transport network;
- Couple economic growth to walking by promoting the revitalization of city and town centres, as well as the central hubs of neighbourhoods through pedestrian zones and shopping streets.

110. (10) To integrate walking into the tourism sector, it is recommended to:

- Develop quality standards for a national network of touristic walking routes that allow as many people as possible to enjoy a wide variety of walking experiences, both urban and rural;
- Develop, fund and maintain a network of national walking routes and trails with characteristics that are distinctive for the country;
- Create a national grading system⁸⁷ for the promotion of walking trails and tours so that walkers know how easy or difficult a walking trip will be and consider a guide for sustainable tourism behaviour;

⁸⁶ See, for example, “Welcome to THINK” Department of Transport, United Kingdom of Great Britain and Northern Ireland think.gov.uk/.

⁸⁷ See, for example, Paths for All, “The Path Manager’s Guide to Grading”, available at pathsforall.org.uk/resources/resource/the-path-managers-guide-to-grading.

- Promote standards⁸⁸ for adventure tourism, to enable providers of hiking and trekking adventure tourism services to plan activities and inform people about their safety and practicability;
- Form partnerships with tour operators and local guides to incorporate walking tours into the services that they offer.

Public Transport Integration

111. (11) To design principles to ensure pedestrian-friendly transport networks, it is recommended to:

- Establish universal design guidelines to ensure easy and barrier-free access to public transport;
- Connect design guidelines to relevant funding schemes;
Encourage walking by promoting space-efficient modes of transport by reducing parking spaces at public buildings and ensuring quality public transport services with good network coverage; promote frequent, affordable public transport and pricing measures for the use of cars such as taxes on fuel and parking fees;
- Provide and promote fiscal incentives for walking and use of public transport as part of local destination travel plans and for commuting.

112. (12) To facilitate multimodality and mobility management, it is recommended to:

- Facilitate the adoption of the sustainable transport mobility pyramid and strengthen the role of walking in the transportation system;
- Also facilitate public transport connections to support sustainable transport choices (ensuring connectivity and multimodality);
- Enable cross-institutional collaboration in terms of planning and providing mobility and transport services (e.g., connect bus, ferry and train companies and encourage them to work together by providing funding schemes and information).

⁸⁸ See, for example, International Organization for Standardization (ISO), International Standard ISO 3021: Adventure tourism – Hiking and trekking activities – Requirements and recommendations, available at cdn.standards.iteh.ai/samples/79513/90f886b9f6064e9dab770ecac93ad2a4/ISO-3021-2023.pdf.

Infrastructure

113. (13) To protect people and reduce speed, it is recommended to:

- Adopt, implement and enforce the Safe System approach.⁸⁹ Measures to actively protect and promote pedestrian safety and mobility, with a view to achieving broader health outcomes, particularly the prevention of injuries, including sexual harassment and gender-based violence;
- Promote 30 km/h speed limits and make it easier for municipalities to set speed limits of 30 km/h speed limits or lower for residential neighbourhoods and urban centres;
- Set assessment of safety standards for all roads and link results to funding and support schemes;
- Define quality standards for developing audits of pedestrian behaviour by identifying crash locations and issues of personal security (by day and by night), and target areas for improvements.

114. (14) To create walking networks, it is recommended to:

- Define standards for high-quality, barrier-free route directness and safe and climate-friendly walking infrastructure;
- Encourage coherent and consistent information and signage systems to support exploration and discovery for walking including links to public transport.

⁸⁹ The Safe System is international best practice in road safety. See WHO and United Nations regional Commissioners, “Global Plan for the Decade of Action for Road Safety 2021–2030”, [available at who.int/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030](https://www.who.int/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030).

Capacity Building

115. (15) In order to properly benefit from knowledge, it is recommended to:

- Develop training programmes to build capacities of policymakers and staff at the national, regional, and local levels to support the planning, development and implementation of walking policies;
- Facilitate knowledge-sharing and peer-to-peer learning between stakeholders through events, networks and competence centres;
- Determine research priorities targeting walking to ensure evidence-based decision-making and to evaluate policy effectiveness and impact.

116. (16) To lead coordination, it is recommended to:

- Support development, implementation and monitoring of walking policies and identify the responsible entity and ensure horizontal and vertical collaboration in government;
- Establish a focal point (e.g. a national walking office) to coordinate the different tiers of government, as well as the technical and financial capacities of subnational and local governments, to help cities and communities realize a shift in design, planning, funding and implementation in favour of walking;
- Set up a task force on walking. (e.g., create a national inter disciplinary working group on walking).

117. (17) To elaborate an action plan, it is recommended to:

- Commit to an action plan on walking and implement pilot projects;
- Embed walking targets and actions in other policies, such as National Adaptation Plans for climate, non-communicable disease prevention strategies, policies on physical activity and active mobility, transport and environment strategies and national urban mobility plans;
- Follow the “8 Steps to an effective policy” process⁹⁰ to help improve the effectiveness of national walking strategies.

⁹⁰ Walk21, “The 8 Steps”, available at walk21.com/work/training/the-8-steps/, Walk21; and German Agency for International Cooperation (GIZ)/Sustainable Urban Transport Project/Walk21/New Urban Agenda/Transformative Urban Mobility Initiative, “Meeting the Needs of People Walking” (Eschborn, GIZ,

118. (18) To identify financing options, it is recommended to:

- Strengthen financing mechanisms to secure the sustained long-term implementation of national and subnational actions for safe, accessible, convenient and adequate pedestrian infrastructure and technology-based innovations in transport and transit systems;
- Allocate funding for walking infrastructure promotion at the national, regional, and/or municipal levels. When there is good infrastructure and people can and want to walk, they save money by using public transport rather than cars or private transport (leaving them with higher levels of disposable income to spend on health and education), along with savings at the societal level.

119. (19) To monitor and evaluate it is recommended to:

- Set up a data platform for walking and periodically collect detailed data and integrate walking aspects into existing monitoring systems (national travel surveys);
- Adopt a global-level walking indicator framework including the “Proportion of population that feel safe walking around the area where they live after dark” and reference the indicators in the national master plan or policy on walking;
- Evaluate continuously the effectiveness of actions. Form partnerships with academic institutions to ensure evidence-based decision-making and to evaluate policy effectiveness and impact.

120. (20) To set the regulatory framework, it is recommended to:

- Improve road traffic regulations;
- Reform building codes and zoning ordinances to encourage walking;
- Set building design regulations to encourage walking in and around housing, public buildings, health-care and educational facilities, transport stops and workplaces;
- Make it obligatory to check and consider walking in new and existing transport infrastructures that are being built or renovated.

2018), available at 665ea41b-deee-40ce-9521-2f6046798b81.filesusr.com/ugd/241361_c32b98bac98847188230767db38ae185.pdf.

5 Actions of the Partnership on Healthy Active Mobility

121. **The Partnership on Healthy Active Mobility** is contributing to the vision of a clean, safe, healthy, active and inclusive mobility, and implements joint actions. These joint actions result from the objectives and action recommendations of this **Pan-European Master Plan on Walking** to strengthen walking in Member States and in the region.

122. The experts on walking of the Partnership will **intensify and strengthen their cooperative efforts** by actively involving Member States, international financial institutions and other stakeholders, including civil society and academia, to support the implementation of this Master Plan.

123. Efforts will be made to **disseminate the Pan-European Master Plan on Walking** and its policy action recommendations throughout the region, in order to influence as many stakeholders from the spatial and land-use planning, transport, health and environment sectors as possible for a successful implementation.

124. The Partnership will continue to **share good practices** and **monitor implementation** of the Master Plan and will seek to expand its geographical scope to include countries that have not been involved in this work. It will report annually to the Steering Committee of THE PEP.

125. Within its mandate and resources, the Partnership is expected to function as an **international competence platform**, facilitating peer-to-peer learning and knowledge-sharing between relevant stakeholders⁹¹ across relevant disciplines. It will **provide information, documentation and training for Member States** to develop and implement walking policies.

⁹¹ In this context it will be worthwhile to partner with relevant academic institutions to ensure evidence-based decisions and to evaluate policy effectiveness and impact.

126. The Partnership will provide Member States with an **overview (continuously updated, as required) of relevant global policies**.

127. The Partnership will consider how it will **proactively engage in and promote ongoing methodological discussions** to support Member States by conceptualizing methodologies on:

- a) Measuring time spent walking; (process, definitions, etc.).
- b) Measuring time spent in public space; (so called “sojourning”).
- c) Improving and standardizing the quality of crash data collection, in particular relating to injured pedestrians;
- d) Identifying a common procedure for collecting the number of injuries or deaths following pedestrian trips, slips and falls;
- e) Measuring proximity (distances on foot to important destinations based on geo-referenced data);
- f) Measuring people’s level of satisfaction with the walking environment in their neighbourhood, village and possibly their city.

128. **Continuous monitoring** of the implementation of the policy actions recommended in this Master Plan will have long-term benefits for Member States.

129. The Partnership will join forces **with international financial institutions** to increase the available budget for walking development and promotion.

130. There are many examples that show how joining forces and **engaging in international cooperation projects can be co-financed**.⁹²

131. The Partnership will provide examples of **design guidelines for spatial and land-use planning**, as well as for inclusive **walking infrastructure**, to support Member States (and subsequently the stakeholders at the regional and municipal levels) in ensuring that public spaces are designed and managed for all ages, abilities and well-being.

⁹² For instance, Austrian Energy Agency, “Active2Public Transport”, available at [Agency energyagency.at/active2public-transport](https://energyagency.at/active2public-transport) ; and Transform Transport, “STEP UP: Walkability for Women in Milan”, available at transformtransport.org/research/inclusive-mobility/step-up/.

132. The existing cooperation with ECE, and the experience in harmonizing definitions of various types of cycling infrastructure could result in the definition of **international standards** allowing the development of road traffic regulations and road codes that are pedestrian-friendly and encourage the adoption of laws reflecting pedestrians' needs. In this respect, the **definition of quality standards for an international touristic walking network** could be an additional topic for cooperation at the United Nations level.

Table of Tables

Table 1 Estimated benefits of walking and cycling per year in the European Union 21

Table 2 Direct cost effectiveness of road improvements on reducing pedestrian fatalities (percentage) 25

Table 3 Shopper-reported mobility behaviour and trader perception of customer mobility behaviour by distance, together with spend on two Berlin shopping streets..... 27

Table 4 Ambitions in existing national walking policies in the pan-European region 2023 35

Table of Figures

Figure 1 Mapping out the benefits of walking and cycling (WHO) 14

Figure 2 The benefits of walking to health..... 15

Figure 3 Mobility example, space consumption and emission production of different modes of transport..... 19

Figure 4 External effects (costs or benefits) of different modes (Euro cents per km travelled) 24

Figure 5 Carbon dioxide emissions of modes of transport (Grams/km)..... 29

Figure 6 Sustainable mobility pyramid: prioritizing healthy, green and sustainable mobility 31

Figure 7 Strategic framework for the Pan-European Master Plan on Walking..... 51

Figure 8 Key actions grouped vertically by themes 52

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