

WALKING AND CYCLING IN AFRICA

Evidence and good practice to inspire action

What governments
and decision makers can do
to retain, protect and enable people
that walk and cycle in Africa



[Download the full report](#)



<https://wedocs.unep.org/20.500.11822/40071>

© 2022 United Nations Environment Programme and United Nations Human Settlements Programme

Walking and Cycling in Africa – Evidence and Good Practice to Inspire Action

ISBN: 978-92-807-3947-3

Job number: DTIE/2444/NA

This publication may be reproduced in whole or in part and in any form for educational or non-profit services without special permission from the copyright holder, provided acknowledgement of the source is made. UNEP, UN-Habitat and the Walk21 Foundation would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing. Applications for such permission, with a statement of the purpose and extent of the reproduction, should be addressed to the Director, Communication Division, United Nations Environment Programme, P. O. Box 30552, Nairobi 00100, Kenya / Director, External Relations, Strategy, Knowledge and Innovation Division (ERSKI), UN-Habitat, P.O. Box 30030, Nairobi 00100, Kenya.

Disclaimers:

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations concerning the legal status of any country, territory or city or its authorities, or concerning the delimitation of its frontiers or boundaries. For general guidance on matters relating to the use of maps in publications please go to <http://www.un.org/Depts/Cartographic/english/htmain.htm>

Mention of a commercial company or product in this document does not imply endorsement by the United Nations Environment Programme or the authors. The use of information from this document for publicity or advertising is not permitted. Trademark names and symbols are used in an editorial fashion with no intention on infringement of trademark or copyright laws.

The views expressed in this publication are those of the authors and do not necessarily reflect the views of UNEP, UN-Habitat and Walk21 Foundation. We regret any errors or omissions that may have been unwittingly made.

© Maps, photos and illustrations as specified

Suggested citation: United Nations Environment Programme and United Nations Human Settlements Programme (2022). *Walking and Cycling in Africa: Evidence and Good Practice to Inspire Action*. Nairobi. <https://wedocs.unep.org/20.500.11822/40071>

Acknowledgements

The United Nations Environment Programme (UNEP), The United Nations Human Settlements Programme (UN-Habitat) and the Walk21 Foundation would like to thank all of the experts involved in the development of this report.

Authors and reviewers have contributed to the report in their individual capacities. Their affiliations are mentioned for identification purposes.

Lead Authors

Jim Walker (Walk21 Foundation), Janene Tuniz (UNEP), Lander Bosch (UN-Habitat) and Tomaz Cigut (UN-Habitat)

Editors

Carly Gilbert-Patrick (UNEP), Bronwen Thornton (Walk21 Foundation), Stefanie Holzwarth (UN-Habitat)

Reviewers

Aggie Krasnolucka (FIA Foundation), Alisha Myers (World Bicycle Relief), Amanda Gibbert (South African Department of Transport), Amanda Ngabirano (National Physical Planning Board, Uganda), Amos Mwangi (UNEP), Dina Abdelhakim (UNEP), Dennis Mwaniki (UN-Habitat), Meleckidzedek Khayesi (World Health Organisation), Monica Olyslagers (International Road Assessment Programme), Neji Larbi (Africa Development Bank), Nhan Tran (World Health Organisation), Richard Clark (FIA Foundation) and Sean Cooke (University of Cape Town)

Publishing, media and launch support

Solange Montillaud-Joyel (UNEP), Laila Saida (UNEP), Benedict Otieno (UN-Habitat) and Michael Kwasi (UN-Habitat)

Design and layout

Kerry and Alexander Moolman (Kadi)

The development of this report would not have been possible without support from the FIA Foundation, UKAID through the UK Foreign Commonwealth and Development Office, HVT Applied Research Programme and the German Environment Ministry's International Climate Initiative (IKI).



Organizational Statements

UN Environment Programme

Although the African continent is among those least responsible for climate change, rapid urbanization and increasing levels of car ownership put the continent at risk of becoming one of the larger emitters. There have been massive increases in ambient air pollution across Africa. In the absence of deliberate intervention, this pollution will increase morbidity and mortality, diminish economic productivity, impair potential human capital, and undercut development.

Transportation is one of the largest sources of air pollution. According to a UNEP report on Air Pollution and Development in Africa, in 2019 air pollution was responsible for 1.1 million deaths across the region.

Most African countries are still early in development. Investing in scalable solutions and minimising pollution is paramount. In Africa, where there is an incredibly high modal share in walking and cycling, decarbonization of the transport sector means retaining and enabling people to move safely in their cities by foot or bicycle.

There has been a shift in focus since the outbreak of the COVID-19 pandemic. The disruption significantly changed people's perceptions of the value of walking and cycling. Indeed, incredible shifts in policy across the continent in favour of walking and cycling have been observed. This is inspiring and shows a remarkable willingness to take action, but there is a lot more to be done.

This report highlights that nearly zero-emission modes of transport, walking and cycling infrastructure are a multi-solution intervention for the environment, for our cities and for our health. With walking and cycling at the centre of transport planning we can ensure the conditions for a greener, more inclusive and more connected African future.

Frank Turyatunga,
Acting Director and Regional Representative of the United Nations Environment Programme (UNEP) Africa Office



UN-Habitat

Addressing the mobility challenges in Africa requires a paradigm shift in urban and transport planning. The bias towards private motor vehicles needs to change in favour of reliable public transport systems integrated with walking and cycling.

This report highlights that universal access to safe, affordable and sustainable transport systems is paramount to achieving environmental, health and road safety targets in alignment with the Sustainable Development Goals, the Paris Agreement, the New Urban Agenda and the transformative 2063 vision for Africa.

UN-Habitat estimates that only half of the world's population has convenient access to public transport but with wide regional variations. Africa is the region with the lowest level of access to public transport with only one in three Africans benefitting of the same. Safe and enabling walking and cycling infrastructure and accessible links to public transport improves socio-economic development while addressing climate change, air pollution and road fatalities. It is important to implement sustainable multimodal transport systems, and the inclusion of non-motorized connectivity is a key element with particular benefits for those that are most vulnerable.

Even though the majority of the population relies on non-motorised transport, African countries are among the least safe places to walk and cycle in the world. The lack of essential infrastructure makes the experience of walking and cycling in African countries difficult, unpleasant, and dangerous. This report is a call to action for the 261 pedestrians and 18 cyclists killed on African roads every day.

As we enter the Second Decade of Action for Road Safety, we need to ensure that the experience of walking and cycling is improved and that urban planning and design focuses on how to bring people and places together. Over the last few months, many cities have expanded walkways and bike lanes providing safe movement during the pandemic. There is a window of opportunity for change in the way we organize our transport systems. I would like to call out to all decision-makers to act now. Change won't happen in the future, it has to happen now.

Oumar Sylla,
*Director for the Regional Office for Africa in the
United Nations Human Settlements Programme*



Walk21 Foundation

People walking and cycling are the heart of our communities and the foundation of sustainable mobility systems. But our streets do not always make it easy or nice to be on foot or bicycle.

In Africa, where the vast majority of people walk everyday, they do so on streets and roads that are not attractive, safe or comfortable. With such poor provision it is not surprising that people seek to 'buy their way out' of these modes as income levels rise.

But while the numbers may fluctuate, people will continue to walk and cycle for many decades to come, no matter what other transport options are built and improved upon. In fact these options need people to walk and cycle, just as our planet needs them too.

We must start now. We need to value walking and cycling more, build better facilities and invite people to use them. We need to increase people's satisfaction with their walking and cycling journeys, so it becomes and stays a mode of choice.

We can put walking and cycling at the heart of planning and investment for our streets and neighbourhoods. They are the solution to the multiple challenges we face and usually at lower costs than the alternatives.

Walk21 Foundation is proud to have been part of developing this report and the important 'call to action' it contains. The report consolidates available data and good practices to inspire politicians, practitioners and advocates across Africa.

Bronwen Thornton, CEO at Walk21 Foundation and Chair of the Africa Network for Walking and Cycling





Executive Summary

Evidence and good practice to inspire action

This report is a first attempt at gathering, analyzing and presenting data to demonstrate the everyday reality for the one billion people in Africa who walk and cycle every day. It baselines conditions in all 54 African countries and highlights inspiring best practices. It sets out recommendations for governments and other stakeholders and makes the case for retaining, enabling and protecting those already moving in the most sustainable way possible. It establishes the basis for investing in walking and cycling to ensure prosperous African urban and rural mobility landscapes based on inclusive growth and Sustainable Development.

The report has been developed by the UN Environment Programme (UNEP), the United Nations Human Settlements Programme (UN-Habitat) and the Walk21 Foundation. It uses existing data sources and interprets them through a walking and cycling lens.

Executive Summary

Evidence and good practice to inspire action

Chapter 1

Walking and cycling, the predominant mode

Chapter 2

Safer Streets, Safer Spaces

Chapter 3:

Access to safe and affordable transport

Chapter 4:

What is it like to walk and cycle in Africa?

Chapter 5:

Promote and Celebrate Walking and Cycling

Chapter 6

Embed Commitment in Policy

The data for this report has been collected in a period where the COVID-19 crisis has dominated the policymaking landscape, particularly in terms of mobility. Around the world the number of motor vehicles on the street plummeted and a rising number of people turned to walking and cycling to move quickly and safely through once car choked cities. Reactive policies around the world have challenged the social significance of the car and created a shift in behaviour and policy focus.

The disruption created by COVID-19 significantly changed people's perceptions of the value of walking and cycling. Many people considered riding a bicycle to work or walking to the store for the first time in their lives to ensure physical distance.

In most African cities, however, the continued need to move remained largely unchanged. Although there are exceptions, data collected in the first year of the pandemic indicated that people in African cities changed their mobility habits less overall when compared to other regions around the world as a consequence of COVID-19.

Instead the pandemic placed a microscope on the inequity of essential walking and cycling infrastructure in African cities.

In Africa, walking is already the primary mode of transport for the majority of people. Up to 78% of people walk for travel every day to access healthcare, education, shops, jobs and public transport – often because they have no other choice.

The billion people that walk and cycle for almost an hour every day put their lives at incredible risk the moment they step outside their homes. They must navigate streets without accessible sidewalks. They have to cross roads dominated by speeding cars or navigate make-shift crossings congested by highly polluting vehicles. They have no option but to breathe polluted air.

Walking and cycling in African cities is not just uncomfortable – it's deadly. Approximately 261 pedestrians and 18 cyclists are killed every day.

Walking and cycling are the most affordable and sustainable transport modes, particularly when integrated into reliable public or informal transport networks. Infrastructure for people that walk and cycle provides a means for reducing pollution, whilst also enhancing health and well-being, improving access to essential services and creating more liveable, equitable and prosperous cities.

Low-carbon recovery measures in the transport sector need to be centralized. This is particularly the case in Africa where low carbon action does not necessarily mean large scale behavioural shifts towards public transport, cycling and walking but instead modal protection and retention through focusing on the safety, accessibility and comfort of active travel.

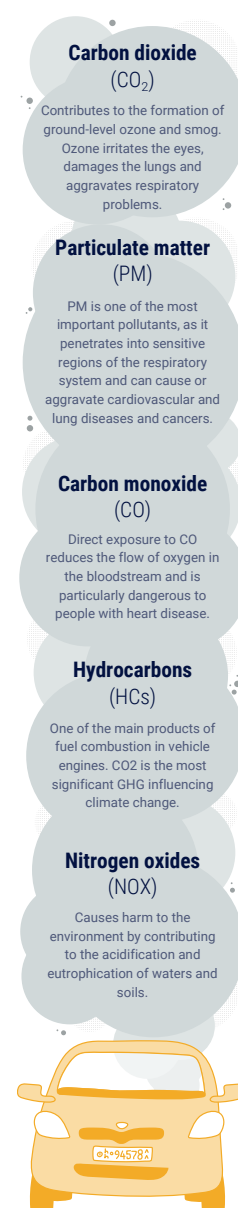
It is essential that actions taken in response to COVID-19 along with those aimed at addressing road safety and traffic congestion integrate air quality, climate and equity generating outcomes. These actions can also contribute to mainstreaming adaptation measures in local mobility and traffic planning.

Emboldened by the need to ensure future resilience by building back better, healthier and greener, this report captures existing inspirational actions and aims to inspire other to invest in walking and cycling across Africa. It has creatively utilized existing data sources supplemented by expert interviews and crowdsourcing to baseline the status of walking and cycling in Africa.

The report sets out how fundamental it is to retain the value created by people walking and cycling. It provides the evidence, knowledge and key actions required to ensure transport decisions made today will deliver safer, more sustainable and resilient networks in the future.

Up to 78% of people walk for transport everyday to reach essential services

FIGURE 1
Common Pollutants from Motor Vehicles



Report Findings:

Locate the demand and need

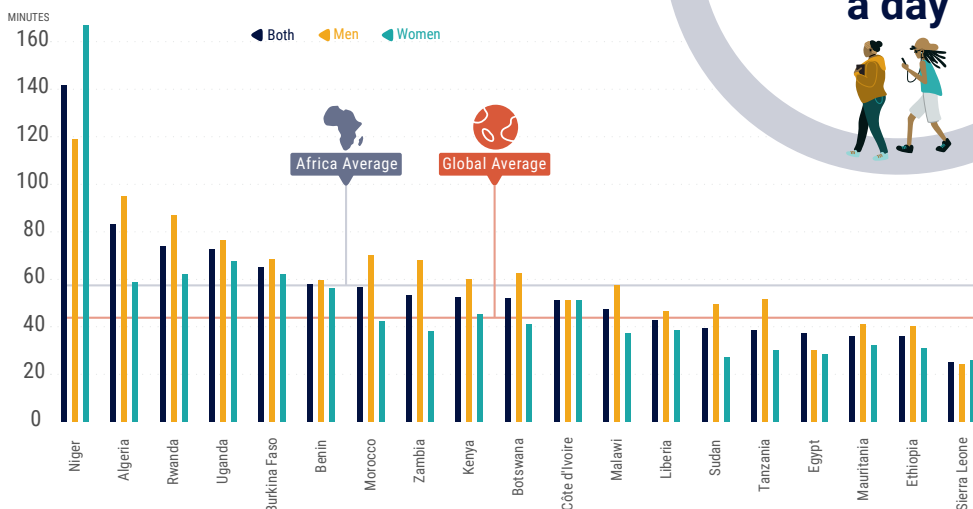
On average, up to one billion people spend 56 minutes walking or cycling for transport every day. These people generate the least noise and air pollution and require no use of fossil fuels. The time spent walking also has significant health benefits.

Retaining the value of this high modal share means shifting urban planning, investment and infrastructure development towards the needs of pedestrians and cyclists to deliver the multiple benefits.

Although the African continent is amongst the least responsible for climate change, car ownership levels are rising rapidly along with increasingly more dangerous levels of air pollution. Air pollution is now one of the largest causes of death in Africa.

The rise in motor vehicle use not only pollutes the air, it impacts public health by discouraging physical activity. Active commuting has seen a renewed appreciation during the pandemic and has strengthened the relationship between the transport and health sectors. This relationship is essential in enhancing resilience and creating the conditions for a greener and healthier recovery.

FIGURE 2 Time Spent Walking or Cycling for Transport



1 DAY

People are active for transport for 56 minutes a day

Assess the landscape to set safe design standards

Africa is the least safe place to walk and cycle in the world - 261 pedestrians and 18 cyclists are killed every day.

The consistent lack of essential infrastructure makes the experience of walking and cycling difficult, unpleasant, and incredibly dangerous.

Africa has only 3% of the world's registered vehicles, but 20% of global road traffic deaths. Estimates indicate that more than 260 000 people were killed on African roads in 2019. Of these 36% were pedestrians and 3% were cyclists.

Action for road safety includes the promotion of sustainable modes of transport, in particular safe walking and cycling. There is an urgent need for safer street designs for all to protect people who walk and cycle.

"State parties shall ensure the needs of vulnerable road users are adequately taken into account in the planning, design and provision of road infrastructure"

Article 14 of the African Road Safety Charter

See Chapter 2 for more on ensuring safer streets and spaces. >

See Chapter 1 to understand the benefits of retaining walking and cycling as the predominant mode >

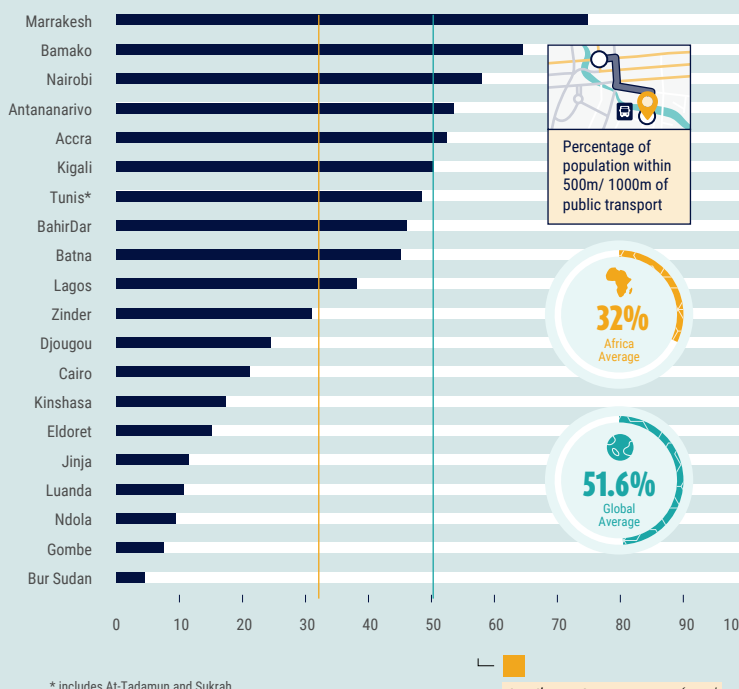
Map public transport catchments and audit their quality

Africa has the lowest level of accessibility to public transport in the world. Based on the existing data collected by UN-Habitat for measuring action for Sustainable Development Goal 11 which covers 137 cities and urban areas from 23 countries, only 31.7% of the population in Africa can access public transport within a walking distance of 500m/1000m (depending on carrier capacity). The global average in 2020 was 51.6%.

Walkable access to public transport is critical, especially for women, children, persons with disabilities and older persons who can only be guaranteed access if the walking environment is safe.

It is important to implement sustainable multimodal public transport systems – for which the inclusion of non-motorized connectivity and catchment zones is a key element.

FIGURE 3 Proximity to Public Transport



See Chapter 3 on access to safe and affordable transport for more >

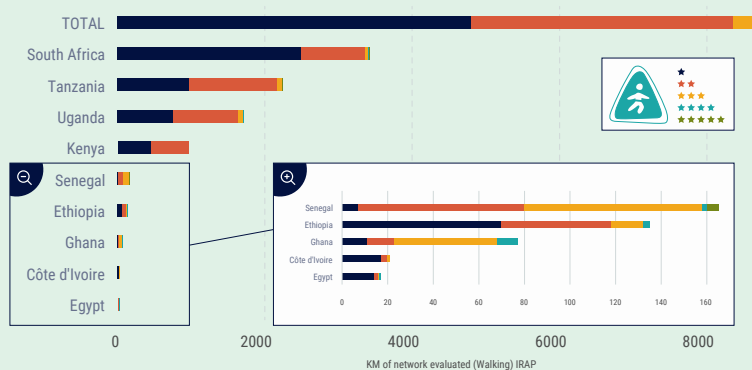
Set an action plan to deliver safer infrastructure

Of the roads in Africa assessed using the International Road Assessment Programme (iRAP) 5 star rating system, 95% fail to provide an acceptable level of service for pedestrians and 93% fail to provide an acceptable level for cyclists. Most roads are 1 star meaning that they have no cycle paths, no safe crossings and high vehicle speeds.

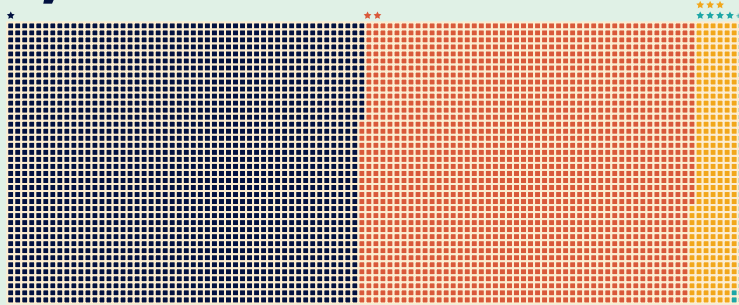
The comfort levels created by the lack of appropriate infrastructure significantly impact people’s mode choice. As income levels rise the impact of individuals “buying their way out of walking and cycling” risks an intensification of the already strained safety levels, air quality standards and traffic flows.

Investment in safe and comfortable road infrastructure has a significant impact on social interaction within neighbourhoods, road safety and accessibility. It can encourage walking and cycling, disincentivise motorized transport and slow the impact of climate change. Star Ratings or infrastructure quality measurement mechanisms significantly improve awareness of pedestrian and cyclist safety for those designing, building and maintaining the road network.

FIGURE 4 iRap Star Rating of Assessed Roads in Africa



4,208 km of roads assessed for cyclists



See Chapter 4 to find out more on what is it like to walk and cycle in Africa >

Less than 1% of roads assessed in Africa to date have reached the 4 or 5 star rating for cyclists

The road has moderate speeds and there are facilities which provide some protection from traffic and safe crossing points.

Proactively promote and celebrate walking and cycling

Many of the people who walk and cycle in Africa feel that they are overlooked and undervalued by traditional transport decision makers. Citizen-centred, gender sensitive approaches can enable meaningful reform in urban transport planning.

Although the numbers may fluctuate, people will continue to walk and cycle for many decades to come, no matter what other transport options are built and improved upon. People that walk and cycle are the foundation of resilient and sustainable mobility futures and their experiences and needs should be ascribed the appropriate value to ensure direct and indirect benefits are realized.

Car-free events are a tried-and-tested intervention that helps re-imagine the way public space is organised. They illustrate that walking and cycling can be enjoyable experiences and can grow demand - converting private car drivers into advocates of walking and cycling. Regular car-free days and car free zones are a celebration of people that walk and cycle as well as being an important part of a city's emission reduction strategy.

Give priority to people walking and cycling in policy and action

59% of the people walking and cycling in Africa are supported by a policy.

A walking and cycling policy either stand alone or as part of an integrated transport strategy, is an enabling condition that puts people and the planet first in transport planning. It sets out the intent of a government, increases recognition of the importance of walking and cycling, acts as a catalyst for provision of safe infrastructure for these modes and leads to integrated and systematic investment in walking and cycling.

In 2019, 19 of the 54 countries in Africa were reported to have a walking and cycling policy (35%).

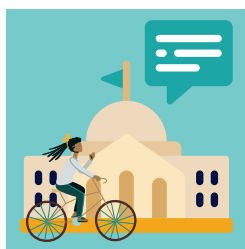
Many African governments are using policies and strategies to incorporate goals that are central to achieving Sustainable Development and Climate ambitions. However, research suggests that concern over climate change is a low priority in African cities compared to other more immediate needs like reducing road fatalities. Transportation is a large source of multiple pollutants which contribute to climate change and poor air quality. African cities have the opportunity to 'leapfrog' investments in private vehicle travel and invest in walking and cycling instead.

59%

59% of the people walking and cycling in Africa are supported by a policy.

FIGURE 5 Walking and Cycling Policy Landscape





POLICY

needs to:

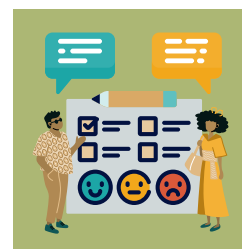
- 1 Retain the levels of walking to minimize the negative effects and costs of congestion, poor air quality, non-communicable diseases and compromised public safety.
- 2 Protect the lives of people that walk and cycle by ensuring both physical and personal safety.
- 3 Enable people of any age or gender, both with and without disabilities, to walk and cycle with dignity.
- 4 Invest in infrastructure that provides an acceptable level of service for people that walk and cycle.



ACTION

needs to:

- 1 Map the catchment areas of every public transport stop to ensure safe walking and cycling access in neighbourhoods and to public transport.
- 2 Include comprehensive safety and security in public spaces.
- 3 Incorporate funding for walking and cycling in transport infrastructure project budgets as well as strategic climate finance plans.
- 4 Invest in relation to the amount saved - when people can walk, they spend nothing on public or private transport and therefore have higher levels of available income for health and education.



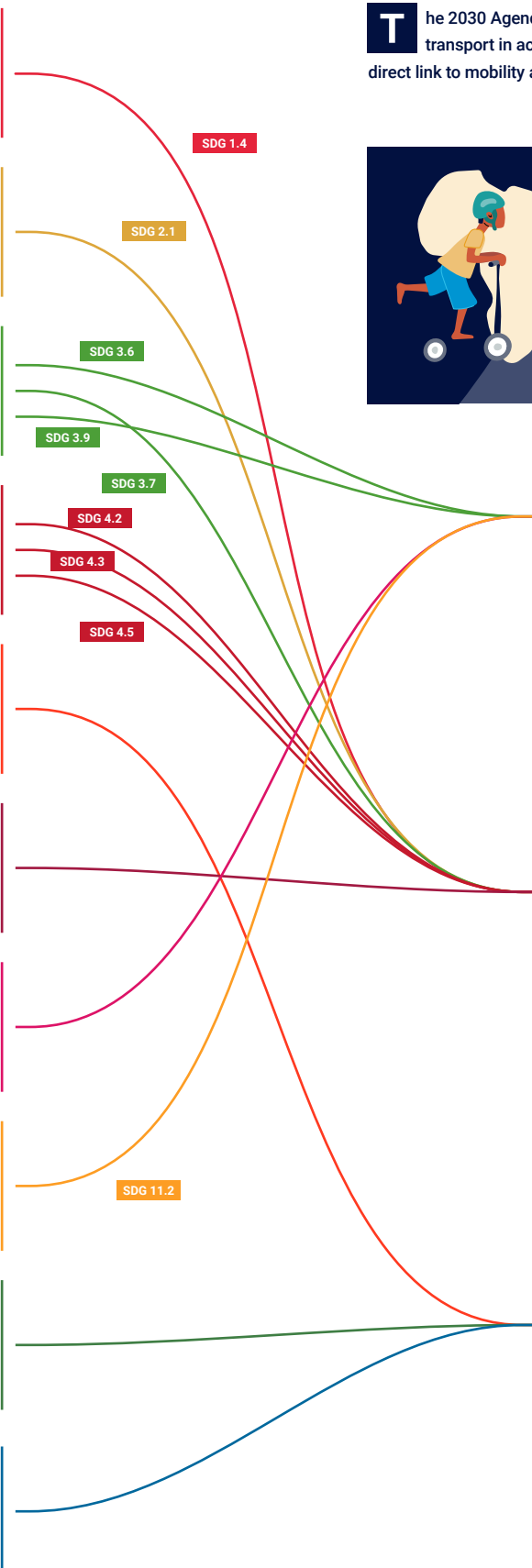
IMPACT

will be more effective if:

- 1 Citizens are involved in policy making and street design processes.
- 2 Communities are given affordable tools that allow them to share their views on where the level of service meets or fails their needs.
- 3 There is continuous evaluation of the effectiveness of delivered actions.
- 4 National health and transport authorities are encouraged to work with The World Health Organization (WHO) to collect consistent data on 'Time spent active for transport'.
- 5 Traffic police are trained on the importance of crash data and processes to collect it accurately and include pedestrians and cyclists.
- 6 There is vertical integration of policies between national and local level and dedicated staff in the local level working on walking and cycling to ensure policy, action and impact data is visible and up to date.



Responding to the SDG Agenda



The 2030 Agenda for Sustainable Development recognizes the importance of transport in achieving the future we want. There are clear targets that bear a direct link to mobility and some that have indirect or cross sectional significance.



Directly

- It is important to ensure the development of reliable, equitable, sustainable and resilient infrastructure that is focused on providing access to safe and affordable and transport systems for all. This includes improving road safety and expanding public transport access with special attention to the needs of those in vulnerable situations.
- Investment in walking and cycling contributes to reducing the adverse environmental impact of cities.
- Quality infrastructure for walking and cycling supports economic development and human well-being. It reduces the likelihood of road traffic injuries and non-communicable diseases as well as the mortality rate attributed to respiratory diseases caused by hazardous chemicals in the air due to pollution from by transport.

Indirectly

- People in vulnerable situations often do not have the means to afford transport and other access basic services. Access to food, healthcare, education and economic resources through equitable transportation access is fundamental to ensuring that the needs of the poor and vulnerable are addressed.
- Land use planning that incorporates sustainable and resilient infrastructure in developing countries includes walking and cycling infrastructure and dense mixed-use urban design.
- Accessible and inclusive cities ensure universal access to sexual and reproductive health-care services, quality education and access to job opportunities amongst other things.
- Inclusive and accessible green and public spaces can be achieved through participatory planning and management. Transparent policy frameworks at the national, regional and international levels based on pro-poor and gender-sensitive development strategies can achieve positive economic, social and environmental links between urban, peri-urban and rural areas.

Crosscut

- Investment in clean, inclusive and gender sensitive transport modes is paramount to achieving sustainable growth.
- Human activities linked to transportation are increasing harmful emissions and in turn the global climate is deteriorating. Low carbon development is an essential component in ensuring a sustainable future for people and for the planet.
- Walking and cycling needs to be integrated into climate change measures in national policies, strategies and planning. This process needs to be inclusive, transparent and responsive to unique needs while fostering climate resilience and low greenhouse gas emissions development.



Download
the full report



<https://wedocs.unep.org/20.500.11822/40071>

United Nations Avenue, Gigiri
P.O. Box 30552, 00100 Nairobi, Kenya
Tel. +254 20 762 1234
unep-publications@un.org
www.unep.org