



Share the Road:

Investment in Walking and Cycling Road Infrastructure



FIA Foundation
for the Automobile and Society





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≡ MAKE ROADS SAFE

ITDPEurope

Acknowledgements

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Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
ASEAN	Association of Southeast Asian Nations
BAQ	Better Air Quality
BC	Black Carbon
BCR	Benefit-Cost Ratio
BRT	Bus Rapid Transit
CBA	Cost Benefit Analyses
CO ₂	Carbon dioxide
CSE	Center for Science and Environment
CTF	Clean Technology Fund
C-XL	Climate Excellence Africa
DALYs	Disability Adjusted Life Years
DTIE	Department of Technology, Industry and Economics
EC	European Commission
EU	European Union
FIA	Federation Internationale de L'Automobile
GAP	Global Atmospheric Pollution
GDP	Gross Domestic Product
GHGs	Greenhouse Gases
GoK	Government of Kenya
GTZ	Deutsche Gesellschaft Fur Technische Zusammenarbeit
HC	Hydrocarbons
ICA	Infrastructure Consortium for Africa
I-CE	Interface for Cycling Expertise
ICT	Information and Communications Technology
IEA	International Energy Agency
iRAP	International Road Assessment Programme
ITDP	Institute for Transportation & Development Policy
km	Kilometres
kph	Kilometres Per Hour
KSI	Killed and Serious Injuries
LOS	Level of Service
MDBs	Multilateral Development Banks
MDGs	Millennium Development Goals
MT	Motorised Transport
NAMAs	Nationally Appropriate Mitigation Actions
NEPAD	New Partnership for Africa's Development
NO _x	Nitrogen Oxide
NMT	Non-motorised Transport
OECD	Organisation for Economic Co-Operation and Development
PM	Particulate Matter
SO _x	Sulphur Oxide
SPM	Suspended Particulate Matter
SSATP	Sub-Saharan Africa Transport Programme
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
USD	United States Dollar
WBCSD	World Business Council for Sustainable Development
WHO	World Health Organisation



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Foreword

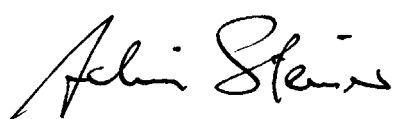
Roads are meant to facilitate mobility, the movement of people and goods. But many roads have become too congested with traffic and no longer meet their main purpose of improving accessibility. Moreover, most roads have been developed with the motor vehicle as the principal user. The results are sobering. Road transport accounts for 17% of the world's energy-related carbon dioxide emissions and 10% of global greenhouse gas emissions. It is also responsible for up to 90% of urban air pollution. More than 1.3 million people are killed every year and more than 50 million are seriously injured; 90% of which is in the developing world. And our cities are losing the vitality and ease of travel preferred by citizens, visitors and investors alike.

To take a more sustainable mobility path, the critical role of non-motorised transport (NMT) needs to be recognized and factored into road infrastructure investments. The most natural and energy-efficient ways to travel shorter distances— walking and cycling – have been sidelined by politicians and planners in many places over the last century in favour of transport systems designed for the motor vehicle. Innovations and new technologies in fuels and vehicles, as well as measures in traffic demand management, need to not only be encouraged but accelerated. It is clear that we need to diversify the options by building integrated, multi-modal transport systems that can propel a transition towards a low carbon, resource efficient, job-generating Green Economy.

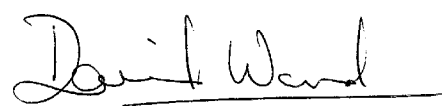
It is a vision that brings together the United Nations Environment Programme (UNEP) and the FIA Foundation for the Automobile and Society (FIA Foundation) through a new campaign—Share the Road. In partnership with governments and donors, Share the Road aims to catalyse decision-making to systematically allocate investments in NMT road infrastructure. A good start would be a set percentage of the project costs set aside for NMT road infrastructure. The core rationale is that such investments are a triple win opportunity in improved environment, safety and accessibility which can contribute to sustainable development.

NMT investments are also a significant part of the package of solutions necessary to achieve the poverty-related Millennium Development Goals (MDGs) and the objectives of the UN Decade of Action for Road Safety in 2011-2020. For example by 2015, road crashes are projected to be the leading cause of health losses for children aged 5 to 14 in developing countries. Unless there are sustainable roads for these children to go to school in safety, we risk losing the progress made in reducing the under-5 mortality rate.

There is a critical window of opportunity to make road infrastructure in developing countries accommodate all users and support development efforts. On behalf of the many partners who contributed to this report, we invite all stakeholders in the international community to take part in the Share the Road initiative.



Achim Steiner
United Nations Under-Secretary-General
Executive Director
United Nations Environment Programme



David Ward
Director General
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Executive Summary

Cities are in urgent need of a new paradigm for envisioning and implementing sustainable transport. While current road transport systems have served as an engine of tremendous economic growth, they have also incurred huge costs in air pollution, emissions of greenhouse gases, injuries and fatalities from road crashes, lost productivity from congestion and, in some cases, the severance of communities. Such problems will be further exacerbated with the projected growth in private light-duty vehicles, namely a tripling of the global fleet by 2050, unless we establish cleaner, safer and more efficient transport systems. This kind of shift is urgent globally, but most acutely in the cities of developing countries where two-thirds of the growth in motor vehicles is expected to take place and where high rates of urbanisation add to the pressures on the environment and society.

Despite the massive benefits of NMT, investments by donors and governments still do not sufficiently finance roads and transport infrastructure to enable safe and enjoyable walking and cycling. The lack of investment in sustainable urban transport is one of the most blatant gaps in government expenditures, development assistance and climate finance. Share the Road draws attention to the missed opportunity and proposes a broad-based partnership to develop the kind of investment policies that will significantly raise the profile and delivery of NMT infrastructure. One possibility lies in linking to the recommendation of the Commission for Global Road Safety that a minimum 10% of total project costs be allocated to safety, inclusive of NMT infrastructure.

Investments in infrastructure for NMT yields tremendous positive impacts in the environment from less pollution and greenhouse gases, in safety from the protection of vulnerable road users from high-speed traffic, and in accessibility itself, by providing the majority of global citizens with a more viable, enjoyable and affordable means of travel.

Depending on the country and city, road investments will need to address an appropriate mixture of measures to preserve the modal share of NMT by preventing the shift to private cars or to increase the modal share of NMT by encouraging the shift to NMT modes. For example, in Nairobi, Kenya, more than half of the population walks or cycles to meet their mobility needs. The paradox is that little, if any NMT infrastructure exists, leaving those who rely on NMT especially vulnerable to road crashes. To rectify the situation and improve the convenience of using NMT, roads must be designed with all users in mind. Whether in rehabilitation projects or new road constructions, there are two common principles – the protection of vulnerable users from high speed impact and the integration of NMT networks with other motorised services such as public buses.

In this context, this report puts forth the following key recommendations to the international community, in particular to donors and to governments, for promoting increased investments in walking and cycling infrastructure:

1. **Recognise the massive benefits of a clean environment, safer roads and better mobility from increased investments in NMT infrastructure:** Current transport systems, overly dependent on motor vehicles, incur high costs from congestion, pollution and road fatalities. Walking and cycling are highly resource-efficient in both energy and space and the ability to use these modes makes our cities more attractive and liveable.
2. **Better balance the share of NMT investments in road and transport infrastructure projects to meet the full range of people's mobility needs:** Roads should facilitate the mobility of people and goods, without preference for some users over others. Sharing the road entails sharing the space and the resources allocated to build, maintain and improve them.
3. **Increase the total amount of investments in NMT infrastructure as part of efforts for greening our economies, improving global road safety and achieving the Millennium Development Goals for reducing poverty:** Sustainable transport is key to multiple agendas of global importance. Investments to address climate change, promote economic growth, improve road safety and reduce poverty should include components on NMT infrastructure as a matter of course.
4. **Collaborate across a wide range of sectors and countries to make investments in NMT infrastructure a matter of policy in donor agencies and government budgets:** The argument is clear, increased investments in NMT infrastructure are necessary for multiple, urgent reasons. Partners must work together to promote this low-cost, high-benefit component to sustainable mobility and institutionalise systematic financing of NMT.



5. **Promote further education and training for engineers, designers, planners and funding proposal writers to raise their capacity to design and finance safe, intermodal transport systems:** Achieving sustainable transport will be a challenging journey that requires a new way of planning, financing and implementing, especially in cities with rapid urbanisation and motorisation. Effective exchange and cooperation across national and sectoral boundaries are needed to cultivate such expertise.
6. **Have creativity and courage in charting a sustainable mobility path:** When faced with particular challenges, a healthy dose of thinking outside the box is necessary. Cities that are now leading examples had to overcome their own difficulties; their champions continue to promote safe, clean, more equitable transport.
7. **Design roads so that vulnerable road users such as pedestrians and cyclists are protected from high speed impact:** NMT facilities that protect users from high speed impact can drastically cut the number of serious injuries and fatalities. Giving NMT users their own space makes these modes of travel more enjoyable and attractive, while also improving traffic flow for motorists.
8. **Integrate NMT networks with other modes, especially public transport, in order to maximise usage and impact:** Walking and cycling are best suited for shorter distances, 3 km to 15 km respectively. Connecting sidewalks and cycling paths to bus stations and other motorised transport expands the possible range of resource-efficient travel and also increases use of public transport.
9. **Develop indicators that can monitor and evaluate roads for their contribution to sustainable development in terms of environment, safety and accessibility:** The traditional method of expressing transport improvements in km paved or the average speed of motor vehicles is outdated. Modern and inclusive ways to measure progress in roads and transport infrastructure must be developed to make investments more successful.
10. **Communicate among donors and governments both at the project and policy level to identify best practices in monitoring and measuring impacts of road investments:** Some donors and governments have already embarked on internal initiatives to improve the effectiveness of investments, as well as to reduce the unintended negative consequences. An open atmosphere of sharing and coordination will help propel a global push for better investments.

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