



LIFE SUPPORT

ADVANCING THE
GLOBAL AGENDA
FOR FINANCING
& ACTION ON
ROAD SAFETY

 **FOUNDATION**



**CHILD HEALTH
INITIATIVE**

ACKNOWLEDGEMENTS

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The FIA Foundation is an independent UK-registered charity, working closely with grant partners to shape projects and advocate to secure change in policy and practice. Our objective is safe and healthy journeys for all. Through partners with global reach, we are supporting safer vehicles and highways, clean air and electric cars and greater mobility access and inclusivity.

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CONTENTS

Foreword	1
Introduction	3
System Failure	5
Conflicting priorities	6
Capacity deficit	7
Flatlining	9
The human cost	12
Closing The Gaps	17
Safe Schools Africa	19
Child Health Initiative	20
10 Step Plan for Safer Road Infrastructure	21
Capacity building in CAREC	22
The Shaanxi Road Safety Demonstration Project	22
PPP financing - toll concessions	23
Beyond infrastructure: collaboration models for other safety priorities	24
Action agenda for motorcycle safety	25
Investing in helmet safety: Vietnam	26
Connecting with climate	27
Active mobility finance	29
Safety critical for climate progress	29
Unlocking finance - the way forward	31
Conclusion	33

FOREWORD

For Fred Itembe, who worked in security at his local town council, life changed in seconds. On 13 October 2024 he was travelling home to the Jinja district east of Kampala after a meeting. He got out of a taxi with a colleague, and they began to cross the Kampala Northern Bypass. A Toyota Corolla hit him as he was crossing. Fred woke up in ICU, to hear that his colleague had died on the spot.

At 47 years old, Fred is now permanently disabled. He lost his left leg, and risks losing his right leg as well due to extensive damage to the tibia. Fred has used all of his life savings on medical treatment and is battling depression. His children have dropped out of education since he can no longer afford their school fees, and he is now relying on neighbours and well-wishers to feed his family of five.

On the Kampala Northern Bypass, Fred's story is sadly all too common (see p.12). The latest, final, phase of construction on the Bypass was completed in January 2022. As with many roads projects, the main objective is to cut travel times and reduce congestion. On paper, the commitment is also to improve road safety, yet in reality there are still far too many deaths and injuries. This road in Kampala is by no means an outlier. Around the world, investment in road infrastructure and transportation is still failing the people it is supposed to serve, the toll of road traffic fatalities and injuries is far too high. Despite two Decades of Action for road safety, readily available solutions to prevent road traffic injury, and global plans emphasising the effectiveness of the 'safe system', progress is far too limited. A fundamental reason for the ongoing failures to address road traffic injury is the weakness of financing. Governments are not investing at the levels needed to address the scale of the problem. The development banks, which play a critical catalytic role, have themselves acknowledged that the financing they deploy needs to be significantly increased. Road safety is often set against what can be seen as competing priorities, including climate, and private investors are relatively scarce. Too often, when financing is available for road infrastructure, or a transportation project, it fails to achieve the road safety outcomes needed.

This report identifies some priority areas that should be focused on if progress is to be made over the next five years. It does not pretend to solve the entire global road safety funding gap, nor does it call for trillions of dollars of investment. Re-issuing global calls to action of this nature in a context of precarious development financing and with multilateralism under attack would be unlikely to achieve much in the way of results. Instead, this report charts a practical way forward, addressing critical weaknesses and closing gaps to make financing on road safety fit for purpose. It focuses on what must be done to fix the system, to improve the way governments demand and access financing, then deliver effective road safety. And it argues the necessity of connecting far more effectively with relevant climate finance, which could also have potential for unlocking private finance.

The agenda we set out here is based on successful efforts that have been made in unlocking financing for road safety. In particular, these efforts address the lack of capacity and outdated standards that inhibit effective financing. There are also strong examples where road safety has been effectively integrated into wider sustainability and climate financing. This is critically important: road traffic injury prevention cannot continue to be an isolated issue, competing for attention with other priorities. It should be seen as integral to sustainability and climate agendas. For the FIA Foundation, these are issues that we are trying to address through our support for the International Road Assessment Programme, partners in the Child Health Initiative, and the leadership and advocacy of the UN Environment Programme and the Partnership for Active Travel and Health, amongst others. The agenda outlined in this report signposts priorities for the coming years. This report is aimed at decision makers, financiers and practitioners - those who can make a difference in fixing a system which in its current form has catastrophic consequences for people like Fred Itembe and millions of others around the world.

SAUL BILLINGSLEY

EXECUTIVE DIRECTOR, FIA FOUNDATION



INTRODUCTION

Progress to save lives on the world's roads needs to be significantly accelerated. As we enter the final years of the Sustainable Development Goals, and the 2nd Decade of Action for Road Safety, road traffic deaths and injuries are increasing in far too many countries.

It should be noted that some countries that are able to mobilise resources and commitment have shown that it is possible to make progress. The latest WHO Global Status Report identified several nations that have managed to halve, or significantly reduce, road traffic fatalities.¹ Globally, the number of deaths is static, although that picture can look more promising in the context of significant increases in population and motorisation.

Yet there is cause for great concern. Many countries are struggling to cope with a rising toll of road deaths and injuries. Judged on purely economic terms, the burden of road traffic injury is unjustifiable, and makes little sense from a national development perspective. Countries lose 3-5% of GDP to road traffic injury – which is roughly the same as the amount they would typically invest in transport and other infrastructure.²

Urgent action is needed, but progress cannot be made without a step-change in funding and financing. For well over a decade, 'safe system' solutions to prevent road traffic injury have been well known and available. But without accessible and strengthened funding streams, these life saving measures cannot be put in place.

As this report will outline, improvements and progress in the coming years to 2030 in four major areas are urgently needed:

- Increase the levels of finance
- Raise government demand & provide capacity
- Scale-up effective solutions
- Integrate funding streams for road safety, sustainable transportation and climate.

While globally, during two 'Decades of Action' for road safety, the level of financing has not achieved the impact needed to address the full scale of the crisis, there have been some signs that improvements can be made. Key questions are: how can progress be accelerated? and how can financing be mobilised towards greater results at-scale that are urgently needed in the next few years?

Ambitious road safety programmes have been supported in recent years. The Multilateral Development Banks (MDBs) are financing safe system programmes, exemplified by the World Bank's more comprehensive 'mass action' financing, results based financing, and policy based lending by a range of MDBs.³ Such initiatives respond to instances of ambitious government targets and national strategic planning where they have been developed.

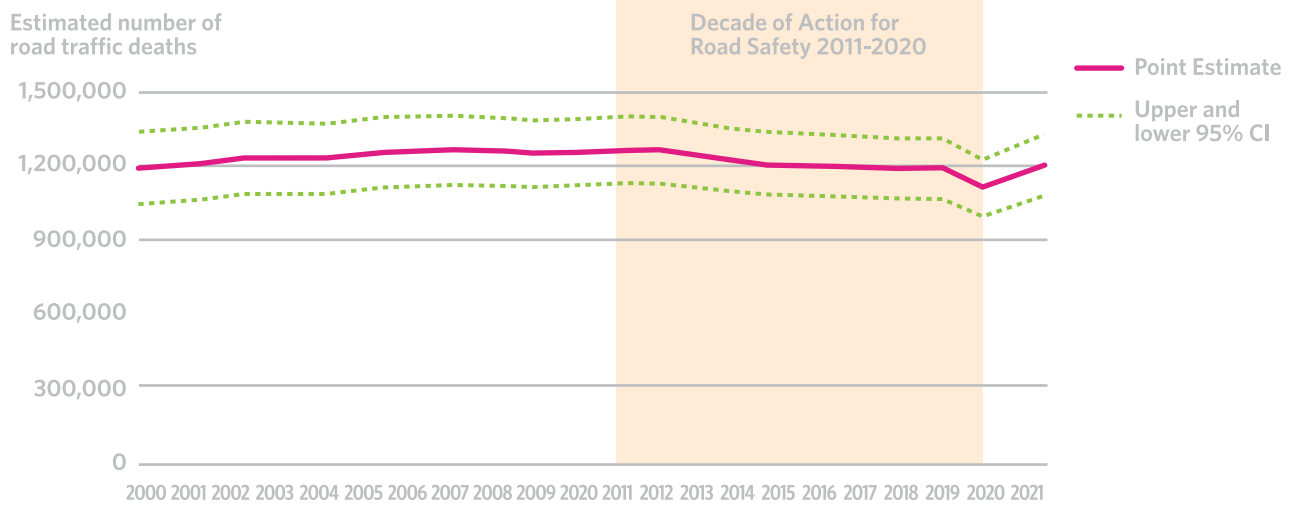
A strong example is Bangladesh, which has a \$358m World Bank financed programme to reduce fatal crashes by 30% by 2027. This focuses on two major highways which account for a large proportion of the country's road traffic injury burden. It takes a holistic 'safe system' approach, encompassing speed management, safe infrastructure, vehicle safety, post-crash care and data management. A further example is in São Paulo where results-based PPP blended finance supported by the Inter-American Development Bank and World Bank is expected to save over 30,000 deaths and serious injuries (see p.23).

This demonstrates that it is possible to generate financing at scale to implement the 'safe system' with explicit and transparent targets.

The current level of dedicated catalytic financing for road safety across the MDBs is estimated at just over \$700m a year. For more countries to deliver effective programmes, working towards more ambitious road safety targets over the next five years, a minimum doubling of MDB catalytic road safety financing would be required. This is broadly in line with the level that has been accepted as necessary by the 10 MDBs collaborating globally on road safety.⁴ In the critical years between now and 2030 this needs to move beyond estimation and aspiration, to delivery.

Such financing must be accompanied by, and unlock national budgetary commitments. And for this, significant strengthening of capacity, standards and expertise is required. It should also be complemented by private investment and connect effectively with climate finance. Small steps in the right direction have been taken in recent years, but an acceleration to 2030 and beyond is essential. The 4th Global Ministerial Conference on Road Safety can provide an important springboard for renewed momentum.

WHO ESTIMATED ROAD TRAFFIC FATALITIES



Source: World Health Organization Global Status Report on Road Safety 2023



SYSTEM FAILURE

As governments aim to achieve economic development objectives, road infrastructure financing is sought from a combination of national budgets, bilateral donors and development institutions, with sources of private finance playing a lesser role. This financing often comes with strings attached, and few of the strings relate to casualty control. In the context of economic development, there is often an understandably dominant objective to decrease journey times, to attempt to handle increasing volumes of traffic – both freight and private vehicles – and to improve access and connectivity. Financing from development banks, a variety of institutional sources, sometimes from the private sector, and governments themselves is designed primarily to achieve these objectives.

It would not be accurate to suggest that road safety is always absent, but it does face challenges from

design through to delivery of a road project. In many instances, road safety at a minimum and far from adequate level is included at least at the planning stage, with some safety features incorporated in the construction: commonly pedestrian footbridges are built (though their effectiveness is questionable see p8), some measures to separate traffic included, and awareness or education initiatives carried out along a corridor. But reviewing a sample of recent high-value road infrastructure projects reveals the road safety challenges. There may be inclusion of road safety to varying degrees and with mixed effectiveness in the planning stage of roads projects. On World Bank projects, for example, road safety safeguards now require a high degree of safety compliance which can lead to good results. However, far too often, once the roads are delivered, safety issues – for a variety of reasons – are not being adequately addressed.



CONFLICTING PRIORITIES

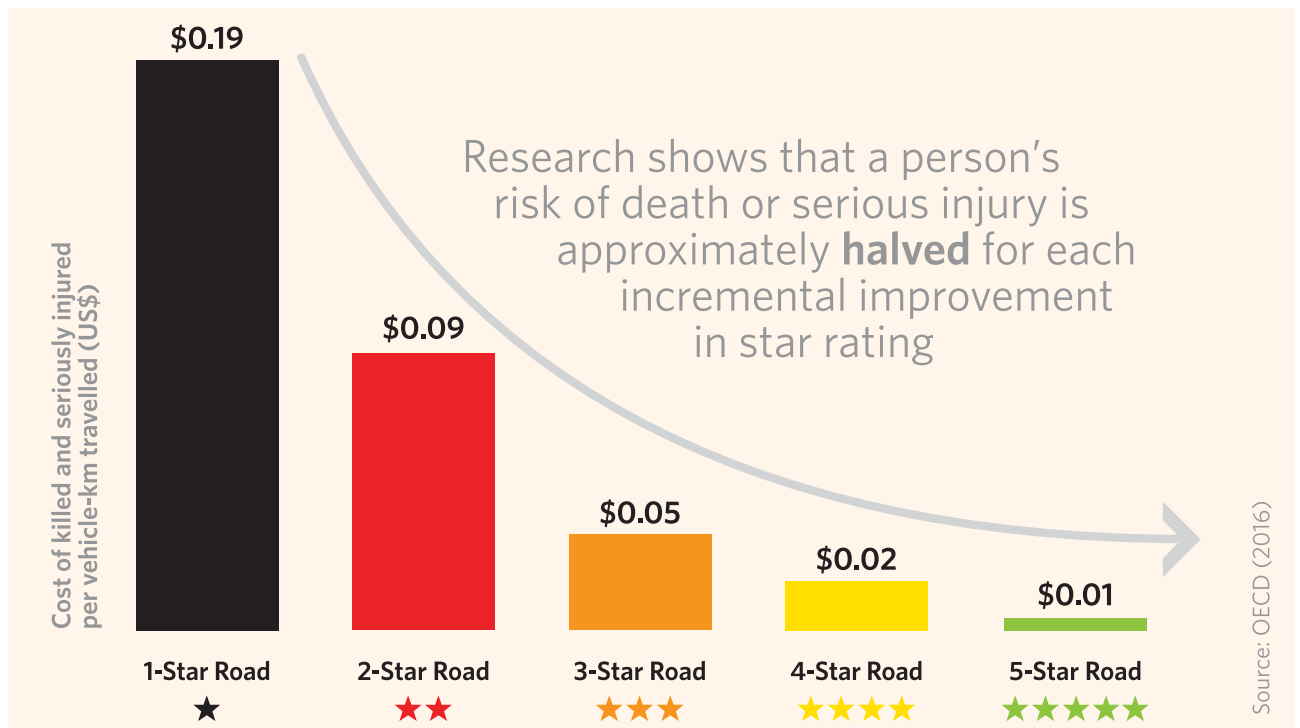
Why are safe system design and management measures still not being incorporated as standard into new and rehabilitated road infrastructure?

Key areas of weakness can be identified: the first is at the top level of government policy making; a second area is in terms of weak standards; and a third is at the project design and implementation level.

In terms of the top level of government, there is a disconnect between the ministries and agencies that have responsibility for road safety, and ministries of finance. Ministries of finance will typically not be aware of the returns on investment for road safety. And while road traffic injury may drain economies of 3-5% of GDP annually, the costs may be difficult to calculate given that they are fragmented across different sectors impacting health, livelihoods and lives. Ministries of transport and road agencies tend

not to engage with ministries of finance on the need to invest in road safety. Yet it is a ministry of finance that will determine budgets and play the pivotal role in accessing and shaping development finance. In this context, budgets are narrowly set according to what are understood to be the economic benefits of a road or transport system, and road safety will often not adequately feature from the outset.

In terms of standards, a major failure is of most national design standards to systematically and routinely include all of the safety features needed to meet a three-star or better standard and make a transport corridor safe for all road users.⁵ With national governments selecting, specifying, designing and constructing the roads that are financed, the starting point is the existing national practice which often has the risk of death and injury built into existing standards.



For more on star ratings for safe road infrastructure visit www.irap.org

At the project level, even if there is an inclusion of road safety once a ministry of finance has sanctioned an investment, too often there are further issues at the policy and project implementation stages. Conflicting priorities in road infrastructure financing tend to play out at design and implementation phases, with road safety suffering, and more obvious economic development objectives winning out.

Road safety safeguards may be required but project managers in both government roads agencies and development banks are constantly performing a balancing act involving politics, timeframes, budgets and the safeguards. They are confronted by conflicting priorities, and can only push to achieve safety requirements and safeguards as hard as the local politics, their timeframes and budgets will allow for fear of a project failing.

CAPACITY DEFICIT

Expert organisations working across low- and middle-income countries report a common failing which can prevent financing from being requested for road safety in the first place, and when it is agreed, often inhibits the effective design for and delivery of safe roads. And from the perspective of the MDBs themselves, in a context of low capacity and awareness, securing demand from countries can be a prolonged process taking years of work and relationship building to get projects into the pipeline.

A prevailing weakness is the capacity gap⁶ in roads agencies, their consultants and contractors, to design and implement road safety which will protect all road users – particularly the vulnerable.

The extent to which road projects are designed according to effective safe system principles, and the necessary countermeasures implemented, is heavily dependent on national design standards and the capacity of the roads agencies and their contractors.

Lowest cost tendering also encourages the omission of safety features during design and/or construction. In many low- and middle-income countries, the traditional focus of training, and roads engineering courses in universities, has been prioritised on the needs of vehicles. The focus of traffic engineering standards and road design manuals is also often on vehicles, with little or no guidance for engineers on designing for pedestrians and other vulnerable road users – despite the fact that only a minority of people own cars.

As a result, many roads engineers do not prioritise the vast majority of road users – those who walk, take often informal public transport or motorcycle taxis, and perhaps cycle – in their designs. A classic outcome is the prevalence of pedestrian footbridges, often placed at points that do not match people's walking patterns, that are unsuitable for the disabled, elderly, or small children, and are unsafe for women walking at night. Because of this inappropriate provision, people often prefer to take their chances moving through fast traffic at ground level.

DYSFUNCTIONAL PROCESS, POOR OUTCOMES



Technical experts from NGOs including the International Road Assessment Programme (IRAP), International Road Federation (IRF), Eastern Alliance for Safe and Sustainable Transport (EASST), working in Central Asia, and Amend in Sub-Saharan Africa, are working with road authorities to try to overcome these challenges and embed people-centred design and safe speeds. At the design phase, they find that many roads engineers are locked into outdated design standards, are overstretched, and can only focus on the 'high level' task of ensuring workable road alignments within the constraints of land

ownership issues, budgets, and the like. They often do not have the capacity to approach road designs with an eye to land-use issues and accommodating specific road users like school children. These deficiencies are also seen at the construction phase.

The net result is a system which often fails to protect both motorised and non-motorised road users, an approach which does not account for speed in situations where pedestrians, two-wheelers and vehicles interact, and a high level of risk and road traffic injury.



FLATLINING

The result is that while there are varying degrees of commitment to road safety, or at least acknowledgement that action in some form must be taken, progress is slow and stagnating.

There is a stark disparity between the billions allocated to road construction and the investment needed to implement the best practice in road safety that has been outlined in the UN's Global Plan to reach the sustainable development objectives for road safety.⁷

Sample of large economies by region	Annual road infrastructure budgets ⁸	% of roads 'unsafe' across all road users (under three star)	Total Fatalities and injuries	Cost of road traffic injuries (% of GDP)	Investment required to reach safe infrastructure target (% of GDP)
EAST AFRICA: KENYA UGANDA RWANDA TANZANIA ETHIOPIA	\$4.3bn	84%	677,000	5.6%	0.3%
CENTRAL ASIA: KAZAKHSTAN TAJIKISTAN UZBEKISTAN KYRGYZSTAN	\$2.6bn	74%	459,000	3.3%	0.3%
SOUTH ASIA: INDIA NEPAL BANGLADESH SRI LANKA	\$38bn⁹	76%	6.7m	4%	0.4%
LATIN AMERICA: ARGENTINA CHILE BRAZIL MEXICO COLOMBIA	\$14.9bn	64%	4.6m	4.3%	0.3%

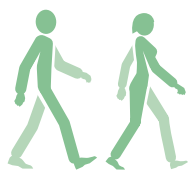
Source: iRAP & national budgets

The prevailing pattern is of a failure to invest at a level commensurate with the size of the problem, to invest in safe system policies and in particular an absence of measures needed to protect vulnerable road users. For example, according to assessments of roads in more than 80 countries using the iRAP

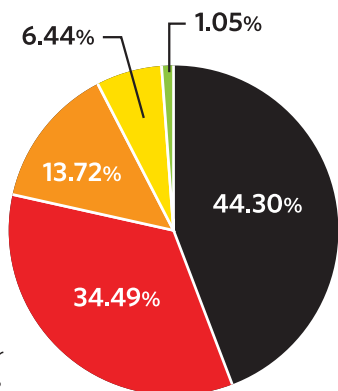
methodology, more than half of all travel in low- and middle-income countries is on roads rated in the highest risk 1- and 2-star categories. For pedestrians nearly 80% of travel is on 1- and 2-star roads and only 4% of roads have sidewalks where pedestrians are present.

BASED ON 600,000 KM OF ROADS IN MORE THAN 80 COUNTRIES

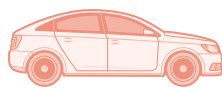
PEDESTRIANS



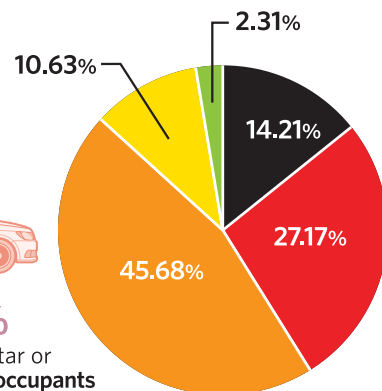
21.21%
of travel is on 3-star or better for pedestrians



VEHICLES



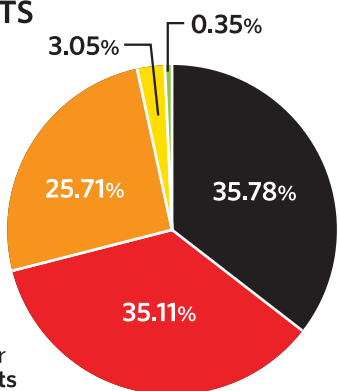
58.62%
of travel is on 3-star or better for vehicle occupants



MOTORCYCLISTS



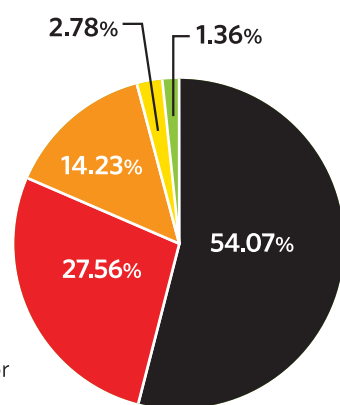
29.11%
of travel is on 3-star or better for motorcyclists



BICYCLISTS



18.37%
of travel is on 3-star or better for bicyclists



★ 1-star ★★ 2-star ★★★ 3-star ★★★★ 4-star ★★★★★ 5-star

Data according to iRAP

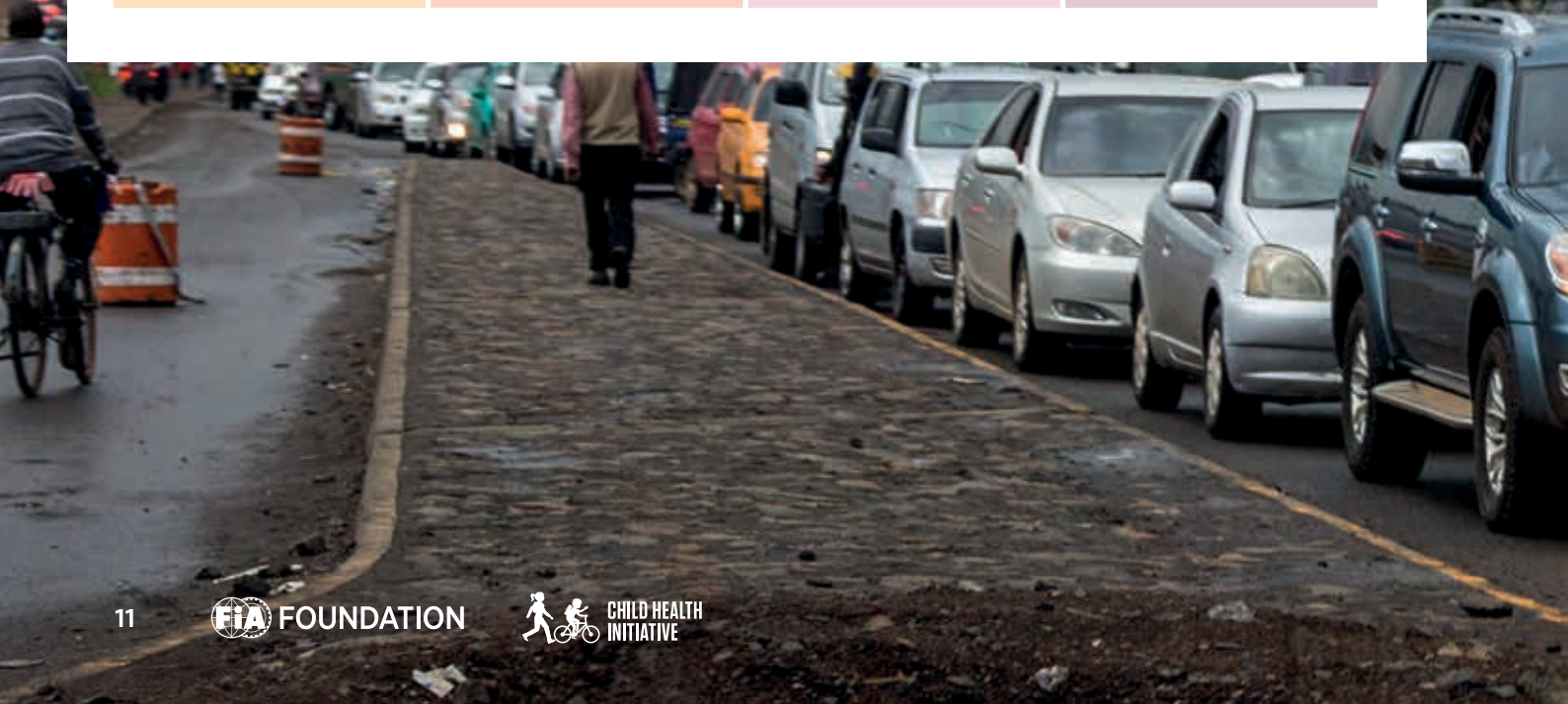


Billions of dollars of financing are spent on road construction globally with the primary focus on reduction in travel time, moving private vehicles and freight at speed. Without the integration of effective safe system road safety and measures to protect vulnerable road users, rising casualties are too often the result. There is often also a lack of appreciation that having both a safe road where speed is managed and an efficient one, are not contradictory

objectives. Having a smooth traffic flow resulting from less crashes can be better for movement of vehicles and more efficient travel times over the long term.

While just a snapshot across regions, financing for many more roads like these with poor safety outcomes, has been approved recently and the practice is continuing.

PROJECT	DESCRIPTION	KEY TARGETS	ROAD SAFETY ISSUES
LAGOS-IBADAN EXPRESSWAY, NIGERIA	Length: 127.6 km Cost: \$200 million	Reduction in travel time 120 min-60 min	Ongoing road safety concerns with reports of crashes
KAMPALA NORTHERN BYPASS HIGHWAY, UGANDA	Length: 22.5km Cost: €106 million	Reduction in travel time: target to 'significantly' reduce city congestion	Reports of high rates of crashes, injuries and fatalities. Poor safety for pedestrians and vulnerable road users
PHNOM PENH-SIHANOUKVILLE EXPRESSWAY, CAMBODIA	Length: 190.6 km Cost: \$2 billion	Reduction in travel time: 5 hours to 2 hours	Safety concerns with a number of fatal and serious injury crashes reported
COLOMBO-KATUNAYAKE EXPRESSWAY, SRI LANKA	Length: 25.8 km Cost: \$292m	Reduction in travel time: 1.5 hours to 20 minutes	Concerns re. safety, speed of traffic and reports of crashes.
LA PAZ-ORURO HIGHWAY, BOLIVIA	Length: 204km Cost: \$250m	Reduction in travel time: aim to decrease by 30%	Safety concerns, reports of crashes



THE HUMAN COST

This failure to invest in proven and universally relevant infrastructure safety policies has a very real human cost. We can measure this in statistics.

But that provides a degree of distance, whereas highlighting real people, the damage to their families and the utter pointlessness of preventable tragedies brings urgency to the need for action.

FRED ITEMBE MASAKA, UGANDA

Fred Itembe's journey on Uganda's main highways in October 2024 was a typical one. He had taken a taxi with a colleague back from the town of Masaka and was travelling through Kampala. It was when he reached the suburbs of the capital that he needed to step out of the taxi he'd been in, to cross the Kampala Northern Bypass. Fred and his colleague were hit by a car as they crossed the road. While his colleague died, Fred suffered serious injuries which have had a devastating impact on him and his family (see p2). There have been reports documenting road safety concerns on the Kampala Northern Bypass even in the years following its completion in January 2022. Of great concern is the number of vulnerable road users, pedestrians and two-wheelers who are killed or injured. The Northern Bypass has seven out of Kampala's top ten 'high-risk' black spots. One small 3.5 km section accounted for 43 deaths from 2021-2023, according to city authorities.¹⁰



SHADRAK MBAO NAIROBI, KENYA

Shadrak Mbao lost his wife, three children and brother in a crash on the Nairobi Mombasa Highway in April 2024. Shadrak and his family had been heading back to Nairobi after spending the Easter weekend at the coast. The crash involved a saloon car, a matatu, and two trucks, in a collision in the Salama area that the police had designated as a 'black spot' - Salama in Swahili means 'safe'. (photo John Njoroge, Nation Media Group).



LINA & SOCHEAVON

KANDAL PROVINCE, CAMBODIA

In June 2024, 15 year-old Lina from Prek Thmei Village was heading out on her motorcycle near her home. Lina was crossing the 6A National Road when she was struck by another motorcycle travelling at high speed. She sustained severe injuries to her collar bone and surrounding bones. Recovery was tough and her family struggled to pay medical expenses. She missed a month of school. She still suffers mentally, experiencing fear, anxiety and a loss of confidence.

Also on the 6A National Road, Socheavon was on his motorcycle and out to buy vegetables when he was in a high speed collision with a car. He suffered severe injuries including a fractured thigh bone, undergoing hospital treatment for six months. His education has suffered as he was forced to take a year-long break from school. Socheavon now emphasises the importance of road safety to prevent similar tragedies.



SANATH NISHANTHA

SRI LANKAN MINISTER

Sri Lankan Minister Sanath Nishantha died age 48, on the Colombo-Katunayake Expressway in January 2024. Alongside him, his security officer also died. His car collided with a container truck in the early hours of the morning while heading back to Colombo, with reports suggesting the vehicles were travelling at speed. Nishantha had started his political career in 1997 contesting the local government elections. He was elected to the Sri Lankan Parliament representing the Puttalam District at general elections held in 2015 and 2020. Minister Sanath Nishantha has three daughters and a son. The death of the Minister highlighted concerns in Sri Lanka over the high speeds of vehicles often travelling on the country's highways. Reports have also suggested that Sri Lanka's road development authority has struggled to invest in the national road network due to lack of funds.



NURWATH HUSSEIN DAR ES SALAAM, TANZANIA

7 year-old Nurwath Hussein was hit in a collision with a motorcycle that was carrying gas cannisters while on her daily journey to school. Nurwath, who attends Kifuru Primary in Dar es Salaam only a kilometer from her home, has been unable to attend school in the months since the crash.



CALEB OLIMA NAIROBI, KENYA

Caleb Olima, a 'bodaboda' motorcycle taxi rider, was on the road in April 2022 in the Two Rivers area of Nairobi County. While joining a slip-road from the neighbourhood of Runda, Caleb was hit head-on by an approaching car that was overtaking another vehicle. The impact of Caleb's head hitting the ground smashed the helmet into pieces, one of which cut into his head leaving a large scar which is still visible today.

Thankfully and due to his motorcycle helmet, Caleb who has two children, had survived and his head injury was superficial. However, when Caleb was taken to hospital, doctors focusing on his head injury failed to notice that he had also dislocated his knee and discharged him three days later. After three weeks, Caleb's knee had become infected, and as a result, doctors had to replace his kneecap, which led to a three-month stay in hospital and a more extended period of recovery. Caleb has yet to regain full mobility and continues to walk with a crutch despite now returning to work as a rider.





FLÁVIA BENIN ZEN AND BIA ZEN SALGADO MOTHER AND DAUGHTER, SÃO JOSÉ DO CEDRO, BRAZIL

Flávia Benin Zen, at 30 years old, had her whole life ahead of her. In 2021 she had a baby girl, Bia Zen Salgado and just over a year later she and her partner Tiago Salgado got married. On 11 May 2023, Flávia was travelling with her little daughter from São José do Cedro to Porto Alegre for that year's Mother's Day weekend. A few hours into the journey, on the road near the town of Sarandi, Flávia's brother, who was driving, lost control. The car crashed into a tree near to

the side of the road. Flávia, who was sitting in the back of the car with her daughter, died. Little Bia was taken to hospital and was in intensive care for five days, but died from her injuries.

Many plans were made by Tiago and Flávia during the years of their relationship, and they still had many dreams to fulfil. All of this was lost in those tragic moments on a road.





SUBHENDU BANERJEE

DELHI, INDIA

In November 2022, Subhendu Banerjee was cycling near the Mahipalpur flyover, Delhi. Subhendu was an active cyclist and owner of a local garment manufacturing business. Out cycling early and planning to go on to his father-in-law's 80th birthday, Subhendu was hit by an SUV. He was rushed to hospital, but was dead on arrival. Police arrested the vehicle's driver and there were reports that he had lost control of the car. The crash underscored the

issue of lack of safe infrastructure for cyclists. On average a cyclist a week is killed on Delhi's roads. The tragedy prompted groups of cyclists in Delhi to demand better safety and infrastructure in the city where significant investment has been made over recent years in roads catering predominantly for vehicles. At a memorial service for Subhendu, his wife Kanika said: "We want safe infrastructure so that no other cyclist sees the same fate."

CLOSING THE GAPS

How can we close the gap between good intention and bad outcome, between strong safeguards on paper and slashed safety budgets in reality, between the technical best practice contained in modern international manuals and the outdated dogmas still being followed by far too many highway engineers?

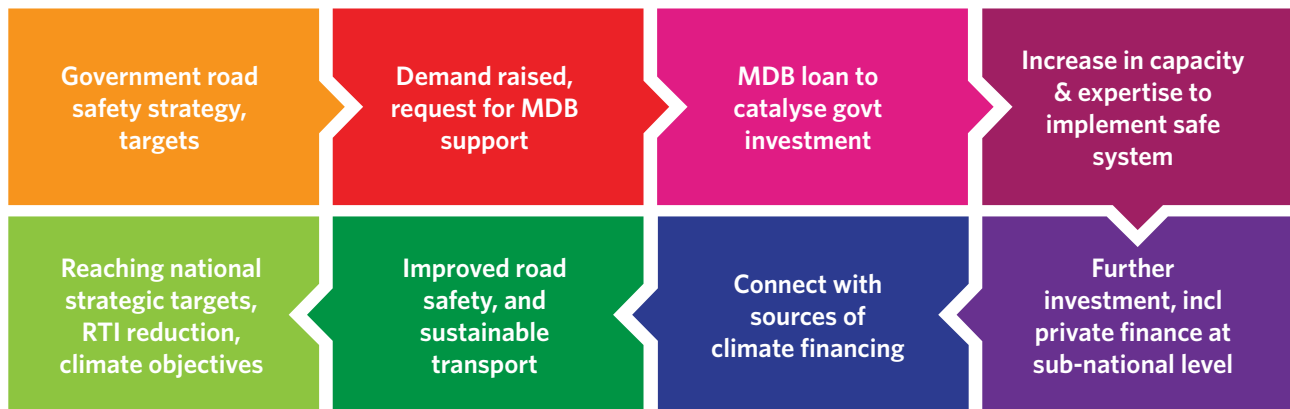
At the high level, governments need more encouragement and support to request increased funding that they can then use to catalyse national action and deliver results. Events like the 4th Global Ministerial Conference on Road Safety can play some role, but are infrequent and less able to fulfill the need for substantive ongoing engagement. They also do little to bridge the policy making gap between those with responsibility for road safety and key ministries, particularly finance that will only take a narrow view of economic development objectives.

The MDB annual cycle of meetings should be a good opportunity to reinforce the safety agenda,

but to what extent is that high-level discussion happening? A constant barrier to progress in global road safety is the indifference or ignorance of the senior political class. It's just not an issue which registers or resonates with the people who set top-level priorities.

For an effective process mobilising finance for road safety outcomes at scale, further attention on raising demand from governments is needed. From Brazil to Bangladesh, there are many examples of effective financing for road safety, but to achieve a step-change in outcomes and sustained impact at scale, the effective case studies which are the exception must become the norm. The process of reaching effective outcomes on safe and sustainable transport where a government can more openly and transparently request effective financing, and have the capacity and integrity to deliver safe system solutions, needs to be far more widely in place:

THE SYSTEM AS IT SHOULD WORK



To make significant progress over the next five years, a set of core priorities for the allocation of financing must be identified for urgent action leading to rapid scale-up and results. A supporting platform is needed to more effectively link governments, MDBs and other sources of financing, together with sources of external expertise that can help deliver the priorities for safe and sustainable transport. Some mechanism, which is not formally in existence or at best, exists in uncoordinated fragments, should be in place to ensure that a pipeline of investible safety projects is developed and the pathway to results can become much more widely accessed and adopted. This shouldn't be a new institution, we have more than enough of those. But harnessing the effective work being done by the World Bank's Global Road

Safety Facility, the UN Road Safety Fund, Bloomberg Philanthropies, International Transport Forum, IRF, iRAP, the FIA Foundation and other players in the infrastructure safety space; and being more flexible and imaginative and timely about how partnerships can be constructed and services procured to serve the frontline needs of highways engineers, could make a massive difference. There are some initial moves underway on such engagement, for example work starting with the Asian Development Bank and member governments of the Asia Pacific Road Safety Observatory (APRSO) to address capacity building on road infrastructure investments – more work on this would be highly beneficial. There are also some promising examples at the project level where substantive engagement is already happening.

THE AGENDA - FINANCING PRIORITIES FOR PEOPLE AND PLANET

1

Design for safety. Protecting vulnerable road users, safe school journeys embedded into roads projects.

2

Target high risk roads. Remedial action on roads with high levels of road traffic injury (RTI).

3

Addressing in national plans and financing priorities motorcycle/2 wheeler safety - a rapidly growing concern in many LMICs.

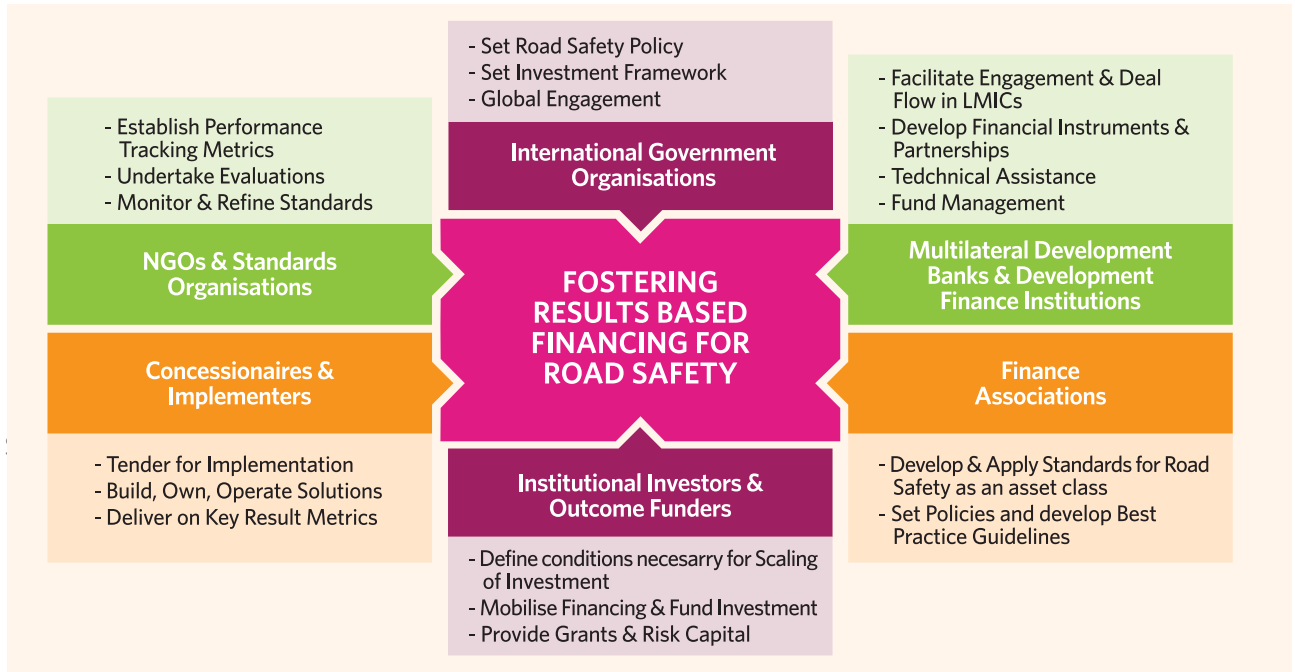
4

Improved coordination between climate, transportation, urban development financing for health and environmental outcomes - and in this respect, a particular focus on active mobility.

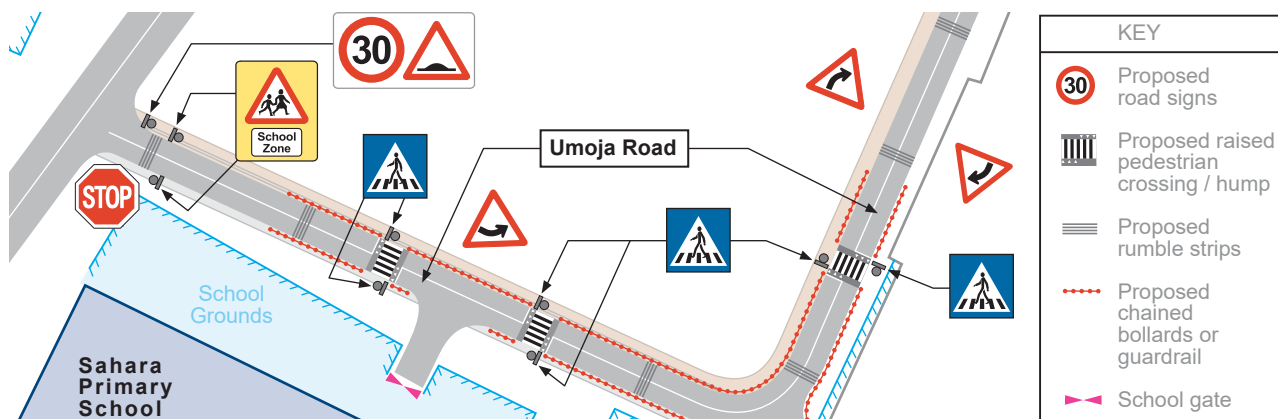
In several Sub-Saharan African countries governments and their MDB partners are designing for safety at the outset of projects. Often there is a gap in capacity and expertise which much be addressed. In Tanzania for example, the NGO Amend has provided expertise on safe system measures to protect vulnerable road users, with a particular focus on school area road safety.

Working closely with Tanzania's roads agencies, in World Bank financed projects with Amend assistance, road safety measures have been incorporated in infrastructure designs, addressing the capacity gap. The result is improved road safety for vulnerable road users. Rather than the exception, this approach should be the norm across road infrastructure projects.

COORDINATING TO FOSTER RESULTS BASED FINANCING FOR ROAD SAFETY (DRAFT SCHEME PRESENTED AT IRF WORLD ROAD CONGRESS, OCTOBER 2024)



EXAMPLE OF SAFE SYSTEMS UPGRADE IN MDB FINANCED PROJECT



SAFE SCHOOLS AFRICA

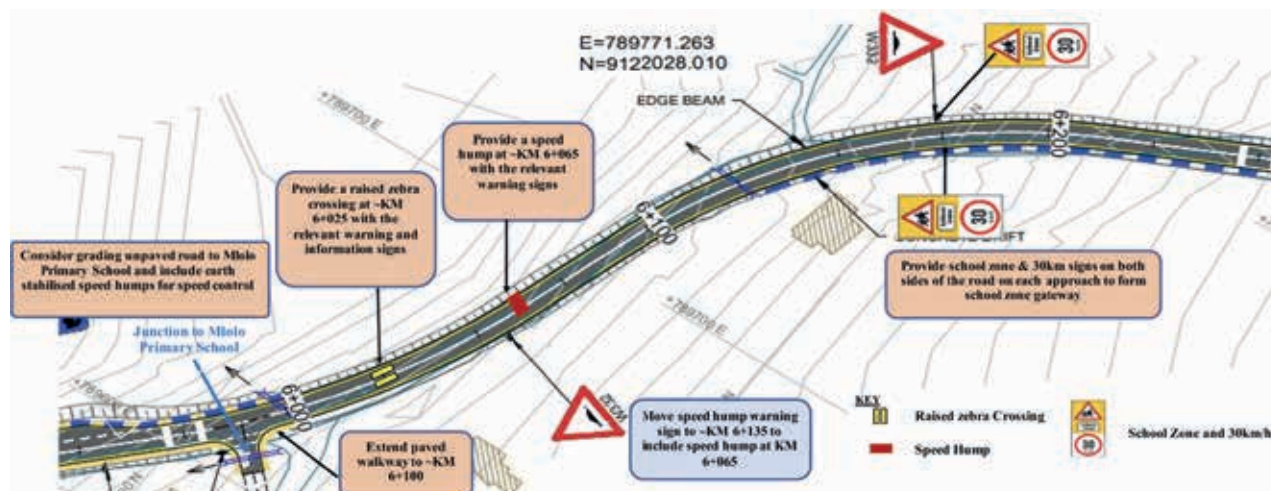
Safe Schools Africa is an initiative which sets out to work intensively with government agencies and the task teams of MDBs and development agencies, ensuring that capacity and expertise on the solutions to protect children and vulnerable road users is integrated at early stages on roads projects. It is currently working on a pipeline of 7 MDB financed roads projects in Sub-Saharan Africa. It provides technical assistance and capacity building in a series of steps from project identification through data gathering, and provision of recommendations to support during construction, training and advocacy.

A strong example is the work carried out on the \$350m World Bank-financed 'Roads to Inclusion and Socioeconomic Opportunities' (RISE) in Tanzania. Here, the Safe Schools Africa team worked intensively with the Tanzanian roads agency, TARURA, to build capacity on a 'people centered design' approach focused on integrating infrastructure into project plans at the early development phases of the project that can protect vulnerable road users. The Amend team provided training to the government roads

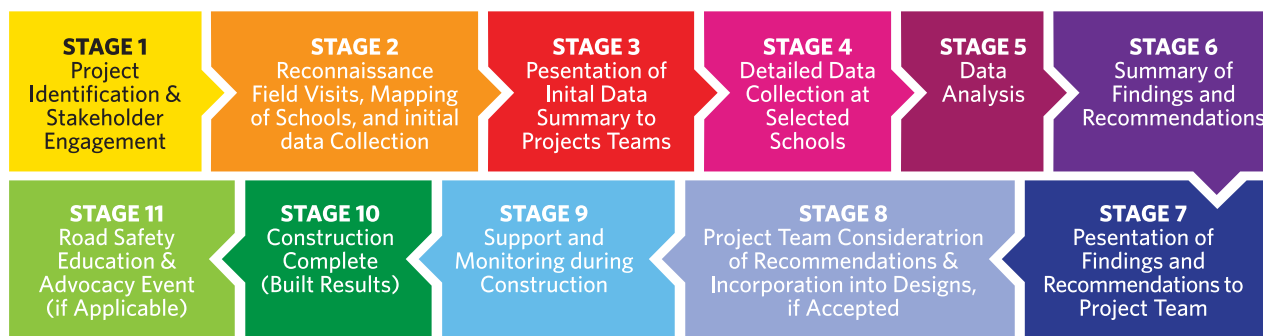
agencies and their consultants and contractors. Technical assistance was then continued through the feasibility, preliminary and detailed design stages of RISE, and into construction, ensuring that infrastructure designed to keep vulnerable road users safe will actually be built.

The adoption and integration of the people centred design methodology has fundamentally affected the financing of RISE. The government has been able to justify increased allocations for effective safe system road safety measures, despite RISE facing the kinds of budgetary pressures usually experienced in a major roads project. The Safe Schools Africa input has meant that engineers in the TARURA agency now have the expertise to design and implement safer roads. Integrating the people centred design methodology will have an impact beyond RISE itself, influencing other MDB financed projects.

Safe Schools Africa is taking a similar approach across the region, influencing development bank financed projects with a combined value of over \$1bn at various stages of development in Ghana, Mozambique, Zambia and Sao Tome and Principe.



SAFE SCHOOLS AFRICA: STAGES OF ENGAGEMENT ¹¹



CHILD HEALTH INITIATIVE

The Child Health Initiative (CHI), established by the FIA Foundation following the launch of the SDGs, is a coalition bringing together practitioners, international organisations and child rights organisations around an advocacy and implementation agenda for safe, low-speed urban environments for children and young people.

It has a particular focus on safe school journeys and supports initiatives such as Safe Schools Africa. The CHI has done much to build political support for implementing low-speed safe system road safety on school journeys.¹² And with the issue raised as a priority globally, this has also begun to have an effect on financing agendas with development banks, including a focus on safe school journeys in strategic planning and project financing.

CHI work has directly influenced World Bank financing for the City of Rio for example. The

Institute for Transportation & Development Policy (ITDP), which is a member of the CHI, had started a small scale safe infrastructure project in the city's low-income neighbourhood of Realengo. ITDP, with FIA Foundation support, worked with the city's engineering department CET-Rio to implement safe footpaths, protected cycle lanes, safe crossings and traffic calming extending from school areas to the wider neighbourhood. This helped inform a \$135.2 million World Bank policy development loan financing package which was agreed and launched in 2022 to scale-up work on safe and sustainable mobility.

Together with initiatives like Safe Schools Africa, this shows that bringing together safe system expertise from partners in a coalition like CHI, with its clear focus on school area road safety globally, can have an effective impact on larger scale financing. Such examples should be replicated in further work with development banks and financing institutions in the coming years.

10 STEP PLAN FOR SAFER ROAD INFRASTRUCTURE

The 10 Step Plan for Safer Road Infrastructure, has been developed by members of the UN Road Safety Collaboration. It is an effective framework for road safety capacity building. Its focus is on building the institutional capacity and regulatory framework to improve infrastructure safety at all stages: mobilising investment; developing management capacity; road safety audits and assessments; investment; design standards; upgrades and monitoring.

There is an emphasis in the 10 Step approach of updating standards and building the regulatory framework for effective road safety. In many low- and middle-income country contexts, standards have not been updated in decades, are not orientated around the safe system best practice for road safety, and do not account for the needs of vulnerable road users. The 10 Step Plan aims to build capacity and provide technical assistance to address this.

The 10 Step plan can apply equally to national or sub-national agencies and supports immediate impact on new or upgrading of existing road projects. 10 Step Plan project implementation has been led by partners including the iRAP, IRF, and the World Road Association (PIARC) with the approach available for all governments and road industry stakeholders to use globally.

In terms of financing, 10 Step Plan projects have been good examples of multi-fund collaboration. In Tanzania, The 10 Step Tanzania project, mobilised donor partners including the United Nations Road Safety Fund (UNRSF), the Global Road Safety Facility (GRSF) and UKAid. This provides an example of multi-fund collaboration involving MDB and development agency partners with the UNRSF. There is potential for the 10 Step approach to be adopted widely with work ongoing to apply it additionally to West Africa, Central Asia and Latin America.

TEN STEP PLAN FOR SAFER ROAD INFRASTRUCTURE - OVERVIEW

UNRSF PRIORITY 1: GAP ANALYSIS



UNRSF PRIORITY 2: NATIONAL STANDARDS & TRAINING



UNRSF PRIORITY 3: INFRASTRUCTURE SAFETY MANAGEMENT



CAPACITY BUILDING IN CAREC

In the Central Asia Regional Economic Cooperation Programme (CAREC), a clear strategy with specified targets has been developed and supported by multilateral development banks, particularly the ADB and EBRD. It is focused on reducing the number of fatalities on the region's road corridors by 50% by 2030, saving an estimated 23,000 lives and 250,000 serious injuries annually. The estimated economic savings amounts to approximately \$16 billion a year.

Developing management capacity and providing training for roads authorities and engineers in the best practice of safe road design has been an important initial component. When the strategy was first issued, it outlined concerns that over 112 roads projects across the region valued at \$18 billion, despite having aims to improve the quality of road infrastructure "little attention has been paid to addressing road safety".¹³ There has been a degree of limited progress with some CAREC countries reporting a reduction in road fatalities, however road casualties are still 10% higher than the global average, and double the average for the European Region.

Working closely with the MDBs and CAREC governments, expert organisations such as iRAP, IRF and EASST have provided much needed technical assistance in the key safe system approaches that are needed to address the road safety crisis in the region.

A major weakness identified by iRAP and EASST is that, often, CAREC countries are using outdated design standards on road infrastructure projects. This means that when financing is agreed for road infrastructure, the project may specify that road safety should be included but it won't effectively be delivered on the ground as the standards won't include the road safety countermeasures needed and engineers won't have the technical knowledge or authority necessary to develop designs not covered by the standards.

One initiative to address this is 'Safe and Inclusive Road Designs in Central Asia'. Piloted in Kyrgyzstan, Tajikistan, and Uzbekistan it is a partnership of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), iRAP, EASST, and the IRF with funding from the UN Road Safety Fund. It will address design standards in each country and aims towards an updated set of design standards for the region. Vitally, there is a priority on vulnerable road users and on low-carbon mobility. Further capacity building is being provided through a range of resources across the region such as the CAREC Road Safety and Sustainable Mobility Course developed by EASST. And there is also a road safety and sustainable mobility programme for the region which has been co-funded and led by development banks – specifically the ADB and EBRD with the Asia Pacific Road Safety Observatory. This specifically targets transport decision makers supporting them to develop and finance projects such as those which include protection of vulnerable road users and encourage active mobility.¹⁴

THE SHAANXI ROAD SAFETY DEMONSTRATION PROJECT - A FOCUS ON RESULTS

Implemented by the Shaanxi Provincial Transport Department and ADB with iRAP and ChinaRAP, this \$344 million project is a good example of combining policy priorities: reducing poverty and providing transport access in Southern Shaanxi, and an effective integration of specific road safety targets to reduce road traffic injuries and fatalities. Completed in 2020, the project financing was a combination of US\$200 million from ADB and US\$144.43 million government funding.

Specific project results include:

- Monthly travel frequency of rural households in the project area increased from 16.4 times per month in 2014 to 21.6 by 2020, exceeding project targets.
- The percentage of three-star rated rural roads rose from 27% to 79% by 2020, exceeding the initial 59% target.
- Crashes were reduced by 52.2%, fatalities by 33.3%, and injuries by 53.1% in 2019, exceeding the target of a 25.0% reduction from the 2011 baseline.

Capacity building was a major feature of the project with over 200 staff trained in safe road infrastructure. Executing and implementing agency staff were trained on road safety policies, strategies, management, innovation, and technologies.

Other partners had helped build capacity and data ahead of the project: road networks had been assessed by the ChinaRAP and iRAP teams using the iRAP methodology and with support from the World Bank Global Road Safety Facility (GRSF) and Bloomberg Philanthropies. Decision making on the project could be effectively guided by the assessments that had previously been carried out.

Road safety was effectively prioritised over travel speeds and vehicle operating costs, and was applied in the economic evaluation – the cost-benefit analysis – of the project. ADB could apply iRAP's safety metrics at all stages from design stage to post-construction, including to set quantitative infrastructure safety targets and indicators.

The project also went beyond infrastructure, engaging with traffic policy, community stakeholders and schools.

PPP FINANCING - TOLL CONCESSIONS

A successful approach has been to integrate iRAP star ratings in PPP financing for toll concessions, the key example being in São Paulo.

Commissioned by the São Paulo State Government, the \$3.4bn Piracicaba-Panorama ("PiPa") concession in Brazil was one of the first PPPs that included results-based targets based on the iRAP '3 star or better' road infrastructure global performance metric for safety.

MDBs issued the tender for private investors. The World Bank IFC, Brazil's National Bank for Economic and Social Development, and the Inter-American Development Bank led the competitive tender which was won by a

consortium of institutional investors, Patria Investments and the GIC - Singapore Sovereign Fund.

It is projected that by raising the performance standard to the iRAP road safety standard of three star or above, the road infrastructure investments in the 30-year concession will prevent an estimated 34,000 road traffic fatalities and serious injuries. An effective and innovative component of the concession contract is the inclusion of bonus schemes with payments for exceeding star ratings incentivising improved outcomes on road safety.

Integrating road safety in this way in PPPs for toll concessions shows promise as an approach to yield further results at least in pay-for-use highways in the years ahead.

PIRACICABA-PANORAMA ("PiPa") HIGHLIGHTS

Authority



Advisors



Technical



Investors



Concessionaire



- \$3.4bn including \$2.5bn CAPEX and \$0.28bn upfront concession fee to Sao Paulo State Government
- ARTESP monitors progress - toll collection only permitted after first performance milestone has been met
- Advisory team support for financing, design of bonus scheme, star rating targets, and independent monitoring

3-star or better targets

User	Y0	Y10	Y30
Vehicle	77%	96%	--
Pedestrian	64%	77%	--
Motorcyclists	61%	75%	--
Bicyclists	67%	82%	--

Bonus Tiers

Achieved	Bonus
110%-120%	0.5% of contribution
121%-130%	1.0% of contribution
131%-140%	1.7% of contribution
140%+	2.7% of contribution

Concessionaires in Sao Paulo are required to contribute a % of toll revenues to the Sao Paulo monetary fund. If performance exceeds targets, they receive a % payback of that contribution



BEYOND INFRASTRUCTURE: COLLABORATION MODELS FOR OTHER SAFETY PRIORITIES

The examples of international collaboration and technical capacity assistance clustered around safe infrastructure both learn from and can be deployed for other safety priorities.

For example, in the safe and clean vehicle arena, the UN Environment Programme is working with African governments and regional bodies to institute a regulatory floor for second-hand car imports. This is showing a high degree of success. In a less monopolistic operating environment than road infrastructure, with more diverse loci of power and responsibility, the Global New Car Assessment Programme is using independent crash and crash-avoidance technology testing to exert pressure on both industry and regulators to drive improvement in vehicle safety standards and performance.

It is clear that tackling motorcycle safety is now a key challenge, and two-wheeler deaths and injuries are a growing contributor to the global burden. Capacity building and technical assistance is fundamental in the approach needed on motorcycle helmet safety. In Rwanda for example, a \$500,000 package of such support has catalysed an effective national motorcycle helmet programme. Funded by the UN Road Safety Fund, with additional support from the FIA Foundation, technical partners have supported key steps including drafting legislation and regulatory frameworks for helmet standards; training personnel on helmet testing equipment; installing helmet testing equipment at the Rwanda Standards Board (RSB); and conducting awareness campaigns to promote helmet safety.

Steps are as follows:

- Strengthening legislation and standards. In Rwanda this involved the introduction of National Helmet Standard in 2024
- Capacity Building – training personnel on helmet testing
- Installation of helmet testing facility and equipment
- Building further political support – eg. ribbon cutting launch of testing facility
- Public campaigning, education on helmet safety

In Rwanda, legislation had already been in place, and the work was then to introduce a national helmet standard and testing regime. Implementing partners and agencies included the Standards Board (RSB), Healthy People Rwanda, MINERFRA, with donor support from the UN Road Safety Fund and FIA Foundation, alongside UNECA and UNECE.

One practical way that the FIA Foundation is helping to build action is through support for national motorcycle helmet coalitions. Modelled on Vietnam's experience in the early 2000s, these bring together government, police, regulatory agencies, the private sector, NGOs and users to identify priorities and policy gaps and work in a collaborative fashion to build a consensus and agenda for change. A focus on financing mechanisms and identifying gaps in financing of motorcycle safety are also key objectives of this coalition work. This includes work with governments to develop effective financing mechanisms and seeking funding from the private sector and other sources. Coalitions are currently active in Kenya, Mexico, Jamaica and the Dominican Republic, working on various aspects of the action agenda outlined on page 25.





MOTORCYCLES IN SAFE AND SUSTAINABLE TRANSPORT POLICY

Current transportation policies favour the private car, to the detriment of public transport, other forms of shared transport, and non-motorised modes such as walking and cycling.

Motorcycles will continue to play a role in transportation in low- and middle-income countries well into the future. They need to be adequately incorporated into wider improved transport and mobility policy, with an institutional framework that prioritises safety, sustainability and equity. Policy must favour the development of mass transit and promotion of active mobility over private cars, and align with the Safe System approach to road safety. Policy should support the transition to electric motorcycles to reduce air pollution and climate emissions, while also addressing safety concerns.



MOTORCYCLE HELMET STANDARDS, TESTING FACILITIES AND ENFORCEMENT

Good-quality helmets are the single most effective way of reducing motorcycle head injuries and fatalities. But current rates of helmet use among riders and passengers in many low- and middle-income countries are low. And, where helmets are worn, they often do not meet a certified standard, are poor quality, are damaged or worn incorrectly.

Certified standards for motorcycle helmets are needed to ensure that they provide appropriate protection while also being affordable. Facilities should be established to test helmets to ensure they meet countries' standards before they become available on the market. The use of helmets should be enforced by qualified and trained officers, and counterfeit helmets should be removed from the market.



ANTI-LOCK BRAKING SYSTEMS FOR MOTORCYCLES

Worldwide, anti-lock braking systems (ABS) on motorcycles have proved to be one of the most effective technologies at reducing fatalities. But very few motorcycles in many low- and middle-income countries are fitted with ABS. In other parts of the world, countries – most notably India and China – have mandated the fitting of ABS on new motorcycles.

Governments should introduce legislation requiring that all motorcycles imported, manufactured, assembled and/or sold in their countries are fitted with ABS, at a minimum on the front wheel.



MOTORCYCLES IN ROAD DESIGN

The intrinsic characteristics of motorcycles put riders and passengers at greater risk of serious injuries than those in other vehicles. But very little consideration has been given to motorcycles in the development of roads in many low- and middle-income countries.

Road infrastructure design must consider motorcycle safety. This will involve including motorcycles in road designs and engineering manuals, providing dedicated motorcycle lanes, and keeping motorcycles off pedestrian footpaths.

The road ahead is clear. If all stakeholders work together on these crucial action items, acknowledging shared responsibility among those who design, manage and use roads and vehicles and provide post-crash care, real progress can be made towards safer, healthier and more prosperous and sustainable lives.

INVESTING IN HELMET SAFETY: VIETNAM

A relatively small investment in Vietnam to develop an effective motorcycle helmet programme has resulted in high levels of impact. Catalytic donor funding of just over \$2,400 000 USD over two years supported the preparation and implementation of Vietnam's universal helmet law. The legislation, enforcement and effective campaign on motorcycle helmets saw an increase in helmet use from 6% to 90% during the initial years. The investment case was shown to be strong: in the first year post-implementation an estimated \$128 million USD was saved, a return of \$53.19 USD for every dollar spent.

In the longer term, the estimated savings are high for Vietnam. Over a ten year period, a reduction in reported road crash fatalities and injuries resulted in total estimated savings of \$15.9 USD billion dollars. Of this total, \$3.5 billion has been attributed to helmet use resulting from the country's successful motorcycle helmet programme, with an estimated 500,000 head injuries and 15,000 fatalities averted.¹⁶

The experience in places such as Rwanda and Vietnam shows that when resources are mobilised for effective motorcycle safety programmes, significant results can be achieved. And with the growing importance of motorcycle safety, given the increase in motorised two-wheelers across low- and middle-income regions globally, such programmes will be of high importance.

As with financing for safety on road infrastructure, platforms bringing together expertise from organisations with long-running experience working on helmet programmes and motorcycle safety, together with governments and MDBs would make an important contribution in catalysing investment for sustained results at-scale. There are examples of effective programmes and they could be replicated, within and across regions with improved collaboration. There is certainly demand in many countries that are confronted with a growing crisis in motorcycle safety, but more work is needed to bring the component parts of an effective response together.



CONNECTING WITH CLIMATE

If the campaign to improve safe road infrastructure suffers from a shortage of both political attention and investment, the essential connections between safe system provision for all road users and a cost-effective climate agenda should provide some solution. Strengthening these connections must be a priority.

There is strong recognition of the important role for transportation in meeting climate targets. Low-carbon transport investment across all sources receives around 29% of mitigation climate financing as a whole, totalling over \$330 billion a year. Investments related to electric vehicles, whether private or public, play a major role in the growing strength of the sector with financing increasing by nearly 30% annually.¹⁷ In terms of MDB financing, transport accounts for 23% of climate mitigation finance for low- and middle-income countries, the second largest sector behind energy, and also accounts for a similarly large proportion of adaptation financing.

For investments that tackle both climate and air quality, transportation is a major focus. According to a recent study by the Clean Air Fund and CPI, of total outdoor air quality finance provided by international public funders in 2015-2021, 67% (USD 11.6 billion) went to projects that tackled both air pollution and climate change.¹⁸ Transport-sector projects received the largest share of these flows (57% or USD 5.4 billion).

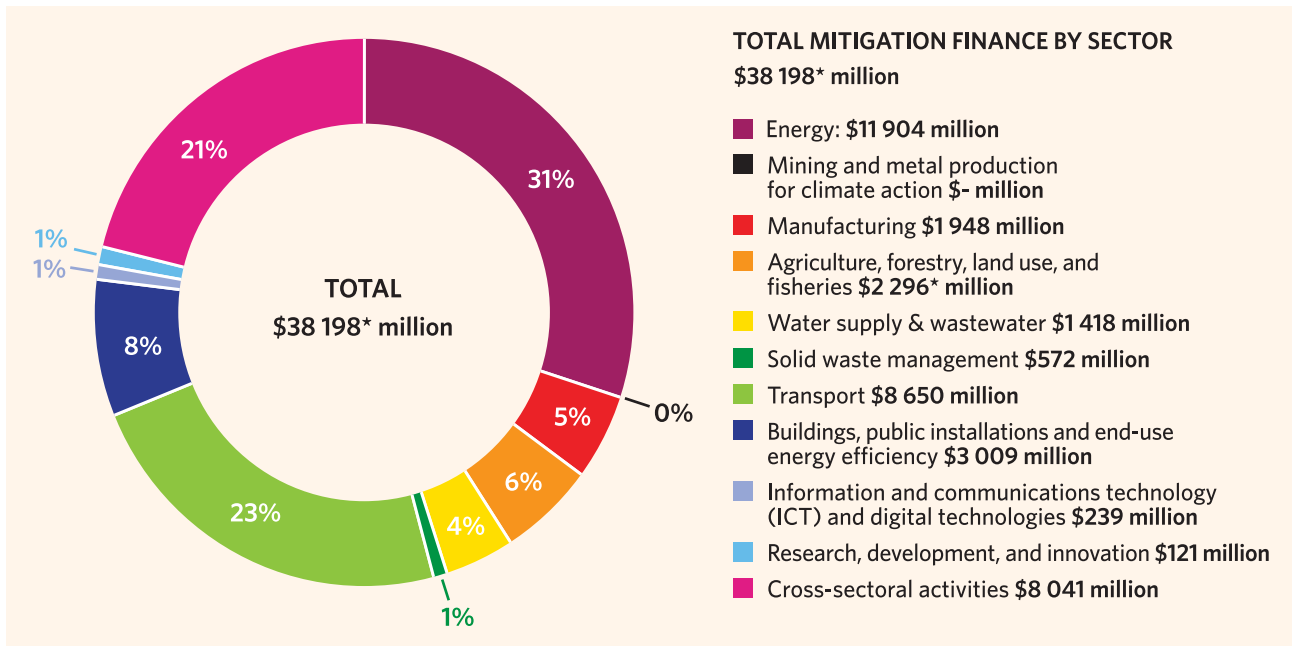
Too often, road safety financing is considered as siloed or at least organised into separate streams from climate financing. However, financing for road safety and climate should be not just loosely connected but firmly integrated.

Moves to recognise the connection between the two are beginning to be made, and these moves should be stepped up going forward to 2030 and beyond. The development banks themselves are starting to more effectively recognise the need for integration in strategic planning. This follows an understanding that:

- 1) reducing speeds results in climate benefits, both in lower emissions in some contexts and importantly in contributing to an enabling environment for walking and cycling;¹⁹
- 2) providing safe infrastructure for active mobility, while critical for reducing emissions, is imperative for road safety, particularly given the level of vulnerable road user fatalities and injuries;
- 3) a more integrated approach to vehicle standards on safety and emissions should be taken

Some financing institutions, including the World Bank, are starting to adopt this approach in strategic planning. The World Bank has stated a commitment to stepping up work supporting the development of improved vehicle safety and emissions standards, and certification and inspection systems to implement them.²⁰ Such an integrated approach informing financing is welcome. It should be applied by financing institutions across the board, and be advanced through open engagement of stakeholders with expertise both in safety and vehicle emissions reduction. Acting on such commitment will likely require collaboration between expert organisations with deep experience working on vehicle emissions standards such as the International Council on Clean Transportation (ICCT) and the UN Environment Programme, together with those leading the work on vehicle safety.

MDB MITIGATION FINANCE BY SECTOR IN LOW- AND MIDDLE-INCOME ECONOMIES, 2022 (IN \$ MILLIONS)



Source: 2022 Joint Report on Multilateral Development Banks' Climate Finance



ACTIVE MOBILITY FINANCE

In terms of the global fatality and injury burden and the need for safe walking and cycling, placing a firm priority on the safety of vulnerable road users is of the utmost importance. The gaps in safety provision for low- and middle-income regions are vast and unacceptable. In Africa, while 78% of the population walk to reach employment, education and services²¹ the road network is failing them: as we have seen, according to iRAP, over 85% of roads in Africa where vehicles travel at over 40km/h and where pedestrians are present have no safe footpaths. Despite the efforts of some to turn active mobility provision into a new arm of the culture wars, pedestrian travel is essential to global modal share, with 95% of people seeing themselves as pedestrians at one time or another in most world regions.²²

Globally, roads are not fit for active mobility with 78% of travel below the minimum three star safety standard for pedestrians, and 82% for cyclists. Most roads (92%) do not have cycle lanes according to the global iRAP assessment. Each day over 1,000 pedestrians and cyclists are killed on the world's roads and on top of this, tens of thousands more are seriously injured. The cost to the global economy runs into hundreds of billions of dollars each year.

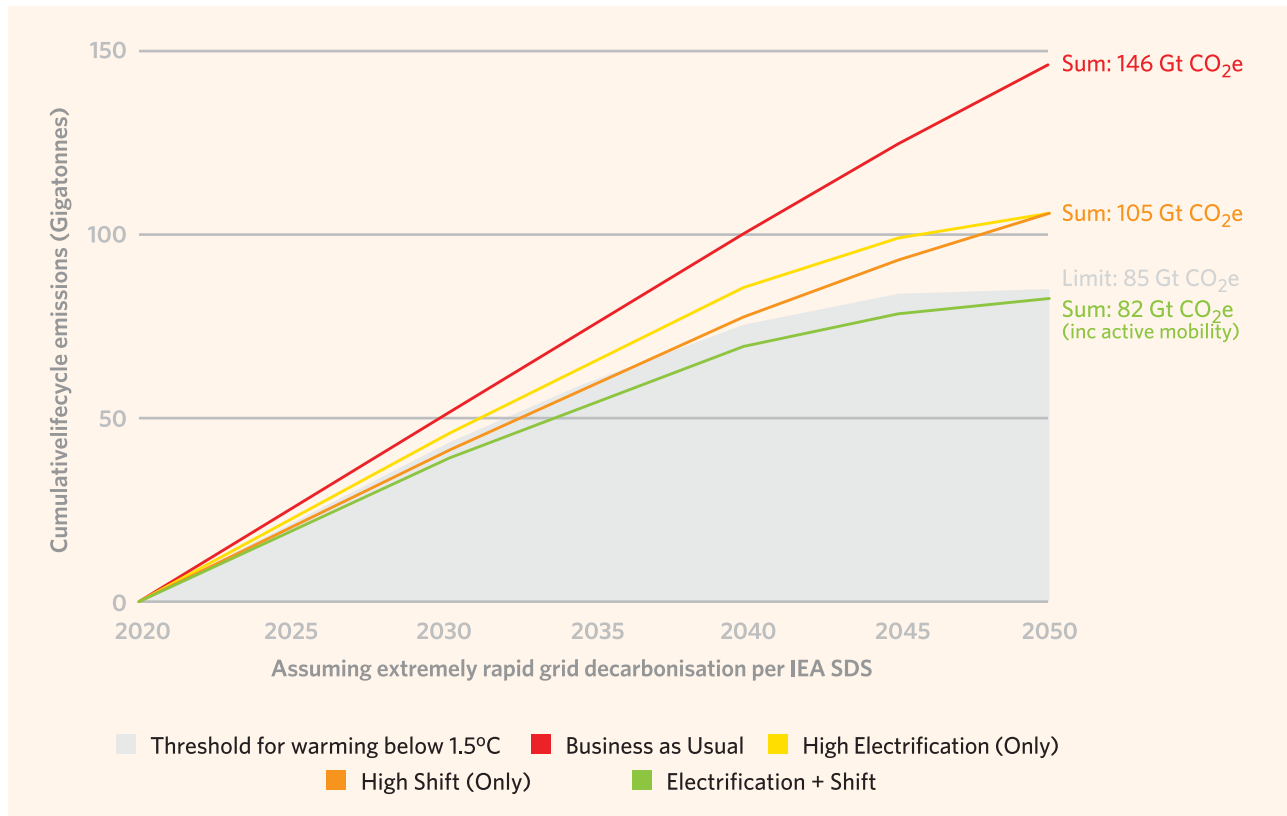
SAFETY CRITICAL FOR CLIMATE PROGRESS

The contribution of walking and cycling to meeting climate targets should not be understated. As reflected in climate financing, transportation has a critical role in the climate agenda. The emphasis within financing priorities is on vehicle electrification, yet investment in walking and cycling is of fundamental importance if progress towards climate targets is to be made.

Transport as a whole can make a highly effective contribution to cutting emissions and reaching climate targets. With committed financing and concerted action on low-carbon transportation, it could be possible by 2050 to cut 64 Gt CO₂e, reducing transport emissions to a level in line with the 1.5°C Paris climate target, certainly below a 2°C level. This represents more than a 40% decrease in emissions from the business as usual to achieve the climate target. In terms of sectoral action, this would be a vital contribution to the overall climate agenda.

However, electrification will only go part-way, itself achieving a 28% decrease in carbon emissions. The remaining 14% will have to be achieved with a modal shift including active mobility and urban planning to reduce car dependency.

URBAN PASSENGER TRANSPORT AND CLIMATE CHANGE



Source: ITDP Compact Electric Cities: The Only Way to 1.5°

This shift, increasing the level of walking and cycling for short journeys and integrating with public transport, cannot be achieved without safety. Where there has been large scale financing for sustainable transport aimed both at climate objectives and serving rapidly growing urban populations, connecting effectively with pedestrian and cycling infrastructure has been key for success.

Where mass transit initiatives have stumbled or failed, the lack of planning and investment for vulnerable road users has been at the core. The notorious case of the Delhi Bus Rapid Transit (BRT) failure involved lack of adequate facilities for pedestrian access, and poor connectivity for vulnerable road users.²³ Failing to account for the needs of vulnerable road users to connect with active mobility has beset mass transit initiatives around the world, with projects at various stages in cities such as Hanoi, Bangkok and Dar es Salaam facing notable challenges. At the same time, safe pedestrian and active mobility access to bus stops, BRT stations and rail systems is also essential if public transport is to take the modal share required to reach climate targets.

THE CASE FOR ACTIVE MOBILITY INVESTMENT: CITIES ACROSS THREE REGIONS

1. Dar es Salaam, Tanzania:

Dar es Salaam is a case in point. Initially, the BRT system was designed without adequate road safety protection for pedestrians and vulnerable road users resulting in cases of road traffic injury and a sense of insecurity for the public that would be accessing the BRT.²⁴

The World Bank engaged iRAP in 2018 under the Bloomberg Initiative for Global Road Safety (BIGRS), to undertake Star Rating assessments of the existing roads prior to BRT construction (baseline) and the designs for BRT Phases 2, 3 and 4, to inform and improve their safety.

The assessment showed that the existing road was rated 2-stars or worse for 92% of pedestrians and 66% of bicyclists which aligned with the recorded crash data showing pedestrian fatalities represented almost 60% of all road user fatalities.

Using the iRAP assessments and road safety audits conducted by the World Resources Institute (WRI), recommendations for cost-effective countermeasures likely to prevent fatalities and serious injuries over the 20-year life of the infrastructure were proposed. Adopting a safe system approach for further phases of the BRT meant reduced risk for all road users, particularly for bicyclists and pedestrians with significant increases in the proportion of network rated 3-star or better.

Infrastructure for pedestrians and cyclists had been included for access to the BRT, but the importance of road safety had become increasingly apparent.

After the project had been developed in its further phases, the returns on investment for connecting walking and cycling infrastructure and road safety were calculated, showing a high internal rate of return at over 30%.

2. Tianjin, China:

The case of Tianjin is particularly instructive on the need to integrate road safety in order to make a mass public transit project effective and viable. Tianjin's \$1.16bn project which included World Bank financing, achieved key performance indicators following road safety assessments and the upgrading of safe facilities for pedestrians and cyclists. The work has fed into Tianjin's green transport strategy. Active mobility was included in the investment in order to reach targets for increasing usage of public transit, but road safety then became highly important. Road safety had become a major concern for the project affecting connectivity and usage of public transit in the city of 13 million people. With iRAP road safety assessments, supported by the World Bank Global Road Safety Facility (GRSF) and Bloomberg Philanthropies, planners identified precisely where infrastructure improvements were needed in order for pedestrians to safely access public transport. In the context of the overall financing of the project, the road safety improvements constituted a relatively small investment, but they greatly contributed to effective outcomes. Performance indicators were reached after the introduction of new infrastructure, with the combination of active mobility and public transport making up 70% of the modal share.

3. Lima, Peru:

Lima's bicycle infrastructure investment is one of the strongest cases of combining safety, environment, and public health objectives in financing. Originally, the World Bank in the 2000s had financed Lima's bus rapid transit and metro projects. Active mobility had, to a degree been included with 32km of bicycle lanes incorporated in this early work. Climate finance through the Global Environment Facility had been deployed for this within a broader \$261.9m BRT investment. Further development of cycling infrastructure has been included in additional phases of Lima's Traffic Management and Sustainable Transport project.

Analysis of one phase of the World Bank financing for the Lima traffic management project, has taken into account travel time savings, road safety benefits, GHG emission reductions, public health benefits, and urban environment improvements. Combined metrics on road safety, emissions reduction, and public health were considered in calculating the investment case.

In the first phase of the project, CO2 emission reduction was valued at USD2.6 million, health improvement at USD104 million, and road safety improvements at several hundred million. The project was found to be highly effective with a very high internal rate of return estimated at 145.3%, with travel time and road safety improvements accounting for the largest share of benefits.²⁵

UNLOCKING FINANCE - THE WAY FORWARD

Cases such as Dar es Salaam, Tianjin, and Lima illustrate that safe active mobility can and must play an integral role in sustainable transport financing, and that a strong investment case can be established. This points to a way forward for connecting climate financing with road safety, unlocking significant resources to achieve safety and sustainability outcomes.

Important initial steps towards this objective have already been taken, and these steps must be further advanced. Formalising the cost-benefit methodology for active mobility financing is a key step, and one that is being taken by partners such as the World Bank and ITDP. Further development of this work - the active mobility cost-benefit calculator - and its application to transport financing will be highly important.

Partnership work bringing together organisations with expertise in climate, sustainable transport, road safety, and financing is vital.

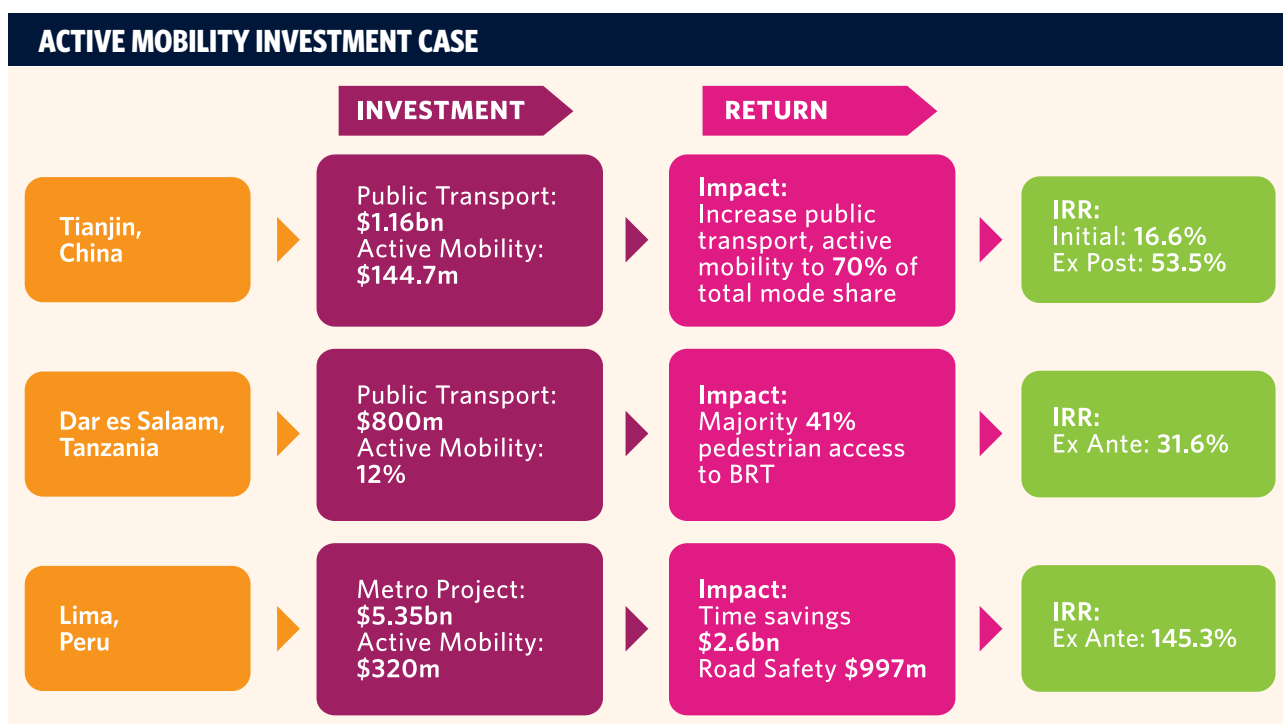
One key collaboration is the Partnership for Active Travel and Health (PATH). It has carried out powerful

advocacy for walking and cycling globally, and particularly at successive UNFCCC COP summits. PATH's targeted advocacy has built momentum around policy commitments for active mobility. Through the COP process, countries have been encouraged and supported in developing and strengthening Nationally Determined Contributions (NDCs) on active mobility. A major focus for PATH has been advocacy encouraging countries to align NDCs with their national policies on active mobility. This policy-focused advocacy in itself is vital and is also an essential component in strengthening finance for active mobility.

A further step for PATH is to advocate for strengthened financing on active mobility, with road safety investment as a vital component. This aligns with work led by WRI and the Government of the Netherlands to strengthen financing for active mobility globally.²⁶ An important further step needed, will be to bring the MDBs, climate financing institutions, and private investors together with governments, cities and expert organisations to develop a financing platform for catalytic funding on safe active mobility. A major and necessary output would be a financing instrument for active mobility - likely a blended finance model.

Work has started and should be advanced towards financing models for safe active mobility. Blended finance models that have been successful in other areas of climate financing are instructive.

Models such as 'Climate Investor One' (CIO) have proved successful in financing green infrastructure projects in low- and middle-income contexts, bringing



together development finance institutions, funds, private investors and governments. Barriers addressed by such approaches include: lack of financing at the project development and initial construction phases; high cost of capital due to perceived market risk; private investor requirements such as re-financing options, and private investor reluctance to commit to pre-operations phases of a project. The model below shows how CIO as a blended finance facility is a development fund in its first component, providing loans at an early stage of a project's life-cycle, then managing perceived risk and bringing in equity investment in the later stages.²⁷

As the World Bank has recognised²⁸ blended finance such as 'viability gap funding' could be used to attract investment in infrastructure for safe active mobility covering the lag-time on returns that would otherwise discourage private investors. MDBs play a critical role in blended finance initiatives that facilitate private investment and can lead to crowding in additional sources of financing or the scaling up of a road safety solution that would otherwise struggle to receive the levels of investment needed. Through to 2030 there should be increased consideration on deploying mechanisms such as the World Bank's Private Sector Window, which seeks to deploy blended finance or investment guarantees in lower-income countries, for road safety.²⁹

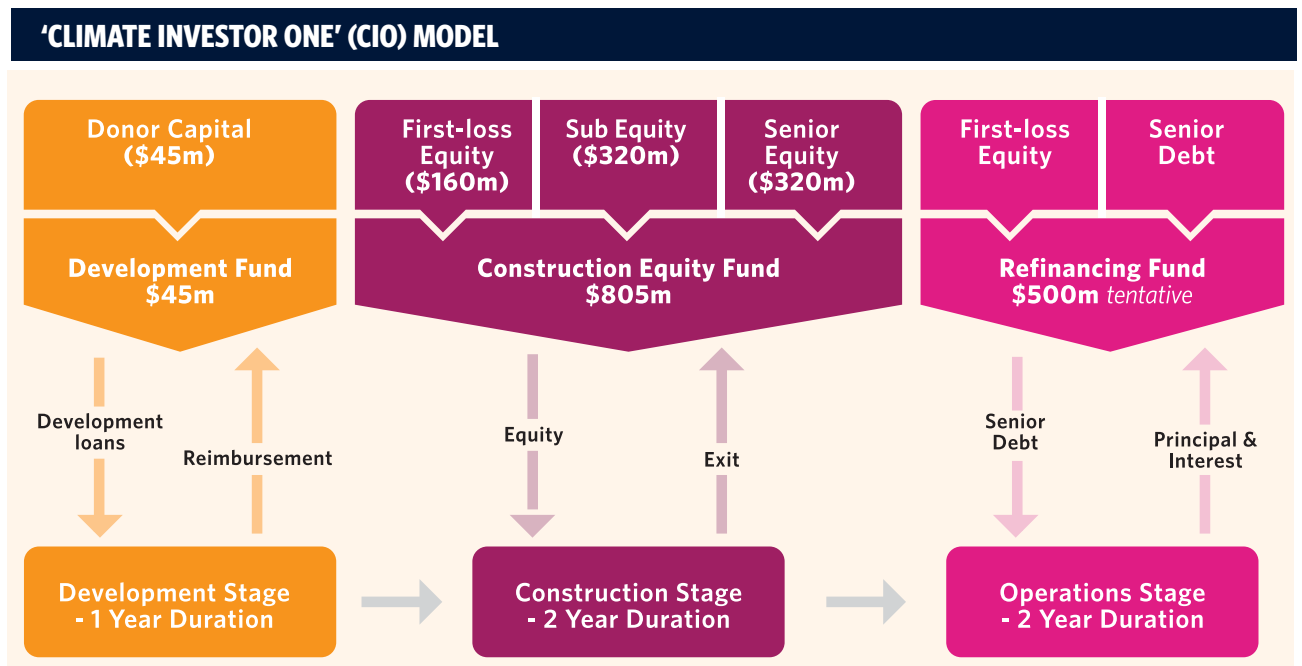
Investors do of course require consistent and comparable reporting and road safety metrics should be integrated into sustainability reporting.³⁰ Partners with expertise in road safety such as iRAP are exploring this – one possibility that merits further exploration being the inclusion of iRAP road safety targets in the 'FAST-Infra' label for sustainable infrastructure.

The FIA Road Safety Index has also made progress in establishing a road safety reporting framework for corporates taking a cue from environmental and carbon footprint monitoring. Such tools will be important moving forward.

In terms of private investment, it should also be noted that particularly in the road concessions sector, road safety has been included in bond and other forms of Environmental Social and Governance (ESG) financing. Autostrade per l'Italia, Abertis and Aleatica have developed such financing based on a corporate commitment to road safety. Such companies can have an important role in further development of private investment in road safety.

There has been a degree of progress in the issuing of sustainability bonds by the MDBs focused on road safety in recent years. Examples include the AUD 50m bond with investor Sampo Japan Insurance and the €85m Folksam Sustainable Development Bond. They have shown some promise in developing blended finance for road safety and a degree of interest from a relevant sector such as insurance. But the level of private investment attracted so far would need to be significantly increased to achieve impact for low- and middle-income countries.

It is in the development of catalytic financing models for safe active mobility in particular that further attention is required. While initial work focused on catalytic financing for safe active mobility has begun, this must be accelerated in the coming years. Further engagement and collaboration between financing institutions and the key stakeholders working on active mobility worldwide will be an important next step.



CONCLUSION

Financing to support progress on road safety across low- and middle-income countries is urgently needed. Since the first Decade of Action for Road Safety and through the second decade and SDG era, much valuable work has been carried out in developing the 'safe system' solutions, policies and frameworks needed to prevent road traffic injuries and fatalities. And while there have been examples of effective financing for road safety, significant improvement and strengthening is needed.

The MDBs play a central catalytic role in road safety financing and, through to 2030, development bank financing must at a minimum be doubled. An increase of this nature has been acknowledged as necessary by the MDBs but it must be delivered upon by them.

Critical however, is support for capacity development in low- and middle-income countries, and technical assistance for governments and authorities to deploy safe system approaches and measures, and to update standards to protect vulnerable road users. All of this should be coupled with a results-based approach to financing. This is a pre-requisite to enable governments to request development bank financing and unlock national budgets, and then to design, build and manage infrastructure that will not end up costing lives. Such assistance and support is required through the lifecycle of road project financing.

More work is needed to bridge the gap in coordination and capacity, particularly in the context of MDB related financing. A key step needed is to establish open and transparent platforms for exchange between countries that have begun to make progress in integrating investment in safe systems and protection of vulnerable road users into road infrastructure financing, and those that are showing nascent interest but are further behind on expertise and capacity. Initiatives such as Safe Schools Africa and the 10 Step Plan for Safer Road Infrastructure can play an important role in this. The work begun by the FIA Foundation on motorcycle helmet coalitions can also provide a basis for the exchange of expertise and strengthening capacity

so that MDBs and governments can then invest in effective motorcycle safety.

An exchange initiative involving groups of road or transport authorities, development bank representatives and technical expert organisations on a regional basis would play an important role in bridging the capacity gap and accelerating progress. Such an initiative should be established, resourced and advanced as a matter of urgency.

Road safety financing should not be siloed and viewed as separate from climate finance however. Road safety and climate finance must be more effectively integrated and connected. MDBs should draw upon the technical assistance of expert organisations such as UN Environment and ICCT. And critical in the connection between road safety and climate finance is active mobility. A next step for coalition work on active mobility must bring together the leading expert organisations on walking, cycling and road safety, together with development finance institutions, private investors, cities and governments. The PATH coalition of partners has made an important start, particularly in policy advocacy and policy development for walking and cycling. An emerging partnership of the Government of the Netherlands and WRI, with direction and input from other key organisations such as FIA Foundation and UN Environment, has begun to address catalytic financing requirements and has started to consider models, including blended finance for safe active mobility. Existing partnership work in this area has started to yield results but this must be accelerated through to 2030.

Ultimately, however technical and perhaps esoteric these recommendations may sound, they serve a human purpose – to prevent avoidable death and injury on the world's roads. Every life lost is a personal tragedy for the families and friends involved. But they are also an addition to the ledger of accountability by which our governments, our institutions, ourselves, should be measured. We know what needs to be done, let's resolve to work together more effectively to achieve it.



END NOTES

- ¹ WHO Global Status Report on Road Safety 2023
- ² The Global Infrastructure Hub details this level of transport, infrastructure spending (www.gihub.org)
- ³ Examples include the ADB's Shaanxi Road Safety Project, the IDB support program for Safe Inclusive & Sustainable Mobility in Mexico, the World Bank Sustainable Development Loan for Rio de Janeiro.
- ⁴ Multilateral Development Banks Road Safety Financing in Low- and Middle-Income Countries 2018-2022 Road Safety Working Group Report
- ⁵ For a further explanation of the three star standard for road infrastructure safety see: <https://irap.org/safety-insights/how-safe-are-our-roads/>
- ⁶ As an issue going far beyond road safety, some partners have identified corruption in roads projects as worthy of attention. Such issues while important, and may impact upon budgets and financing, are beyond the scope of this report.
- ⁷ 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>
- ⁸ These budget totals are around 1% of GDP
- ⁹ India accounts for \$33bn in the FY 2023-2024 national budget
- ¹⁰ Kampala Road Safety Report 2023, Kampala Capital City Authority.
- ¹¹ Safe Schools Africa: Strengthening Road Safety on Development Bank Financed Roads in Sub-Saharan Africa. FIA Foundation, Amend.
- ¹² 'Manifesto 2030: Progress Report' Child Health Initiative, FIA Foundation 2025
- ¹³ Safely Connected: A Regional Road Safety Strategy for CAREC Countries. Central Asia Regional Economic Cooperation Programme & ADB.
- ¹⁴ The CAREC Safety and Sustainable Mobility Course provides a good example:
<https://elearning.carecinstitute.org/carec-road-safety-and-sustainable-mobility>
- ¹⁵ For an extensive guide to motorcycle safety see 'Wheels of Change: Safe and Sustainable Motorcycles in Sub-Saharan Africa.
<https://www.fiafoundation.org/resources/the-wheels-of-change-safe-and-sustainable-motorcycles-in-sub-saharan-africa>
- ¹⁶ For a full discussion of Vietnam's motorcycle helmet programme and its impact see FIA Foundation | Head First: A Case Study of Vietnam's Motorcycle Helmet Campaign
<https://www.fiafoundation.org/resources/head-first-a-case-study-of-vietnam-s-motorcycle-helmet-campaign>
- ¹⁷ Global Landscape of Climate Finance. Climate Policy Initiative 2023.
- ¹⁸ Clean Air Fund and Climate Policy Initiative 2023.
- ¹⁹ The George Institute summarises research showing that lowering speed particularly in 'stop-start' urban environments can result in reduced emissions. See: https://cdn.georgeinstitute.org/sites/default/files/6-reasons-why_co-benefits-of-reducing-speeds-on-our-streets_policy-document.pdf
- ²⁰ World Bank Global Road Safety Facility Business Plan 2024.
- ²¹ <https://walk21.com/2022/08/22/report-walking-and-cycling-in-africa/>
- ²² Meesmann U, Wardenier N, Torfs K, Pires C, Delannoy S, Van den Berghe W. A global look at road safety. Synthesis from the ESRA2 survey in 48 countries.
- ²³ <https://thecityfix.com/blog/learning-from-delhis-brt-failure-looking-citys-future-dario-hidalgo/>
- ²⁴ <https://journalspress.com/wp-content/uploads/2021/03/Challenges-of-Pedestrian-Safety-Management-Along-Bus-Rapid-Transit-BRT-Corridor-in-Dar-Es-Salaam-City.pdf>
- ²⁵ The Path Less Travelled: Scaling Up Active Mobility to Capture Economic and Climate Benefits, ITDP and World Bank.
- ²⁶ iRAP has also been working with the Millennium Challenge Corporation on active mobility financing and work to develop a 'Footpaths for Africa Bond' is showing signs of early promise.
- ²⁷ For further discussion see: <https://www.greenclimate.fund/project/fp099>
- ²⁸ Saving Lives Through Private Investment in Road Safety. Daniel Pulido and Veronica I. Raffo. World Bank 2022.
- ²⁹ This has also been suggested in 'Saving Lives Through Private Investment in Road Safety,' World Bank.
- ³⁰ See also Innovative results-based financing platforms for infrastructure and road safety investment Rob McInerney, Stephen Perkins, Mattias Landgren, Rosemary Addis. This proposes a platform to develop and certify safety metrics supporting a pipeline of investible projects.





For more information

www.fiafoundation.org