THE MISSING LINK:
Road traffic injuries and the Millennium Development Goals

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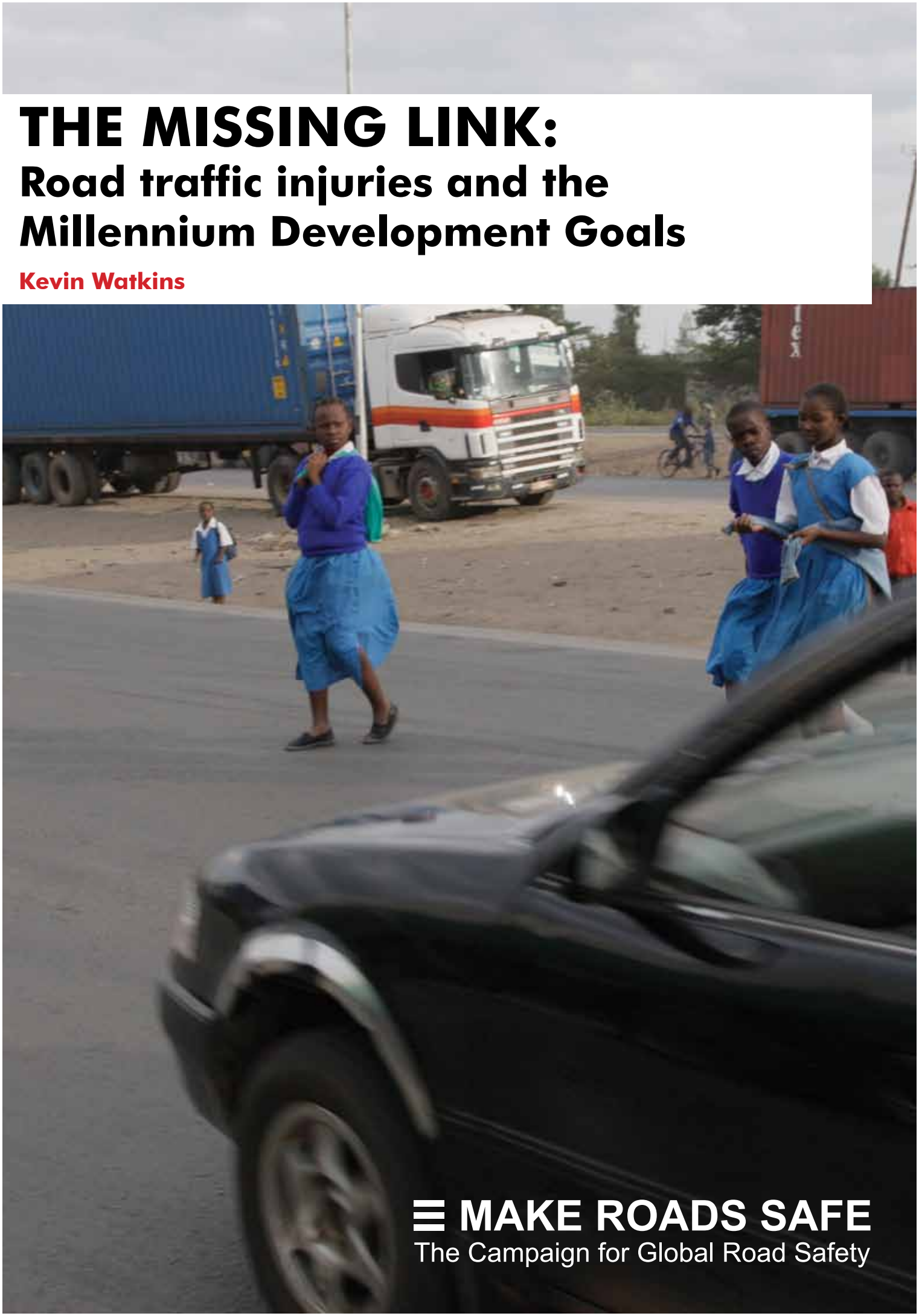


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The missing link: road traffic injuries and the Millennium Development Goals

On 9 June 2010 a single event captured the attention of the international media. The date marked the opening ceremony of the football World Cup in South Africa.

But it wasn't the star-studded cast of performers that made the news. It was the death of a single child in a road traffic incident. Tragically, there was nothing unusual about the event. Every year, around 15,000 people die on South Africa's roads. And every day national and local newspapers across the countries record the stories of victims and grieving relatives. The difference on this occasion was that the victim was Zenani Mandela, the great grand-daughter of former South African President Nelson Mandela.

The road death that robbed Zenani Mandela of her life and her family and friends of a loved one briefly put the spotlight on a hidden public health epidemic. This year, that epidemic will claim the lives of 1.4 million people –that's 3,500 every single day. Countless millions more will be left injured or maimed. The vast majority of the victims will be vulnerable road users in developing countries. Here are some of the recently reported local events behind the global statistics:

- 29 people killed and 24 seriously injured on the highway from Nairobi to Mombasa when a truck collided with a speeding bus
- a 10 year old boy on his way to school crushed by a reversing bus in Delhi, one of more than 100 people killed in crashes involving a single bus company in the city last year.
- 54 people killed in Guatemala when a bus carrying 77 passengers skidded into a ravine

Every road traffic incident has its own story and set of distinctive circumstances. The speeding driver, the child in the wrong place at the wrong time, the bus that comes off a road, and the burst truck tyre, all figure prominently in accident reports. But most road traffic incidents have two things in common – they are both predictable and preventable. They are predictable, because we know in advance how many victims will be claimed each day - and who the victims will be. And they are preventable because investments in road safety backed by stronger regulation and enforcement would save millions of lives.

The Millennium Development Goal summit - a window of opportunity

Road safety management does not make international headlines. The subject is absent from the agendas of global summits on poverty reduction. Yet few issues merit more urgent attention. Road traffic deaths and injuries represent a global epidemic – and the costs of that epidemic are borne overwhelmingly by the world's poorest countries and people. When it comes to death and injury, no war or humanitarian disaster rivals the impact of road injuries. Few killer diseases pose an equivalent level of risk. And apart from the devastating human consequences, road traffic injuries are holding back progress in economic growth, poverty reduction, health and education. With projections pointing to a relentless increase in fatalities and injuries on the roads of the world's poorest nations, it is time to call a halt to the culture of neglect that pushes road safety to the margins of transport and development policy.

The UN Millennium Development Goal summit in New York on 20-22 September 2010 has provided an opportunity for action. The challenge is to put the road traffic injury crisis where it belongs – at the centre of the international development agenda. Some people might question the case for linking road safety to the MDGs. But the evidence is compelling. Consider first the MDG target of halving extreme poverty. Achieving that target

requires pro-poor economic growth. Road traffic injury undermines progress on two counts: it undermines growth and the poor bear the brunt of the injury, with devastating consequences for their livelihoods, earnings and prospects for escaping poverty.

The MDG ambition includes universal primary education. Here too the world's roads are a threat because the lives of millions of school children are blighted by the risk of serious injury. In fact, road traffic injuries are the second biggest killers of children during the primary and early secondary school years. While the MDGs include targets for cutting deaths from malaria, HIV/AIDS and tuberculosis, road traffic injuries kill more 5-14 year olds than any of these deadly infectious diseases. Setting targets for cutting mortality rates among children aged 0-5 years and then turning a blind eye to one of the biggest killers of 5-14 year olds is not just irrational – it is ethically indefensible.

The cumulative costs of road traffic injuries should propel the issue into the front line of dialogue on international development goals. No government can afford to ignore the potential gains for economic growth prospects and public finance from a reduction in road traffic injury. And no government should ignore the harm inflicted on the education and productivity of young people, or the vast drain on health financing resources absorbed in treating victims. Yet few finance, education or health ministers in developing countries, or their aid partners, appear to have made the link between road traffic injury and the national budget.

The MDG targets reflect a powerful consensus rooted in shared commitments to human rights, ethical values, and social justice – and in the recognition of shared responsibility for change. At the heart of the road traffic injury crisis is an approach to development that challenges these commitments and points to a failure of shared responsibility. Too often, governments and aid donors view road safety as a peripheral concern meriting little more than an occasional glance in the rear view mirror. Their priority is to expand road systems and reduce journey times to boost economic growth. These objectives are important – and transport infrastructure is vital for national development. Yet metalled roads and journey times are not the ultimate measure of national progress - neglect of road safety is putting lives at risk. Transport systems should aim to better the lives of people. That is why road safety and the protection of vulnerable people should be at the heart of national transport strategies. It is also why governments and donors have to face up to their responsibilities for tackling a tragedy that claims 1.3 million lives annually – over 90% of them in developing countries.

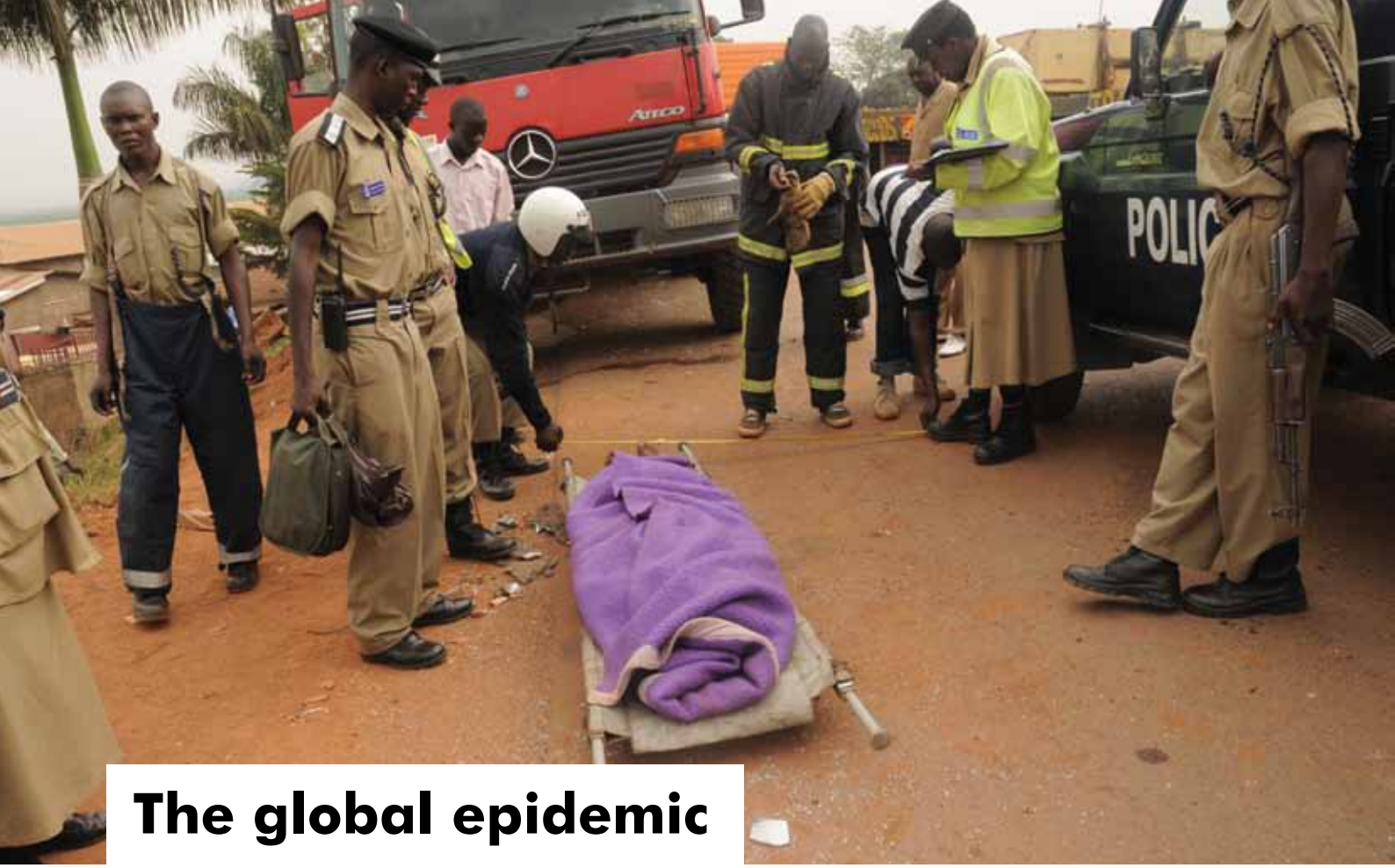
There are some positive signs of progress. In 2009, the first global ministerial conference on road safety adopted a resolution promising bold action to save lives. This was followed in 2010 by a UN General Assembly resolution that bluntly recognised road traffic injury as a public health challenge that threatened to "hinder progress towards the Millennium Development Goals." The resolution, co-sponsored by one hundred countries including Russia, France and Brazil, proclaimed the inauguration of a Decade of Action for Road Safety starting in 2011.

The MDG process needs to build on this momentum and to start the transition from words to action. The Decade for Action has to start with national plans that build 'five pillars' for progress in road safety management, road infrastructure, vehicle safety, road user behaviour and post-crash care. And national plans in poor countries have to be backed by international support in the form of finance, technical advice and capacity-building. The overall goal is to halt, or even begin to reverse, the relentless rise in road traffic death and disability.

Governments face a choice between two different scenarios. They can continue on a business as usual trajectory, turning a blind eye to road safety while periodically signing high-sounding declarations of intent. This is a scenario which will see road deaths increase from around 1.4 million to almost 2 million per annum in the next 10 years, with the vast majority of victims selected from the ranks of poor people in poor countries. Alternatively, governments can start to put people first and ensure that roads are built and transport systems regulated with a view to human safety. This scenario is affordable and achievable – and it could save 5 million lives over the next decade. Decisive action could make this scenario a reality.

As with most of the MDGs the real barriers to progress on road safety are not technical or financial. Building roads that offer vulnerable pedestrians a safe crossing point, enforcing rules on speed, seat belts and protective helmets, and regulating public transport providers does not require rocket-science and vast investments. It requires political will, strategic vision and empathy with the plight of vulnerable road-users. Above all, though, change is about adopting new attitudes. Too often, governments measure the success of their transport policy in journey times and metalled roads. Road traffic injury is seen as a form of collateral damage – the inevitable price to be paid for a more efficient infrastructure. The underlying rationale can be bluntly but accurately summarised in a simple phrase: 'never mind the body count, look at the asphalt roads.' This perverse logic has to be turned on its head, with the security of vulnerable road users put at the centre of national policy and international action.

This report is divided into 3 parts. It starts by looking at the scale of the current epidemic and the hidden human costs that are holding back progress towards the MDGs. Section 2 looks beyond the headline global numbers to the experience of vulnerable road users in Kenya. Section 3 looks ahead to the scope for decisive action in cutting road death and injury.



The global epidemic

Road transportation provides obvious benefits to countries and individuals. It facilitates the movement of goods and people, creating employment, supporting economic growth, and enhancing access to education and health care. The association between roads and human development is well-established. Data from low-income countries consistently demonstrates that communities living furthest from roads experience higher levels of poverty, lower levels of school attendance and worse health outcomes. In sub-Saharan Africa, inadequate access to all-season roads is holding back agricultural productivity and poverty reduction in rural areas. Only 40% of the region's rural population has access to such roads, compared with an average of over 65% for other developing regions. Transport infrastructure may seem far removed from human development concerns – but it is one of the building blocks for progress towards the MDGs.

Road safety is another building block – or it should be. Death and injury on the world's roads is arguably the single most neglected human development challenge. The vocabulary of the road traffic injury epidemic helps to explain the neglect. While child deaths from, say, malaria are viewed as avoidable tragedies that can be stopped through government action, road traffic deaths and injuries are widely perceived as 'accidents' – unpredictable events happening on a random basis to people who have the misfortune to be in the wrong place at the wrong time.

The vocabulary is out of step with reality. Road traffic fatalities and injuries are accidents only in the narrow technical sense that they are not intended outcomes. They are eminently predictable, and we know in advance the profile of the victims. Of the 3,500 people who will die on the world's roads today around 3000 will live in a developing country and at least half will be a pedestrian or vulnerable road user who is not driving a car. When it comes to road traffic injury, the future is not just predictable – it is also changeable. Far from being the consequence of forces beyond human control, road traffic death and disability is in large measure the consequence of government action and inaction. Just as government action can cut predictable child deaths through immunisation, the provision of insecticide-treated bed nets

Figure 1: Leading causes of death by age, world, 2004

RANK	5-14 YRS	15-29 YRS	TOTAL
1	Lower respiratory infections	Road traffic injuries	Ischaemic heart disease
2	Road traffic injuries	HIV/AIDS	Cerebrovascular disease
3	Malaria	Tuberculosis	Lower respiratory infections
4	Drownings	Violence	Perinatal causes
5	Meningitis	Self-inflicted injuries	Chronic obstructive pulmonary disease
6	Diarrhoeal diseases	Lower respiratory infections	Diarrhoeal diseases
7	HIV/AIDS	Drownings	HIV/AIDS
8	Tuberculosis	Fires	Tuberculosis
9	Protein-energy malnutrition	War and conflict	Trachea, bronchus, lung cancers
10	Fires	Maternal haemorrhage	Road traffic injuries

Source: WHO (2008), Global Burden of Disease: 2004 update.

and nutrition programmes, so it can cut road deaths through the enforcement of rules and regulations that put people first.

The global epidemic in numbers

Statistics can never adequately capture the individual human tragedies that come with road traffic injuries. The most important impacts of the road safety crisis are beyond measurement. For each of the 1.4 million victims there are grieving parents, brothers and friends trying to come to terms with the loss of loved ones. For every person left disabled, there is pain and the emotional and financial cost that comes with long-term care. Human grief and loss have no price, and no simple numbers can be put on trauma, anxiety or loss. What statistics can capture is the relative level of risk posed by various threats to human well-being – and the risks associated with roads are heavily under-estimated.

Around 1.4 million die on the world's roads each year. Nine in every ten of the deaths and injuries that take place on the world's roads happen in developing countries. Over the two days of the Millennium Development Goal Summit in New York, some 7,000 will have died on the world's roads and for every death up to 10 people will have been seriously injured. The cumulative effect of these injuries is not widely recognised. Each year almost 100,000 people die on India's roads, but an estimated 2 million people in the country are living with a disability caused by road traffic injury. And in a country lacking an effective social welfare net, a disability is a one-way ticket to poverty.

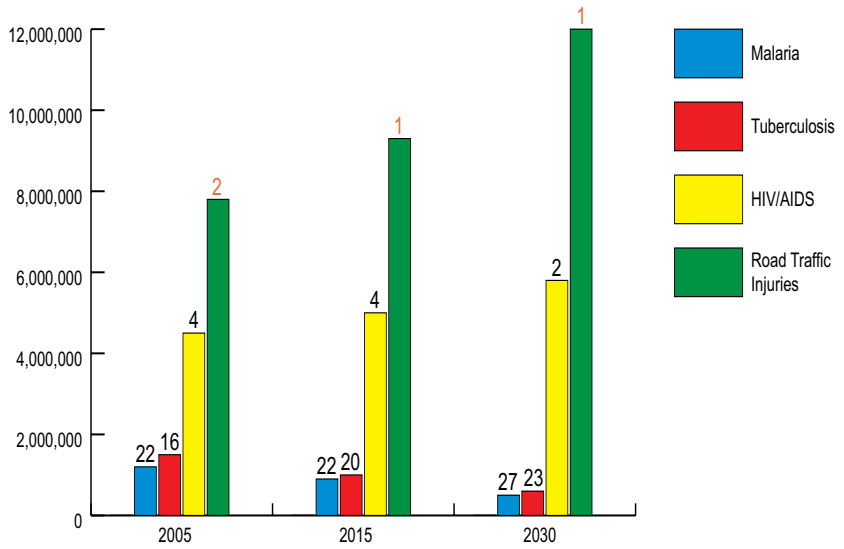
Measured for scale the road traffic injury epidemic poses one of the gravest threats to public health. For children aged 5-14 years old, that epidemic is the second biggest killer (See Figure 1). In 2004, the last year for which comprehensive data is available, it claimed more lives among this age group than major killers such as malaria, diarrhoea and HIV/AIDS. Yet unlike these killers, road traffic injuries are conspicuous by their absence from the international development agenda. For the

Figure 2: Projections for Global & Regional road fatalities 2008-2030

	WORLD	AFRICA	THE AMERICAS	EASTERN MEDITER-RANEAN	EUROPE	SOUTH EAST ASIA	WESTERN PACIFIC
2008	1,438,047	246,931	157,702	167,571	121,870	368,818	375,156
2015	1,676,000	325,000	169,000	202,000	109,000	459,000	412,000
2030	2,191,000	562,000	194,000	282,000	87,000	620,000	446,000
% Change 2008-2030	52%	127%	23%	68%	-36%	68%	18%

Source: Revised global and regional projections of mortality and burden of disease by cause for 2008, 2015 and 2030 (baseline), Colin Mathers, Ties Boerma and Doris Ma Fat, WHO, 2008

Figure 3: Projected Disability Adjusted Life Years (DALYS) in developing countries: (children aged 5 – 14)

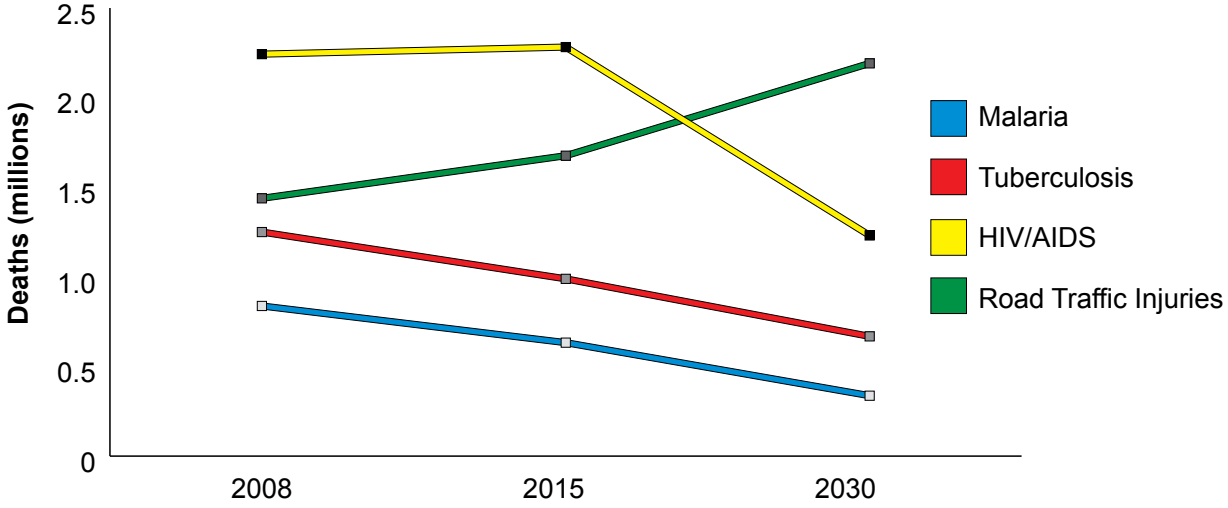


Source: Mather C, Loncar D, Updated projections of global mortality and burden of disease, 2002-2030: data sources, methods and results, WHO, October 2005

15-29 year-old age group, road traffic injury is the single biggest cause of death. Yet while issues such as war and violent conflict have figured prominently in international dialogue on the MDGs, the body count on the world's roads heavily outweighs the casualty figures from armed conflict. The neglect of road traffic injury is evident also in national health systems. In India, per capita spending on HIV/AIDS is 13 times greater than spending on road traffic injury, even though the latter is a greater source of fatality and injury.

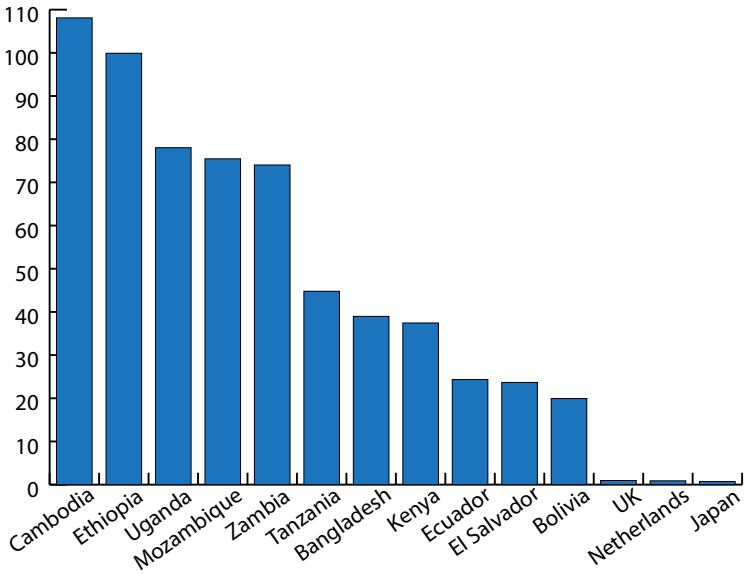
However grave the present threat the future looks worse. Rich countries have been making progress in cutting road traffic deaths and injuries for the past half-century. Even though much remains to be done, the trend remains strongly positive. Poor countries are moving in the opposite direction. Comparing 2020 with 2000, fatalities are predicted to increase by more than 80% in low and middle income countries and by 144% in South Asia. By 2030, the projected number of deaths on the world's roads will climb to at least 2.1 million. Compared

Figure 4: Projected global deaths for selected causes, 2008-2030



Source: WHO Global Burden of Disease 2008 (baseline figure)

Figure 5: Deaths per 10,000 vehicles



Source: Figures based on data taken from WHO 2009 *Global Status Report on Road Safety*

with 2008, projected deaths in sub-Saharan Africa will double while those in Europe will fall by 36% (See Figure 2). Long before this - by the MDG target date of 2015 - road deaths are projected to be the leading cause of health losses for children aged 5-14 years (See Figure 3). In contrast to the major infectious disease killers, the road death graph is heading in the wrong direction (See Figure 4).

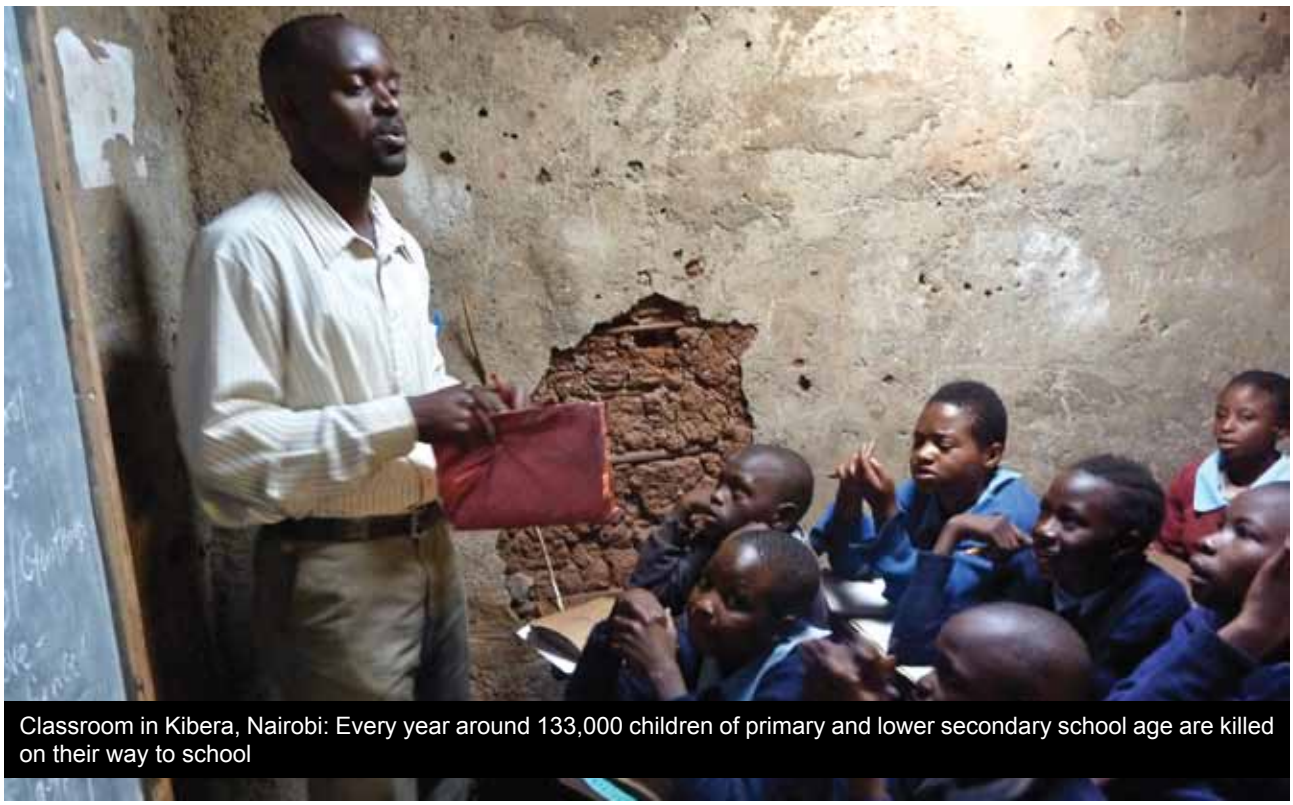
The deadly arithmetic behind these projections can be traced to a three-way interaction between people, vehicles and road system. Developing countries currently have less than half of the world's registered motor vehicles but represent 90% of deaths. Put differently, a person in a typical developing country is more than twice as likely to die from a road traffic injury as a person in a rich country, even through there are half as many cars on the road. Crudely stated, every

vehicle on the roads of the world's poorest countries is far more likely to kill or maim than a vehicle in a rich country (See Figure 5). In Ethiopia, 100 people are killed for every 10,000 cars. The comparable ratio for Japan is one death for every 10,000 cars. Put differently, when Ethiopians use their country's roads they face a fatality risk in excess of 100 times that faced by a Japanese road user.

The stark difference in risk on roads in rich and poor countries reflects differences in a state of the road infrastructure, allied to the governance of road safety. Rich countries still have a long way to go. But their citizens benefit from the efforts made over several decades to separate vulnerable road users from vehicles and to put road safety at the centre of transport policy. By contrast, the surge in vehicle use in developing countries is being superimposed on transport systems that attach low priority to the safety of vulnerable road users.

With economic growth and investment in transport infrastructure driving up the number of vehicles and increasing average speeds, the human risks facing vulnerable road users are rising by the day. The United Nations Environmental Programme (UNEP) estimates that the world's light duty vehicle fleet will triple by 2050. By then almost two-thirds of the global vehicle fleet will be found in developing countries – a six-fold increase over current levels. Without a fundamental change in approaches to road safety, this is a trend that points unequivocally to a sustained surge in death rates.

It is not just the headline casualty count numbers that are predictable. The profile of the victims can also be anticipated with a high level of confidence. Almost half of those who die in road traffic crashes are pedestrians, cyclists or users of motorised two-wheelers – a group collectively described by the WHO as 'vulnerable road users'. In rich countries, most of the victims of road traffic injuries are drivers or passengers of cars. In poor countries, the vast majority of the victims are too poor to own a car. Children walking to school, adults crossing a road of cycling to their place of work, and people using public transport face the greatest risks. Around 70% of road traffic injury casualties in developing countries fall under the 'vulnerable road user' category. Child pedestrian injury is highest in South Asia and sub-Saharan Africa.



Classroom in Kibera, Nairobi: Every year around 133,000 children of primary and lower secondary school age are killed on their way to school

Road traffic injury and the MDGs

The MDGs have played a key role in pushing poverty to the centre of the international agenda. Adopted by 189 countries in 2000, the development targets set for 2015 have provided a benchmark for measuring progress towards the eradication of extreme human deprivations. There has been progress, disappointment and setback in equal measure. Partly because of the impetus provided by the MDG framework, extreme poverty is falling, fewer children are dying before the age of five, and more children are getting into school. Despite these gains, most of the world's poorest countries are not on track to achieve the key MDGs – and the financial crisis, rising food prices, and armed conflict threaten to slow down the pace of advance. The MDG summit has provided governments across the world with a chance to reflect on what has been achieved and – more importantly – to draw up a bold plan of action to accelerate progress.

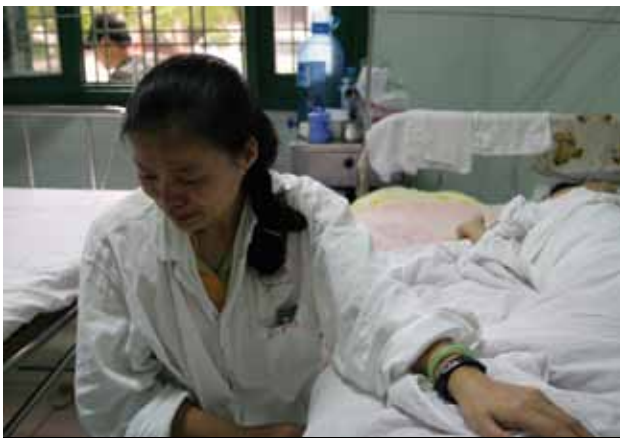
At first glance road safety seems a remote and peripheral concern for an MDG summit. It is easy to understand why the issue has not captured the headlines. Delivering life-saving vaccinations and antiretroviral drugs for HIV/AIDS, financing maternal and child health programmes, putting kids in school, and providing clean water and sanitation all have an intuitive appeal as priorities for an obvious reason: they hold out the promise of saving lives and expanding opportunity. By contrast, issues such as road design, traffic rules, and regulatory frameworks for public transport providers appear technical, mundane, and largely irrelevant to the ethical framework that underpins the MDGs.

Nothing could be further from the truth. Road safety is an area in which relatively small investments have the potential to save large numbers of lives, and to prevent millions of debilitating injuries. On any measure of cost-effectiveness, these investments are every bit as valid as spending in other areas to prevent death and disability. But that is not the only reason for putting road safety on the MDG agenda. While road traffic injury may not pose the same type of threat to the MDGs as events such as the global

BOX 1:

A family torn apart

Huynh Trong Hieu, 32 years old, lives in the outskirts of the tourist city of Nha Trang, Vietnam. Hieu is married with a son and a daughter and was the breadwinner of his extended family, including his wife, children, mother, and his two mentally-disabled sisters. Hieu worked as a motorcycle repairman and because of his mechanical ability and hardworking attitude, he was able to earn enough to support his entire family. However, in early 2008, Hieu was in a motorbike crash. The tragic accident forever changed his and his family's quality of life. One afternoon, while driving the motorbike of a customer to test a problem, Hieu crashed while trying to avoid a direct collision with a bicyclist making an irregular crossing. Hieu was not wearing a helmet and suffered severe brain trauma and was hospitalized for three months under intensive care. After being released from the hospital, the left side of his body was, and remains, paralyzed, and he is mentally disabled.



At the time of the accident, Hieu did not have medical insurance. The family had to mobilize financial support from family members and borrow cash from acquaintances. The only property of real value in the house, a Honda motorbike, was sold after the accident. They received only 150 USD for the motorbike, which covered a small portion of Hieu's total hospital charge of 4,500 USD.

Hieu's pre-RTI income was an average of 170 USD per month. A year after the accident, Hieu, using a wheelchair that cost him 35 USD, became a lottery ticket seller. His income plummeted to an average 30 USD per month -- only enough to cover his acupuncture treatment, rehabilitation fee, and other medical follow-up treatment. His father was absent, his mother had chronic arthritis and his two sisters suffered from mental illness and were not married. His income therefore supported his mother, two sisters, and his two children. His wife earned enough to support only herself as a private tailor before the accident, and following the accident, she was required to stay at home and care for Hieu. His accident pushed his family into poverty.

Since Hieu could no longer support his two children, they were separated from their parents and now live with their mother's parents. However, the grandparents were too old to provide adequate care for the children, and Hieu's two children are said to be malnourished and poorly taken care of. At the time of the interview, Hieu's relatives indicated that his wife has already shown her dissatisfaction with the family situation, and that she is thinking of leaving the family, and possibly obtaining a divorce.

Source: Asia Injury Prevention Foundation

financial crisis, armed conflict or high profile humanitarian emergencies, it is holding back progress towards the international development targets on a global scale. The following briefly outlines some of the connections:

Extreme poverty and malnutrition (MDG 1). Progress towards the MDG target of halving extreme poverty is a function of two things: national per capita income growth and the share of any increment to growth captured by the poor. Road traffic injury causes damage on both sides of the equation. Quantifying the impact of road traffic injury on national economic wealth is inherently difficult. However, credible estimates place typical losses in developing countries at between 1-3% of GDP, which is more than many receive in aid. Financial loses caused by road traffic accidents and injuries have been estimated to cost developing countries US$100 billion per annum. To put that figure in context, 2009 aid levels were around US$120 billion. According to UNEP, current cost estimates for sub-Saharan Africa are running at US$6.2 billion annually. These losses are comparable in scale with the impact of the global economic recession on many low-income countries. In contrast to the recession, road traffic losses occur on a permanent basis. On a simple calculation of the relationship between GDP growth and poverty reduction, the economic costs associated with road traffic events are keeping between 12 million and 72 million people in poverty. In fact, this understates the scale of the problem. Like HIV/AIDS, road traffic injury strikes hardest at people in their most productive years. It deprives countries of people who represent a vital source of the skills and abilities needed to sustain growth. And because the costs of road traffic injury are borne disproportionately by the poor and vulnerable, the effects on poverty reduction are even more severe:

- Poor people are more likely to be vulnerable road users. They are more likely to travel on foot, by bicycle, or by public transport – and in many cases public carriers are a major source of road traffic injury. Research from Bangalore, India, found that mortality from road traffic injuries was twice as high among the poorest socio-economic groups as among the richest – a finding that held for both urban and rural areas.

- Road traffic injury can dramatically cut household income. The most precious asset of the poor is their labour – and road injuries or fatalities can erode the value of that asset. In Bangladesh, 75 per cent of poor households reporting a road traffic death reported a decrease in living standards

- The poorest families are hit hardest by post-injury costs. Poor households are less likely to have the financial resources they need to pay the direct and indirect costs related to road traffic injuries. Many are driven into poverty by the costs of prolonged medical care and rehabilitation. One study in Kenya found that only one in five people attending a health facility as a result of road traffic injury were in a position to pay the resulting bills, with almost two-thirds indicating that they would have to seek financial assistance from relatives and friends. Many are denied access to care because they cannot afford the costs. One study in Ghana found that only one quarter of people injured in road crashes used hospital services. The most common reason for not seeking care was ‘lack of money’. The long-term costs associated with treating road traffic injuries drives many households into debt, diverting resources from other areas (see box 1).

Achieving universal primary education (MDG 2). The effects of road traffic injury on education have been widely ignored – yet they are of great significance. Ensuring that children reach their fifth birthday is one of the most important of all MDG goals. It is harder to think of a more important measure of human progress. By the same token, turning a blind-eye to the shocking death toll on the world’s roads among children aged 5-14 is difficult to justify. Every year, around 133,000 children of primary and lower secondary school age in developing countries lose their right to education for a single tragic reason: they are killed on the world’s roads, often making the journey to school. Many thousands more see their prospects for education diminished by injury and disability. For youth and young adults coming out of secondary school, the risk of death and injury is even greater. For children who are left disabled, access to school can become a major problem. Post-traumatic stress is another consequence of road traffic injury

A Delhi bus: public transport can play an important role in combating climate change, but effective safety regulation is vital

that can have devastating consequences for learning achievement. And the loss of a parent can leave children with long-term psychosocial problems. Given that road traffic injury is the single biggest cause of death in the15-29 year-old age group and the third biggest for the 30-44 year old age group, fatality on the world's roads is one of the primary reasons that children are left as orphans. In Bangladesh, road traffic accidents are the single biggest cause of death by injury among fathers and the second biggest cause of death by injury among mothers.

Cutting child and maternal mortality and reducing the burden of disease (MDGs 4,5 and 6). Road traffic injuries are a minor source of child death before the age of 5, and they may not appear to have a direct bearing on maternal mortality and infectious disease – but they are a potent indirect brake on progress in all of these areas. Health systems are in the front line of national efforts to achieve progress on child survival, safe pregnancy and the treatment and prevention of infectious disease. Yet road traffic injuries place an enormous strain on these already badly over-stretched systems. In Kenya, road traffic injury patients represent 45-60% of all admissions to surgical wards. In India they account for 10-30% of hospital admissions. Moreover, because of the severe and long-term nature of the injuries incurred, the per patient costs of treatment are often very high. One hospital in Uganda reports spending around US$399 per patient treating road traffic injuries. This is in a country with national spending of US$20 per person. Cutting the burden imposed on health systems by road traffic injury would release human and financial resources to combat the poverty-related infectious diseases and provide the front-line services needed to accelerate progress towards the health-related MDGs.

Ensure environmental sustainability (Goal 7). The environmental and human health costs of road transport are growing with the size of the world's vehicle fleet. That fleet is a primary cause of the urban air pollution that causes over 80,000 deaths each year, more than 70% in developing countries. It also generates three-quarters of the world's transport-related CO2 emissions from fossil-fuel combustion – and that share is rising. Transport policy can play a central role in combating climate change not

just by creating fuel-efficiency incentives and supporting the development of low carbon fuels, but also by supporting the development of safe public transport and creating the conditions for safe non-motorised transport. When safe sidewalks and cycle lanes are available, people are far more likely to undertake trips by walking or cycling. Yet only one-third of countries covered in a recent World Health Organisation (WHO) survey were found to have national policies promoting walking and cycling as an alternative to motorised transport.

Develop a global partnership (Goal 8). The road traffic injury epidemic cannot be overcome by countries acting alone. For the world's poorest countries, the challenge is to combine the expansion of a transport infrastructure that facilitates economic growth and generates employment, with policies that reduce the number of deaths and injuries. While no country is too poor to act, the poorest countries need financial, technical and wider capacity-building support to act on the scale required. The UN Decade of Action provides an opportunity to put in place measures that could save 5 million lives and prevent 50 million serious injuries between 2011 and 2020.

The cumulative costs of road traffic injuries should propel the issue into the front line of dialogue on international development goals. Losing 1-3% of GDP on an annualised basis is a brake on development. It holds back job creation and erodes opportunities for development. It also restricts the level of revenue collected by governments for investment in priority social and economic infrastructure. No government can afford to ignore the potential gains for economic growth prospects and public finance from a reduction in road traffic injury. Yet few finance ministers appear to have made the link between road traffic injury and the national budget.

Much the same might be said of health ministers. Front-line doctors, nurses and paramedics deal every day with the consequences of the injuries sustained on national roads. They are aware of the level of resources directed towards the treatment of these injuries. Yet there is little evidence of health ministries leading calls for the road safety investments that could release large amounts of financing for the development of basic health provision.

For the individuals most directly affected, road traffic injuries are often a one-way ticket into poverty. Losses of labour caused by disability translate into lower levels of income, the erosion of savings, and reduced investment, trapping people in cycles of poverty and vulnerability. With limited coping capacity, the poorest households may have no alternative but to meet the costs of health treatment by incurring debt, cutting back on nutrition, or taking children out of school, sacrificing prospects for a better future for survival in the present.

All of this has implications for the Millennium Development Goals. Investment in roads can play an important role in accelerating progress towards poverty reduction. By the same token, investment on the current model is generating a level of human, social and economic cost that ought to be regarded as unacceptable.

Charting a new course

Addressing road safety management in a comprehensive manner requires action at many levels and the involvement of many sectors. Roads have to be designed with the security of vulnerable users treated as a priority, rather than an afterthought. Legislation aimed at lowering risk has to be not just adopted but also implemented. And governments and civil society organisations have to work together to change the attitudes that endanger lives. There are no blueprints – but there are tried and tested approaches with a proven track record.

When it comes to road design the first principle is that vulnerable road users have to be separated from vehicles. Pedestrians and cyclists have to be provided with protected spaces in the form of safe, clearly marked walkways, lanes and crossing points. At the same time, road design has to put a priority on safety rather than speed, with lanes and junctions clearly marked. And the rules, regulations and norms that govern road use have to prioritise the public good. That means effective enforcement of laws on drink-driving, speeding, seat belts and crash helmets.

These are simple ideas that are widely ignored, with consequences that can be observed on roads across the developing world. Every

This unhelmeted family in Mumbai is typical of many thousands using motorcycles as the main family transport

morning, tens of thousands of primary school age children negotiate the task of crossing a major road, and often a six lane highway, separating their home from their school. Millions of adults walk or cycle to their place of employment alongside highways lacking a safe pavement. Such problems can be addressed through 'retrofitting' security in the form of an overpass or a protected area for pedestrians and cyclists and, where relevant, for motorcyclists. But 'bolting-on' safety options to a flawed system is a second-best option. Whether measured in terms of cost-effectiveness or ethical principles, the best place to start is with the integration of road safety into road design and wider transport policy.

The adoption and enforcement of traffic laws and vehicle regulation can make an enormous difference. Rwanda has lower levels of road traffic injuries than many of its neighbours not because it is richer, or because it has better roads, but because its government has been more stringent in enforcing laws on speeding. In Viet Nam, a law requiring all motorcycle users to wear crash helmets has saved thousands of lives. While India has a law requiring helmet use, that law is systematically violated - and enforcement agencies turn a blind eye (see picture). Ensuring that public carriers such as bus and taxi companies meet effective safety standards could avert tens of thousands of deaths annually. Increasing police training and tackling corruption are essential steps to improving enforcement of speed and drink drive laws, enabling vehicle inspection regimes and improving road user behaviour in relation to seat belts and helmets.

Global and regional initiatives have heightened awareness of the potential for rapid progress on road safety. There have also been strong calls for international support. African ministers for transport and health have adopted a strong statement – the Accra Declaration – calling for strengthened partnerships on road safety. That theme has been echoed in successive United Nations General Assembly resolutions. International donors and aid agencies have also acknowledged the need for a concerted effort to tackle the road safety crisis. Yet the gap between words and action, captured in World Health Organisation assessments, remains vast:

- **Most countries lack a strategy.** Only one in three developing countries have a national road safety strategy that includes specific targets and has funding allocated for their attainment. For the most part, road safety continues to be treated as an afterthought with the emphasis firmly on cutting journey times. Even when countries do have nominal strategies, most lack clear targets and financing provisions. One recent review carried out by the World Bank Global Road Safety Facility of road safety in Ethiopia reached a conclusion that could be applied with equal, if not greater, force for most low-income countries: "Road safety is overall not given the high priority and commitment that is needed for sustainable road safety improvement…The highest political bodies have not set a vision for road safety…Most institutions involved in road safety do not have clearly defined targets for improved road safety performance in their field...and the leadership in road safety agencies can therefore not be held accountable for their (lack of) performance."

- **Legislation is often partial.** Fewer than one half of the countries covered in the World Health Organisation's (WHO) Global Status Report on Road Safety had a motor cycle law requiring both riders and passengers to wear helmets. While most countries have laws prohibiting drunken driving, 49% stipulate a legal limit above that recommended by the WHO. Speed is a key risk factor for injury among pedestrians and cyclists, yet fewer than one-third of countries meet basic criteria for reducing speed in urban areas – and most have urban speed limits in excess of the 50km/hour threshold considered compatible with lower levels of risk.

- **Enforcement is weak.** Even when the legislation is in place it often serves as a weak guide to policy. For example, in an assessment ranking enforcement on a scale from 0 to 10, only 9% of countries enforce speed limit provisions at a level higher than 7 in the WHO assessment. Only one in five countries was found to enforce seat belt laws.

- **Few countries have reliable data.** Information and statistics have a vital role to play in addressing the road traffic injury crisis. Measuring the scale, location and profile of any health threat is a first step towards countering it through policy interventions. Yet data collection on road traffic injury is often haphazard and incomplete, with large inconsistencies in the data reported by different government agencies. The WHO found that just one-in-five countries had broadly credible data on the extent of fatal and non-fatal road traffic injuries. It is likely that under-reporting is most marked in poor urban areas, especially when the victims are too poor to attend treatment centres.

In Sweden, the model of road safety is encapsulated in the two words of a policy adopted in the late 1990s – 'Vision Zero'. The starting point for that was the simple idea that the transport environment had to be modified, with human safety made the first priority. Two broad approaches defined Vision Zero. The first emphasised the role of road design and engineering in separating people from motorised transport though bicycle and pedestrian lanes, tunnels, overpasses, and protected play areas. Where separation was not possible, the strategy acknowledged the importance of giving priority to pedestrians, particularly by reducing speed. The second approach started from the recognition that human error on the part of both pedestrians and drivers was inevitable – and that road safety strategies had to factor-in measures to reduce the likelihood of injury when errors occurred.

Every country has to frame its own road safety strategy – and developing countries do not have Sweden's resources at their disposal. Yet the principles underpinning the 'Vision Zero' strategy still serve as a relevant guide to policy, not least because they put people and human safety at the centre of transport strategy.

Kenya - 'accidents cannot be prevented'

What do four people travelling to work in Nairobi on a minibus, a five year-old girl called Sharleen Nyaboke walking along a roadside, eleven people on a bus travelling from Nairobi to Mombasa, and a former Kenyan world athletics champion at 800 metres all have in common? The answer is that they were all killed during the first half of 2010 as a result of road traffic injuries.

Kenya has some of the world's deadliest roads. Around 3,000 road deaths are recorded each year, along with 12,500 serious injuries, although the real casualty level may be far higher (See box 2). Kenyans themselves have an expression that captures the fatalism felt by many at the relentless tide of death and injury. 'Ajai haina kinla' is Swahili for 'accidents cannot be prevented'. For some accidents, that is true – but when it comes to road traffic injury much of the death and disability is preventable. When primary school age children are left to cross the equivalent of a six lane highway to get from their homes informal settlements to school (see picture), the resulting injuries are not 'accidents' but an inevitable consequence of the rules governing road design.

In many ways Kenya's roads are a microcosm of a wider problem across sub-Saharan Africa and beyond. Economic growth has led to a sharp increase in motorised vehicle use, which has in turn clogged-up the transport infrastructure. Traffic volume increased at 5% a year from 2004 to 2008 and projections for the next five years point to 10% annual increases. The number of vehicles in the major cities has doubled. So, too, has the journey time between the capital city of Nairobi and cities such as Machakos, Kisumu and the port of Mombasa. Average daily traffic on the Northern Corridor connecting Nairobi to Mombasa increased from a peak of around 12,000 a day in 2003 to 20,000 a day in 2007. The poor quality of the country's roads following many years of under-investment, inefficiency and poor governance has been identified by the Kenyan government and the country's major donors as a bottleneck to economic growth.

Removing that bottleneck is now established as a national priority. In 2007, the Kenya Roads Act overhauled the system of roads governance, creating three autonomous authorities – the National Highways Authority, the Rural Roads Authority and the Urban Roads Authority - and

BOX 2:

Undercounting casualties on the Mombasa Road

Across the developing world there are huge gaps and variations in the quality and coverage of data on road traffic injuries. Inconsistencies between the reporting systems of police, health centres and hospitals are common. These data problems make it difficult to track progress over time, to compare across countries and – most importantly – to generate the information needed to inform policy. Under-reporting is widespread, particularly with respect to non-fatal incidents.

Kenya is not an exception to the general rule. In order to examine problems in reporting, the Make Road Safe campaign commissioned a study covering three small sections – totalling 68 kilometres – of the Mombasa Road just outside of Nairobi.

The road has undergone a US$122 million World Bank reconstruction and upgrading project, completed in 2005. Our study compared police records on road traffic injuries and fatalities with the records of community health centres, Red Cross paramedics and St John's Ambulance teams. It covered a one year period from June 2009 to June 2010.

The results are striking. Red Cross, health centre and St John's Ambulance reports recorded 87 fatalities, compared with 33 fatalities in police records – a 160 per cent disparity. In the case of one road, a 27 kilometre stretch from Mlolongo to Kyumbi, fatalities reported by paramedics, health centres and ambulance services were five times higher and serious injuries seven times higher than registered in police records. While these figures cannot be taken as nationally representative, they do point strongly in the direction of institutionalized under-reporting.

Why the disparities? There are several plausible explanations from interviews conducted with police, health providers and local communities. The police often record 'serious injuries' without following-up with hospitals to determine whether or not injury leads to fatality.

Nairobi hospitals estimate that 5-15% of people admitted on the basis of serious injuries sustained in road accidents die after admission. The hospital records in turn will record the death as the consequence of a medical condition, rather than a road traffic injury – a practice that artificially depresses the real fatality rate.

Another problem is that data is not effectively reported from local police station to headquarters. National figures on road traffic injury and fatality are compiled from police records, but there is no effective system in place for ensuring that local police stations report fully on accidents – and a lack of follow-up with hospitals is likely to depress the figures for both fatality and serious injury.

Road traffic injury reporting on the Northern Corridor, A109 Nairobi-Mombasa
Differences between police and survey data for three research sites
(June 2009-June 2010 reporting period)

	FATALITIES			SERIOUS INJURIES		
Data collection points	**Police data**	**Survey data**	**Survey data as a multiple of police data**	**Police data**	**Survey data**	**Survey data as a multiple of police data**
Reliance-Mlolongo (5km)	14	23	1.6	7	33	4.7
Mlolongo Centre-Kyumbi (27km)	9	46	5.1	10	77	7.7
Salama-Sultan-Hamud-Emali (36km)	10	18	1.8	14	87	6.2
Total (68km)	**33**	**87**	**2.6**	**31**	**197**	**6.3**

requiring the Kenya Roads Board to undertake a nationwide road classification study. The three authorities are overseen by independent boards, with a majority of members drawn from the private sector.

Aid donors have thrown their considerable financial weight behind the national roads strategy. This is partly because the improvement of road infrastructure has been identified as a key element in the country's poverty reduction strategy and is central to the World Bank's Country Assistance Strategy. Donors have also identified Kenya's road transport bottleneck as a constraint on growth beyond the country's borders. The Northern Corridor, which connects Nairobi to the port of Mombasa, is also the principle artery for transit traffic going to neighbouring countries such as Uganda, Rwanda, Burundi, the Democratic Republic of Congo, Sudan and Ethiopia. With the World Bank describing the port of Mombasa as "possibly the single most important piece of infrastructure in East Africa", there has been a growing emphasis on the development of a road system that will enable Kenya to play the role of a regional transport hub.

Development assistance is flowing into Kenya's road system on an unprecedented scale. In 2009, the World Bank approved an additional US$253 million for the Northern Corridor Transport Improvement Project, bringing its total investment to US$460 million – and making the Northern Corridor one of its largest infrastructure investments in sub-Saharan Africa. The African Development Bank, the European Union, the French Development Agency and the Nordic Development Fund are also involved in co-financing, with the Government of Kenya investing a counterpart share of US$177 million. As in other countries across the region, the Chinese government has also invested heavily in supporting the development of the road infrastructure. Major Chinese aid projects include a series of bypass roads around Nairobi, including an ambitious US$111 million northern and eastern bypass.

The physical impact of the flow of investment into Kenya's roads is already highly visible. That impact can be seen not just in construction activity, but in the rapid emergence of multi-lane highways that carry vehicles at high speed. But what does the current road strategy imply for human safety?

Unfortunately that question has not been asked, let alone answered. In many ways, the neglect of road safety is one of the defining features of the current road strategy, both with respect to the Kenyan government and donors. In its assessment of the country's roads, the Kenya Roads Board does not provide a comprehensive review of risks to road users. Moreover, while the reformed road governance system has given more weight to stakeholders, the independent boards are not effectively mandated to set targets for road safety improvement. The road authorities themselves are not subject to specific legislative targets for reducing fatalities and injuries.

In many respects, the donor community has been even more negligent. There appears to be an inbuilt tendency to accept approaches to road safety in Kenya that would be regarded as intolerable in a donor country. Consider the World Bank's Northern Corridor Project. Submitted to the Bank's Board in March 2009, the 90-page project proposal included ten technical annexes and a framework for assessing results. Yet the only risk assessment undertaken was a financial cost-benefit analysis, and the primary metric for measuring performance is kilometres of asphalt as a proxy for assessing reductions in journey times. The 'Results Monitoring Framework', a key element in the World Bank's project management system, makes no reference to targets for cutting road deaths and injuries along sections of the Northern Highway for which the World Bank is responsible. Indeed, in a document that defines the terms and conditions for one of the World Bank's largest road infrastructure operations, there is (i) no reference to the problem of road traffic death and injury (ii) no indication of specific measures that will be taken to cut death and injury (iii) no requirement that the Kenyan government reports on road safety measures and outcomes and (iv) no financial provision for dedicated road safety investments.

None of this is to single out the World Bank as an exemplar of bad practice. Project documents for most of the major donors in the road sector are similarly silent on provisions for road safety. Moreover, the World Bank has been in the forefront of efforts to put road safety on the international development agenda. Through its Global Road Safety Facility, the Bank has

Box 3:

Saving lives on Kenya's roads – an ethical imperative that is good economics

Most project documents on road investment adopt a simple cost benefits framework. Planners consider the cost of initial investment and upkeep against a flow of future benefits resulting from improvements in productivity, increased investment, and economic growth linked to reduced journey times. This narrow approach is based on a questionable approach to the ethics of road safety – and an outmoded approach to the economics of transport investment.

Work carried out by the International Road Assessment Programme (iRAP) in Kenya illustrates the case for viewing road investment through a wider lens. In a joint project carried out with a team of engineers from Kenya's Ministry of Roads, the Road Board and the Ministry for Local Authorities, iRAP surveyed the safety features of 2559 km of roads, including sections of the Northern Corridor and major roads in and around Nairobi.

The survey revealed a wide range of road safety concerns. While the physical condition of roads was generally either good or medium, away from urban centres, 97% had no pedestrian footpaths, 70% had poor markings, delineation of junctions and barrier condition. The combination of good road surface with poor delineation was identified as a major risk factor because they created conditions for high speed driving with few guides for enhanced safety.

Specific problems were identified within Nairobi. In general, the roads were larger, with almost half operating two lanes in both directions. Four in every five roads had identifiable roadside hazards, including ditches. Of particularly serious concern was an almost total failure to segregate vehicles from pedestrians. Some 95% of the roads surveyed recorded high pedestrian flows, while only 20% had pedestrian footpaths.

Broad-based cost benefit analysis carried out by iRAP powerfully demonstrates the case for attaching more weight to human safety. Among the example of low-cost investment today with a potential to save lives over a 20 year period:

- Shoulder-widening on inter-urban roads. By investing US$14.3 million an estimated 26,100 deaths and serious injuries could be avoided
- Pedestrian crossings on Nairobi's roads. An estimated US$3.5 million could save an estimated 10,300 deaths and serious injuries, with an additional US$1.9 million in segregated pathways averting another 4,200 deaths and serious injuries
- Roadside safety barriers. The combined effect of increased US$2 million in increased investment in road safety barriers in Nairobi and another US$15 million for the inter-urban network could save 14,700 lives and serious injuries.
- Improved road delineation. The iRAP study found that US$3.9 million spent on the simple task of improving road markings could save 5,300 lives and serious injuries on the inter-urban network

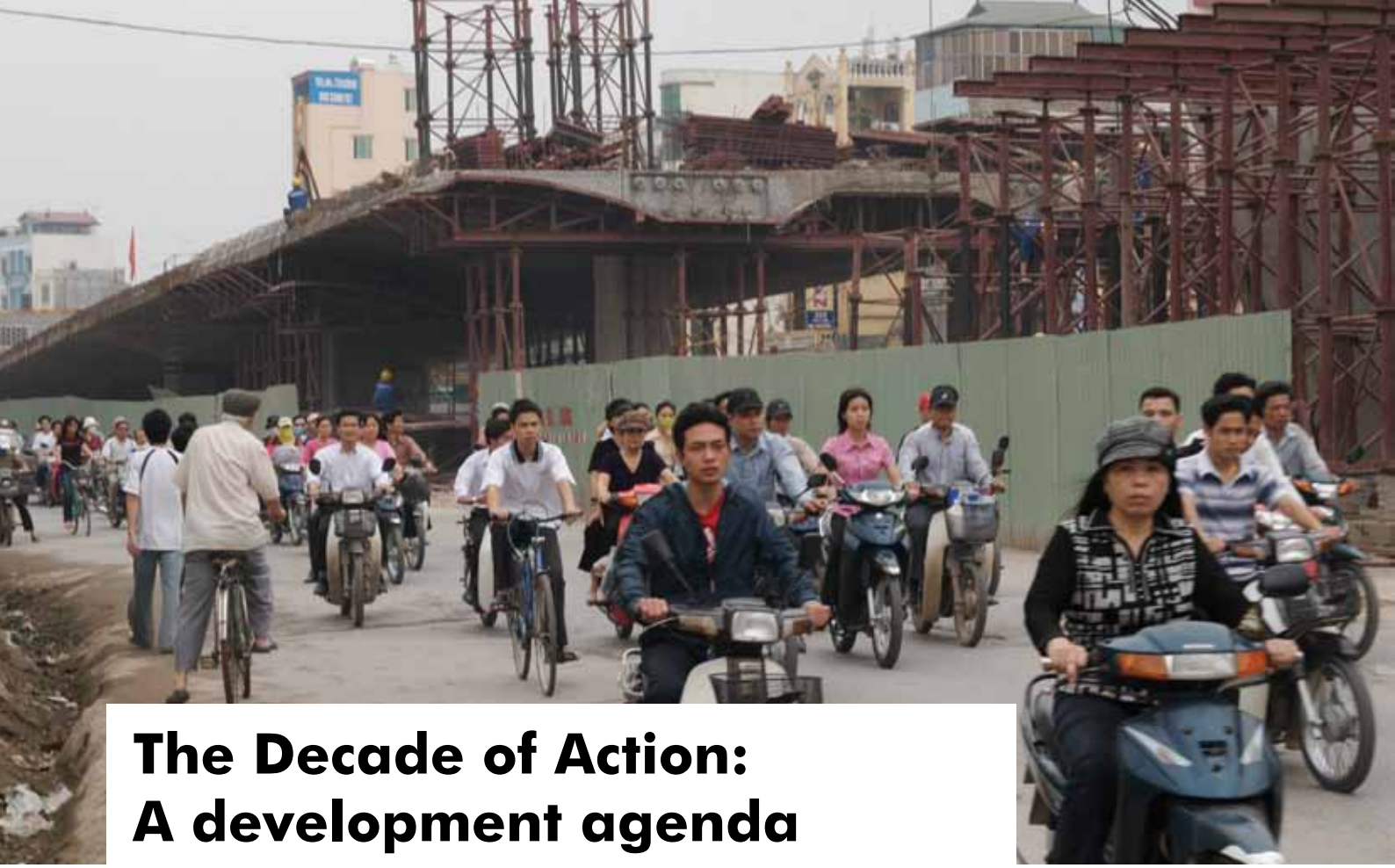
The iRAP study is instructive on two counts. First, it provides an insight into where investments in road safety can deliver the highest returns in terms of lives saved. Second, it illustrates the potential for small amounts of investment to dramatically enhance human safety. In the case of Nairobi, a programme of US$60 million could save 75,000 lives and serious injuries over 20 years. Meanwhile, an investment of US$80 million on the inter-urban network could save 88,800 lives and serious injuries and generate economic benefits estimated at US$2.1 billion over a twenty year financial cycle.

These very high returns point to the potential for a rapid breakthrough on road safety, with simple, affordable, and achievable interventions breaking the current association between increased road investments and a rising body count.

Source: iRAP Kenya Results 2009

Nairobi's National Spinal Injury Hospital: rebuilding lives shattered by road safety policy failure

worked with governments to assess road safety problems and identify practical solutions. This is a record of leadership that stands in stark contrast to the World Bank's own project management practices. These practices suffer from the elevation of technical criteria and financial calculus over human safety. But they reflect also a curiously narrow approach to cost-benefit analysis which may be deflecting attention from the case for investments that are good for both human security and transport efficiency (see box 3). More broadly, the World Bank's approach to project management matters because the agency is uniquely well-placed not just to inform and influence national strategy, but also to coordinate the efforts of multiple donors currently working across the roads sector. The World Bank and the other leading multilateral development banks are now beginning to recognise the consequences of their neglect of road safety. A joint declaration and strategy 'A Shared Approach to Managing Road Safety', published by seven MDBs in November 2009, commited them "to taking a leading role to address what is becoming one of the most significant public health development priorities of the early 21st century".



The Decade of Action: A development agenda

The international road safety agenda is at a crossroads. In signing-up for the UN Decade of Action for Road Safety, the international community could chart a new course that puts human security at the heart of transport policy. Alternatively, the Decade of Action could result in a steady stream of encouraging communiqués, high-level summits and words without action. The business as usual option will cost millions of people their lives and leave many millions more with injuries that blight their opportunities.

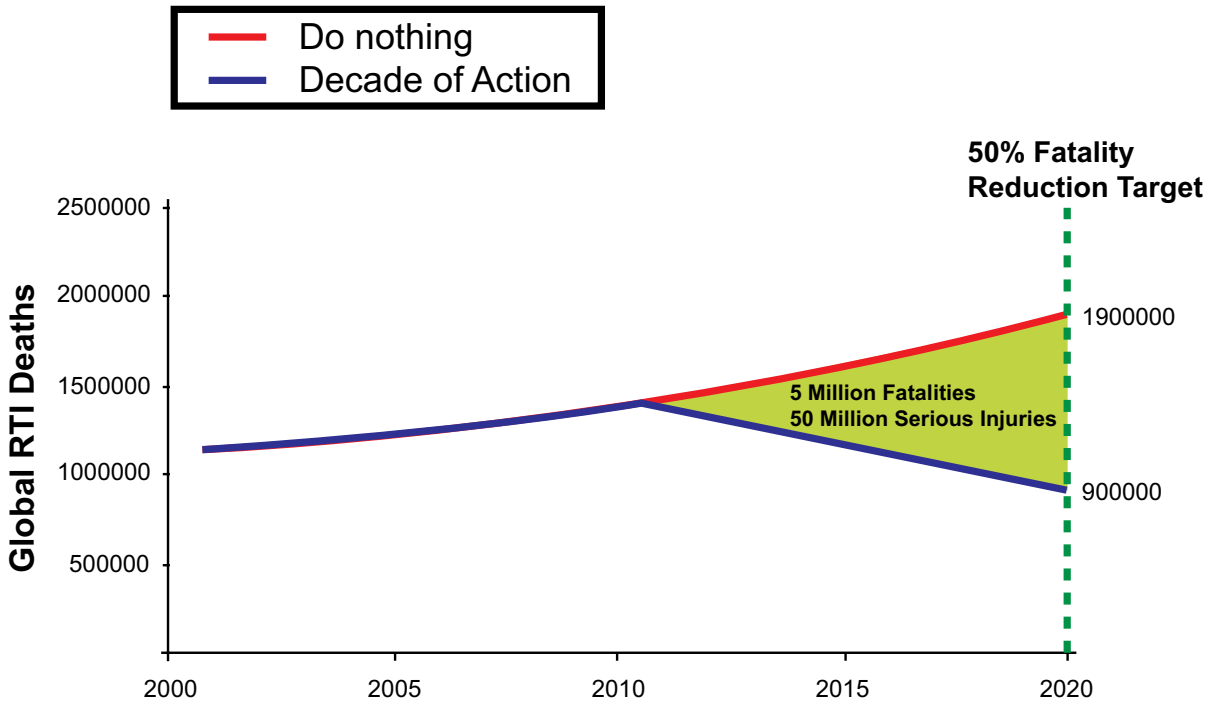
Real progress will require concerted action on the part of many actors. Within countries, effective road safety planning requires cooperation across many ministries and government agencies. Achieving that outcome will in turn require the development of new coalitions bringing together health professionals, teachers, parents and others. At an international level, development agencies and civil society organisations need to start treating road traffic injury as a core element in their activities, rather than as is currently the case an appendage.

Road safety as an MDG target

The MDGs have demonstrated that targets can make a difference. They have the potential to provide a focal point for action and galvanise governments and civil society. Setting targets also provides a benchmark against which to monitor progress and to hold governments to account. What matters is not just the adoption of a global figure, but the translation of the global ambition into national targets and strategies.

Setting targets – from global to local. Any credible international target has to aim first at slowing and then reversing the global road traffic injury trends outlined in this paper. The Commission for Global Road Safety has recommended that the target for the UN Decade of Action on Road Safety should be a reduction of 50 per cent in projected road fatalities to 2020. This would save 5 million lives and prevent 50 million injuries (See Figure 6). As an interim MDG-compatible target, governments should commit to halt the increase in road traffic fatalities in developing countries by

Figure 6: Changing Direction: Potential of a Decade of Action for Road Safety



Source: Guria, J. for Commission for Global Road Safety (2009)

BOX 4:

The 'Safe Systems' approach

Taking a Safe System approach can unlock a large potential for raising road safety performance. It requires that the road system be designed to expect and accommodate human error, recognising that prevention efforts not withstanding, road users remain fallible and crashes will occur.

The basic strategy of a Safe System approach is to ensure that in the event of a crash, the impact energies remain below the threshold likely to produce either death or serious injury. This threshold will vary depending upon the level of protection offered to the road users involved. For example, the chances of survival for an unprotected pedestrian hit by a vehicle diminish rapidly at speeds greater than 30km/h, whereas for a properly restrained motor vehicle occupant in a well engineered vehicle the critical impact speed is 50km/h for side impact crashes and 70km/h for head-on crashes. The Safe System approach should therefore guide all aspects of road safety management – land use planning; road design; vehicle standards; speed limit policy; road user training – to meet these energy threshold parameters.

The Safe System offers new potential for improvement for countries at the leading edge of road safety performance, and has for example been adopted in the road safety policies of the Netherlands and Sweden, but it is appropriate at all levels of road safety performance and economic development. The interventions adopted will differ from country to country but the synergies achieved by taking a comprehensive approach can accelerate improvement significantly.

Source: ITF/OECD

Police enforce helmet use on a dedicated motorcycle lane in Malaysia: an example of the 'safe systems' approach in action

2015. Developing country governments should integrate national targets consistent with this aspiration into national road strategies.

- Strengthen national planning. Global targets will only be meaningful if they are converted into operational national planning targets and – more importantly – backed by comprehensive national strategies directed by a lead agency. Governments need to set out the legislative and enforcement mechanisms that will be put in place to achieve the targets that are set. Adopting a 'safe systems' approach to road safety management will help to establish a clear, holistic governing framework for interventions (see box 4).

- Mobilise additional financing. Aid donors should back national efforts by adopting a US$300 million international action plan to catalyse traffic injury prevention and refocus national road safety policies and budgets. For an investment of US$30 million a year the leading donor nations and major public health philanthropies could transform the way road safety is understood and managed across the developing world. The first steps towards this US$300 million investment have been taken, with a step-change in donor funding signalled by Bloomberg Philanthropies' donation of US$125 million for road injury prevention in 2009, together with new commitments by the FIA Foundation and other donors to global road safety programmes. This must now be followed by sustained funding commitments throughout 2011-2020.

- Integrate road safety into road design. Aid donors and the major multilateral lenders should set-aside at least 10% of financing for road programmes for investment in safety assessment and measures to protect vulnerable users. It is also important that donors strengthen their own capacity for providing support, as very few road safety specialists are currently employed within development agencies or the international financial institutions. It is welcome that the World Bank and the main regional development banks have issued a joint declaration and strategy 'A Shared Approach to Managing Road Safety'. But now we need to see these words translated into action.

- Put safety at the heart of project design. International aid agencies should ensure that all road infrastructure project documents include a comprehensive assessment of potential implications for road traffic risks – along with credible targets for reducing injury and fatality. The World Bank's Project Results Framework should be amended to include detailed targets for reducing road traffic injury, linked to specified financial, technical and capacity-building support measures for national road safety authorities. All aid-financed road projects should include as a matter of course a cost-benefit analysis of potential investment for reducing road traffic deaths and injuries, building on the iRAP framework. Aid donors should support the development of capacity of national agencies to establish, monitor and report on progress towards agreed targets.

- Deliver road safety vaccines. We have the knowledge and the 'vaccines' to tackle this epidemic. Road design that puts vulnerable road users first; motorcycle helmets and seat belts; enforcement regimes for drink driving and speed; vehicle standards and driver training and licensing – these are the measures that are proven to reduce road traffic injuries. Now international and country level commitment and resources are urgently needed to deliver these life saving interventions.

Time for Action

The UN Decade of Action for Road Safety 2011-2020 provides the opportunity to lift the veil of neglect hanging over road safety. One hundred governments, co-sponsoring the UN resolution for the Decade of Action, have recognised that road traffic injuries represent a serious public health challenge that, left unchecked, could "hinder progress towards the Millennium Development Goals." With this political endorsement, we can now chart a new course aimed at halving the projected increase in the forecast level of road fatalities – a goal that, if achieved, could save 5 million lives and prevent 50 million serious injuries over the course of the Decade.

Translating that goal into action will require leadership at many levels. International development agencies like the World Bank and the leading regional development banks, amongst the largest sources of investment in roads, should ensure that road safety assessments become a standard part of the toolkit for future funding decisions. Developing country governments can draw up national plans for cutting road deaths through action across the 'five pillars' of road safety interventions and adopt targets for 2015 and 2020 to measure progress. International aid donors should catalyse and support these efforts by contributing to a US$300 million international action plan as a first step, as proposed by the Make Roads Safe campaign, and encouraging interventions to deliver road safety 'vaccines'.

Highlighting the contribution of road safety to the MDG framework provides the opportunity to rethink the links between transport policy and development. We need to shake off a business model that measures national progress in terms of kilometres of metal roads and turns a blind eye to avoidable human suffering. And, as we prepare for the Decade of Action for Road Safety, we need to put safer roads at the heart of the international development agenda.

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Acknowledgements

Sections of this report were originally included in a Make Roads Safe paper prepared for delegates to the First Global Ministerial Conference on Road Safety, held in Moscow on 20-21 November 2009. Dr Devi Sridhar co-authored the original paper and coordinated the research included within it. Dr Sridhar is a Senior Researcher at the Global Economic Governance Programme where she directs the GEG's Global Health Project. She is also a Fellow in Politics at All Souls College as well as a Research Associate at Oxford's Centre for International Studies and a Research Associate of the Institute of Social and Cultural Anthropology, Oxford. She has worked at the Kaiser Family Foundation, on the Oxfam GB Policy Team, as a contributor to the UNDP Human Development Report, and as

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Tami Tamashiro assisted with research and drafting of the original report.

Research for the Kenya section of this report was coordinated by Bright Oywaya, ASIRT Kenya, and Daniel Mburu, Mlolongo Red Cross

The paper also includes input from country background papers prepared by Centre for Injury Prevention and Research (Bangladesh), the Institute for Road Traffic Education (India), Asia Injury Prevention Foundation (Vietnam), Liliana Escober-Chaves (Colombia), and the Injury Control Centre (Mable Nakitto) & Paul Kwamusi (Uganda). Additional material provided by the ITF/OECD Joint Transport Centre, and the FIA Foundation.

Photos and additional background material provided by Richard Stanley Productions.

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