MAKE ROADS SAFE

A NEW PRIORITY FOR SUSTAINABLE DEVELOPMENT

Commission for
Global Road Safety

CONTENTS

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FOREWORD

This report aims to focus political and public attention on a global road traffic injury epidemic that claims the lives of more than 1.2 million people and injures around 50 million annually.

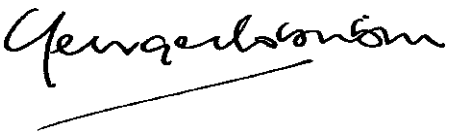
Road traffic injuries are responsible for a global health burden similar to malaria and tuberculosis, and as with those diseases road crashes hit developing countries hardest. Yet while the fight against malaria and TB justifiably commands considerable funding and political and media attention, global road safety is seriously under-resourced in all these respects.

Global road safety has barely featured on the international political agenda, yet it should be a priority for sustainable development. Our report sets out the arguments for including road safety in sustainable development strategies. It calls for high level political leadership on the issue and a significant scaling up of resources. Both are needed urgently.

Dangerous roads have an impact on every development objective, including delivery of the Millennium Development Goals (MDGs), not least because of the immense economic and social cost of road crashes to low and middle income countries. The importance of road infrastructure to the MDGs has been highlighted by the G8, which endorsed a significant increase in road infrastructure funding at the 2005 Gleneagles Summit. However, the vital need to integrate road safety into this investment in new roads has not yet been recognised. To achieve this the Commission for Global Road Safety recommends that all donor supported road projects in developing countries should include a minimum 10% road safety component, to ensure roads are designed with safety in mind and that effective engineering, enforcement and education measures are combined together to promote injury prevention

High income countries have learnt through painful experience that it is possible to reduce road casualties even as traffic increases. Now the challenge is to transfer and implement this knowledge into low and middle income countries. This will only succeed and be sustainable if these countries have the political will and technical capacity to lead their own road safety strategies and set their own targets. The Commission for Global Road Safety recommends that donor governments and private sector donors should together fund a ten year, $300 million Action Plan for global road safety to catalyse this development of national road safety capacity in low and middle income countries. This in turn will equip countries to put in place effective governance structures and road injury prevention strategies and to unlock larger scale funding for road safety from the development banks.

In 2005 millions of people, and the leaders of the G8, responded to the call to Make Poverty History. A great deal was achieved. But - knowing that road traffic crashes cost at least $64.5 billion a year to low and middle income countries - we can see that many of the gains for development won in 2005 will be at risk if action is not taken to reverse the rising toll of road traffic death and injury. Every day 3000 people are killed in crashes on unsafe roads. We know that many of these deaths are preventable. That is why we must act together now to Make Roads Safe.



Rt. Hon. Lord Robertson of Port Ellen KT. GCMG
Chairman of the Commission for Global Road Safety

MAKE ROADS SAFE

EXECUTIVE SUMMARY

Commission for Global Road Safety

1. Deaths and injuries from road traffic crashes are a major and growing public health epidemic. The World Health Organization has estimated that in 2002 almost 1.2 million people died in road crashes worldwide and as many as 50 million were injured. Unless action is taken, global road deaths are forecast to double by 2020 and yet many of these deaths and injuries are known to be preventable;

2. More than eighty five per cent of road traffic deaths and injuries occur in low income and middle income countries. Road traffic deaths and injuries impose huge economic costs on developing economies in low and middle income countries. These economic costs are estimated at $64.5 billion - $100 billion. This compares with total bilateral overseas aid that amounted to $106.5 billion in 2005.

3. Despite the rapidly increasing road traffic deaths and injuries in low and middle income countries, road safety has been almost totally ignored as an issue of sustainable development. Road safety does not feature in the Millennium Development Goals (MDGs) and is missing from United Nations and G8 policies and programmes for sustainable development.

4. The burden of disease attributed to road safety is comparable with malaria and tuberculosis. These infectious diseases are included explicitly in the Millennium Development Goals and are - justifiably - attracting substantial human and financial resources in an effort to control them by 2015. The global burden of tuberculosis is increasing at a rate of 1% per year, while the global burden of road traffic injuries is predicted to increase by more than 65% by 2020.

5. Global road safety is seriously under resourced. We estimate that annual bilateral grant aid explicitly for road safety in middle and low income countries is currently below $10 million a year. There are a very small number of dedicated road safety professionals working in the major multilateral institutions worldwide, and the technical capacity of developing countries to develop and implement effective road safety strategies and programmes is weak. As a consequence global road safety has remained a low political priority and largely absent from grant or loan agreements between donor and recipient nations. It has also been overlooked as a contributor to the achievement of the Millennium Development Goals even though road safety has a direct role to play in reducing child mortality and alleviating poverty.

6. There is a growing recognition that investment in road infrastructure will be an important factor in achieving the Millennium Development Goals. The OECD Development Assistance Committee (DAC) 'Task Team on Infrastructure for Poverty' has highlighted the 'pro-poor' benefits of transport in facilitating greater access to markets, job opportunities, educational and health facilities, rural development and social inclusion. Today, more than 1 billion people in the world have no access to roads. The UN Millennium Project, led by Professor Jeffrey Sachs, has suggested a minimum "MDG compatible" target for rural areas that access to an all weather road should be just two kilometres.

7. Road investment will increase exposure to the risk of road traffic deaths and injuries, unless a coherent action plan for road safety is also put in place. The World Bank has internal guidelines on the road safety component that should be included in road infrastructure investments. **The Commission recommends that at a minimum 10% of all road infrastructure projects should be committed to road safety and that this principle should be rigorously and consistently applied by all bilateral and multilateral donors**.

8. At the Gleneagles G8 Summit it was agreed that official development assistance to Africa will increase by $25 billion a year by 2010, more than doubling aid to the continent compared with 2004. The G8 also agreed to launch the 'Infrastructure Consortium for Africa', which will support the implementation of a Short Term Action Plan prepared by The New Partnership for Africa's Development (NEPAD). This includes a $1.2 billion Short-Term Programme for Roads, with a road safety component estimated at $20 million. However, if the World Bank's 10% guideline were applied to this programme, $120 million should be allocated to road safety.

9. Insufficient attention is being given to the road safety component of the NEPAD roads programme. To strengthen the road safety dimension of this much needed investment in Africa's roads, there urgently needs to be increased donor support for road safety related knowledge transfer and technical capacity, both at country level but also in regional bodies such as the AfDB and UNECA. **The Commission recommends that the G8 countries work with the Africa Infrastructure Consortium to invest at least 10% of the total cost of planned road infrastructure development into safer roads and into capacity building for development of national road safety plans**.

10. High income countries have developed effective road safety measures after decades of trial and error and human tragedy. While more effort is still needed in the industrialised nations the major challenge now is to ensure through early intervention that low and middle income countries do not have to experience the same bitter learning curve. Much of the experience available in high income countries is transferable to low and middle income countries.

11. The World Report on road traffic injury prevention, published by WHO and the World Bank in 2004, details the key road injury 'risk factors', the major contributing factors to road crashes and injury severity, including drink driving; lack of helmet use; seat belt non compliance; excessive speed; and poor infrastructure design and management. The World Report recommends practical actions to mitigate these factors and an integrated 'safety systems approach' to road safety improvements, using a lead agency to coordinate the development of national road safety strategies and plans.

12. The international community is starting to take notice of the global road safety epidemic. UN General Assembly resolutions in 2003, 2004, and 2005 have recognised that there is a 'road safety crisis' in middle and low income countries, and have mandated WHO to organise a global road safety collaboration to coordinate the responses of agencies and stakeholders.

13. Co-operation on road safety between the industrialised countries has a long history. These international efforts have included the exchange of best practice in road safety actions and strategies, research collaboration and the sharing of data systems, and negotiating international standards for motor vehicle and road construction standards. By contrast, middle and low income countries currently have very limited opportunities for international road safety collaboration.

14. The World Bank has established a Global Road Safety Facility to generate increased funding and technical assistance for global, regional and country level initiatives to build capacity and implement road safety programmes in low and middle income countries. The Facility currently has pledged funding of $5 million over 3 years from the World Bank, $5 million over 5 years from the FIA Foundation, and €1 million from the Government of the Netherlands.

15. To implement the recommendations of the World Report, an Action Plan for global road safety is needed. This will require greater financial support from the donor community. The Action Plan could be managed through the World Bank Global Road Safety Facility, would support the ongoing UN collaboration activities, develop country level pilot programmes on the key risk factors and step up training in technical capacity to implement road safety strategies and plans. To ensure that the Action Plan is effectively resourced **the Commission proposes a ten year commitment of US$300 million, of which US$200 million could be contributed by donor governments and US$100 million from other sources**. This is substantially less than is already being committed to comparable public health problems such as malaria and tuberculosis, but would enable significant and measurable progress to be made in reducing global road traffic deaths and injuries.

16. Political support for road safety is vital. The United Nations should convene a Ministerial level meeting on global road safety. A Ministerial Conference could review progress in implementing the World Report and examine road safety's contribution to achieving the Millennium Development Goals. The Ministers could review the work of the UN Collaboration, the Global Road Safety Facility, and receive reports from the UN Regional Commissions. The Conference could review progress on regional road safety targets, and consider common definitions for key road safety related data reporting systems and best practice in knowledge transfer. **The Commission recommends that a Ministerial Conference on Global Road Safety be held in 2008 under the auspices of the UN, which could bring together Transport, Health, and Interior Ministers**.

17. Road safety is a shared, multi-sectoral, responsibility of governments and a range of civil society stakeholders. Successful road safety strategies in all countries depend on a broad base of support and common action. Beyond the sphere of government, civil society can make a huge contribution to road safety. **The Commission proposes, in order to encourage this common effort, the creation of a Global Road Safety Charter, through which stakeholders can pledge their support to the implementation of the World Report and progress to reversing the rising toll of road traffic deaths and injuries**.

18. The World Bank estimates that, if fatality rates per vehicle in poorer countries were reduced by 30% by 2020, more than 2.5 million lives could be saved and 200 million injuries avoided. To encourage a sustained reduction in global road traffic deaths and injuries, **the Commission recommends that governments in low and middle income countries should adopt their own national road traffic casualty reduction targets. These targets should be ambitious but achievable and supported by use of key performance indicators, such as levels of seat belt and helmet use, and supplemented by regional road safety targets where appropriate**.

19. The Commission hopes that G8 leaders can give a strong signal of support for investment in safer roads and for implementation of the recommendations of the World Report. This is important especially for Africa, but also in Asia, Latin America, the Middle East, in Russia, and in the CIS. The World Bank's Global Road Safety Facility supporting the efforts of the UN Collaboration deserves recognition by the G8 as the key mechanism to catalyse an accelerated reduction in road deaths and injuries in developing countries.

20. We now know that the epidemic of road deaths in the developing world is a major and growing public health problem. It is also recognised that many of these deaths and injuries are preventable. A mandate is now in place from the UN, together with a delivery mechanism that is poised to "inoculate against the disease" of road traffic deaths and injuries. The one missing ingredient is a political and funding commitment to support an Action Plan to reverse the rising trend of global road traffic deaths and injuries and make roads safe.

MAKE ROADS SAFE: SUMMARY OF KEY RECOMMENDATIONS

- New road infrastructure is essential for achievement of the Millennium Development Goals. But new roads must be safe. At a minimum 10% of all road infrastructure projects should be committed to road safety. This principle should be rigorously and consistently applied by all bilateral and multilateral donors.

- The G8 countries should work with the Africa Infrastructure Consortium to invest at least 10% of the total cost of planned road infrastructure development into safer roads and a stronger regional capacity to develop national road safety plans.

- An Action Plan for global road safety is needed to develop sustainable road safety capacity in low and middle income countries. The Action Plan should be managed by the new Global Road Safety Facility, hosted by the World Bank.

- The Action Plan should be effectively resourced by means of a ten year commitment of US$300 million, of which US$200 million could be contributed by donor governments and US$100 million from other sources.

- A Ministerial Conference on Global Road Safety should be held in 2008 under the auspices of the UN, bringing together Transport and Infrastructure, Health, and Interior Ministers.

- A Global Road Safety Charter should be created, through which stakeholders can pledge their support to the implementation of the World Report and progress to reversing the rising toll of road traffic deaths and injuries.

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A GLOBAL PUBLIC HEALTH CRISIS REQUIRING A GLOBAL RESPONSE

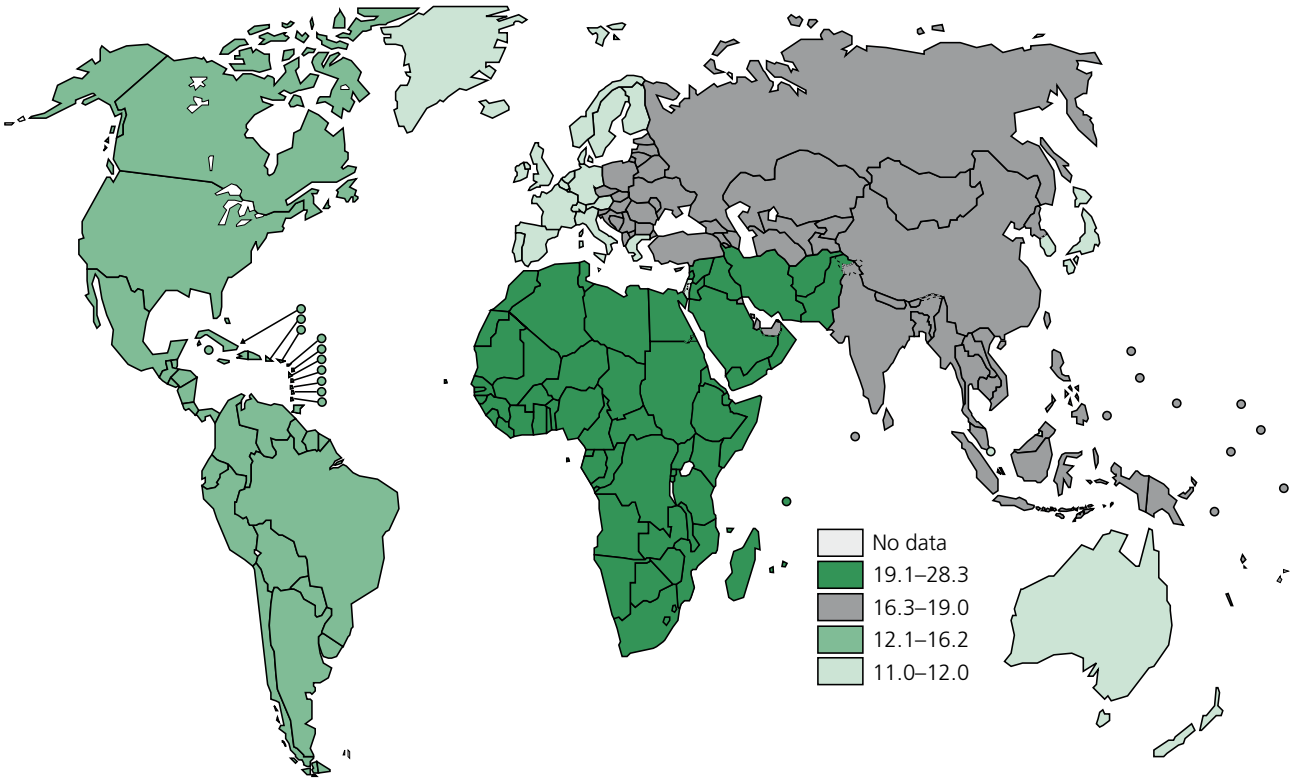
Road traffic injuries are a hidden global epidemic affecting millions of human lives and costing billions of dollars in economic costs every year. They are a particular burden on the poorest people and countries.

A hidden epidemic of deaths and injuries from road traffic crashes is growing in the world today. The World Health Organization estimates that, each year, almost 1.2 million people die in road crashes worldwide and as many as 50 million are injured or disabled. Every month a silent tsunami wave of road traffic crashes sweeps away 100,000 lives. For developing countries in particular, road traffic deaths and injuries represent a serious and rapidly worsening public health crisis.

More than eighty five per cent of all road traffic deaths and injuries occur in low income and middle income countries. The injury/mortality rates per 100,000 population differ by region (Fig 1) with Africa enduring the world's highest rates per population and most dangerous roads, but South East Asia experiencing the highest number of actual fatalities and injuries and the highest predicted growth in road traffic injuries.

Road traffic deaths and injuries (RTIs) impose a huge economic burden on developing economies, amounting to 1-2% of GNP in most countries (Figure 2). These costs, some $64.5 billion[1] - $100 billion[2], are comparable with the total bilateral overseas aid contributed by the industrialised countries, which amounted to $106.5 billion in 2005[3]. These estimates take account only of the direct economic costs – mainly lost productivity – rather than the full social costs often recognised by industrialised countries. There is also the direct impact on health services, with road traffic victims accounting for almost half the hospital bed occupancy in surgical wards in some low income and middle income countries.

FIGURE 1: ROAD TRAFFIC INJURY MORTALITY RATES (PER 100 000 POPULATION), 2002



WHO REGION	LOW INCOME AND MIDDLE INCOME COUNTRIES	HIGH INCOME COUNTRIES
African region	28.3	-
Region of the Americas	16.2	14.8
South-East Asia Region	18.6	-
European Region	17.4	11.0
East Mediterranean Region	26.4	19.0
Western Pacific Region	18.5	12.0

Source: World Report on road traffic injury prevention, 2004

Worldwide, more than half of road traffic casualties are in the 15-44 age group, the key wage earning and child raising age group. In Kenya, for example, more than 75% of road traffic casualties are amongst economically active young adults[4]. The loss of the main wage earner and head of household due to death or disability can be disastrous, leading to lower living standards and poverty, in addition to the human cost of bereavement.

A recent study in Bangladesh and India examined the direct economic impact of road traffic crashes resulting in death or serious injury on individual urban and rural households (Box 1). The study shows that road deaths often act as a trigger for poverty. The majority of households suffering a road death see a decline in household income after the crash. For those families in a precarious economic position, a road crash can be the unexpected event that topples them below the poverty line.

Road traffic crashes can also disproportionately affect the poorest groups in society. In low and middle income countries poor people are usually vulnerable road users (pedestrians, cyclists and motorcyclists). They are at particular risk from the greater variety and intensity of traffic mix and the lack of separation from other road users. Slow moving and non motorised modes have to share road space with fast moving vehicles, leading to increased conflict and risk. In Kenya, pedestrians and passengers in mass transportation accounted for 80% of all fatalities[5], and in Mumbai, India, 78% of road fatalities were pedestrians[6].

As vulnerable road users, children are at particular risk. Children in low and middle income countries are much more likely than children in high income countries to be involved in a road crash. In South Africa,

for example, more than 26 child deaths per 100,000 population occur as a result of road traffic crashes compared to 1.7 per 100,000 population in the EU as a whole[7]. Overall, 96% of child road fatalities occur in low and middle income countries[8]. Peter Adamson, senior adviser to UNICEF, warns of the consequences of failing to act on road traffic injuries: "Without being alarmist you can see that there will be millions of young children killed on the roads of the world in the years ahead. There is so much that could be done by developing countries at their current stage of economic development, and it could prevent so much misery and tragedy. It would be outrageous if it were allowed to continue in the years ahead"[9].

Indeed, unless there is concerted action, the World Bank expects global road fatalities to increase by more than 65% between 2000 and 2020, with different trends across regions of the world. Fatalities are predicted to increase by more than 80% in low and middle income countries, but to decrease by nearly 30% in high income countries (Figure 3), a widening gap between the road safety rich and the road safety poor.

FIGURE 2: ESTIMATED ANNUAL CRASH COSTS

REGION	GNP	ESTIMATED ANNUAL CRASH COSTS $ BILLION	
	1997 $ BILLION	GNP%	COSTS
Africa	370	1	3.7
Asia	2454	1	24.5
Latin America and Caribbean	1890	1	18.9
Middle East	495	1.5	7.4
Central and Eastern Europe	659	1.5	9.9
Sub-total	**5615**		**64.5**
Highly motorized countries	22665	2	453.3
Total			**517.8**

Source: Jacobs G, Aeron-Thomas A, Astrop A. Estimating global road fatalities, TRL, 2000

FIGURE 3: PREDICTED ROAD TRAFFIC FATALITIES

WORLD BANK REGION	% CHANGE 2000 - 2020
South Asia	144%
East Asia & Pacific	80%
Sub-Saharan Africa	80%
Middle East & North Africa	68%
Latin America & Caribbean	48%
Europe & Central Asia	18%
Sub-total	**83%**
High income countries	-28%
Global total	**66%**

Source: Kropits E, Cropper M. Traffic Fatalities & Economic Growth, 2003

BOX 1:

The Impact of Crashes on the Poor

Research conducted by the Transport Research Laboratory (TRL)* on behalf of the Global Road Safety Partnership (GRSP) in Bangladesh and Bangalore (India) in 2004 focused on the involvement and impact of road crashes on the poor, in comparison with the non-poor, in both urban and rural areas.

The study found that, while the poor were not consistently at greater risk from road death and serious injury, many of the poor households identified were not poor before the death or serious injury caused by a road crash. The poor victims contributed most to their household's earnings (average 62% in urban areas and 42% in rural areas), and the loss of income tipped many households into poverty.

Breadwinners were most at risk. Among both poor and non-poor households, the most common road death was a male in prime of life (16-45 years). One in every 4 deaths and 1 in 6 serious injuries to the poor involved a child (under 16 years). The poor are killed and seriously injured mainly as vulnerable road users (pedestrians, motorcyclists and cyclists).

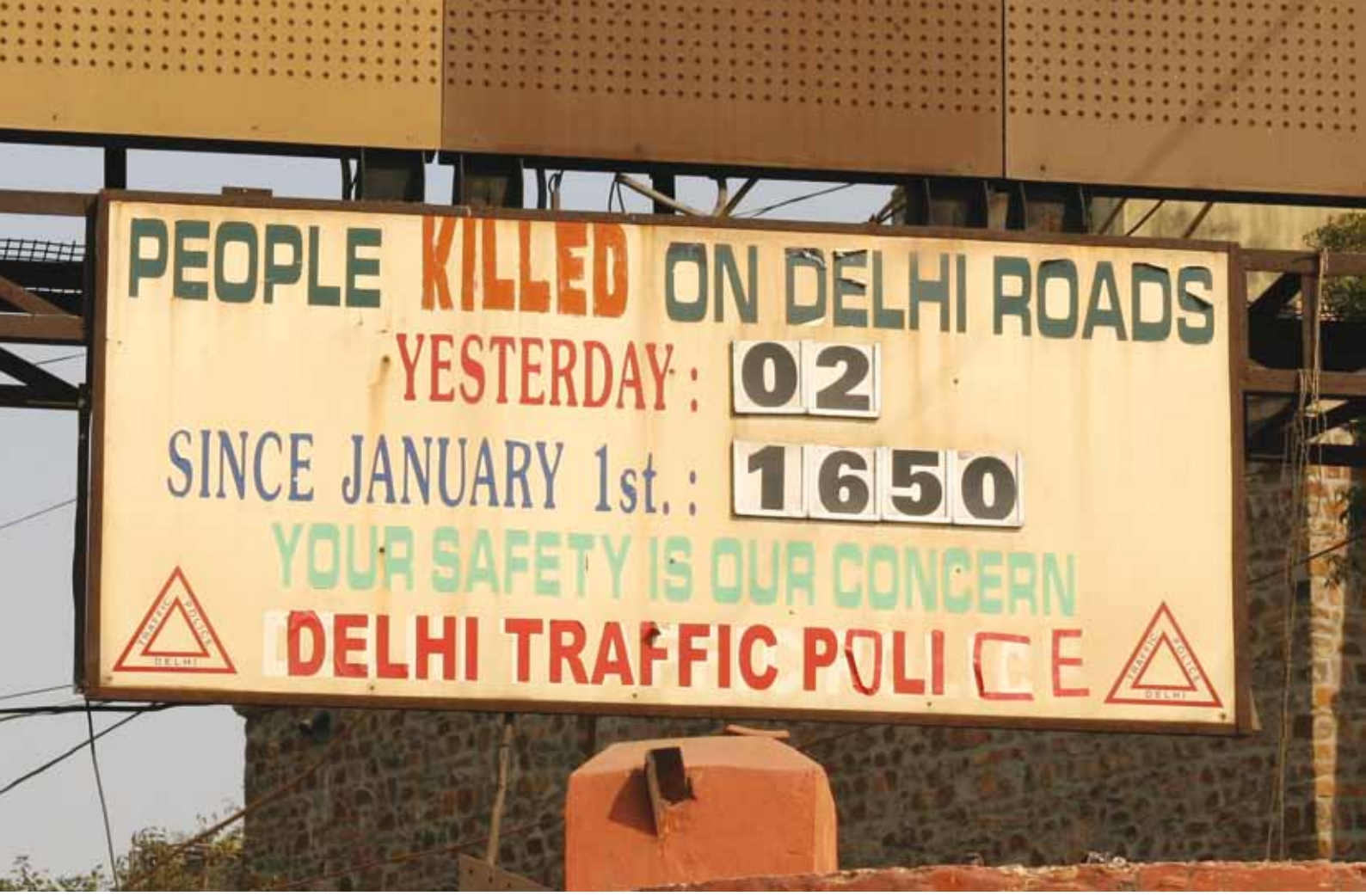
The surveys also found that many more people, both poor and non-poor, are being killed and seriously injured in road crashes than police data indicate. In Bangladesh the actual number of road deaths is estimated to be four times more, and serious injuries almost 75 times more, than shown in police statistics. In Bangalore the police report 10 injuries (both serious and slight) for every road death. Yet the urban survey found substantially more – particularly amongst the non-poor. The Indian Government's Planning Commission estimates that there are 15 hospitalised injuries and 70 minor injuries for every road death.

As well as loss of earnings, poor households paid a significant proportion of their household income on funerals (almost 3 months' income in urban areas) and medical costs (4 months' income in rural areas).

In Bangalore, the majority of poor households reported at least one person having to give up working or studying to care for the injured. The poor injured also had less job security, and fewer were able to return to their previous job. The rural poor in Bangladesh took longer to find a new job. The consequence of a fatal crash or serious injury for more than 7 out of 10 poor families in Bangladesh was that food consumption decreased as a result of the lower household income.

The burden from road crashes tips many households into poverty. In Bangalore 71% (urban) and 53% (rural) of poor households were not poor before the fatal crash. In Bangladesh the figures were 33% (urban) and 49% (rural) for bereaved households.

The involvement and impact of road crashes on the poor', Aeron-Thomas et al, 2004; Study commissioned from TRL by GRSP with funding from the Swedish International Development Cooperation Agency (Sida) and TRL. The report is available at www.grsproadsafety.org.



WHY ARE ROAD TRAFFIC INJURIES IGNORED?

Road traffic injuries are ubiquitous yet invisible. As a global issue they have been largely ignored by the international community. At national level, in developing countries, prevention is also low on the political agenda.

Given the alarming rise in global road traffic injuries why is road safety not a priority for the governments of low and middle income countries?

Most of the time road traffic deaths and injuries remain almost invisible to society at large. They are a hidden epidemic. Hundreds of thousands of traffic crashes remain scattered individual events, tragic to those involved, but not newsworthy; unlike train or aircraft crashes which, in contrast, are almost always treated as sensational media events. The road user is also often viewed as at fault for being involved in a crash, or simply a victim of fate. Blaming the victim, however, is an attitude that can easily discourage investigation and action to develop measures that can make crashes less likely and their consequences less severe.

In middle income and low income countries this lack of visibility is exacerbated by lack of information about the true scale of the problem. The estimates above use health data, and allow for under-reporting of road casualties. Only 75 countries report death data to the WHO, including road traffic injury fatalities from death certificates. The quality of the data and the extent of under-reporting are variable. The WHO has based its global injury estimate on this database augmented by incomplete data for 35 further countries and various epidemiological sources.

In many countries the definition of a death in a road crash is not consistent with international practice. Although there is an agreed international definition of road fatality as 'death occurring within 30 days of the crash' this is not universally adopted and often much

shorter timescales such as death at the scene are used, leading to serious under-reporting of the true scale of road traffic fatalities. In some low income and middle income countries road crash victims often go unaccounted for because of their location in remote or rural areas, or their low status in society.

When the real level of danger is invisible to the public and the authorities overlook the huge social and economic costs involved, a high degree of risk may be tolerated. This lack of demand for road safety all too often results in the transport system being allowed to operate at a level of safety far below its potential. Even though countermeasures with a very positive cost benefit ratio are available, they are not implemented

Road safety is also ignored because traffic deaths and injuries are the unintended by-products of transport systems responding to society's demand for mobility. In many low and middle income countries there is a strong interest in raising investment in road infrastructure to promote economic growth, trade, and employment. This powerful economic imperative understandably will preoccupy governments striving to accelerate the development of their country.

Lack of political priority leads to lack of resources and to a reluctance to take ownership of the issue by relevant government departments and authorities. Resources are unlikely to be forthcoming without the political will in government to bid for budget allocations for road safety. Underlying these problems is a key human resource constraint. In many countries there is a shortage of skilled manpower and a lack of technical capacity. The necessary procedures and data to assess the scale of the road safety problem are either missing or incomplete. In turn this makes it hard for governments in low and middle income countries to develop effective national road safety strategies and plans. Reliance on expertise from consultants and other countries' experts is only a short-term solution.

For road safety to be made a priority for action there must be local capacity building and knowledge transfer in order to sustain long-term crash and injury prevention programmes. In addition, governments must recognise the necessity for road safety to be a national priority that requires strategic planning, co-ordination and adequate resources.

Poor governance and corruption can also lead to road safety being ignored or neglected. Road safety

"Most of the time road traffic deaths and injuries remain almost invisible to society at large. Tragic to those involved but not newsworthy. This is a hidden epidemic. "

These factors often result in safety being treated as a secondary issue by road users and those responsible for managing the transport system. Safety requirements are treated as an afterthought, rather than integrated into the design of road infrastructure. This tendency may also be reinforced if donors from the high income countries, supporting investment in the road transport systems of low and middle income countries, also overlook the real costs of road traffic injuries.

The lack of visibility of road traffic injuries has a direct impact on political will to recognise and address the problem. The higher the profile of an issue, the more likely it is that the resources will be found to address the problem. If national politicians do not perceive pressure and concern, they may feel justified in choosing not to act on road traffic injury and instead concentrating on other vital public health issues such as HIV/AIDS. They will also be likely to neglect road safety if the international community also fails to give the issue the attention it deserves.

is a core competence for governments which places considerable demands on the quality, transparency and effectiveness of a variety of public authorities. If corruption is widespread the ability of low and middle income countries to implement effective road safety policies will be undermined.

Public respect for traffic rules and for enforcement authorities will be severely diminished, for example, by corruption among road traffic police. Corruption also impacts on the effectiveness of vehicle testing, driver licencing and insurance regimes. Weak governance structures in many developing countries are at the core of their road safety problems and need to be addressed if progress is to be made. Good governance and anti-corruption measures are now a significant area of engagement by both multilateral and bilateral donors and road safety is clearly an area that warrants support in this regard.

THE EXPERIENCE OF HIGH INCOME COUNTRIES

High income countries have learnt how to reduce road traffic injuries, even as traffic levels rise, through a systems approach which tackles driver behaviour, vehicle design and performance and the safety of road infrastructure.

Although the highly heterogeneous traffic conditions that exist in developing countries are very different from those of the industrialised countries, there are important lessons to be gained from the rapid increase in motorisation that occurred in high income countries in the second half of the twentieth century. During the 1950s and 1960s, the number of fatalities in Western Europe and the United States increased substantially as they struggled to develop effective strategies for crash and injury prevention. The rise in road traffic deaths and injuries peaked during the 1970s. Despite continued traffic growth, in many of these countries the rising trend in fatalities was reversed over the 1980s and 1990s. Road traffic injuries were reduced by as much as 50%, even as vehicle volume and distance travelled increased.

A major contributor to progress in the high income countries since the 1970s has been a move away from 'blame the victim' attitudes.

Instead there has been a paradigm shift towards the so-called 'safety systems' approach. This new attitude to road safety management treats the road user, the vehicle, and the road infrastructure as three components of a dynamic system. Rather than focusing on behaviour alone, the safety systems approach recognises good road and vehicle design and traffic management as integral elements in road safety planning, complementing actions to reduce hazardous behaviour. This does not mean that the responsibility of the road user to obey the law and avoid risky behaviour is diminished.

It does however recognise that a driver who respects the law should be protected as far as possible from severe injury should a crash occur.

Crucially, the safety systems approach acknowledges that a degree of road user error is inevitable and should be 'tolerated' by making the system as a whole more 'forgiving'.

From the outset, therefore, system designers need to understand the physical limits that the human body can withstand in a crash situation, and should manage the level of energy in the system to make crashes and injuries less likely. To achieve this the key 'risk factors' that contribute to making crashes fatal or serious must be identified, and then countermeasures should be applied to avoid them in the first place or mitigate the consequences; for a more detailed explanation of the concept of 'risk factors' see Annex 1 of this report.

A pioneer of the safety systems approach was William Haddon, the former Administrator of the US National Highway Safety Administration. He developed a matrix which provides a simple way to develop holistic 'system wide' interventions applicable during the phases of a crash across the three main components of the driver, vehicle and road infrastructure (Box 2).

Much of the progress in road safety in industrialised countries since 1970 has come from improvements across the matrix involving:

Safer Road Users

The enforcement of speed limits and drink-driving laws to moderate human behaviour of road users has proved to be highly effective, especially when combined with well designed public awareness and education campaigns. The introduction of seat belt use laws, again supported by enforcement, has been a crucial step forward in protecting vehicle occupants in a crash. Similarly helmet use laws have been important in reducing risk to motorcycle and bicycle riders. Reliable data systems have allowed road safety authorities to recognise and target high risk and vulnerable groups, for example young road users.

"The safety systems approach acknowledges that a degree of road user error is inevitable and should be 'tolerated' by making the system as a whole more 'forgiving'."

Safer Motor Vehicles

Improvements in vehicle design have transformed the chances of survival in a motor vehicle crash. In the United States and the European Union, for example, regulatory requirements for front and side impact crash tests, combined with consumer information programmes, such as New Car Assessment Programmes in many high income countries (Box 3), have stimulated vehicle manufacturers to dramatically improve the crashworthiness of their products and apply a range of safety devices such as air bags, improved head restraints, and seatbelt and child restraints. Crash avoidance technologies such as Electronic Stability Control are also proving successful in preventing incidents from occurring in the first place.

BOX 2: HADDON'S MATRIX FOR CRASH AND INJURY PREVENTION

		PEOPLE	VEHICLE	ENVIRONMENT
Pre-crash	Crash Prevention	Education / training Impairment Attitudes / behaviour	Road-worthiness / crash avoidance System (lights, brakes, tyres etc.)	Road design Signs, markings Maintenance
Crash	Injury Prevention	Use of restraints	Restraints / air bags Crash-worthiness	Protection (barrier) Pedestrians crossing
Post-crash	Life sustaining	First aid skill Access to medical care	Ease of access Fire risk	Rescue facilities Congestion

BOX 3:

Role of Ratings Systems in Road safety

NCAPs – crash test assessment

In addition to the standards set by national and international regulatory authorities, independent assessment programmes for new cars have played an important role in enhancing vehicle crash-worthiness design through empowering consumers with comparative information about the relative safety performance of different car models. The US Insurance Institute for Highway Safety, the European New Car Assessment Programme (Euro NCAP) and the Australian NCAP have all focused public and industry attention on improving vehicle occupant protection and pedestrian impact protection levels by conducting and publishing the results of tests that go beyond the minimum regulatory requirements.

As the rising car economies of China and India develop their manufacturing operations, similar, and preferably harmonised, independent car assessment programmes, based on transparent and data-based research, would stimulate and accelerate safety improvements, increase public demand for safer cars and roads, and enable manufacturers to export to countries with tough safety regimes. Indeed, a private consortium, including a university and a motoring organisation, has recently announced plans for an NCAP China, based on Euro NCAP protocols, to test and rate new cars built or sold in China.

iRAP – international road assessment programme

The concept of safety rating that has been so influential in promoting improved vehicle design is now also now being introduced to road infrastructure. The European Road Assessment Programme (Euro RAP), an international non-profit association brings together road users, road authorities and vehicle manufacturers to develop an independent safety rating system for Europe's road network. Its latest report *From Arctic to Mediterranean* (available at www.eurorap.org) sets out progress in 20 European countries.

The Euro RAP protocols measure risk and provide benchmarks using three standard protocols:

1. Risk Mapping - which uses standard colour coded road maps to show a user's risk of being killed or seriously injured on different road sections based on serious crash data and traffic flow.

2. Performance Tracking – which allows tracking of the rate at which risky roads are being eliminated by focussing on "persistent high risk roads" where people continue to be hurt in large numbers and where authorities need to do more; and on "most improved roads" to identify good practice and encourage competition in excellence.

3. Star Rating – which gives a "road protection score" based on how the road protects users against the main cause of death in crashes.

This kind of road assessment is proving very successful at focusing the attention of policymakers on an often neglected element of the road safety 'system' and encouraging network improvements. A successful sister scheme has been launched in Australia (Aus RAP) and a pilot project in the US (US RAP) is also now underway. Combined together as iRAP, the road assessment programmes are now working to develop road protection assessment protocols for countries in transition, and middle and low income countries. As these protocol come on stream iRAP will provide a powerful rating and assessment capability for road sector development in all regions of the world.

Safer Road Infrastructure

Better road infrastructure has also played a crucial part in reducing road traffic casualty rates in high income countries. Well designed engineering measures such as anti-skid surfaces, markings, signs, lane separation, pedestrian crossings, guard rails, and crash barriers, and traffic calming measures such as speed humps, roundabouts and chicanes have helped both avoid and mitigate the consequences of a crash. Amongst the best performing industrialised nations, improved road infrastructure remains the major source of expected future contributions to casualty reduction targets. New road assessment systems (such as European Road Assessment Programme (EuroRAP)) are now being applied to develop risk mapping of the road network which will give a star rating to show how well a road protects users if a crash occurs.

Among high income countries the adoption of national road safety strategies and plans to promote safer road users, safer vehicles and safer roads have proved effective when combined in a systems approach (Box 4)

civil society to support the aims of the Action Plan and the achievement of the casualty reduction target.

Establishing a strong political commitment to the achievement of ambitious road safety plans and targets has also contributed to the effort of high income countries to reduce traffic crashes and casualties. In France, for example, President Jacques Chirac in his 2002 'Bastille day' speech identified road safety as a personal priority for his administration. Political leadership at this high level sent a powerful message to government departments, the police, and the public about the high cost of road traffic deaths and injuries in France.

In 2002 more than 7000 people were still being killed each year on French roads. By 2005 fewer than 5000 people were killed, a drop of more than 20%. Interestingly road user behaviour began to change soon after the highly publicised speech by the President and the announcement of new road safety enforcement measures, but well before the measures for penalising traffic offences were actually put in place. The President's high profile political act of making road

"Political leadership on road safety sends a powerful message to government departments, the police and the public."

An important feature of their road safety strategies has also been the adoption of casualty reduction targets. These targets help to galvanise responsible authorities both nationally and locally to sustain progress in the prevention of road traffic casualties. They need to be as far as possible evidence based, and targets should be challenging but achievable. Ongoing work of the Joint OECD/ECMT Transport Research Centre's Working Group on 'Achieving Ambitious Road Safety Targets' has shown a strong correlation between target setting and success in reducing casualties.

A similar approach has also been adopted at a supranational level. The European Union, for example, has adopted a Common Road Safety Action Plan to try to reduce the 40,000 people killed each year in road crashes. A key feature of the plan is the target to achieve a 50% reduction in the road traffic fatalities by 2010. Built upon a shared information infrastructure this target will enable comparison of the road safety performance of all 25 EU Member States and stimulate a healthy rivalry between countries to outperform each other in a European road safety 'league' and is a good example of how aspirational regional targets can complement national targets. In 2004 the EU also adopted a European Road Safety Charter to mobilise

safety a priority issue was decisive in encouraging a corresponding change in the public's attitude and in driver behaviour.

The Government also allocated €400 million to a 3 year investment plan to purchase automatic radar devices and breath testing equipment and to set up computer centres for the automatic monthly processing of hundreds of thousands of speeding offences. This was reinforced by a sustained communications campaign using hard hitting media messages. Though the sums involved may appear considerable, the amount spent on new road safety actions since 2003 demonstrate a significant rate of return. The economic benefits in reduced crash costs for the country represent 50 times the annual amount spent on road safety promotion[10].

The success of President Chirac's initiative has encouraged other nations to follow his example. Italy, for example, has achieved a similar improvement in RTI numbers through the introduction of a driving licence penalty point system. Another G8 country, the Russian Federation, is also taking a high level strategic approach to tackling its road safety challenges (Box 5).

BOX 4:

Key Priorities for National Action

A National Road Safety Strategy and Plan is more likely to be effective if a 'systems' approach is adopted. Five key action areas should be given priority.

Establishing the scale and characteristics of the problem

An understanding of the basic distribution of injury between road user groups, locations, and regions is necessary for profile raising and prioritisation of activity. Where there are no data collection systems in place, possible data sources should be investigated and, where possible, robust systems set up. Road safety targets need to be based on an understanding of likely future trends, or they may be too conservative or may not afford the appropriate level of challenge.

Assessing priorities for casualty reduction measures

Using as much information as can be obtained at reasonable cost, the second key action is to set out the key target areas for action. In many low and middle income countries vulnerable road users will suffer the majority of injuries and are an obvious group for high priority action.

Establishing the institutional framework

The third priority is to establish the necessary institutional arrangements for implementation of the Strategy. This may include devolved responsibilities, ensuring an adequate capacity to implement and manage programmes, decisions on funding, and legislative programmes. Highly effective institutional frameworks focus on prevention, base actions on scientific evidence, and work collaboratively across governmental sectors as well as with civil society and the private sector.

Preparing an action plan with specific measures to reduce casualties

Each country needs to establish where its actions should best be targeted, but in general all road safety programmes should contain measures that:

- Address the requirements of vulnerable road users for safe mobility;
- Ensure that safety is an integral part of land-use and transport planning and highway development, including systems for safety audit;
- Legislate for seat belt wearing and enforce the law;
- Legislate for motorcycle helmet wearing and enforce the law;
- Bring in, and enforce with roadside testing, limits for consumption of alcohol by drivers;
- Set suitable speed limits and enforce them through engineering measures and police action or automatic speed detection using cameras;
- Educate and inform road users of risk and the need for restrictions on their behaviour.
- Setting up funding mechanisms and training

New sources of income may need to be identified and training systems set up to increase the supply of skilled manpower. Harnessing funding and activity from the private sector and NGOs can make a valuable contribution to supplement government funding, but it should be seen as an additional source rather than the primary source.

* Promoting international, regional and global cooperation to promote harmonization of data systems and regulations, and to share knowledge learned and best practices.

BOX 5:

Road Safety Challenges in Russia

Road traffic deaths and injuries are a serious problem in Russia. In 2003 there were 204,267 road traffic crashes on Russia's roads killing 35,600 people and injuring more than 244,000. Worryingly, recent years have seen a steady rise in road traffic injuries. Since 2002 road traffic crashes has increased by 10.8%, the number of fatalities by 7% and the number of serious injuries by 12.7%.

The Russian Federation has recognised that a comprehensive approach is needed to improve road safety in the country. As in France, where President Chirac took a high profile lead in road safety efforts, President Vladimir Putin has taken a personal interest in reducing his country's road injuries. Speaking at a meeting of the State Council Presidium in November 2005, President Putin pointed out that material damages from road accidents during the past four years total more than 2% of Russia's GDP, saying "the country, economy and Russian families lose hundreds of billions of rubles." The President also identified long-term investment in the construction and modernization of highways as a priority. "According to experts' estimates, by 2020 the load on the road network will be ten times higher that its' carrying capacity", Mr Putin told the meeting.

Above: President Putin of Russia has taken a personal interest in improving road safety.

The Russian Government has announced a strengthening of the law relating to traffic violations, the greatest cause of road crashes. At the federal and regional levels a number of measures are being developed to address the need for improved road infrastructure which takes greater account of safety. Pedestrian safety has been highlighted as an area for action with measures being taken in towns and other built up areas to separate pedestrian and traffic movement.

The safety of school children is also a priority issue with improvements being made to the organisation of passenger transport so to provide for safer routes to school.

Russia is also now playing a leading role in road safety internationally. General Victor Kiryanov, Head of the Russian Road Traffic Safety Inspectorate, participated in the UN General Assembly debate on global road safety in New York in 2004, arguing that road traffic injuries are 'among the most urgent socio-economic problems facing the world community'. At the UNECE in Geneva, a senior Russian transport official has now been elected as Chairman of the Working Party for Road Traffic Safety (WP1). Road safety officials in the Russian Government have also recently worked together with experts from the WHO, ECMT and World Bank on a Peer Review of Road Safety in Russia, which could act as a useful model for practical international cooperation.

Sources: Russian Federation report to UN; Novosti, 15 November 2005; The Global Road Safety Crisis, Taskforce for Child Survival & Development, 2004

CAN ROAD SAFETY KNOWLEDGE TRANSFER WORK?

Road safety knowledge can and must be transferred to low and middle income countries, and a sustainable national knowledge capacity in these countries must be rapidly developed, if the worst predictions of a future road deaths epidemic are to be avoided.

Action is needed now if low and middle income countries are to avoid repeating the painful learning curve that high income countries experienced in the 1950s, '60s and '70s. Studies of the relationship between GDP per capita, growth of motorised vehicles, and road fatalities, have shown that fatality rates increase as GDP increases at relatively low levels of GDP per capita, but then start to decline with continued GDP growth. The peak position on this inverted U-shaped curve is not, however, immutable. The challenge now is to bring about a shift in the relationship between economic growth and road fatalities, so that developing countries benefit from a much earlier improvement than traditional models predict based on the experience of high income countries.

The Commission strongly believes that this is possible, given early and effective action, to promote knowledge transfer and implementation; however, to be successful, some basic ground rules must be respected. There are few quick fixes for traffic safety problems, and sustained programmes over many years are necessary in order to prevent the predicted growth in motorisation leading to a worsening situation in terms of road traffic injury. This is why support for local technical capacity building is so important, to enable countries to design, implement and assess programmes and policies for road safety.

Capacity building is a highly effective way of improving road safety performance. At the individual level, it

means having people in place so that knowledge and best practices can be transferred to decision-makers and professionals in developing countries. Capacity building that involves collaboration with private sector initiatives (such as vocational training) can also be extremely effective. At the institutional level, capacity building in low and middle income countries puts in place the human resources and institutional structures to enable analysis of their own priorities and strategies for injury prevention. The aim of capacity building must be to achieve true management and ownership of road safety programmes, rather than seeing them as the recommendations of transient international consultants that are imported and sustained only as long as the international aid on which they are dependant.

Lack of ownership will be a problem if the political climate is unfavourable. It also arises if measures that may be suitable elsewhere are adopted without consideration for local custom and circumstance. Public acceptance and support, based on information and knowledge and evidence of effectiveness will be achieved only if road safety measures are seen to be appropriate and targeted at local needs.

For example, it is very important to recognise that the composition of vehicle fleets and transport modes in developing countries are different from the industrialised countries. The variety, durability and vulnerability of road vehicles in many low and income nations are much greater. A single road space may be shared with pedestrians, animal drawn carts, bicycles, motorcycles, passenger cars, and trucks. Many of the motor vehicles are old and retained in use for decades. This has consequences for the effective transfer of safety technologies.

For example, the major improvements in vehicle crash worthiness summarised above are unlikely to have a rapid impact on the safety performance of low and middle income countries. While a minority can afford the latest car models, including all safety features, there tends to be a much wider variation in age and quality of the overall vehicle fleet than in high income countries. Furthermore, in many developing countries the occupants of private vehicles are not a high risk group compared with vulnerable road users such as pedestrians, cyclists, motor bike riders and, in certain circumstances, public transport users. Hence progress in traffic injury prevention may depend to a greater extent on other measures – such as low cost infrastructure improvements and effective enforcement of speed limits, helmet wearing and drink driving.

Cultural, social and economic issues are relevant. Road safety measures inevitably to some extent constrain road users, requiring them to conform to traffic rules and regulations and to change their behaviour. Compliance with these rules and regulations may be harder to achieve in a society where there is a high tolerance of risk. In addition, the burden of road traffic injuries is inequitably distributed and those with most to gain from road safety improvements are often vulnerable road users with low incomes and little political and economic clout.

In countries where poverty and the need for economic development are key priorities, it may be harder to create demand for a high level of road safety. For the transport sector in particular there is inevitably major pressure to achieve society's desire for better access to opportunities for trade, services and employment. As Professor Ian Johnston of the Monash University Accident Research Centre has observed; "It is only when a country has fulfilled its fundamental infrastructure needs that it will begin to think about satisfying some of the other objectives expected from sustainable transport[11]." To overcome this likely scenario the integration of road safety more forcefully into planned road infrastructure investment is essential. After all, increased road networks will increase 'exposure' to the risk of a crash, but it is also an opportunity to mainstream injury prevention at an early stage. This is critically important in countries such as China and India where new road infrastructure is being added at a rapid rate.

Integrating road safety into policy areas that already command local support will be an effective way of making progress. It is also important to promote synergies where the goals of road safety and other policies are compatible.. Road safety can be mainstreamed into urban and rural planning and strategies for sustainable mobility. Measures to promote good governance and overcome corruption can also have a very significant road safety dimension. For example, corruption among road traffic police seriously weakens the role of public authority, and also makes it harder to enforce road traffic rules. Similarly, financial fraud and mismanagement can result in the failure to meet safety related construction standards in road projects.

Rather than having a single-minded approach to traffic injury prevention, road safety advocates and professionals need to be prepared to integrate their concerns into this wider policy agenda. This may well encourage multi-sectoral engagement in road safety, but also unlock access to additional resources from other areas of government or donor assistance.

Increasingly, the immense economic and social cost of road crashes is causing some low and middle income countries to take action. In hard economic terms, reducing road traffic injury makes sense. There are examples of low and middle income countries that are making progress by successfully adapting the experiences of

BOX 6:

Effective Road Safety Actions in Middle and Low Income Countries

In the 1990s Chile was facing a sharp increase in deaths of 2,000 per year from a population of 15 million people. In response, the National Commission for Road Safety (CONASET) was established by a Presidential Decree in 1993. CONASET comprises 9 Ministries and the National Police (Committee of Ministers) and was deliberately structured in this way to promote multi-sectoral support for its road safety strategy.

CONASET has designed, developed, and implemented policies covering education, engineering, and enforcement. The Commission has successfully reformed Chile's road traffic laws. It has developed road safety audit systems that have reduced the number of crashes. Together with the national police it has supported a major effort to control drunken driving, using breath alcohol analysers. Through these and other similar measures, CONASET has markedly improved the country's road safety performance. The number of deaths on Chile's roads has stopped rising, and has begun to decline, despite a continuous and significant increase in traffic volume. This progress has significantly lowered the economic cost of road traffic injuries to the country.

Costa Rica is another example of a country that has successfully applied road safety policies that were consciously modelled on the best practice of industrialised countries. In 2003-4 the country mounted a major public awareness campaign to promote seat belt use. The campaign 'Por Amor' was developed by the Ministry of Transport, the National Road Safety Council, the national Insurance Institute, and the Automobile Club of Costa Rica. The campaign was supported by national television adverts, and was closely linked to the introduction of a new seat belt law. The legislation was passed in April 2004 and was followed by a campaign of police enforcement. The target of the campaign was to achieve a seatbelt wearing rate of 70%. However, the combination of the campaign and police enforcement raised seatbelt use for drivers from 24% to 82% and recorded fatality rates in the same period dropped.

Ghana suffers from very poor road safety rates with road traffic crash fatalities some 30 to 40 times greater than those in industrialised countries. One of the key contributory factors to the high volume of serious traffic crashes in Ghana is inappropriate vehicle speed, often in built-up areas. In order to address the problem of speeding in Ghana, speed bumps and rumble strips have been installed at various crash-prone locations on highways and in built-up areas in order to bring down vehicle speeds and to create a safer traffic environment for more vulnerable road users such as pedestrians and cyclists.

The use of such speed control devices have been an effective tool for speed management on Ghanaian roads. For instance, when rumble strips were installed at the crash hot-spot of Suhun Junction on the main Accra-Kumasi highway, the number of traffic crashes fell by around 35%. Fatalities fell by some 55% and serious injuries by 76% between January 2000 and April 2001*.

In Thailand the high rate of death and serious injuries involving motorcyclists in Khon Kaen prompted the authorities in the Province to take action to cut the death and injury toll by introducing legislation to make helmet wearing compulsory. In the year following the enforcement of the law, helmet use increased five-fold. The introduction of the legislation was coupled with an intensive public education and police enforcement programme, the combined effects of which achieved a helmet wearing rate of over 90%, a 40% reduction in head injury and a 24% reduction in mortality in motorcycle injuries over a one year period (1996).

Sources: CONASET; Por Amor - Costa Rica's seat belt campaign, FIA Foundation; R. Norton et al, Unintentional Injuries, Chapter 39, DCPP (Disease Control Priorities Project (DCPP), 2006

Above: Costa Rica: the Por Amor seat belt campaign achieved a significant increase in seat belt use

high income nations, saving lives as a result (Box 6). All of these examples demonstrate that, with careful adaptation to local conditions, strategies and measures that work in high income countries can also be successfully applied in low and middle countries, and those countries facing rapid motorisation and fast growing economies. This positive experience needs to be encouraged by the international community through a stronger commitment to international road safety collaboration.

To provide a clear framework for global action to promote road safety, the World Health Organization and the World Bank published, in 2004, the World Report on Road Traffic Injury Prevention. The first ever comprehensive global overview of the magnitude, risk factors and impact of road traffic injuries the World Report has contributed powerfully to the case for action on global road safety. Involving over 100 experts, from all continents and different sectors, the World Report clearly identifies road traffic crashes and injuries as an epidemic, a preventable public health crisis that disproportionately impacts on developing countries, vulnerable groups, and the poor.

Promoting the 'systems approach' the World Report offered six key recommendations as flexible guidelines that governments should follow:

1. Identify a lead agency in government to guide the national road traffic safety effort;
2. Assess the problem, policies and institutional settings relating to road traffic injury and the capacity for road traffic injury prevention in each country;
3. Prepare a national road safety strategy and plan of action;
4. Allocate financial and human resources to address the problem;
5. Implement specific actions to prevent road traffic crashes, minimise injuries and their consequences and evaluate the impact of these actions;
6. Support the development of national capacity and international cooperation.

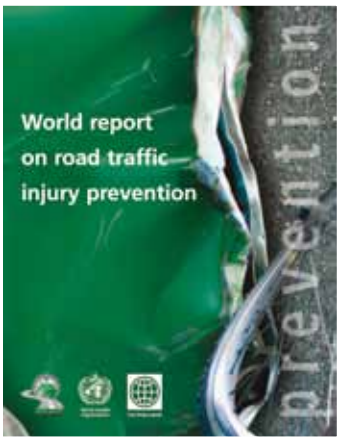
A major task of the World Report was to highlight the most important 'risk factors' that contribute to road crashes and injury severity. Based on the findings of the Report, the UN Road Safety Collaboration has recommended priority action in five key areas: lack of helmet use; seat belt non compliance; drink driving; excessive speed; and poor infrastructure design.

The Report also stressed the importance of strong political will and the need for sustained effort across a range of sectors. In particular it urged the public health community to work more closely with the transport sector that has traditionally taken responsibility for road safety. Recognising that not all low income and middle income countries would be able to take all these recommendations forward with their own resources, the Report suggested that countries should work with international or non-governmental organisations or other partners to implement the recommendations, and summarised a range of actions available to the relevant stakeholders (Box 7).

BOX 7:

The World Report on Road Traffic Injury Prevention

Proposed Actions for Road Safety



What governments can do

Institutional development

- Make road safety a priority.
- Appoint a lead agency for road safety; resource it adequately; and make it publicly accountable.
- Develop a multi-disciplinary approach to road safety.
- Set appropriate road safety targets and establish national road safety plans to achieve them.
- Support the creation of safety advocacy groups.
- Create budgets for road safety and increase investment in demonstrably effective road safety activities.

Policy, legislation and enforcement

- Enact and enforce legislation requiring the use of seat belts and child restraints, and the wearing of motorcycle helmets and bicycle helmets.
- Enact and enforce legislation to prevent alcohol impaired driving.
- Set and enforce appropriate speed limits.
- Set and enforce strong and uniform vehicle safety standards.
- Ensure that road safety considerations are embedded in environmental and other assessments for new projects and in the evaluation of transport policies and plans.
- Establish data collection systems designed to collect and analyse data and use the data to improve safety.
- Set appropriate design standards for roads that promote safety for all.
- Manage infrastructure to promote safety for all.
- Provide efficient, safe, and affordable public transport services.
- Encourage walking and the use of bicycles.

What public health can do

- Include road safety in health promotion and disease prevention activities.
- Set goals for the elimination of unacceptable health losses arising from road traffic crashes.
- Systematically collect health-related data on the magnitude, characteristics, and consequences of road traffic crashes.
- Support research on risk factors and on the development, implementation, monitoring, and evaluation of effective interventions, including improved care.
- Promote capacity building in all areas of road safety and the management of survivors of road traffic crashes.
- Translate effective science-based information into policies and practices that protect vehicle occupants and vulnerable road users.
- Strengthen pre-hospital and hospital care, as well as rehabilitation services for all trauma victims.

- Develop trauma care skills of medical personnel at the primary, district and tertiary health care levels.
- Promote the further integration of health and safety concerns into transport policies and develop methods to facilitate this, such as integrated assessments.
- Campaign for greater attention to road safety, based on the known health impact and costs.

What vehicle manufacturers can do

- Ensure that all motor vehicles meet safety standards set for high income countries – regardless of where the vehicles are made, sold or used – including the provision of seat belts and other basic safety equipment.
- Begin manufacturing vehicles with safer vehicle fronts, so as to reduce injury to vulnerable road users.
- Continue to improve vehicle safety by ongoing research and development.
- Advertise and market vehicles responsibly by emphasising safety.

What donors can do

- Highlight the improvement of road safety outcomes as a global development priority.
- Include road safety components in grants for health, transport, environmental and educational programmes.
- Promote the design of safe infrastructure.
- Support research, programmes, and policies on road safety in low income and middle income countries.
- Make funding for transport infrastructure projects conditional on the completion of a safety audit and any follow-up required.
- Set up mechanisms to fund the sharing of knowledge and the promotion of road safety in developing countries.
- Facilitate safety management capacity building at regional and national levels.

What communities, civil society groups and individuals can do

- Encourage governments to make the roads safe.
- Identify local safety problems.
- Help plan safe and efficient transport systems that accommodate drivers as well as vulnerable road users, such as cyclists and pedestrians.
- Demand the provision of safety features, such as seat belts, in cars.
- Encourage enforcement of traffic safety laws and regulations, and campaign for firm and swift punishment for traffic offenders.
- Behave responsibly by:
  - abiding by the speed limit on roads;
  - never driving when over the legal alcohol limit;
  - always wearing a seat belt and properly restraining children, even on short trips;
  - wearing a crash helmet when riding a two-wheeler.

Source: World Report on road traffic injury prevention

INTERNATIONAL COOPERATION ON ROAD SAFETY

High income countries have built a network of international cooperation on road safety to guide and inform national actions. By contrast, developing countries operate in isolation, with limited access to knowledge sharing and mutual support.

Cooperation on road safety between the industrialised countries has a long history. Almost one hundred years ago the first International Road Congress was held in Paris in 1908, followed by the first International Road Traffic Convention, in 1909. This meeting marked the beginning of international cooperation on common 'rules of the road' to promote both efficient and safe transport by motor vehicles. This work was taken further by the League of Nations in the 1930s, continued after the Second World War by the United Nations, and it is still being developed today.

As a result, industrialised countries now benefit from an extensive system of road safety collaboration (Box 8). These international efforts have included the exchange of best practice in road safety actions and strategies, sharing in research collaboration and common data systems, and negotiating standards for a wide range of road safety issues that warrant agreement at an international level such as motor vehicle and road construction standards.

In marked contrast, governments from low and middle income countries have limited opportunities for international road safety collaboration. There are few organisations available to exchange experience, strategies or technologies that would help these countries reverse the rising trend of traffic-related deaths and injuries on their roads. Participation by middle and low income countries in the existing international

BOX 8:

International Road Safety Collaboration

Industrialised countries benefit from a network of institutions that provide technical, statistical and policy support and guidance on road safety, to each other and to member countries, enabling governments and other stakeholders to share experience and expertise.

The transport division of the **United Nations Economic Commission for Europe (UNECE)** hosts two important international committees on road safety. The **Working Party on Road Traffic Safety (WP1)** is responsible for updating existing legal instruments relating to road safety, including the Vienna Conventions on Road Signs and Signals and on Road Traffic of 1968, and the 1971 European Agreements supplementing them. WP1 also introduces new legal instruments when required and organises expert sub groups to examine issues such as seat belt use and road signage, conducting questionnaires amongst the wider membership, and providing information and support to member governments. Membership of WP1 includes all governments of Western, Central, and Eastern Europe and former CIS countries, including the Russian Federation. Representatives of the US National Highway Traffic Safety Administration also participate.

UNECE also hosts the **World Forum for Harmonisation of Vehicle Regulations (WP29)**, a truly global body with authority to set harmonised vehicle safety and environmental standards. WP29 operates under two main agreements, the 1958 Agreement and the 1998 Agreement, which includes the United States, Japan, China and India. Regulations approved under the 1958 Agreement are not mandatory, but countries (and supranational bodies such as the EU) can accede to them and introduce them into national legislation. Signatories provide formal mutual recognition of the standards. Under the 1998 Agreement countries in WP29 can agree Global Technical Regulations (GTRs) which harmonise technical standards without requiring mutual recognition between territories of type approval or certification. Any UN member country can participate in WP29 and benefit from the existing body of vehicle regulation.

Road safety policy development and research are conducted by the **Organisation for Economic Development (OECD)** and also, in Europe and the former CIS, by the **European Conference of Ministers of Transport (ECMT)**. These organisations play a role both in developing formal policy, approved through resolutions at Ministerial inter- governmental meetings, and in providing expert analysis and guidance to member countries. In 2002, the ECMT was the first international body to agree a casualty reduction target, when Ministers unanimously agreed to reduce by 2012 the number of victims killed in road traffic crashes by 50% compared with 2000. The joint OECD/ECMT Transport Research Centre, established in 2004, includes expert working groups of national officials working on policy reports including advice on achieving ambitious road safety targets, speed management, and young driver safety.

The OECD/ECMT Transport Research Centre also oversees the **International Road Traffic and Accident Database (IRTAD)**, which collates and harmonises national road traffic injury and other road transport data to identify knowledge gaps and to facilitate effective international comparisons. Membership and focus of IRTAD is currently based on OECD countries, but non OECD members are encouraged to join. IRTAD aims to extend its activities to Latin America in the future.

The **World Road Association (PIARC)** brings together governments, regional authorities and a range of other transport stakeholders to share knowledge and expertise. PIARC has national committees, a large range of international and national meetings, seminars and technical workshops, and technical committees, including one for road safety. The membership is truly global, including governments of high, middle and low income countries, and this membership is represented in the geographical spread of PIARC activities.

road safety organisations listed above is low, either because of ineligibility for membership, lack of activity relevant to middle or low income countries, inaccessibility through language, geography or lack of travel budget, or simply because the country lacks the technical capacity to participate.

Regional bodies that could replicate some of these activities such as the UN Regional Economic Commissions are under resourced, lacking both capacity and technical expertise. Furthermore, when Transport Ministers from developing country regions do meet, matters other than road safety, such as regional transport integration, usually dominate the discussion. The Commission believes that much more could be done to encourage developing countries to participate more actively in relevant existing fora for international and regional road safety co-operation hosted by adequately resourced UN Regional Economic Commissions.

the European Bank for Reconstruction and Development, and the Asian Development Bank are all investing substantially in road sector investments in low and middle income countries. But with the notable exception of the Asian Development Bank, which is supporting important road safety projects in China and the ASEAN countries, they do not have dedicated capacity or programmes for road traffic injury prevention. In future, much greater effort on their part will be needed to ensure that their transport lending has a high road safety component.

Other regional bodies, such as the Asia Pacific Economic Community (APEC), which combines both developing and industrialised countries could significantly increase its road safety activities. APEC Transport Ministers are meeting in Adelaide, Australia, in March 2007 and will discuss the subject. There is merit in APEC considering the adoption of a regional casualty reduction target, as has already been done by

“Given additional capacity and a clear mandate, international and regional bodies could play a leading role in developing effective road safety programmes.”

For example, all Member States of the UN are free to participate in the 1949 Convention on Road Traffic and the 1968 Conventions on Road Traffic and on Road Signs and Signals. Similarly, developing countries that have significant motor vehicle producing capacity should play a full role in the work of the World Forum for Harmonisation of Vehicle Regulations (WP29). This body sets globally applicable standards for a wide range of safety related vehicle technologies. For example, high income countries have established rigorous crash test standards and are working towards greater global harmonization of these standards through WP29. Developing countries should be encouraged to adopt a basic set of safety standards, to sign the 1958 and 1998 agreements and to implement the safety standards contained in these agreements within a reasonable timeframe.

Regional financial institutions could also be much more involved in road safety. The African Development Bank, the InterAmerican Development Bank, the European Union and the European Conference of Ministers of Transport. At the same time, APEC could identify the mutually supportive measures that each APEC economy could take to assist others in attaining their national and regional road safety goals, including sharing of expertise and provision of donor funding. Similarly the Joint OECD/ECMT Transport Research Centre and the International Road Traffic Accident Database could become more involved in knowledge transfer activities.

Given some additional capacity and a clear mandate, these international and regional bodies could play a leading role in strengthening the ability of low and middle income countries to develop effective road safety plans and programmes. Indeed, the Commission strongly believes that road safety should become a more prominent feature of co-operation between high, middle, and low income countries and those in transition.


G VỊ VIỆT NAM

ROAD SAFETY AND SUSTAINABLE DEVELOPMENT

Road traffic injuries must be recognised as both a rapidly growing worldwide epidemic, with a current global disease burden comparable to malaria and tuberculosis, and as an urgent new sustainable development priority.

Despite the growing epidemic of traffic deaths and injuries in low and middle income countries, the subject has been ignored as an issue of sustainable development. Road safety does not feature in the Millennium Development Goals (MDGs) and is missing from United Nations and G8 policies and programmes for sustainable development. This lack of international interest in road safety reinforces the tendency for road safety to be a low priority in many developing countries.

In 2000 the UN agreed the Millennium Development Goals. They consist of key areas of action by which the international community aims to achieve significant and measurable improvements in people's lives by the target year of 2015. Road traffic injuries were not then recognised as a major public health concern.

Similarly, at the World Summit on Sustainable Development in 2002 the Johannesburg Plan of Implementation was agreed. Again, although the document did refer briefly to transport safety in general, it did not identify road safety as a specific matter of concern.

It is instructive that, whilst malaria and tuberculosis do feature prominently in the Millennium Development Goals, road traffic injuries do not, despite having a similar impact on mortality and injury (Figure 4). Malaria, tuberculosis and road traffic injuries occupy a similar space on the radar screen of incoming public health problems. It is legitimate, therefore, to examine the scale of resources available to combat malaria and tuberculosis as an approximate comparator for the level of global support for road traffic injury prevention.

FIGURE 4: TWELVE LEADING CAUSES OF MORTALITY, 2002

RANK	CAUSE	PROPORTION OF TOTAL (%)
DEATHS		
1	Ischaemic heart disease	12.6
2	Cerebrovascular disease	9.7
3	Lower respiratory infections	6.9
4	HIV/AIDS	4.8
5	Chronic obstructive pulmonary disease	4.8
6	Perinatal conditions	4.3
7	Diarrhoeal diseases	3.3
8	Tuberculosis	2.7
9	Trachea, bronchus, lung cancers	2.2
10	Road traffic injuries	2.1
11	Diabetes mellitus	1.7
12	Malaria	1.6

Source: Mathers c, Loncar D. Updated projections of global mortality and burden on disease, 2002-2030: data sources, methods and results, WHO, October 2005

The fight against Malaria and tuberculosis is, justifiably, resourced with hundreds of millions of dollars and thousands of public health officials. The Global Fund To Fight AIDS, Tuberculosis and Malaria has allocated US$1.8 billion to fight malaria for a five year period 2002-06 (in 69 countries, including 38 in Africa), while $1.9 billion has been requested from the Global Fund by 62 countries for the second five year operation period, beginning in 2007. The Global Fund has allocated US$1.2 billion to combating tuberculosis over the five year period 2002-2006 [12]. The US alone contributes $200 million annually for malaria eradication through bilateral programmes and the Global Fund. The Bush Administration has proposed that this increase by $30 million in 2006; $135 million in 2007; and a further $300 million after 2008 [13]. Private grant making foundations, such as the Bill and Melinda Gates Foundation, are also providing hundreds of millions of dollars, some of it via the Global Fund, to fight these diseases. This is an impressive demonstration of the international community's willingness to tackle a major public health problem.

In stark contrast, road safety has not featured among the priority areas of action for multilateral, bilateral or private donors. The global amounts of development assistance that can be classified as specifically related to road safety are low. Road safety is not formally recognised as a specific category of development assistance, and usually consists of a small component of aid to the road transport sector. Consequently, it is difficult to measure the scale of the international effort currently devoted to road traffic injury prevention in low and middle income countries. The total amount of bilateral aid specifically for global road safety probably amounts to less than $10 million a year. The number of road safety professionals working on global road safety is also small. The Commission estimates that, among the relevant multilateral institutions, the World Bank, the WHO, the UNDP, the UN Regional Commissions, and the Regional Development Banks, no more than ten public servants work on road safety more or less full time.

In the United Kingdom, for example, which combines an excellent domestic road safety performance with a generous and high quality overseas development assistance programme, the Department for International Development (DFID) in 2003-4 committed just £331,592 to road safety overseas, compared with expenditure on road transport related projects of £19.9 million [14].

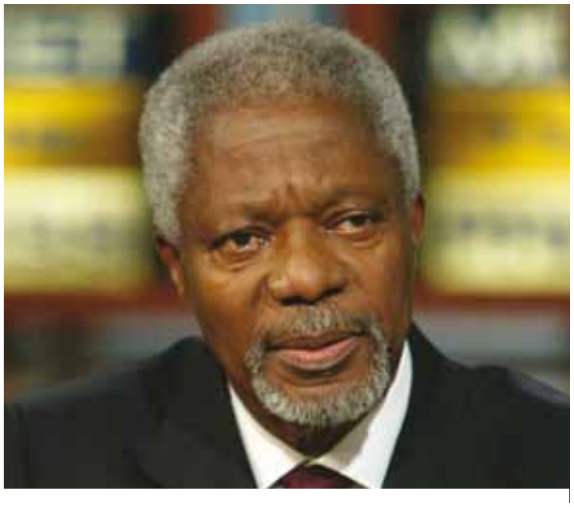
This lack of priority for road safety, which is shared by all the major donor nations, has a negative impact on the willingness of low and middle income countries to take action on road traffic injuries. If donor nations have little to offer, recipient nations will not bother to prioritise road safety and will focus on other better resourced issues.

A particular problem for those high income countries with a rich experience in road traffic injury prevention is that this expertise and engagement is usually contained in the country's transport ministry, rather

BOX 9:

"WE SHOULD DO MUCH MORE"

UN Secretary General Kofi Annan was interviewed by the FIA Foundation in advance of World Health Day 2004



Q: Why do you feel the problem [of global road safety] is so low on the international agenda and does not receive the attention that injury figures suggest it should?

KA: These accidents often occur one by one, and it is a personal and individual tragedy. I am not sure if people are aware of the kind of numbers involved, and if they were to look at it in those terms it will have an impact and it will raise awareness.

Q: Road traffic injuries also have a disproportionate effect in the developing world, I wonder if you would address both the terrible personal tragedies to individuals and also the major economic impact?

KA: Ninety per cent of the people killed are between the ages of fifteen and forty, which are the most productive years in most countries. Apart from the personal tragedies for the families it has a real economic impact and it is also affecting children disproportionately. About 96% of the 180,000 children killed a year are in the South.

Q: What do you think can be done to raise this on the political agenda? What needs to be done with key decision makers and politicians?

KA: I think first of all they need to recognize that there is a problem at the national level, and also to understand that it is not an issue for the Ministry of Transport alone and it does affect the Ministry of Finance, the Ministry of Health, Education, Justice and the police. They also should come up with a national plan to declare road casualties, and governments have done this. France did this very recently, with President Chirac himself leading the process, and I would urge other leaders to see this as a major problem and to play their leadership role. I think the UN has to get governments to acknowledge that this is a real problem. I think the UN has a voice, it has a convenient power, and I think this is an area where we should do much more.

Q: Looking to the future and the serious implications of growing car ownership increasing the urgency of this issue, will you address the dangers of what will happen unless action is taken?

KA: You have the question of the number of cars on the road and the ways the roads are constructed, some, particularly in the developing world, without any safety consideration. So you need to ensure that cars have the safety requirements, the proper brakes, and are properly inspected, and also that the roads are built with safety in mind. Because if they do not do that the kinds of figures that we see now could increase by about sixty percent, and nobody would want to see that."

Edited extract from an FIA Foundation interview with UN Secretary General Kofi Annan, January 2004

than its aid agency. Thus the US National Highway Traffic Safety Administration (NHTSA) plays a strong and leading role in the international road safety work of the UNECE and OECD. However, NHTSA has almost no funds at all to participate in bilateral road safety programmes. This authority lies with the United States Agency for International Development (USAID) but this agency is not significantly involved in road safety assistance. Interestingly, the UK Department for Transport, rather than DFID, gave financial and technical support to the WHO in preparing the World Report. In Sweden, precisely to unlock the country's transport road safety expertise, the Swedish Agency for International Development (SIDA) has allocated some of its own budget to the Swedish Road Administration (SRA) to carry out road safety work in low and middle income countries. This is an interesting example of 'joined up' government that could usefully be copied by other donor nations.

Achievement of all the Millennium Development Goals represents a worthwhile and challenging ambition that would improve the lives of millions of the world's poorest people. The Millennium Development Goals will stimulate long overdue action to eradicate extreme poverty, hunger, and to promote education, health, and gender equality. However, the realisation of the Millennium Development Goals will require a broad based effort to promote sustainable development. The Commission strongly believes that road safety can and should make its contribution to the Millennium Development Goals. Road traffic injury prevention needs to be integrated into the overall effort necessary to meeting the goals by 2015.

Although road safety was not recognized at the World Summit in Johannesburg, or seen to be a significant contributor to the achievement of the Millennium Development Goals, these oversights are beginning to be understood. The sheer scale of road traffic deaths and injuries in low and middle income countries, and the alarming extent of their global increase, is forcing the international community to take notice.

One of the first to ring the alarm bell was the International Federation of Red Cross and Red Crescent Societies (IFRC), when it warned in its 1998 World Disasters Report that "… road crashes are a worsening global disaster destroying lives and livelihoods, hampering development and leaving millions in greater vulnerability." The following year, the World Bank initiated the Global Road Safety Partnership (GRSP) as part of its Business Partners for Development Programme. The GRSP, hosted by the IFRC, brings together business, civil society, and governments to promote sustainable reductions in road crashes in developing and transition countries.
In 2001 the World Health Organization, concerned by the lack of awareness of the contribution of road crashes to the burden of disease worldwide, adopted a five year strategy for road traffic injury prevention. WHO stated that "Road traffic injuries are a major public health problem" but the agency acknowledged that they "… have been neglected because injuries have been seen as accidents or random events. Now injuries are known to be preventable." The strategy objectives were to build capacity at national level, to monitor the magnitude of road traffic injuries, to incorporate injury prevention into public health agendas around the world, and to promote action to prevent and control the health consequences of motor vehicle crashes.

The WHO also decided that, in order to promote global awareness of the urgent need to tackle an avoidable public health issue, road safety would be the theme of the 2004 World Health Day. This decision was announced by the then Director General, Gro Harlem Bruntland, at a high level conference in London in February 2003, organised by the FIA Foundation, and which brought together experts from the UN, the World Bank, the OECD, research bodies, the private sector, and NGOs.

A few months later the growing political and diplomatic interest in road safety resulted in the adoption of the first ever UN General Assembly resolution on global road safety (A/RES/57/309 - 22/5/03), tabled by the Sultanate of Oman, which has become a world leader among nations in road safety advocacy. The resolution acknowledged the global scale of road traffic deaths and injuries, and requested a report by UN Secretary General, Kofi Annan. Published in August 2003, this report recognised that the road safety efforts of the UN and other stakeholders had "remained fragmented" and recommended that a coordinating body be created within the UN system and that road safety be integrated into other polices, "… such as those relating to sustainable development, the environment, gender, children or the elderly." Giving road safety his strong personal endorsement, the UN Secretary General called for greater international action to promote road safety (Box 9).

In April 2004, World Health Day was celebrated in Paris at a ceremony hosted by President Jacques Chirac with the slogan 'Road Safety Is No Accident' (Box 10). On the same day, jointly with the World Bank, the WHO published the World Report on road traffic injury prevention.

BOX 10:

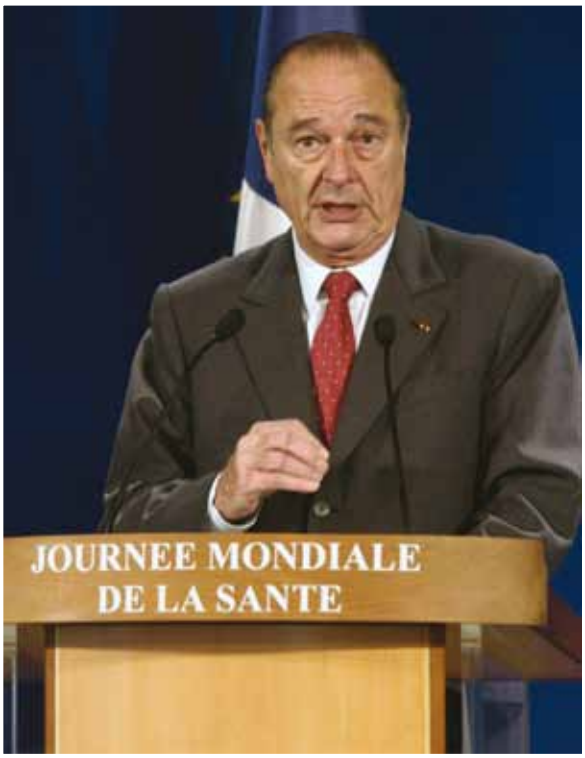
World Health Day 2004: Demonstrating Public Support for Road Safety Around The Globe

In 2004 the WHO's annual advocacy day 'World Health Day' was, for the first time, dedicated to the theme of road safety. Hundreds of events took place around the globe to help raise awareness amongst the public and policy makers about the devastating health impact and high societal costs of road traffic injuries. The day's slogan "Road safety is no accident" served as a stark reminder that only through deliberate and coordinated efforts can roads be made safer and lives be saved.

The global World Health Day 2004 event was co-hosted by the Government of France and the World Health Organization (WHO) on 7 April in Paris. The event was chaired by French President Jacques Chirac and the WHO Director General Jong-wook Lee, both of whom made moving statements and shared personal testimonies with participants who came from all around the world to attend the ceremony. Among them were senior officials from government, non-governmental organisations, and the private sector. During the ceremony a video statement by Kofi Annan was broadcast, in which the United Nations Secretary General pledged his support to World Health Day 2004, and called on countries to wake up to the growing toll of road traffic crashes and to take urgent preventative action.

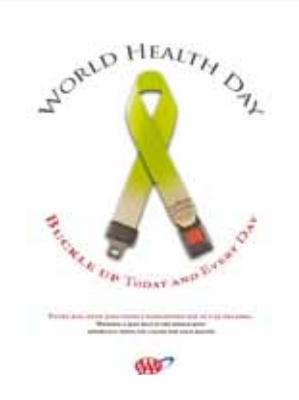
While the official World Health Day 2004 event was taking place in Paris, hundreds of national, local, and regional events were taking place around the world. In Italy, for example, a coalition led by the Automobile Club of Italy organised a campaign for World Health Day entitled "April 7th - Let's give it a try: No casualties on the road" which mobilised national stakeholders, including business, trades unions, football teams, and the Church.

The European Red Cross used World Health Day 2004 to launch its good practice guide on road safety and first aid education for children. The guide, which was launched in Berlin in Germany, was the culmination of a year long



Above: French President Jacques Chirac at the Paris launch of World Health Day 2004

Above: Road Safety is No Accident was the theme of World Health Day 2004



Above: Non-governmental stakeholders played an important role in promoting World Health Day 2004

Above: In India, more than 30 organisations hosted activities and events in support of World Health Day

road safety campaign entitled "You've only got one life…so take care!" The guide was translated into 13 languages and contains 36 proven practices for improving road safety for children, including learning activities for children travelling to and from school.

In Ethiopia, students, health workers and traffic police took to the streets of Addis Ababa to share information with the public on the merits of specific prevention measures such as seat belts and helmets. They later joined representatives from the highest levels of government and industry for a road safety conference, during which the President of Ethiopia called upon them to work together to reverse the trend of rising road traffic deaths and injuries in the country.

In India, more than 30 organisations hosted activities and events in support of World Health Day 2004, ranging from seminars to street plays, poster competitions and road safety quizzes. Road safety advocacy materials were produced and distributed around the country in many Indian languages. A workshop in New Delhi brought together researchers and decision-makers from transport stakeholder organisations to discuss the future policy directions for road safety in India. The group adopted a declaration entitled "The Road Ahead" which called for the Government to create a national lead agency for road safety, establish interdisciplinary research centres, and implement proven safety measures which focus on the most vulnerable road users.

Media coverage of World Health Day 2004 was extensive. For a four week period leading up to and following World Health Day 2004, the BBC World Service conducted a road safety season involving intensive radio coverage of road safety-related issues around the world. More than 500 articles appeared in the world's leading national newspapers, and most international television news services carried interviews and feature stories on World Health Day.

Source: Milestones in international road safety, World Health Day 2004 and beyond (WHO, 2005)

A NEW COMMITMENT TO GLOBAL ROAD SAFETY

The United Nations General Assembly has provided a mandate for international action and UN collaboration on road safety.

One week after World Health Day, the UN General Assembly held its first ever plenary debate on the issue of road safety. Addressed by 20 countries and leaders of the WHO, UNICEF, and the World Bank, the General Assembly adopted a resolution on 'Improving Global Road Safety' (A/58/289 11 May 2004). The resolution was a call to action by the international community to reverse the rising toll of deaths and injuries on the road. It clearly recognised the importance of international cooperation in the field of road safety and the need to build capacity in developing countries by providing financial and technical support for their efforts. The resolution also invited the WHO to serve as coordinator within the UN system on road safety issues.

A striking feature of the both the Assembly debate and the resolution was the quality of the contributions and broad base of support from industrialised and developing countries. Oman, represented by its Foreign Minister HE Yousef bin Alawi bin Abdulla, was again the lead sponsor, strongly supported by Seamus Brennan, the then Minister for Transport of Ireland and representing the European Union. Other prominent contributions were made by the representatives of China, India, and Russia. Interestingly, the United States (represented by the Transportation Secretary Mr Norman Mineta and the NHTSA Administrator, Jeff Runge) played a key role in negotiating the text and in securing agreement on the establishment of a coordination mechanism for road safety within the UN system, as recommended by Kofi Annan.

The debate in New York was not limited to UN Member States. The General Assembly debate was followed by a Global Road Safety Forum which brought

together stakeholders from government, the private sector, experts, and NGOs. There was a remarkably high degree of consensus among the participants about the scale of the problem and the need to develop a common platform of road safety advocacy and action[15].

The events of 2004, in particular World Health Day, the World Report on Road Traffic Injury Prevention, and the General Assembly decisions represent a breakthrough for international recognition of road safety as a major public policy concern. The 2004 events have stimulated a wide range of follow-up activities which have sustained the momentum of road safety at a world level.

In response to its new role as coordinator within the UN system for road safety, the WHO has established the UN Road Safety Collaboration, which brings together the UN agencies and regional commissions, governments, NGOs, and the private sector, providing a platform for dialogue and coordination. The UN Road Safety Collaboration is co-ordinating the production of a series of good practice guides on the main risk factors of non use of seat belts and helmets, excessive alcohol and speed, on low cost infrastructure measures, and on data collection. This series will be co-published by the WHO, the World Bank, the GRSP, and the FIA Foundation.

The WHO has also continued to implement its own five year strategy for road traffic injury prevention. It has launched the WHO Helmet Initiative to promote motorcycle and bicycle helmet use, implemented prevention programmes in Mexico, Ethiopia, Cambodia, Poland, and Vietnam, and published a report on pre-

BOX 11:

Pre-hospital care and Essential Trauma Care Systems

Prompt and effective post crash medical intervention can save lives and reduce the severity of injuries, be it by first aiders, medical staff trained in basic trauma care, or more advanced paramedics or physicians. The World Health Organization has established clear policy guidance in this area, with its handbook Prehospital trauma care systems, WHO, 2005 which identifies the institutional steps needed at national level to improve the quality and availability of prehospital trauma care.

The handbook sets out the core strategies, equipment, supplies, and organisational structures needed to create effective and adaptable prehospital care systems. It focuses on the most promising interventions and components of prehospital trauma care systems, particularly those that require minimal training and relatively little in the way of equipment or supplies. Recommended organisational strategies for training, record-keeping, supervision and accountability are also included.

The document is based on several fundamental principles:

- an effective prehospital trauma care system should be simple, sustainable, practical, efficient and flexible.
- Wherever possible, prehospital care should be integrated into a country's existing health care, public health, and transportation infrastructures.
- Effective systems for prehospital care should form the foundation of all emergency care wherever they are established, and will quickly be tasked with the responsibility of addressing a broader range of health concerns.

Pre Hospital Trauma Care Systems and its companion document, Guidelines for Essential Trauma Care, are two of the outputs from the WHO five year strategy for road traffic injury prevention.

BOX 12:

Response to the World Report: The Private Sector

The private sector has responded positively to the new international focus on global road safety. In May 2005 seven of the world's largest automobile and oil companies announced a collaborative five-year, $10 million, project to reduce road traffic fatalities in developing countries. The Global Road Safety Initiative (GRSI) supported by Shell, Ford, General Motors, Honda, Michelin, Renault, and Toyota will focus on such key road safety themes as pedestrian safety, helmet wearing, and seat belt use, the training of road safety professionals in developing countries, and the provision of seed money to support pilot programs to improve road safety in these countries. The initiative is being implemented by the GRSP, with the participating companies also contributing expertise and linkages with governments and the community in the selected countries.

Above: The Global Road Safety Initiative (GRSI) is supporting a programme to tackle risk factors, such as helmet wearing, in the ASEAN region

Within the GRSP private sector membership has grown, and a number of companies have undertaken significant road safety promotion activities, both within their business and among wider civil society. BP, for example, introduced a comprehensive formal standard on driving safety in January 2004. This new standard contains a set of strict rules designed to reduce the number and frequency of driving related accidents and fatalities by demanding higher standards from BP employees and BP contractors.

The Bridgestone Corporation, in partnership with the FIA Foundation, has launched a global awareness campaign called 'Think Before You Drive'. The campaign highlights key steps that drivers should take before they drive, such as using seat belts, child restraints and head rests. and checking the condition of the tyres. Promoted by Bridgestone, dealers and motoring clubs in over 60 countries from all regions of the world, the campaign also warns drivers not to drink, not to take drugs, or use mobile phones while driving, and to avoid excessive or inappropriate speed.

Above: Crown Prince Shaikh Salman bin Hamad Al Khalifa and Michael Schumacher give their strong personal support to the FIA Foundation/Bridgestone Think Before You Drive campaign in Bahrain

hospital trauma care as an important component of road safety (Box 11). The important leadership role being played by the WHO in global road safety was also formally endorsed by Health Ministers at the 2004 World Health Assembly. The resolution urged governments to integrate traffic injury prevention into public health programmes, to facilitate multisectoral collaboration, and proposed the creation of a fund to increase resources for global road safety[16].

At the regional level, there has been a significant increase in road safety activities. In November 2004 the ASEAN group of countries launched a regional road safety initiative with the support of the Asian Development Bank. Transport Ministers from the region agreed the Phnom Penh Ministerial Declaration on ASEAN Road Safety, and adopted a Strategy and Action Plan 2005-2010. The plans commit the countries to harmonisation of key road safety regulations and data systems, to raise safety standards on the road infrastructure, and to encourage collaborative research and adoption of best practices in the prevention of road crashes. The Ministers also agreed to establish an ASEAN Road Safety Network (ASNet) to encourage knowledge sharing, and the promotion of a body of road safety practitioners.

The UN Regional Commissions have also increased their activities. The UNECE Working Party on Road Traffic Safety (WP1) hosted the 2nd meeting of the UN Collaboration, and is contributing significantly to its work. The Working Party's consolidated resolutions and data collection systems offer a rich resource for other Regional Commissions to replicate. The UNESCWA held a Workshop on the Implementation of Good Practices in Road Traffic Safety in Muscat in Oman in November 2005. Opened by HE Sheikh Mohamed Bin Abdalla Al Harthy, the Sultanate's Minister of Transport, the workshop was attended by heads of traffic safety departments from 11 countries from the region, and focused on the implementation of the main recommendations of the World Report.

In January 2006, the UNECLAC hosted a regional road safety workshop for Latin America and the Caribbean in its headquarters in Santiago, Chile. Keynote speakers at the Santiago meeting included Chile's Minister Transport, Mr Jaime Estevez Valencia, and the Health Minister, Dr Pedro Garcia Aspillaga. The event examined the road safety trends and experiences from 11 countries, and also highlighted the successful experience of Chile in reversing a rising trend of road crash fatalities. The workshop explored the potential to encourage other countries in the region to follow Chile's success. It was agreed to establish a Regional Road Safety Forum for Latin America and the Caribbean which will encourage a multi-sectoral approach to road safety promotion and the exchange of good practice among a wide range of stakeholders. The new Forum will meet again in San Jose, Costa Rica, in mid September 2006.

Also in January 2006 India held the first Indian Road Safety Stakeholders Forum in Delhi, organised by the Indian Institute for Road Traffic Education (IRTE) with a commitment to pursue a multi-sectoral approach to road safety that will address all three phases of road traffic injuries; prevention, acute care, and long term rehabilitation by mobilising both government and non-governmental resources.

In May 2006 UNESCAP hosted a meeting of the UN Collaboration and, as the region most affected by road traffic deaths and injuries, is working on a regional project to develop road safety development goals. It is hoped that regional and country specific targets will be adopted, with the aim of promoting actions that could save 120,000 lives by 2015. ESCAP is planning to hold a Ministerial Conference on Transport in the Autumn of 2006, and will submit a draft Declaration on Road Safety to the meeting.

In October 2005, the UN General Assembly adopted a further resolution on global road safety which sets out its most detailed recommendations to date in support of road traffic injury prevention. The full text of this resolution is included in Annex 2 of this report. The General Assembly accepted a proposal submitted by the UNECE to hold the first UN Global Road Safety Week from 23 to 29 April 2007. The Week, aims to build on the success of World Health Day in 2004. and will be targeted at improving the safety of young road users which are a highly vulnerable group in all regions of the world. (See Box 13) The UN Resolution also agreed to recognize the third Sunday in November every year as a World Day of Remembrance for Road Traffic Victims.

A vital element in road traffic injury prevention is research into effective road safety strategies. Evidence-based research has been a powerful tool used by industrialised countries to develop counter-measures to reduce road crashes. The challenge now is to transfer this experience, but also to undertake new research on strategies that are applicable to low and middle income countries. To support these efforts the Road Traffic Injuries Research Network (RTIRN) was established. Now based at University of Peradeniya, Kandy, in Sri Lanka, the RTIRN is a partnership of over 150 individuals and institutions – government, academic and non-governmental, from over 30 countries that collaborate to further research on the impact and causes of road traffic injuries in low and middle income countries, and to identify appropriate interventions to the problem.

The publication of the World Report, and the subsequent decisions of the UN General Assembly, have

BOX 13:

At Risk on the Road: Children and Young Road Users

Young road users are at particular risk of road traffic injury. In developing countries it is more likely to be child pedestrians who bear the greatest burden of injuries, whereas in high income countries fatality rates are highest among young car drivers and occupants.

Children in low and middle income countries are much more likely than children in high income countries to be involved in a road traffic crash. In South Africa, for example, more than 26 child deaths per 100,000 population occur as a result of road traffic crashes compared to 1.7 per 100,000 population in the EU as a whole.

A recent study by the Global Road Safety Partnership found that in Bangladesh one in every four road deaths and one in six serious injuries to the poor involves a child. In Bangladesh an alarming trend was also identified which found that although male casualties greatly outnumber females at any age, Bangladeshi girls accounted for a larger share of total female deaths and serious injuries (32%) than did boys for total male deaths and serious injuries (12%) (see box 4).

There is evidence that children themselves recognise the dangers they face on the road. In a recent survey of children in Kabul, carried out by Save the Children and co-funded by UNICEF, road traffic was singled out as the biggest danger that children feel they face in their daily lives. Many had also experienced the sadness of loss of a family member in a road crash.

In OECD member countries road traffic crashes are the single greatest cause of death for 15-24 year olds. Young drivers in particular are over-represented in road traffic crashes. In 2004 it was estimated that over 9000 young drivers of passenger vehicles were killed in OECD countries alone. It is among young males that the majority of these deaths occur with males in the 15-17 age group twice as likely to be killed in road traffic crashes as females in the same age group. For the 18-24 age group young males

are around 3.5 times more likely to end up as a traffic fatality than females of the same age group.

A recent report published by the ECMT on young driver risks found that young drivers represent about 27% of all drivers killed in OECD countries, but only account for about 10% of the population. Furthermore, crashes involving young drivers are unlikely to result in the death of the young driver alone. Research in the US and the Netherlands has found that for each young driver killed a likely 1.3 or more passengers or other road users also die .

A number of reasons have been put forward for the overrepresentation of young people in road crashes. Alcohol, drug driving and low seat belt use are key factors. In a study conducted in the US, 18% of high school students admitted to never or rarely wearing a seat belt when riding with someone else . Young drivers and males in particular are more inclined towards risk taking and often overestimate their driving abilities.

Effective counter measures to tackle young driver fatalities can and have been developed. In the US a graduated driver licence initiative has been rolled out in all States, following a campaign led by the American Automobile Association (AAA) which allows for a controlled phasing in of driver privileges for new teen drivers. Post license driver training is also becoming an increasingly popular method of developing risk awareness and greater self-awareness among novice drivers.

To recognise the particular vulnerability of young road users, the first UN Global Road Safety Week (23rd – 29th April 2007) will focus on the road safety needs of children, young road users and novice drivers.

Sources: C. Sowton, Protecting the Future: Road Safety in Ghana and South Africa, Transaid, 2005; Save the Children USA, The Children of Kabul: Discussions with Afghan Families, 2003; ECMT, Young Driver Risks and Effective Counter Measures, 2006; Centres for Disease Control and Prevention, 2004

served as a powerful catalyst to international collaboration on road safety. The challenge now is twofold: to integrate this new level of road safety awareness and activity with the broader agenda of sustainable development; and to increase substantially the resources available to road traffic injury prevention in low and middle income countries, as recommended by the World Report.

ity will act as a catalyst both to stimulate developing countries to adopt national road safety strategies and to leverage a positive response from donors.

For the Bank, the creation of the Facility will enable a significant strategic shift from small, fragmented, one-off projects, to larger multi-sectoral projects, which are the first step in a longer, sustained process

"The Global Road Safety Facility will offer an efficient and innovative way to support action to implement the World Report."

Mobilising resources to implement the recommendations of the World Report is clearly an enormous challenge. The resolutions of both the UN General Assembly and the World Health Assembly recognised the need for new financial resources for global road safety. Unfortunately, no funding mechanism existed to serve this purpose. However, this obstacle was overcome in November 2005, when the World Bank announced the creation of a Global Road Safety Facility with the following goals:

- Strengthen global, regional, and country capacity to support sustainable reductions in road deaths and injuries in low and middle-income countries;
- Increase road safety investment in low and middle income countries;
- Accelerate safety knowledge transfer to low and middle income countries;
- Promote innovative infrastructure solutions to improve the safety of mixed traffic, mixed speed road environments in low and middle income countries.

The Facility will be managed by the World Bank, which is committing $5 million over three years. The FIA Foundation is providing $5 million over five years, and the Government of the Netherlands is contributing €1 million. It is expected that other government donors will also contribute in due course. For bilateral and private sector donors, in particular, the Facility will offer an efficient and innovative way to support action to implement the World Report, and to support the ongoing activities of the UN Collaboration. The Facility will act as a catalyst both to stimulate developing countries to adopt national road safety strategies and to leverage a positive response from donors.

For the Bank, the creation of the Facility will enable a significant strategic shift from small, fragmented, one-off projects, to larger multi-sectoral projects, which are the first step in a longer, sustained process of investing in improved road safety. In particular the Facility can encourage more governments from low and middle income countries to include road safety in their development loan agreements with the World Bank. Vietnam, for example, recently agreed a $30 million project with the Bank to support a large-scale multi-sectoral road safety strategy aiming to reduce its 12,000 plus annual road traffic deaths. Hopefully more countries will follow this positive example.

As the world's largest source of finance for development, the World Bank's commitment to promote global road safety is immensely important. The Bank is a multi-sectoral institution working in transport, public health, rural and urban development, and good governance; all areas of importance to road safety. More than any other multilateral agency, it has the ability both to encourage senior policy makers in low and middle income countries to start to take early action to reduce the huge social and economic costs of road traffic injuries, while mobilising donors, both public and private, to support them.

The Bank's powerful role in the transport and health sectors around the world is especially important. For example, at the end of 2005 the Bank's active transport portfolio amounted to US$ 20.4 billion, of which nearly 80% was for roads and highway projects[17]. If, through the Facility, the Bank can become a champion of the 'safety systems' approach, and apply this approach across its road transport portfolio and encourage other multilateral and bilateral donors to do the same, the multiplier effects for road safety in low and middle income countries will be immensely significant.

TRANSPORT INFRASTRUCTURE, ROAD SAFETY, AND THE MILLENNIUM DEVELOPMENT GOALS

Road infrastructure has a key role to play in helping to deliver the Millennium Development Goals. But new roads must be designed and managed for safety if we are to avoid a further escalation of road traffic injuries.

In parallel with the long overdue recognition of road safety as a global concern, an important recent development is better understanding of the importance of transport in general, and road infrastructure in particular, to the achievement of the Millennium Development Goals (MDGs). Today, more than 1 billion people in the world have no access to roads (Figure 5). There is an enormous infrastructure gap in road transport. Between 2005 and 2010 annual investment needs in the roads sector alone total $90 billion, of which more than half is for maintenance[18]. This lack of roads makes the poor pay heavily in time, money, and health as they try to meet their basic transport, energy and water needs.

Lack of roads will make achieving the Millennium Development Goals much harder. Recently the OECD Development Assistance Committee's 'Task Team on Infrastructure for Poverty' highlighted the 'pro-poor' benefits of transport in facilitating greater access to markets, job opportunities, educational and health facilities, rural development, and social inclusion.

Their work clearly illustrates the contribution that transport can make to the achievement of the Millennium Development Goals (Box 14). And of course, road safety also has an important role to play in helping to achieve the Millennium Development Goals and, in particular, child mortality targets.

Unfortunately, since the early 1990s development assistance for infrastructure in all sectors has declined significantly (Figure 6). Many donors from high income countries have shifted from infrastructure to social investments, in the expectation that private investment in infrastructure would increase as public investment and aid declined. But with investors deterred by low rates of return, this has not happened. The private sector's share of infrastructure investment remains limited in terms of volume, sectors, and countries – especially in Sub-Saharan Africa but also in South Asia, the Middle East and North Africa. The move from support for transport infrastructure has been particularly marked among major bilateral donors. In the United Kingdom, for example, the Department for International Development's allocation of aid to the transport sector was 2.1% in 2003-4, compared with 5.7% in 1997-8[19].

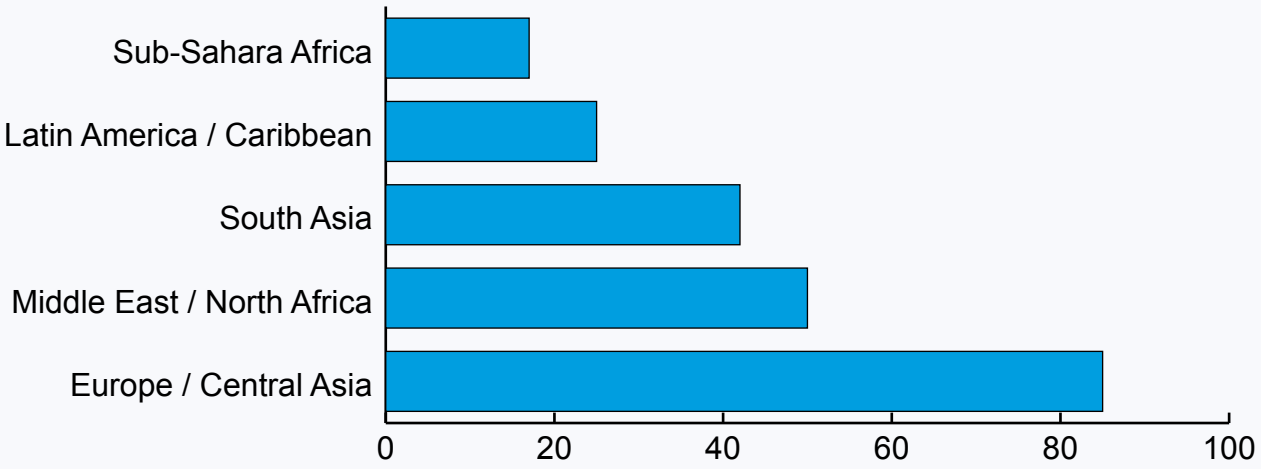
The decline in investment has been especially serious for the road sector in low income countries, which account for 50% of the total infrastructure stock. Fortunately, the links between transport infrastructure and pro-poor growth are now better understood. The OECD DAC Task Team, in particular, has highlighted the role of transport infrastructure in enhancing economic activity, removing bottlenecks in the economy which disadvantage poor people, and promoting distributional effects on growth and poverty reduction.

Similar evidence was presented in a report published last year by the African Union and the UN Economic Commission for Africa, 'Transport and the Millennium Development Goals'. This report examined the contribution of transport to each Millennium Development Goal. It showed for example, that the availability of paved roads had a significant influence in school attendance levels in a community in Morocco. Attendance rate rose from 21% to 48% for girls, and from 58% to 76% for boys. In Burkina Faso it was found that communities living more than 10 kilometres from a health centre suffered infant mortality rates as much as 33% higher than those within a ten mile radius.

"Road safety has a vital role to play in helping to achieve the Millennium Development Goals."

The many benefits of transport infrastructure have also been confirmed by the Commission for Africa (2005) and the UN Millennium Project (2005), which advocates a major increase in road infrastructure investments to help countries (especially in Africa) escape the poverty trap. Led by Professor Jeffrey Sachs, the Millennium Project has suggested as a minimum "MDG compatible" target for rural areas that access to an all-weather road should be just two kilometres. This work has prompted African Transport Ministers to set a target of halving the proportion of rural population living beyond 2 kilometres of an all season road by 2015[20].

FIGURE 5: PERCENTAGE OF PAVED ROADS



Source: NEPAD Short Term Action Plan - Infrastructure (2002)

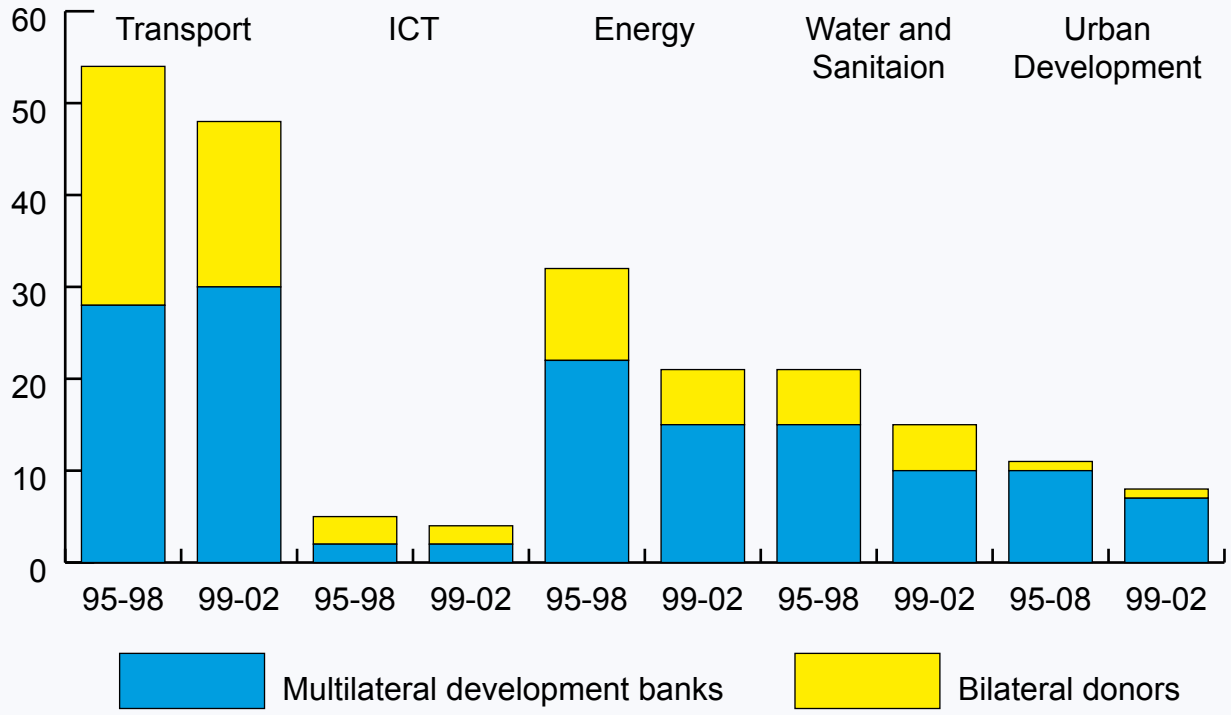
BOX 14: POTENTIAL CONTRIBUTIONS OF TRANSPORT INFRASTRUCTURE TO THE MILLENNIUM DEVELOPMENT GOALS

	TRANSPORT - LOCAL (VILLAGE TO TOWNSHIP OR MAIN ROAD)	TRANSPORT - TRUNK (BEYOND THE TOWNSHIP)
MDG 1: Reduce Income, Poverty and Hunger	+++ Improvements to low-volume local roads and associated networks of village tracks/paths can significantly reduce poor farmers' transaction costs and expand their production possibilities (incl. non-farm)	+++ Availability of competitive transport services on adequately maintained trunk network is critical to the effective participation of an area in national and international markets
MDG 2: Full Primary Education Coverage	++ Village roads significantly affect school enrolment and attendance	+ Quality of link to regional centre significantly affects quality of teacher who can be attracted and his/her attendance
MDG 3: Gender Equality in Education	++ Girls' attendance significantly increased by safer roads	+ Helps secure better quality of teacher
MDG 4: Reduce <5 Mortality	+ Increases use of primary healthcare facilities and facilitates access to better water	++ Vaccines/drugs supply, visits by more skilled health personnel and emergency evacuations
MDG 5: Maternal Mortality Reduction	+ Positively affects antenatal care and share of deliveries professionally attended	+ Increases in-hospital deliveries and often critical when emergency obstetrics required
MDG 6: Communicable Disease		+ Important for drug supply & higher-level diagnostics Care needed to avoid stimulating AIDS spread
MDG 7: Environmental Protection	+ Care needed to maximise compatibility of engineering design with local environment	- - Great care needed in fragile ecological environments to minimise risks and compensate people who suffer
MDG 8: Framework for Development	+ Work on local roads/transport can generate much youth employment	+++ Essential facility to enable area to benefit from international trade opportunities

Note: +, ++ and +++ indicate percentage improvements relative to initial levels of attainment. While the overall experience suggests that some types of infrastructure might have been more efficient in achieving specific MDGs, in specific projects that is not always the case. Hence the need for ex ante impact assessments at the project level derived from general sector-level analysis.

Source: OECD DAC 'Task Team on Infrastructure for Poverty' (2006)

FIGURE 6: THE DROP IN DONORS' INFRASTRUCTURE INVESTMENT HAS HIT ALL SECTORS



Source: Hesselbarth, 2004

With a much clearer understanding that investment in roads can be a critical catalyst to achieving the Millenium Development Goals, there is now growing support to restore levels of investment in transport infrastructure and in roads.

In January 2005, for example, UK Chancellor of the Exchequer Gordon Brown emphasised the importance of access to roads for alleviating poverty. "Infrastructure is key. Even today for 12 African countries less than 10 per cent of their roads are paved…and while tariff costs are often highlighted, it is actually transport costs that often constitute a bigger burden of the cost of exporting. With freight and insurance costs representing 15 per cent of the total value of African exports it is difficult for them to be competitive. So we must also provide developing countries with the additional resources they need to build physical infrastructure… to enable growth, investment, trade and therefore poverty reduction"[21].

However, as development assistance for the transport sector of low and middle income countries rises, much greater effort will be required to mainstream road safety into the design of road infrastructure projects. There is a significant risk that a renewed interest in road building and rehabilitation will adversely impact on road safety. Improved access to transport inevitably increases exposure to the risk factors that cause road traffic crashes and injuries. Bilateral and multilateral donors must now ensure that progress towards the Millennium Development Goals is not undermined by an acceleration of road traffic fatalities and injuries, particularly for vulnerable road users such as pedestrians and cyclists.

Above: UK Chancellor of the Exchequer Gordon Brown: "Infrastructure is key" to tackling poverty

The World Bank already has guidelines on the road safety component that should be included in road projects. As long ago as 1982, following a seminar held jointly with the Pan American Health Organization (PAHO), the Bank adopted a set of internal policy guidelines. The key elements of the guidelines were:

- In all road projects, explicit consideration should be given to traffic safety.
- This would include measures to separate pedestrian and motor vehicle traffic.
- Pilot safety programmes were encouraged.
- Traffic safety funding could constitute 5 to 10% of total project costs, not to exceed US$ 5 million, later raised to $10-12 million.

By the mid-1990s, an internal review showed that about 50 per cent of the World Bank's road projects had an identifiable safety component, mostly concerned with physical engineering, but also data collection, institutional capacity and enforcement. However, the road safety component amounted to only 3% of total project funding[22].

The Bank's guidelines identified the need for a 5-10% safety component in road infrastructure projects as long ago as 1982. Since then, the level of motorisation of low and middle income countries has increased substantially, along with the number of road traffic deaths and injuries. Understanding of how to integrate road safety into road infrastructure projects has also become much more sophisticated. The Bank's original 5-10% guideline should, therefore, be reconsidered in the light of current experience, and current road traffic injury trends in low and middle income countries. **The Commission recommends that 10% of total project cost be considered as an absolute minimum to be allocated to a much more comprehensive system of road infrastructure appraisal and assessment and related road safety measures consistent with the recommendations of the World Report, and should be rigorously applied to the road transport lending of all multilateral and bilateral donors**.

This would have an important impact on the network of regional development banks. At present, other than the Asian Development Bank, neither the European Bank for Reconstruction & Development, the Inter-American Development Bank, nor the African Development Bank systematically include a road safety component in their road sector investments. For example, the European Bank's recent 2005-2008 Transport Operations Programme does not significantly address road safety at all, and their environmental impact assessments of road projects do not systematically evaluate the potential for traffic injury reduction. This is surprising, given the significant road safety problems affecting some of the bank's partner countries, such as Russia and the CIS countries.

The Commission believes that the World Bank's new Global Road Safety Facility should take a lead in encouraging a globally consistent approach to road infrastructure safety assessment. The Commission believes that the Facility should establish a joint taskforce with the Regional Development Banks to mainstream road safety assessment into their road infrastructure investments. Each of the Regional Banks should appoint road safety specialists to increase their own technical capacity to work with recipient countries to carry out road safety assessment.

If the World Bank could take the lead in applying the 10% guideline and a common approach to road projects safety assessments, this could generate significant multiplier effects for traffic injury prevention worldwide. The combined road sector investments of the multilateral banks in 2005 amount to over US$4 billion[23]. If 10% of this portfolio were applied to road safety, as suggested by the World Bank guidelines, this would amount to a total of US$400 million. If properly used, these resources could make a huge contribution to making roads much safer in low and middle countries.

"The combined road sector investments of the multilateral banks amount to over US$4 billion...If properly used, these resources could make a huge contribution to making roads much safer."

Africa's road infrastructure needs received a major boost at the Gleneagles G8 Summit in 2005. The Summit agreed to create an Infrastructure Consortium for Africa, based at the African Development Bank, to work on a Short Term Action Plan developed by the New Partnership for Africa's Development (NEPAD) [24]. The Action Plan has developed a Short-Term Programme for Roads at a total estimated cost of $1.2 billion[25].

Africa, with a road traffic fatality rate of 28.3 per 100,000 people, has the world's most dangerous road network. In several African countries, a motor vehicle is over 100 times more likely to be involved in a fatal road crash than in the United Kingdom or the United States. NEPAD estimates the economic cost to African countries accruing from road crashes in the range of 2% of GNP or $6.2 billion. Already facing such high human and economic costs it is, therefore, vital that investment in Africa's roads should not come at the price of even higher levels of death and injury.

Following the Gleneagles G8 Summit, official development assistance to Africa will increase by $25 billion a year by 2010, more than doubling aid to the continent compared with 2004. There should, therefore, be sufficient resources to make significant progress in implementing the NEPAD roads programme. But road investment in Africa will also increase exposure to the risk of road traffic deaths and injuries unless a coherent action plan for road safety is also put in place.

Encouragingly, African Transport Ministers have given their political support for action on road safety. At their meeting in Addis Ababa in April 2005, the Ministers adopted a target to halve the rate of accident fatalities from road and other transport means by 2015. This is the first time that Africa, or any major region of mainly low and middle income countries, has adopted a road safety target. The question now is whether the G8 and the wider donor community will respond positively to this African road safety initiative.

The NEPAD $1.2 billion Short-Term Programme for Roads includes a road safety component estimated at $20 million. However, if the World Bank's 10% guideline were applied to this programme, $120 million should be allocated to road safety. This shortfall shows that insufficient attention is being given to the road safety component of the NEPAD roads programme. To strengthen the road safety dimension of this much needed investment in Africa's roads, there urgently needs to be increased donor support for road safety related knowledge transfer and technical capacity, both at country level but also in regional bodies such as the African Development Bank and the UNECA.

The Commission recommends that the G8 countries work with the Africa Infrastructure Consortium to invest at least 10% of the total cost of planned road infrastructure development into safer roads, and a stronger regional capacity to develop national road safety plans.

The Sub-Saharan Africa Transport Programme (SSATP), established in the late 1990s by the World Bank and the UN Economic Commission for Africa, should also be engaged more actively in developing a road safety dimension to its work in support of the NEPAD roads programme. Managed by the Bank, the SSATP brings together 32 countries, regional bodies, and public and private donors. At its most recent Ministerial meeting in Bamako in November 2005, road safety was acknowledged as a significant issue but is not a major element in its work programme as yet. With the help of the Bank's new Global Facility, the Commission believes that the SSATP should play a significant role in promoting a marked improvement in the safety levels of Africa's road infrastructure network.

Above: G8 and other World leaders at the G8 Gleneagles Summit recognised the role of road infrastructure in achieving development objectives.

A GLOBAL ROAD SAFETY ACTION PLAN

An Action Plan for global road safety is needed, to catalyse sustainable road safety capacity development at national level and to generate real and measurable improvements in traffic injury prevention.

Integrating road safety into road infrastructure investments would be an important step, not only for Africa, but also for other regions of the world, especially Latin America and South East Asia, the two regions with the highest number of actual road fatalities and injuries. It would involve the redirection of existing planned investments to ensure that new road and road rehabilitation programmes be as safe as possible. This would be one part of a comprehensive strategy for global road safety. However, more needs to be done if the recommendations of the World Report and the UN General Assembly resolutions are to be implemented fully.

The Commission recommends establishing a Global Road Safety Action Plan which could be managed through the World Bank's Global Road Safety Facility and provided with sufficient resources to catalyse a substantial reduction in global traffic deaths and injuries.

New resources are needed to increase local technical capacity, and to ensure that road safety management becomes self-sustaining over the long term. The Commission believes that a ten year programme of catalytic investment is needed to support the on going UN collaboration activities, and develop country level pilot programmes on the key risk factors, infrastructure assessment, research effective counter measures, develop data and monitoring systems, improve post crash response, and human resource development and training in technical capacity to design and implement road safety strategies and plans. An illustrative outline of a proposed Action Plan, (which would be developed in detail in consultation with agencies, governments and stakeholders), is provided at the end of this report.

New resources are already being devoted to road safety by the World Bank Facility, and also the private

sector's Global Road Safety Initiative. This is welcome, but it is insufficient to implement the ambitious scale of the proposed action plan. The Commission believes that greater effort is needed from the major donor nations, from multilateral institutions, from foundations and other private sources. To ensure that an Action Plan is effectively resourced **the Commission proposes a ten year commitment of US$300 million of which US$200 million be contributed by donor governments and US$100 million from other sources**.

If the donor governments of the OECD DAC Committee agreed to fund an Action Plan as proposed on the basis of their current percentage share of total ODA, their individual contributions would be affordable, given the rising level of aid budgets towards the UN target of 0.7% of GNP. The Members of the G8, taken together, would contribute just over US$14.1 million per year. For example, the United States would provide $5 million per year, while the UK, Japan and France would each provide around $2 million per year. This is very substantially less than is already being committed to comparable public health problems such as malaria and tuberculosis, but would enable significant and measurable progress to be made in reducing global road traffic deaths and injuries.

• Agree on common definitions for key road safety related data reporting systems, and identify good practice in knowledge transfer on key risk factors and the development of multi-sectoral national road safety strategies;

• Examine the progress of the UN World Forum for Harmonisation of Vehicle Regulations and the 1949/1968 UN Road Traffic Conventions, and progress towards wider participation in these efforts;

• Identify road safety's contribution to the achievement of the Millennium Development Goals and prepare proposals for the review of the transport dimension of sustainable development to be undertaken by the UN Commission on Sustainable Development in 2010;

• Provide an opportunity for low and middle income countries to confirm their commitment to action to implement the World Report and adopt national road safety strategies and targets.

This last point is important, as it is vital that developing countries take ownership of the issue of road safety and develop their own strategies and sources of financial support for road traffic injury prevention.

"It is vital that developing countries take ownership of road safety and invest in their own skills and strategies."

Alongside a substantially increased level of resources there also needs to be a scaling up of the political and institutional response to global road safety. More resources will necessarily entail more accountability. The Commission believes, therefore, that the UN should consider convening a (first ever) global Ministerial level meeting on road safety. The Commission appreciates that, given the already crowded agenda of high level meetings, there needs to be both strong justification for, and solid outcomes from, a Ministerial Conference. However, the Commission is confident that this would be the case. The Conference agenda could:

• Review the work of the UN Collaboration, the World Bank Global Road Safety Facility, the Action Plan, and the implementation of the World Report and the related UN Resolutions;

• Assess progress at a regional level, by considering relevant action plans and reviewing targets (such as those of the UN Regional Commission's ASEAN, APEC, the AU, and the EU) and the progress made towards achieving them;

It would be particularly beneficial were the proposed Conference to bring together delegations of Ministers from each region of the world ,and involve a mix of those responsible for transport, health, and law enforcement.

The Commission recommends that a Ministerial Conference on Global Road Safety be held in 2008 under the auspices of the UN, which could bring together Transport and Infrastructure, Health, and Interior Ministers.

Successful road safety strategies in all countries depend on a broad base of support and common action. Indeed, road safety is a shared responsibility of governments and a range of civil society stakeholders. Beyond the sphere of government, civil society can make a huge contribution to road safety. The private sector across many industries, non-government groups, charitable foundations, motoring organisations, educational and research institutions, and victims' groups all can play a vital role in promoting road safety.

The Commission proposes, to encourage this common effort, the creation of a Global Road Safety Charter, through which stakeholders can pledge their support to the implementation of the World Report, and progress to reversing the rising toll of road traffic deaths and injuries.

The World Bank estimates that, if fatality rates per vehicle in poorer countries were reduced by 30% by 2020, more than 2.5 million lives could be saved, and 200 million injuries avoided. **To encourage a sustained reduction in global road traffic deaths and injuries, the Commission recommends that governments in low and middle income countries should adopt their own national road traffic casualty reduction targets. These targets should be ambitious but achievable and supported by use of key performance indicators, such as levels of seat belt and helmet use, and supplemented by regional road safety targets where appropriate.**

The Commission hopes that G8 leaders will give a strong signal of support for investment in safer roads, and for implementation of the World Report. This is important especially for Africa, but also in Asia, Latin America, the Middle East, in Russia, and the CIS.

The World Bank's Global Road Safety Facility supporting the efforts of the UN Collaboration deserves recognition by the G8 as the key mechanism to catalyse an accelerated reduction in road deaths and injuries in developing countries.

A mainstreaming of road safety into the international sustainable development agenda is particularly important at the national level because governments, particularly in low and middle income countries, have many competing priorities for resources, and recognition of the importance of road safety by the international community would provide a powerful signal. Furthermore, the arguments for acting on road safety are compelling: in terms of the human impact of injury and death, the economic costs associated with road crashes and the other policy benefits, not least to the Millennium Development Goals.

It is now known that a rising toll of road deaths and injuries in the developing world is predictable; and it is also known that many of these injuries are preventable. Also now in place are a mandate from the United Nations and a delivery mechanism that is poised to "inoculate against the disease" of road traffic deaths and injuries. The sole missing ingredient is a political and funding commitment to support an Action Plan that will reverse the rising trend of traffic deaths and injuries and make our roads safe.

A Global Road Safety Action Plan - Illustrative Budget

The objective of the proposed Global Road Safety Action Plan is to increase local technical capacity in low and middle income countries, and to ensure that road safety management becomes self-sustaining over the long term. A ten year programme of catalytic investment is needed to support the Action Plan which, in the judgement of the Commission, should be managed by the World Bank Global Road Safety Facility. The Plan requires funding of $300 million over this ten year period, this figure being based on the assumption that the Commission's recommendation of a 10% redirection of existing multilateral road infrastructure funding to road safety components is met, with the consequent re-allocation of approximately $400 million to highway safety audit and network-related road safety programmes, with more money to follow as safety components of future multilateral bank loan agreements.

The proposed Global Road Safety Action Plan stands to be implemented on three levels:

- **Global activity**, essentially coordination and advocacy;

- **Regional activity**, focused on achieving minimum staffing requirements for the key multilateral organisations and building in regional coordination and advocacy activity; and catalytic

- **Country level activity**, where the majority of the Facility's funding would be directed to a combination of institutional capacity building and technical demonstration projects, which is where the majority of funding would be directed.

The following table provides an illustrative example of how the Action Plan might be composed.

ACTIVITY COMPONENT	ACTIVITY	BUDGET
1. Strategic Global Direction	Funds for the Action Plan to 2015 to be directed by the Global Road Safety Facility, hosted by the World Bank, working in partnership with donor countries and organisations, and other road safety stakeholders. Activities to be delivered by a range of implementation partners, including, for example, the UN Global Road Safety Collaboration; Global Road Safety Partnership (GRSP); Global Road Safety Forum; iRAP; and the Road Traffic Injuries Research Network.	
Global activity 1.1. Coordination	Coordination UN Global Road Safety Collaboration Role: to coordinate the response of UN agencies and regional commissions to road traffic injuries; organise bi-annual meeting and produce advisory publications; and to work with the Global Road Safety Facility, Road Traffic Injuries Research Network, Global Road Safety Partnership, and other stakeholders to ensure a common agenda;	

ACTIVITY COMPONENT	ACTIVITY	BUDGET
1.2. Advocacy	Global Road Safety Forum Role: to organise an annual Road Safety Stakeholder Forum, and to assist in coordinating regional stakeholder events designed to raise awareness and foster collaboration; to promote the Global Road Safety Charter; to help promote knowledge sharing.	
1.3. Regional Activity	Capacity Building & Coordination Funding to enable capacity building and coordination at regional level: working with road safety specialists in each UN Regional Commission and regional development bank tasked with identifying and facilitating a network of national road safety 'champions' in government and civil society; developing and sustaining regional strategies; and promoting wider adoption of best practice.	
Illustrative Budget: Strategic Global Direction	**10% budget allocation at $3 million per year for 10 years.**	**$30 million**
2. National Activity	The bulk of Action Plan funding to be directed to national activity, with the emphasis on providing seed corn funding for integrated, multisectoral projects in line with the 'system's approach' to injury prevention. This stands to anchor the country capacity building efforts in systematic, measurable, and accountable investment programmes. These integrated packages to include the following four components:	
2.1. Assessment & Research	The Assessment & Research component consists of four main elements: i. Road safety systems analysis Analysis of a country's road safety management capacity is essential for identifying governmental strengths and weaknesses, data availability, and the operating environment for any potential donor support. The Action Plan can provide funding and experts to assist with this evaluation, which must be a prerequisite for support in other areas;	

ACTIVITY COMPONENT	ACTIVITY	BUDGET
	ii. Data collection and analysis Injury data are a necessary tool for both understanding, and responding to, road traffic injuries. The World Report considers in detail the data requirements for a reliable injury reporting system. Data are not just of interest to academic researchers; they are vital political tools that provide the evidence needed to marshal resources and determine priorities for action. Without such evidence on the scale, incidence, and causation of road crashes, the problem may be neglected, and the resources that are made available may not be used in the most cost-effective way. Building the systems to deliver reliable data should be a priority action for many countries. Funding through the Action Plan stands to catalyse knowledge transfer and implementation of data collection in police and health services. A priority should be to develop the system with region-wide participation and coordination; iii. Infrastructure Assessment Safety assessment of new road projects should be a core component of road infrastructure budgets. The Action Plan would complement this support by building assessment capacity – training the assessors – and in developing assessment tools. The International Road Assessment Programme (iRAP) is developing assessment protocols for low and middle income countries which should be applied nationally; iv. Research into countermeasures Research into the effectiveness and transferability of countermeasures is an important quality control element within the integrated project approach. RTIRN researchers and advisers from transport consultancies such as TRL have considerable experience in this area, and can work with institutions and universities in low and middle income countries developing national research skills at the same time as measuring countermeasure delivery and results. Building sustainable national and regional capacity for designing,implementing,	
Illustrative Budget: Assessment/Research	**10% Budget allocation at $3 million per year for 10 years**	**$30 million**

ACTIVITY COMPONENT	ACTIVITY	BUDGET
2.2. Institutional Capacity	Institutional Capacity Strengthening the institutional capacity of government to lead road traffic injury prevention needs to be a priority. Systemic capacity weaknesses – unsuitable or fragmented road traffic regulation; lack of accountability or coordination; weak or corrupt governance and enforcement systems; lack of training and funding – are the biggest obstacle to implementing road safety programmes, and the first area that must be addressed. The Action Plan will facilitate assistance to governments in implementing the key relevant recommendations of the World Report: identifying and funding a lead agency; preparing national (and regional/local) road safety strategies and action plans; and allocating financial and trained human resources to injury prevention. Addressing management systems, encouraging governmental integration at departmental/agency level, reviewing police enforcement issues and strategies, and encouraging a strong civil society response to road injuries (for example through a National Road Safety Council and supporting victims groups) will all be included in capacity reviews. In many countries there is a shortage of skilled manpower and a lack of knowledge and understanding. For road safety to be made a priority for action there must be capacity building and knowledge transfer in order to sustain long-term programmes. Secondment of experts, and twinning arrangements to train local staff, conferences and workshops, and provision of technical expertise and manuals are all methods to achieve capacity building so that expertise can be increased.	
Illustrative Budget: Institutional Capacity	**35% budget allocation at $6 million per year, rising incrementally to $15 million per year by year 8.**	**$105 million**

ACTIVITY COMPONENT	ACTIVITY	BUDGET
2.3. Road Traffic Injury Prevention	Pilot and demonstration projects focused on the recognised road injury risk factors are another key area for activity within the Action Plan. The components of the Plan outlined above are intended to create an enabling environment for effective knowledge transfer from global and regional partners to low and middle income countries. This should take the form of well targeted and measurable projects and campaigns addressing key areas such as seat belt use; helmet compliance; drink driving; and speed management. Projects could also include technology transfer and adaptation from high income countries, for example low-cost median barriers and traffic calming measures.	
Illustrative Budget: Injury Prevention	**30% budget allocation at $4 million Y1; $6 million Y2&3; then 10 million per year rising to $12 million in Y9&10.**	**$90 million**
2.4. Post Crash Interventions	For people not killed outright in a road crash, prompt and effective post crash medical intervention can save lives and reduce the severity of injuries, be that by first aiders, medical staff trained in basic trauma care, or more advanced paramedics or physicians. The World Health Organization has established clear policy guidance in this area, and has identified the institutional steps needed at national level to improve the quality and availability of prehospital trauma care. There is a role for the Action Plan in investing in capacity building measures and in pilot projects that will measurably improve post crash intervention in low and middle income countries, and reduce the DALYS burden of road crashes on already overburdened health systems.	
Illustrative Budget: Post Crash Interventions	**15% budget allocation at $3 million per year for 5 years and $6 million per year for 5 years**	**€45 million**
Global Road Safety Action Plan: Illustrative Budget Total		**$300 million**

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24. G8 Gleneagles Summit Declaration on Africa, paragraph 23(a)
25. NEPAD Short Term Action Plan, Infrastructure, Chapter 4, Transport, page 52 – NEPAD Secretariat May 2002


Road ways

ANNEXES

1. What are Road Safety Risk Factors?
2. UN Resolution A/RES/60/5: Improving Global Road Safety
3. World Health Assembly Resolution WHA57.10: Road Safety and Health

ANNEX 1

WHAT ARE ROAD SAFETY RISK FACTORS?

Road Safety specialists frequently refer to risk factors. This note provides an explanation of the concept, and its application to road traffic injury prevention. In considering risk factors it is useful to use a categorisation of primary and secondary risks.

Primary risk describes the factors that contribute to the risk of occurrence of a road crash:

- Exposure
- Behavioural factors
- Road environment
- Vehicle factors.

Secondary risk includes the likelihood of injury occurring and its severity:

- Vulnerability of certain modes of transport
- Vehicle factors
- Use of safety devices
- Behavioural factors
- Road environment
- Post-crash medical care.

Primary risk

Exposure

In road safety terms, exposure is usually taken to refer to the amount of travel undertaken, defined as the number of trips, the distance travelled, or time in the road environment. However, when considering global comparative risk and trends in risk, several other factors are relevant. Economic development, and the accompanying rise in the number of motor vehicles and the amount of motorised traffic, are key determinates of risk of traffic injury. The quality of the road network, the mix of types of traffic, and the extent of public transport and facilities for more vulnerable road users such as pedestrians and cyclists, all contribute to the level of risk for any given traffic volume. Whilst car ownership is increasing rapidly as incomes rise in developing countries, for the majority, vulnerable transport modes remain their only option.

In low income and middle income countries, rapid growth in motorisation, especially two wheeled motor vehicles, has not been accompanied by sufficient improvements in the road environment to allow for such growth to take place without an increase in the rate of road traffic crashes. Although similar problems were faced in high income countries when their motorisation increased rapidly in the 1950's and 1960's, their

per capita incomes were high enough to allow for concurrent road investment, and the mix of traffic was much less varied than the present situation in low income and middle income countries. Hence, since the 1970's, and notwithstanding continued traffic growth, fatality rates in high income countries have tended to decrease, and in many countries in Western Europe the number of fatalities has also declined. The challenge now is to assist such a transition in low income and middle income countries, so that much needed economic development is not paid for through human tragedy.

Behavioural factors

Human behaviour makes a direct contribution to crash risk through the extent of knowledge and understanding of traffic systems, driver experience and skill, and the relationship between risk and factors such as speed choice and alcohol consumption. Attitudes to risk, and in particular recognition of the vulnerability of non-motorised modes, are also determinates of crash rates. In all countries, inexperienced drivers are relatively high-risk drivers, and it follows that in newly motorised societies the risk is increased by the relatively high proportion of new drivers in the driving population. Where this growth is accompanied by inadequate driver training and testing regimes, the risk is further increased.

Excess or inappropriate speed is a key contributor to crash risk. Speed choice is influenced by the legal speed limit, but also by road layout, traffic density, road surface condition, and the level of enforcement of speed limits. There is still a lack of acceptance amongst drivers, even in high income countries where

speed has been an integral part of road safety campaigning for many years, that their choice of speed may increase crash risk for themselves and other road users. Changing drivers' perception of speed risk remains a high priority to reduce crash risk.

Impairment through alcohol, drugs and fatigue is also a well established risk factor. Studies have shown crash risk rising rapidly at a blood alcohol concentration (BAC) above 0.04 g/dl. Legal blood alcohol levels for drivers exist in many countries, but their effectiveness in reducing crash risk depends on drivers' perception of the likelihood of being apprehended if over the legal limit. An indication of the difficulty that countries can face in persuading drivers of the risks imposed by alcohol is the recent suspension of alcohol testing in Kenya due to protests that careers and lifestyles had been harmed by the new breathalysers and a failure to clarify the offence in law.

The level of enforcement of traffic law, and the severity of penalties for infringement, also influence behaviour, and perceived low levels of enforcement will negate efforts made to improve safety through legislation. Rule of law, and fair and impartial enforcement trusted by the public, is also vital. Simply legislating is seldom effective without education, and publicity campaigns to raise public awareness of the purpose of the legislation.

Road environment

Road safety engineering and traffic management make a direct contribution to reduction of crash risk. Crash risk is increased by lack of attention to safety in both planning and design of new road networks and new roads. Road design affects road user behaviour and crash risk through the speed that drivers will perceive as appropriate, through detailed design factors such as curves, gradients, and road markings, and through failure to provide facilities for vulnerable road users.

In modern road systems, vulnerable road users are disadvantaged because such systems are largely designed for the motor vehicle. The absence of footpaths and cycle tracks, or traffic calming measures to reduce speed where pedestrians and cyclists mix with motorised traffic, increases the risk of a crash occurring and its severity. High income countries have made progress in providing facilities for pedestrians and cyclists, and speed reduction schemes, particularly on roads in residential areas. In low income countries little provision is made for vulnerable road users.

Existing road networks may have safety defects that become critical when traffic density increases, unless such problems are identified and dealt with. Lack of road maintenance leading to hazardous surface conditions can be a particular risk for motorcyclists.

In many low income and middle income countries, traffic growth in both urban and rural areas has outstripped the ability to improve the road infrastructure. Too often the main focus has been on increasing road capacity as an aid to economic development, without including safety as an objective or subjecting road designs to safety audit procedures.

Vehicle factors

Whilst vehicle defects are generally considered to contribute to less than 5% of crashes, risk is directly affected by vehicle design through braking systems, lighting, and tyre quality. Most attention has been paid to secondary safety as a feature in vehicle design, but improvements in primary safety features are also instrumental in reducing crash risk. Inadequate braking systems for large commercial vehicles are a recognised risk factor.

Secondary risk

Vulnerability of certain modes of transport

In all countries, vulnerable road users, pedestrians, cyclists and motorised two-wheeler riders are especially vulnerable to injury, and are much more likely than vehicle occupants to die when hit by a motor vehicle. Data for the European Union countries show that risk of death by mode, relative to car occupants, calculated by distance travelled, is 20 times higher for powered two-wheelers, and eight to nine times higher for cyclists and pedestrians. Impact speed is a crucial determinant of injury severity for vulnerable road users. For example, 90% of pedestrians survive impacts with cars at speeds up to 30 km/hour, but more than half will die at speeds of 45 km/hour or more. Older road users are also more likely to die or sustain severe injury, due to their more fragile bodies and lower ability to recover from injury.

In addition to the higher risk of death, vulnerable road users are more likely to sustain severe injuries, in particular injuries to the head, pelvis and legs. Head injuries are a major cause of death, but if survivable can lead to long-term disability. Lower-leg injuries also have high incidence of lasting disability, and are a particular risk factor for motorised two-wheeler users and pedestrians.

Vehicle factors

Much progress has been made on vehicle crashworthiness and occupant protection in high income countries. There are well established systems for regulation of vehicle safety standards, in Europe, North

America, Japan, and Australasia. The Euro NCAP, Australian NCAP and US Insurance Institute for Highway Safety crash tests have encouraged car manufacturers to improve occupant protection through its crash tests and star rating system. Most new models on sale in Europe reach the Euro NCAP five star standard. There is still scope for improvement even in the newest models, and it will at least a decade before the majority of cars on the road have the present day best car standards.

In middle income and low income countries, new vehicles are available that do not conform to the safety design standards found in vehicles in high income countries, and safety systems are not standard fittings. Moreover, the vehicle fleet is older, and the variability is greater. Research in the United Kingdom has shown that occupants of older cars are at a disadvantage when involved in a crash with newer cars. The wide mix of traffic, and incompatibility of vehicle size and design, are key injury risk factors, and crashes between cars and trucks lead to a greatly increased severity of injury and higher death rates than car-to-car collisions.

Little progress has been made with vehicle designs that are more protective for pedestrians. Most new cars tested in the Euro NCAP programme provide little protection for pedestrians and cyclists. In many low income and middle income countries vulnerable road users are at particular risk from impact with buses and trucks, and these heavy vehicles cause more severe injuries. In India, in cities and on rural highways 50% of the crashes in which pedestrians are killed or injured involve buses and trucks.

Use of safety devices

One of the most effective means of reducing death and injury for vehicle occupants is the use of seat belts in the front and rear seats. Whilst many high income countries have succeeded in achieving high seat belt wearing rates, particularly in the front seats, this is not universal even within Europe, and wearing rates are often very low in middle income and low income countries. In many of the latter, there is no legal requirement either to fit or use belts. Failure to wear a seat belt is a major cause of death in crashes, and studies of the effectiveness of seat belts have shown that use by front seat occupants reduces risk of death by 40-65%.

In European Union countries, front seat belt wearing rates range from 52% to 92%, showing that there is still considerable scope for improvement in some countries. Much lower rates are the rule elsewhere. For example, in Argentina, rates vary from 26% in Buenos Aires to 58% on national highways; in Kenya seat belt use is as low as 1%. Rear seat belt wearing

rates tend to be lower everywhere, and in EU countries range from 9% to 80%.

Child restraints are particularly important as a means of reducing injury, and are effective in reducing fatalities. Usage is high in high income countries, typically around 90%, but negligible in low income countries.

Air bags are increasingly available in cars in high income countries, most commonly as protection against frontal impact, but also for side impact protection in some newer models. However, air bags can increase injury risk for children, and rear-facing child safety seats should never be used in seating positions where air bags are fitted.

Helmets are the main means of protection for two-wheeled vehicle users. Non-use of helmets increases the risk of head injury for motorised two-wheeler riders by a factor of three, and helmets reduce fatal and serious head injuries by between 20% and 45%. Wearing rates are high in many high income countries, being virtually universal in the United Kingdom for example. In middle income and low income countries where two-wheeler traffic has increased rapidly, wearing rates may be close to zero, or almost 100% if laws on helmet use are in place and enforced. Even where the rider wears a helmet, passengers may not do so, and children in particular are often unprotected.

Cyclists are also at risk from head injury, but legislation on cycle helmet wearing is much less common than for motorcyclists. Where legislation is not in place, wearing rates are often as low as 10%. Bicycle helmets have been shown to reduce head injuries by between 63% and 88%.

Behavioural factors

Speed is a major determinate of the extent of injury. The effect of impact speed on the risk of death for pedestrians has already been mentioned above, but for vehicle occupants also, injury severity increases with impact speed. The probability of fatal injury in-

creases from close to zero to almost 100% as the change in impact speed increases from 20km/hour to 100km/hour.

Crashes involving alcohol are also more likely to lead to fatalities. Studies in the United States and the United Kingdom show that relative risk of a fatality increases exponentially with alcohol level. In low income countries alcohol has been found to be present in between 33% and 69% of fatally injured drivers.

Road environment

The need for road design to be more 'forgiving' of driver error is increasingly being recognised. Even where a crash may be inevitable, the consequences can be reduced by the provision of median and roadside barriers to reduce impact with oncoming vehicles and roadside objects. Road signs, trees, ditches, and other features can cause severe injury on impact, especially where speeds are high, and well-sited barriers can be very effective in reducing injury. Road design can also provide protection for vulnerable road users by reducing impact speed through traffic calming measures.

Post-crash medical care

The outcome of a road crash for the victims, in terms of their chance of survival and long-term prognosis, is affected by the level of available medical care. In European countries, around half of all fatalities occur at the scene of the crash or on the way to hospital, but in low income and middle income countries, where access to emergency services may be poor, death before arrival at hospital can be as high as 80%. In many cases there is no availability of ambulances, and road crash victims must rely on passers-by for help. Lack of early medical intervention and long difficult journeys to hospital reduce the chance of survival.

Once in a hospital emergency department, the level of care is variable, and in low income countries medical staff often lack trauma training. A shortage of expert staff and of surgeons skilled in trauma care means that injuries that would be survivable in high income countries go undiagnosed and untreated until it is too late to save the patient's life. Inadequate treatment for injury can lead to long-term disability for those who survive. Adequate attention to long-term and rehabilitative care can greatly improve the functional capacity of survivors and rehabilitation, together with pre-hospital and acute care should form part of every national road safety plan.

Above: A crashed car in the forecourt of a Washington DC high school reminds students of the dangers of drinking and driving

General Assembly

Distr.: General
1 December 2005

Sixtieth session
Agenda item 60

Resolution adopted by the General Assembly

[*without reference to a Main Committee (A/60/L.8 and Add.1)*]

60/5. Improving global road safety

The General Assembly,

Recalling its resolutions 57/309 of 22 May 2003, 58/9 of 5 November 2003 and 58/289 of 14 April 2004 on improving global road safety,

Having considered the report of the Secretary-General on the global road safety crisis,[1]

Commending the World Health Organization for its role in implementing the mandate conferred upon it by the General Assembly in its resolution 58/289 to act, working in close cooperation with the United Nations regional commissions, as a coordinator on road safety issues within the United Nations system,

Also commending the United Nations regional commissions and their subsidiary bodies for having responded to the above-mentioned resolutions and to the report of the Secretary-General by accelerating or expanding their road safety activities,

Noting with satisfaction the progress made by the United Nations Road Safety Collaboration as described in the report of the Secretary-General,[2] as well as the road safety initiatives undertaken by relevant United Nations agencies and international partners,

Underlining the importance for Member States to continue using the *World Report on Road Traffic Injury Prevention* as a framework for road safety efforts and implementing its recommendations by paying particular attention to the five risk factors identified, namely, the non-use of safety belts and child restraints; alcohol; the non-use of helmets; inappropriate and excessive speed; and the lack of infrastructure,[3]

Welcoming the proposal of the Economic Commission for Europe to host the first United Nations Global Road Safety Week, in Geneva in April 2007, targeted at young road users, including young drivers,

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[1] A/60/181 and Corr.1.

[2] Ibid., para. 32.

[3] Ibid., para. 37 (*f*) and (*g*).

05-48784

Also welcoming the proposal to designate the third Sunday in November as the World Day of Remembrance for Road Traffic Victims, in recognition of road traffic victims and their families' loss and suffering,[4]

Convinced that responsibility for road safety rests at the local, municipal and national levels,

Recognizing that many developing countries and countries with economies in transition have limited capacities to address these issues, and underlining, in this context, the importance of international cooperation towards further supporting the efforts of developing countries, in particular, to build capacities in the field of road safety and of providing the financial and technical support associated with such efforts,

1. *Expresses its concern* at the continued increase, in particular in developing countries, in traffic fatalities and injuries worldwide;

2. *Reaffirms* the importance of addressing global road safety issues and the need for the further strengthening of international cooperation, taking into account the needs of developing countries, by building capacities in the field of road safety, and providing financial and technical support for their efforts;

3. *Encourages* Member States and the international community, including international and regional financial institutions, to lend financial, technical and political support, as appropriate, to the United Nations regional commissions, the World Health Organization and other relevant United Nations agencies for their efforts to improve road safety;

4. *Invites* the United Nations regional commissions, relevant United Nations agencies and international partners to continue the existing road safety initiatives, and encourages them to take up new ones;

5. *Encourages* Member States to adhere to the 1949 Convention on Road Traffic[5] and the 1968 Convention on Road Traffic[6] and Convention on Road Signs and Signals,[7] in order to ensure a high level of road safety in their countries, and also encourages them to strive to reduce road traffic injuries and mortality in order to achieve the Millennium Development Goals;

6. *Stresses* the importance of the improvement in the international legal road traffic safety norms, and welcomes in this regard the work of the Working Party on Road Traffic Safety of the Inland Transport Committee of the Economic Commission for Europe in the elaboration of a substantial package of amendments to the 1968 Conventions on Road Traffic and Road Signs and Signals;

7. *Invites* Member States to implement the recommendations of the *World Report on Road Traffic Injury Prevention*, including those related to the five main risk factors, namely, the non-use of safety belts and child restraints; the non-use of helmets; drinking and driving; inappropriate and excessive speed; as well as the lack of appropriate infrastructure;

[4] Ibid., para. 37 (*i*).

[5] United Nations, *Treaty Series*, vol. 125, No. 1671.

[6] Ibid., vol. 1042, No. 15705.

[7] Ibid., vol. 1091, No. 16743.

8. *Also invites* Member States to establish a lead agency, on a national level, on road safety and to develop a national action plan to reduce road traffic injuries, by passing and enforcing legislation, conducting necessary awareness-raising campaigns and putting in place appropriate methods to monitor and evaluate interventions that are implemented;

9. *Invites* the United Nations regional commissions and the World Health Organization to organize jointly, within their resources as well as with voluntary financial assistance from concerned stakeholders from government, civil society and the private sector, the first United Nations Global Road Safety Week to serve as a platform for global and regional, but mainly national and local, activities to raise awareness about road safety issues and to stimulate and advance responses as appropriate for these settings, and to convene a second road safety stakeholders' forum in Geneva as part of the Global Road Safety Week to continue work begun at the first forum held at United Nations Headquarters in 2004;

10. *Invites* Member States and the international community to recognize the third Sunday in November of every year as the World Day of Remembrance for Road Traffic Victims as the appropriate acknowledgement for victims of road traffic crashes and their families;

11. *Requests* the Secretary-General to report to the General Assembly at its sixty-second session on the progress made in improving global road safety;

12. *Decides* to include in the provisional agenda of its sixty-second session the item entitled "Global road safety crisis".

38th plenary meeting
26 October 2005

ANNEX 3

FIFTY-SEVENTH WORLD HEALTH ASSEMBLY **WHA57.10**

Agenda item 12.7 **22 May 2004**

Road safety and health

The Fifty-seventh World Health Assembly,

Recalling resolution WHA27.59 (1974), which noted that road traffic accidents caused extensive and serious public health problems, that coordinated international efforts were required, and that WHO should provide leadership to Member States;

Having considered the report on road safety and health;[1]

Welcoming United Nations General Assembly resolution 58/9 on the global road-safety crisis;

Noting with appreciation the adoption of resolution 58/289 by the United Nations General Assembly inviting WHO to act as a coordinator on road safety issues within the United Nations system, drawing upon expertise from the United Nations regional commissions;

Recognizing the tremendous global burden of mortality resulting from road traffic crashes, 90% of which occur in low- and middle-income countries;

Acknowledging that every road user must take the responsibility to travel safely and respect traffic laws and regulations;

Recognizing that road traffic injuries constitute a major but neglected public health problem that has significant consequences in terms of mortality and morbidity and considerable social and economic costs, and that in the absence of urgent action this problem is expected to worsen;

Further recognizing that a multisectoral approach is required successfully to address this problem, and that evidence-based interventions exist for reducing the impact of road traffic injuries;

Noting the large number of activities on the occasion of World Health Day 2004, in particular, the launch of the first world report on traffic injury prevention,[2]

1. CONSIDERS that the public health sector and other sectors – government and civil society alike – should actively participate in programmes for the prevention of road traffic injury through injury surveillance and data collection, research on risk factors of road traffic injuries, implementation and evaluation of interventions for reducing road traffic injuries, provision of prehospital and trauma

[1] Document A57/10.

[2] *World report on road traffic injury prevention*. Geneva, World Health Organization, 2004.

care and mental-health support for traffic-injury victims, and advocacy for prevention of road traffic injuries;

2. URGES Member States, particularly those which bear a large proportion of the burden of road traffic injuries, to mobilize their public-health sectors by appointing focal points for prevention and mitigation of the adverse consequences of road crashes who would coordinate the public-health response in terms of epidemiology, prevention and advocacy, and liaise with other sectors;

3. ACCEPTS the invitation by the United Nations General Assembly for WHO to act as a coordinator on road safety issues within the United Nations system, working in close collaboration with the United Nations regional commissions;

4. RECOMMENDS Member States:

(1) to integrate traffic injuries prevention into public health programmes;

(2) to assess the national situation concerning the burden of road traffic injury, and to assure that the resources available are commensurate with the extent of the problem;

(3) if they have not yet done so, to prepare and implement a national strategy on prevention of road traffic injury and appropriate action plans;

(4) to establish government leadership in road safety, including designating a single agency or focal point for road safety or through another effective mechanism according to the national context;

(5) to facilitate multisectoral collaboration between different ministries and sectors, including private transportation companies, communities and civil society;

(6) to strengthen emergency and rehabilitation services;

(7) to raise awareness about risk factors in particular the effects of alcohol abuse, psychoactive drugs and the use of mobile phones while driving;

(8) to take specific measures to prevent and control mortality and morbidity due to road traffic crashes, and to evaluate the impact of such measures;

(9) to enforce existing traffic laws and regulations, and to work with schools, employers and other organizations to promote road-safety education to drivers and pedestrians alike;

(10) to use the forthcoming world report on traffic injury prevention as a tool to plan and implement appropriate strategies for prevention of road traffic injury;

(11) to ensure that ministries of health are involved in the framing of policy on the prevention of road traffic injuries;

(12) especially developing countries, to legislate and strictly enforce wearing of crash helmets by motorcyclists and pillion riders, and to make mandatory both provision of seat belts by automobile manufacturers and wearing of seat belts by drivers;

(13) explore the possibilities to increase funding for road safety, including through the creation of a fund;

5. REQUESTS the Director-General:

(1) to collaborate with Member States in establishing science-based public health policies and programmes for implementation of measures to prevent road traffic injuries and mitigate their consequences;

(2) to encourage research to support evidence-based approaches for prevention of road traffic injuries and mitigation of their consequences;

(3) to facilitate the adaptation of effective measures to prevent traffic injury that can be applied in local communities;

(4) to provide technical support for strengthening systems of prehospital and trauma care for victims of road traffic crashes;

(5) to collaborate with Member States, organizations of the United Nations system, and nongovernmental organizations in order to develop capacity for injury prevention;

(6) to maintain and strengthen efforts to raise awareness of the magnitude and prevention of road traffic injuries;

(7) to organize regular meetings of experts to exchange information and build capacity;

(8) to report progress made on the promotion of road safety and traffic injury prevention in Member States to the Sixtieth World Health Assembly in May 2007.

Eighth plenary meeting, 22 May 2004
A57/VR/8

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Commission for Global Road Safety

The Commission for Global Road Safety was established by the FIA Foundation with a remit to examine the framework for, and level of, international cooperation on global road safety, and to make policy recommendations. The Commission is chaired by Rt.Hon Lord Robertson of Port Ellen. One Commissioner has been invited to serve from each of the Group of Eight (G8) countries. Each has an extremely distinguished record of achievement in his or her field of work, and a particular knowledge or expertise that has contributed to the preparation of this Report. The members of the Commission serve in a personal capacity.

Lord Robertson of Port Ellen (Chairman)

Rt Hon the Lord Robertson of Port Ellen KT, GCMG, hon FRSE, PC was Secretary General of NATO (1999-2003) and Defence Secretary of the United Kingdom (1997-1999). He was a member of the British House of Commons from 1978-1999 when he was elevated to the House of Lords.

In opposition he was a spokesman on Foreign Affairs, and in particular Europe. In 1995 he was elected to the Shadow Cabinet and was responsible for drawing up the plans for the Scottish Parliament. He is a Knight of the Order of the Thistle, one of HM the Queen's personal decorations and the most senior for Scots. He also holds the Knight Grand Cross of the Order of St Michael and St George.

In 2003 he was awarded the Presidential Medal of Freedom, America's highest civilian honour, and holds high honours from 20 countries and honorary doctorates from 10 Universities.

He was the founding Chairman of the Seatbelt Survivors Club, an organisation founded to campaign for compulsory seat belts in cars. He was a founder member of the UK All Party Parliamentary Action Committee on Transport Safety.

Mr Rosario Alessi (Italy)

Rosario Alessi is Chairman of the FIA Foundation. He was President of the Automobile Club of Italy (ACI) 1982 – 2000, and since 2000 has been Honorary President of ACI with responsibility for international affairs.

Mr Alessi has been President of SARA Assicurazioni S.p.A. and SARA VITA Assicurazioni S.p.A. since 1993. He was a Vice President of the Federation Internationale de l'Automobile (FIA) 1984-2001; he was a member of the FIA Bureau de Comité which then became the FIA Senate, 1982 – 2003 and President of the FIA Senate 2001-2003. Mr Alessi studied Law and is a Lawyer at the Italian Supreme Court.

Mr Victor Kiryanov (Russian Federation)

Mr Victor Kiryanov is Lieutenant General, Chief of the General Department of the State Road Safety Inspectorate (Traffic Police), Ministry of Internal Affairs of the Russian Federation.

After serving in the Armed Forces of the Soviet Union, Mr Kiryanov joined the State Traffic Inspectorate and served as Deputy Head of the State Traffic Inspectorate prior to his current role as concurrent Chief State Road Traffic Safety Inspector and Major-General. Mr Kiryanov also holds the post of President of the Russian Automobile Federation (RAF).

Dr. John Llewellyn (United Kingdom)

Dr. John Llewellyn received his undergraduate degree at the Victoria University of Wellington, New Zealand, and his Doctorate at the University of Oxford. In 1970 he was appointed a Research Officer in the Department of Applied Economics at the University of Cambridge. From 1972 he was a Fellow of St. John's College, Cambridge, and in 1974 he was appointed Assistant Director of Research in the Faculty of Economics at Cambridge.

He then spent seventeen years at the OECD in Paris, where for the first eight he was in charge of international economic forecasting and policy analysis. He then became Deputy Director for Social Affairs, Manpower and Education, and for the last five years he was Head of the Secretary-General's Private Office (Chief of Staff).

In 1995 he joined Lehman Brothers as Managing Director and Global Chief Economist. He directed the economic research teams who cover North America, Europe, and Asia. In 2006 Dr. Llewellyn moved within Lehman Brothers to become Senior Economic Policy Advisor for Europe.

Dr. Llewellyn's published work has covered a range of economic topics and he has also co-authored two books: one on the international aspects of forecasting, modelling, and economic co-operation; and the other on economic policies for the 1990s.

Dr. Llewellyn is a member of the Handelsblatt/Wall Street Journal ECB Shadow Council; a member of the President of the European Commission's Group of Economic Policy Analysis; a member of the International Economics Advisory Board, Chatham House; and a member of the UK Department of Trade and Industry Secretary of State's Panel on Monitoring the Economy.

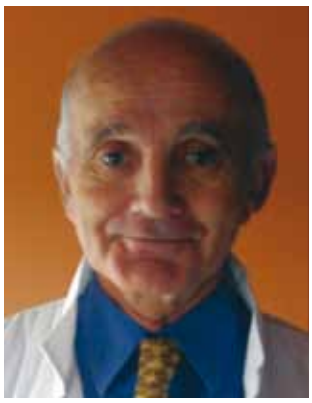
Mark L. Rosenberg, M.D., M.P.P. (United States of America)

Mark L. Rosenberg currently serves as Executive Director of the Task Force for Child Survival and Development, a nonprofit public health organization that works collaboratively with partners worldwide to advance health and human development through innovation in public health practice.

Before assuming his current position, Dr. Rosenberg served 20 years with the Centers for Disease Control and Prevention (CDC), including early work in smallpox eradication, enteric diseases, and HIV/AIDS. He was instrumental in establishing a National Center to focus on injury surveillance, research, and prevention. Dr. Rosenberg was named Acting Associate Director for Public Health Practice when the National Center for Injury Prevention and Control was formed, became the first permanent director in 1994, and served as director until 1999. There he helped to design and develop the first Center-based extramural research grant program at CDC. Dr. Rosenberg's public health commitment with a special interest in injury control and violence prevention continues. The Task Force is currently serving as the secretariat for a coalition working to promote global road traffic safety in developing nations.

Dr. Rosenberg is board certified in both psychiatry and internal medicine with training in public policy. He was educated at Harvard University where he received his undergraduate degree as well as degrees in public policy and medicine. He completed a residency in internal medicine and a fellowship in infectious diseases at Massachusetts General Hospital, a residency in psychiatry at the Boston Beth Israel Hospital, and a residency in preventive medicine at the CDC. He is on the faculty at Morehouse Medical School, Emory Medical School, and the Rollins School of Public Health at Emory University.

He has received the Surgeon General's Exemplary Service Medal as well as the Meritorious Service Medal, Distinguished Service Medal, and Outstanding Service Medals from the US Public Health Service.



Professor Gérard Saillant (France)

Gérard Saillant is a Professor of orthopaedic surgery based at the Pitié Salpêtrière Hospital in Paris. He is formally the chairman of the orthopaedic surgery department of the Hospital where his specialist areas included spine surgery, sports injuries, road traffic injuries and traumatology. He is also ex Dean of the medical university of Pitié Salpêtrière Paris VI.

Mr Saillant is President of the Institute for Brain and Spinal Cord Disorders (ICM) which is housed in the CHU Pitié Salpêtrière Hospital in Paris. The ICM is a project aimed at creating an international centre of research and treatment of neurological and psychiatric disorders and especially brain and spinal cord trauma.

Michael Schumacher (Germany)

With seven world championship titles, Michael Schumacher is the most successful driver in Formula 1 history. Up to the beginning of the 2006 season, he has gathered 84 victories and is leading most of the statistics of his sport. Aged 37, he has competed in the highest motor sport category for more than 15 years and has gained respect for his skill and dedication around the world.

As one of the directors of the Grand Prix Drivers' Association, he has played a leading role in promoting safety in motor sport. He has also taken a strong interest in road safety and has supported a number of the road safety campaigns promoted by the Federation Internationale de l'Automobile (FIA). In 2004 he participated in the launch of the European Union Road Safety Charter at a meeting of Transport Ministers hosted by the Irish Presidency in Dublin. More recently he has participated in the worldwide 'Think Before You Drive' campaign promoted by the FIA Foundation and Bridgestone Corporation.

Ms Tayce A. Wakefield (Canada)

Tayce Wakefield is Executive Director, EU Affairs, for General Motors, with responsibility for government relations and public policy for General Motors Europe. She currently serves as Chair of the Global Road Safety Initiative, a 5 year, US$10 million initiative through the Global Road Safety Partnership to improve road safety in developing companies, sponsored by Ford, GM, Honda, Michelin, Shell and Toyota.

Ms. Wakefield served as Executive Director, Environment & Energy, for General Motors Corporation in Detroit, Michigan from 2003 to 2005 and as Vice President of Corporate and Environmental Affairs and a member of the Board of Directors for GM Canada from 1995-2003. Wakefield joined GM in 1984 in the Government Relations Department and held progressively responsible positions in Government and Public Relations, where she worked on a variety of key legislative issues including pension reform, labor, safety and environmental issues, trade and tax legislation, as well as media relations, employee communications and charitable contributions. She served on the GMCL Women's Advisory Council from 1985-1988 and was the founding Chair of GM's Affinity Group for Women (in the U.S.) from 2000-2002.

Ms. Wakefield has served on numerous government commissions and Boards of not-for-profit organizations in Canada, including as Chair of the Canada Safety Council from 1998-2001, on the Ontario Council of Regents (the governing body for Ontario's Colleges of Applied Arts and Technology) from 1997-2003, as the Alumni Co-Chair of McMaster University's $100 million "Changing Tomorrow Today" campaign, and on the Executive Council of the Ontario Chamber of Commerce from 1992-1998.

Ms. Wakefield holds a Master of Science in Management (M.S.M.) degree from Boston University – Vrije Universiteit Brussels, a law degree (LL.B.) from Osgoode Hall and a B.A. in Political Science from McMaster University.

Mr Shigeo Watanabe (Japan)

Mr Watanabe is Board Member and Advisor to the Board of Bridgestone Corporation, since March 2006. He was President, Chairman and Chief Executive Officer of Bridgestone Corporation between 2001-2006.

Mr Watanabe joined Bridgestone Tyre Corporation Ltd. (Now Bridgestone Corporation) in April 1965 and has held a number of senior roles during his career, including Technical Advisor for Bridgestone Tyre Manufacturing USA Inc. 1983 – 1988 and General Manager for Manufacturing and Technology for Bridgestone/Firestone Europe S.A. 1990 – 1993. In March 1994 he became a member of the Board.

In 1997 he became Vice President and Director of Tyre Development Division I and in 1998 he became Senior Vice President of Tyre Development. In 2000 he became Senior Vice President of Tyre development, Tyre Quality Assurance and Tyre Production and Production Technology concurrently. In March 2001 Mr Watanabe became President, Chairman of the Board and Chief Executive Officer of Bridgestone. In January 2004 he also became Chief Risk-Management Officer.

* Mr Kiryanov replaced Dr Andrey Kortunov as Member of the Commission for the Russian Federation in November 2006. The Commission for Global Road Safety is grateful to Dr Kortunov for his participation and expertise.

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The principal authors of the Report are Kate McMahon and David Ward

Kate McMahon OBE has recently retired from her position as Head of Road Safety Strategy Division in the Great Britain Department for Transport where her responsibilities included the safety of vulnerable road users, delivery of the Road Safety Strategy, and management of the road safety research programme. She was in charge of the work for development of the Government's Casualty Reduction Target for 2010 and had a major role in the development of the Road Safety Strategy that was published in March 2000. She was subsequently in charge of monitoring progress towards the target. She was a member of the OECD's expert groups on Safety of Vulnerable Road Users, and Road Safety Strategies, and chaired the expert group on Child Safety, the report of which was published in April 2004.

David Ward is the Director General of the FIA Foundation and Secretary of the Commission for Global Road Safety. He is a member of the Executive of the Global Road Safety Partnership, a board member of the European New Car Assessment Programme and a Director of the International Road Assessment Programme. He has also served in a number of road safety related advisory committees and working groups of the OECD, the WHO and the European Commission.

Editorial Advisory Board:

This report benefited from the advice and contributions of an Expert Advisory Board. The Commission for Global Road Safety would like to thank the following people, who provided their extremely valuable time and expertise in a personal capacity:

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FIA Foundation
for the Automobile and Society

The Commission for Global Road Safety is an initiative of the FIA Foundation for the Automobile & Society. Established by the Fédération Internationale de l'Automobile (FIA) in 2002 as a registered charity in the UK, the FIA Foundation is a leader in global road safety advocacy and a major supporter of road safety research, working closely with international partners to promote road safety and a sustainable approach to mobility. The Foundation is a member of the UN Road Safety Collaboration and the Global Road Safety Partnership and is a major contributor to the recently established World Bank Global Road Safety Facility.

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MAKE ROADS SAFE

MAKE ROADS SAFE is an advocacy film produced by Richard Stanley Productions for the FIA Foundation. The film can also be viewed at www.makeroadssafe.org

International reaction to the Make Roads Safe report…

"The efforts of the Commission for Global Road Safety to promote better road safety worldwide are to be applauded"

Kofi Annan, UN Secretary General, 1997- 2006

"I welcome and value this initiative…we appreciate the Commission's endorsement of the World Bank's Global Road Safety Facility and confirm our willingness for the Facility to coordinate and manage the activities associated with the Action Plan proposed by the Commission"

Paul Wolfowitz, President of the World Bank

"We hope that development banks will lead the way by requiring that at least 10 per cent of their investments for infrastructure development be applied to road safety programs. We will also urge that resources be committed to the World Bank Global Road Safety Facility by the industrialized nations so that the Facility can reach a total investment of at least $300 million by 2015"

President Oscar Arias Sanchez of Costa Rica

"The Commission…has recommended a practical action plan for the international community. I very much welcome the recommendation that all road project investments should include a provision for road safety…not only will this principle become best practice for DFID projects but we will endorse the principle for others to follow…"

Hilary Benn MP, UK Secretary of State for International Development

"The recommendation for 10 per cent of all infrastructure projects supported by bilateral and multilateral donors to be committed to road safety ("the 10 per cent rule") is a good step in promoting sustainable mobility worldwide"

Achim Steiner, Executive Director, United Nations Environment Programme (UNEP)

"The Make Roads Safe report proposes actions that are necessary to address the serious issue of road accidents"

Bindu N.Lohani, Director General, Sustainable Development, Asian Development Bank

"I welcome and support the valuable work which the Commission for Global Road Safety is undertaking. I should also be happy to add my support should international road safety be included in a future G8 communique"

Tony Blair MP, UK Prime Minister

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