

Association
mondiale
de la Route



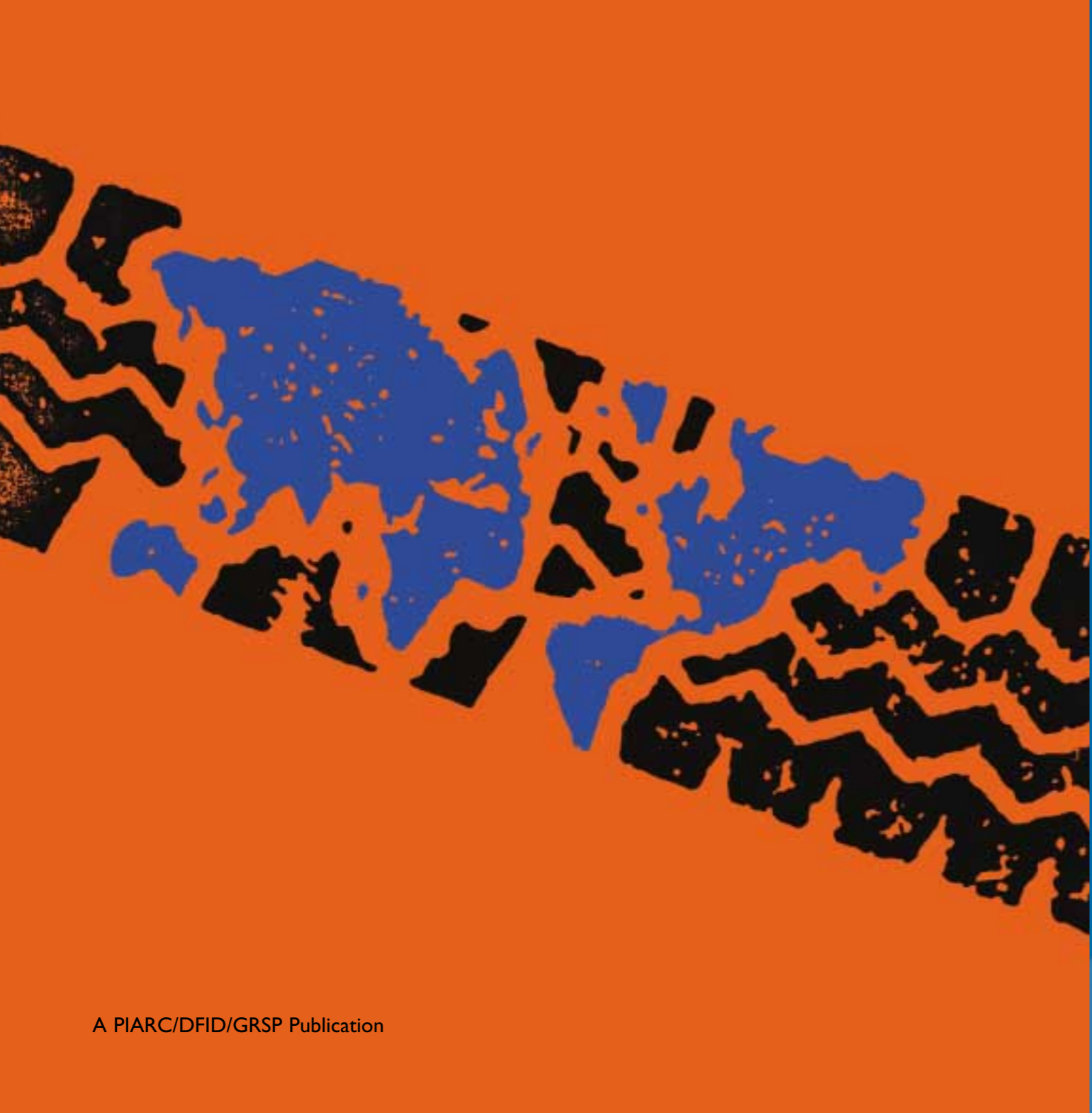
World Road
Association



GLOBAL
ROAD SAFETY
PARTNERSHIP

Keep death off your roads





Keep death off your roads

The message is clear

Your roads are a vital part of your country's growth and development.

But, with more traffic, more and more people die and are injured in accidents.

Worldwide, over 1 million people are killed and 50 million people are injured each year.

Apart from the human suffering, accidents cost **your** country a great deal of money, time and effort.

But this waste is not inevitable.

Countries **can** reverse the trend, given the political will for sustained effort. And much can be done to protect your people without spending large sums of money.

Accidents damage many aspects of your country's well-being. And many different bodies and agencies are needed in the fight against them.

By working together and with even modest investment, you and your colleagues can make a **real** difference.

This booklet shows you:

The size of the problem	p 6
How to improve road safety	p 12
Who should do what	p 16
How to get value for money	p 18
How to get advice	p 20

This briefing is for those with the drive, foresight and ability to act **now**.

What they are saying...

“The slaughter and mutilation that occurs on the streets and roads in the world every day are events which are unacceptable in modern society.”

Hans Van Holst, Royal Institute of Technology - Sweden, 1995

“The fatalities and the injuries on our roads...are an accusation against the society of today.”

Mr Leber, Minister of Transport - Federal Republic of Germany, 1970

“Road crashes are a worsening global disaster destroying lives and livelihoods, hampering development and leaving millions in greater vulnerability.”

World Disasters Report - International Federation of Red Cross and Red Crescent Societies, 1998

“Road safety is an issue of immense human proportions; it is an issue of economic proportions; it's an issue of social proportions and it's also an issue of equity. Road safety very much affects poor people.”

James D Wolfensohn, President - World Bank, 1999

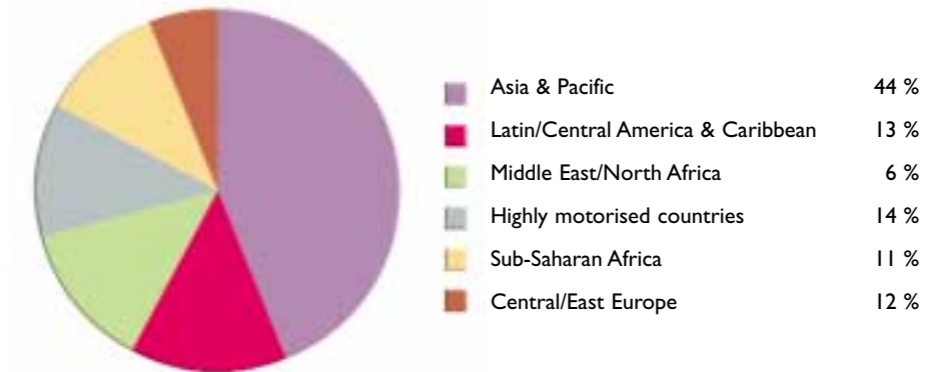
The size of the problem

The size of the problem

The global situation

- Worldwide, about one million people die in road accidents each year and up to 50 million people are injured.
- Over 80 per cent of these are in the developing and emerging nations of Africa, Asia, Latin America and the Middle East.
- Over 40 per cent are in the countries of the Asia-Pacific region alone.
- Some regions such as Sub-Saharan Africa and the Middle East have three times as many road deaths than might be expected by their levels of vehicle ownership.
- The global cost of road accidents in developing and emerging nations of the world is at least US\$ 70 billion each year. This is more than the total aid received from all bilateral and multilateral sources. It corresponds to 1.0 per cent of GNP for developing countries and 1.5 per cent of GNP for emerging nations.
- In the developing world, about 70 million in-patient days are taken up in hospitals each year with road accident victims. This is an intolerable burden on scarce medical resources.

Estimate road fatalities by region



What they are saying ...

“It was extraordinary for society not to realise the minefield it was creating for itself with new developments such as widespread use of cars, until as the years went by the carnage developed.”

Dr Howard Baderman, Accident and Engineering Specialist

“The rate of road accidents in Africa is increasing at an alarming rate... it is approaching crisis proportions in our part of the world.”

Adebayo Adedeji, Executive Secretary - UN Economic Commission for Africa, First African Road Safety Congress, 1984

The size of the problem

The size of the problem

Who is at risk?

- In many Asian, African and Middle Eastern countries between 40 and 50 per cent of people killed are **pedestrians**.
- **Public transport** accidents are common in developing countries: buses are involved in 20 to 40 per cent of all accidents.
- **Other forms of public transport** such as cycle or scooter rickshaws, mammy wagons, jeepneys etc., have a particularly dangerous reputation. In many countries people travel unprotected in open trucks and vans.
- In the rapidly motorising countries of South East Asia over 50 per cent of deaths are **motorcyclists**.
- Typically around 20 per cent of those killed and injured in road accidents in developing countries are **under 15 years old**.
- People from **low income households** are at greater risk from road crashes, as they are more likely to be pedestrians or public transport passengers. They have no social security or insurance cover to help them.
- Hospital studies of accident victims suggest that **women, children and the poor** are less likely to get medical attention.

What they are saying ...

“Death comes to Britons’ holiday of a lifetime. 26 tourists die in horror crash at Long Tom Pass.” (South Africa)

Daily Mail (UK), Sept 1999

“30 children die as bus plunges into Delhi river. India’s perilous road witness another tragedy.”

Times of India, Nov 1997

“Another tragedy befalls Tanzania. 70 people die and 25 injured in bus accident.”

Daily News (Dar es Salaam), May 1998



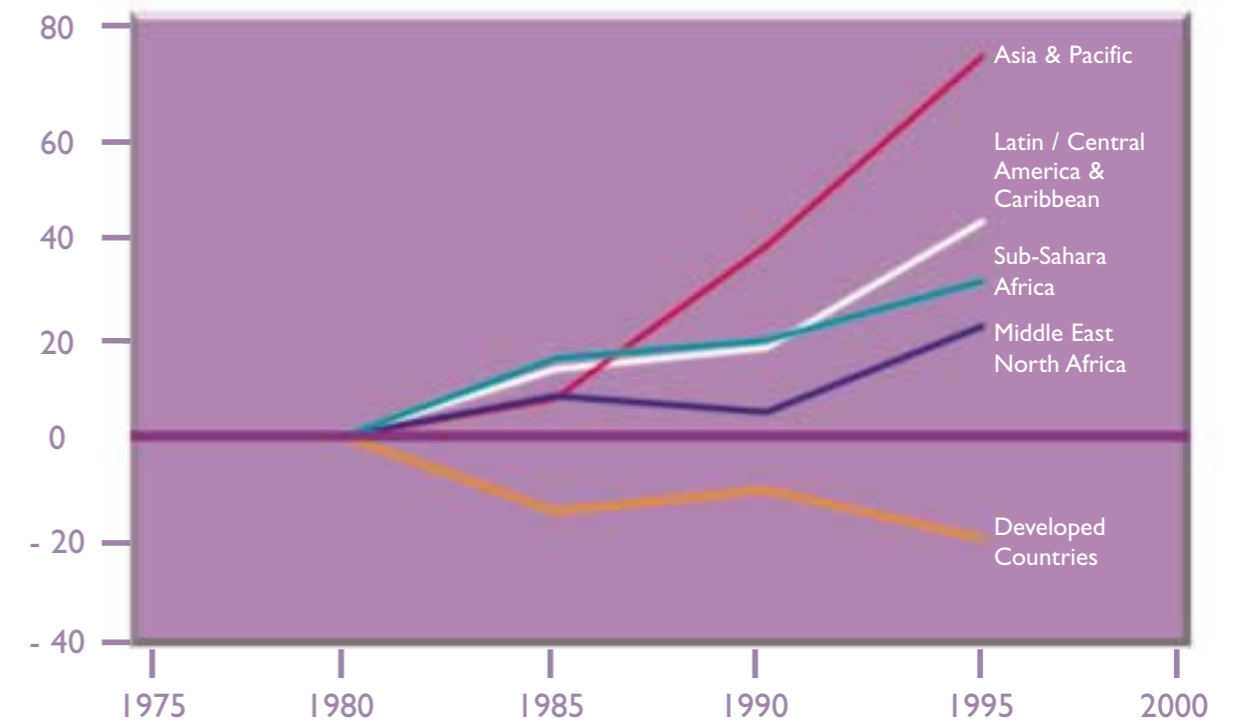
The size of the problem

The size of the problem

Delay is not an option

- In all developing regions of the world, the numbers of road deaths continues to grow.
- Between 1980 and 1995 the total number of road deaths increased:
 - in Asian countries by an average of **70 per cent**;
 - in Latin American/Caribbean countries by about **40 per cent**;
 - in Sub-Saharan African countries by about **25 per cent**; and
 - in Middle Eastern countries by about **20 per cent**.
- On the other hand, in the highly motorised countries of the world, road deaths fell by about **20 per cent**.
- This shows what can be done with **targeted and sustained investment**.
- In 1990, the World Health Organisation (WHO) stated that, worldwide, road accidents were the **ninth** most important cause of years of life lost. Unless all countries take action now, by 2020, they will rise to **second** place.
- Road casualties threaten to take up about 25 per cent of hospital beds in developing countries.
- The following section shows how **your** country can face its road safety problems and play its part in meeting this worldwide challenge.

Percentage change in fatalities 1980-1995



How to improve road safety

How to improve road safety

To deal effectively with the problems that your country faces, you need to act in three key areas:

- **Information systems** - to have a comprehensive picture of what is happening now and to know how effective your future actions have been;
- The development of **road safety action plans** - based on the knowledge of your country's particular problems;
- Securing the **resources** to fund and sustain the action plans.

Information systems

- Accurate and reliable information is needed on:
 - where accidents occur
 - when they occur
 - who is involved
 - what happened.
- Your traffic police are best placed to record and manage accident data. It should be made a legal requirement to collect information on all injury accidents.
- The police need to be motivated and convinced of the importance of this work.

- Their annual reports and statistics should be circulated widely to assist in the development and evaluation of policy, the setting of targets, and the monitoring of specific programmes.
- Under-reporting of nonfatal accidents is always a problem. Supplementary data can be collected from hospital records and insurance companies.
- Easy to use computer programs are readily available for storing information and analysing the data.

The development of road safety action plans

Your information system will tell you how big your problem is, how fast it is growing and what its main features are. It will also give you some idea of what it is costing your country.

- Based on the knowledge of your country's position, you should make sure that road safety appears prominently in your country's overall transport policy and receives its proper share of resources.
- An action plan must then be prepared which is realistic, achievable and affordable. It should focus on measures which have been shown to be cost effective.
- This plan should be reviewed annually and evaluated on a regular basis.



How to improve road safety

How to improve road safety

Road safety action plans should contain:

- Measurable objectives.
- A balanced programme of actions covering all key areas of road safety in order of priority. This should cover:
 - *highway improvements*: Good design will save lives. Low cost improvements at dangerous sites are particularly effective.
 - *vehicle safety*: Any improvement or testing programme should concentrate on basics such as tyres, brakes, lights and reflectors.
 - *education, training and publicity*: Key measures to improve behaviour and safety awareness of all categories of road user.
 - *legislation and enforcement*: Many countries have found that taking action on seat belt, crash helmet, alcohol and speed control have been particularly effective.
 - *emergency services*: Prompt actions in the 'golden hour' immediately after an accident is particularly effective. Lives can be saved that would otherwise be lost.
- A description of the roles and responsibilities of each of the implementing agencies involved in road safety in your country.
- An estimate of the budgets required by each agency.

Funding and support for road safety

- It is appreciated that road safety is only one of the many competing demands for your country's scarce resources.
- But it is essential that it is not overlooked in developing plans and policies.
- Only governments can accept full and overall responsibility for developing a road safety strategy and providing the funds needed for each agency's involvement.
- In addition to conventional tax sources, other sources of funding should be pursued:
 - road user charges (from vehicle licensing, taxation, fuel levy, insurance etc.)
 - a proportion of traffic fines
 - an element of the road maintenance budget
 - private sector sponsorship
 - public – private partnerships
 - non governmental organisations (NGOs) already working in your country.
- Commitment from private companies and NGOs is more likely if they are involved in the planning process.
- Multilateral and bilateral aid agencies may also be prepared to assist with the funding of road safety activities and provide specialist support.
- Although money is essential, it is not the only scarce resource that you need. You must encourage your professionals to take safety seriously. Help them train and keep up with the latest know-how.



Who does what? Who does what?

You are responsible!

Each road accident is a personal tragedy for those involved. But accidents are spread out over your country and they take place over many years. They do not have the drama of large-scale catastrophes such as famine, flooding or epidemics. They are a steady, background wastage which slowly weakens your economy. Only at the national level can the full seriousness of the situation be seen. And only at the national level can senior decision makers take appropriate action. Commitment at the highest levels of government is essential.

Working together

Road accidents have many different causes, and there are many ways in which they can be tackled. Success depends on many people in many organisations working together.

As a general rule, one body must have clear responsibility for the management and co-ordination of road safety activities. This 'lead organisation' is usually the roads/transport authority.

The lead organisation must co-ordinate all the agencies involved in delivering road safety programmes, particularly the traffic police, as well as report to the government.

- However, different organisational systems in different countries have been shown to deliver road safety improvements with varying degrees of success. There is no 'best' structure for all situations or countries.
- Organisation of road safety should be built on local examples of successful co-operation between government (and other) bodies. If none exist, the road safety co-ordinating body should be limited to key agencies.
- In many countries, a National Road Safety Council has been set up. To be successful, councils need financial and administrative support and committed pro-active members.
- The 'lead organisation' can also promote partnerships with the private sector and the general public.

Mobilising skills

- Skilled people are an essential part of the solution.
- To unleash their energies, they need to believe that road safety is a priority worth their effort and have their contribution valued.
- Building capacity and strengthening professional skills in road safety are thus essential in all cases.
- Decision makers need to look at existing human resources:
 - are there sufficient engineers, planners, police officers and technicians to sustain your action plans?
 - if so, do they have sufficient skills, equipment and freedom of action to get on with the job?
 - if not, what needs to change?



Value for money Value for money

*Governments and their agencies have a moral responsibility for the safety and well-being of their country's citizens. But there is an added advantage to investing in road safety: **sound improvements will save far more money than they cost.***

- Investment in road safety provides rates of return that cannot be matched by any other investment within the transport sector.*
- Studies have shown that low cost engineering improvements at dangerous accident sites can give economic rates of return in excess of 100-200 per cent.*

Road safety in figures...

In a recent study it was calculated that in a particular country the annual cost of road crashes was about US\$ 30 million. A series of safety improvements were outlined which, it was estimated could reduce the cost of crashes by five per cent per annum (i.e., a saving of US\$ 1.5 million per year).

These improvements (in highway design, education, training etc.) were estimated to cost US\$ 750,000 in a programme of measures set over a five-year period (i.e., at an average annual cost of US\$ 150,000). The average first year rate of return on investment was therefore about 1,000 per cent and the benefit : cost ratio about 10 : 1.

High rates of return such as the above are common in road safety appraisals and illustrate the economic benefits of investing in road safety programmes.



Seeking advice Seeking advice

- There is plenty of information available to help you deal with your road safety problems. The resource list which follows provides a useful but certainly not exhaustive starting point.
- National organisations with wide experience of the safety problem in African and Asian countries include the Australian Road Research Board, CSIR Transportek (South Africa), the Swedish National Road Administration/ SweRoad, and the Transport Research Laboratory (UK). These have published many useful reports and guidelines on the more detailed aspects of road safety in developing countries.
- For a number of years now the major multilateral aid agencies such as the World Bank and the European Community, and the regional development banks (i.e., for Asia, Africa and Latin America) have included a road safety component in highway or urban sector projects. Their project managers have at their disposal specialists able to give detailed advice on road safety matters.
- There are similar specialists available through the aid and development departments on many national governments.
- The World Road Association (PIARC) can provide contact details of its national committees and advice on its World Interchange Network (WIN).
- Finally, support guidance and information can be obtained from the recently created Global Road Safety Partnership (GRSP), initiated by the World Bank, the International Federation of Red Cross and Red Crescent Societies. It creates partnership programmes and disseminates information on road safety good practice.

What they are saying...

“If road safety education could be introduced into primary schools in Uganda it would be the single most important contribution to road safety ever seen in this country.”

Justin Okot, Chairman National Road Safety Council - Uganda, 2000

“I do not have words to express the sorrow or loss I felt. It left a hole in my heart that can never be filled.” (on hearing of the death of his eldest son in a road accident in 1969)

Nelson Mandela, Long walk to freedom, 1994

“Traffic accidents are one of the greatest, perhaps the greatest of the nation’s public health problems.”

John F Kennedy, US President, 1960-1963

“After the first road fatality in Britain in 1886 the coroner said, ‘this must never happen again.’ But it has, about 25 million times worldwide since then.”

Nicholas Faith, Crash - The limits of car safety, 1997



Resources

Useful websites

Global Road Safety Partnership:
www.GRSProadsafety.org

DTLR (UK) on roads, vehicles and road safety:
www.roads.dtlr.gov.uk

Institution of Highways and Transportation:
www.iht.org.uk

Institute of Transportation Engineers:
www.ite.org

American Association of State Highway
and Transportation Officials. Publications listed at:
www.transportation.org/publications/bookstore.nsf

Federal Highway Administration (USA):
<http://safety.fhwa.dot.gov>

Contact details

TRL Limited / International Division
Old Wokingham Road - Crowthorne
Berkshire RG 45 6 AU - UK
T: +44 1344 73 131 / F: +44 134 47 70 719
e: international_enquiries@trl.co.uk
w: www.trl.co.uk

Department for International Development
DFID Public Enquiry Point
94 Victoria Street
London SW1E 5JL - UK
T: +44 1355 84 8132 / F: +44 1355 84 3632
e: enquiry@dfid.gov.uk
w: www.dfid.gov.uk

Global Road Safety Partnership
PO Box 372 - 17 Chemin des Crets
CH-1211 Geneva 19 - Switzerland
T: +41 22 730 4249 / F: +41 22 733 0395
e: grsp@ifrc.org
w: www.GRSProadsafety.org

World Road Association (PIARC)
La Grande Arche - Paroi Nord - Niveau 8F
La Défense
92055 Paris cedex - France
T: +33 147 96 81 21 / F: +33 149 00 02 02
e: piarc@wanadoo.fr
w: www.piarc.lcpc.fr

Acknowledgements

This booklet is part
of the programme of the PIARC
Committee on Road Safety (C13).

Special thanks to:
Goff Jacobs, Malcolm Read and
Stuart Yerrell for compiling the text.
Thanks also to Peter Elsenaar, C13 chair,
and the members of Committees C3 and C13
who provided comments.



Two final thoughts...

On September 11, 2001 the twin towers of the World Trade Centre were destroyed. Almost 3,000 died, about the same number as those killed on the roads of the world in any one day.

It probably took you ten minutes to read this booklet. During that time another 20 people have died somewhere on the world's roads.

Isn't it time we started to change things?