



#### A New Global Challenge – Make Roads Safe

**David Ward** 

- → FIA Foundation
- Director General
- d.ward@fiafoundation.com



#### **Reversing the Rise of Road Traffic Injuries**

1.2 million people are killed and 50 million injured in road crashes worldwide.

Road crashes are number one killer of young people aged between 10 and 25.

Low and middle income countries account for more than 80% of global deaths from road crashes.

Most of these crashes are predictable and preventable.



### What can be done to Make Roads Safe?

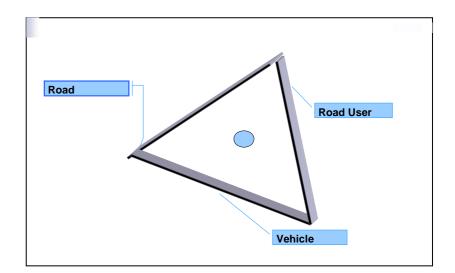
### Answer... Apply the Safety Systems Approach

Three components in a dynamic system:

The road user

The vehicle

The road infrastructure



Rather than 'blaming the victim' for causing crashes, the risk of human error is anticipated and 'tolerated' by a 'forgiving' system that has been designed to ensure that the consequences of human error are non fatal as far as possible.

The design challenge is to manage loss of control of kinetic energy within tolerances survivable by the human body.

### Haddon's Injury Prevention Matrix

| -          | Road User   | Vehicle  | Road                                     | Environment  |
|------------|---|--|--|--|
| Pre-crash  | Education/<br>training<br>Impairment<br>Attitudes/<br>behaviour | Type Approval<br>Road test<br>Crash<br>avoidance<br>systems<br>(ABS/ESC) etc | Road layout<br>Road signs<br>Maintenance | Licensing<br>Rules of the<br>road<br>Enforcement<br>Speed limits etc |
| Crash      | Use of<br>restraints<br>Seat belts<br>Head restraint<br>etc     | Seat belts<br>Air bags<br>Crumple zones<br>etc                               | Barrier systems<br>Escape lanes          | Emergency<br>response  |
| Post-crash | First aid skill<br>Access to<br>medical care                    | Ease of access<br>Fire risk  | Ease of access<br>Rescue<br>facilities   | Medical<br>services  |

#### **Road Users – Key Actions**

Awareness/enforcement campaigns:

- Seat belt use both front and rear
- Helmet use
- Avoid excessive speed
- Avoid impaired driving

and target young drivers as greatest 'at risk' group.



In France improved enforcement has achieved a 45% reduction in Fatalities since 2001.

### **Motor Vehicles – Key Actions**

Modernise the vehicle fleet to benefit from:

- Front/Side/Pedestrian Impact crash test standards
- Electronic Stability Control

Encourage a market for safety using:

- Crash test information
- Fiscal incentives for safer cars
- Fleet purchasing policies
- Promote Global Standards





23e Congrès mondial de la Route - Paris 2007

CHOOSE

ESC

#### **Road Infrastructure – Key Actions**

Build 'forgiving' roads which:

- Use low cost safety architecture
- Are self enforcing (less scope for speed)
- Separate vulnerable users from vehicles
- Avoid vehicle conflicts (eg: roundabouts rather than junctions)



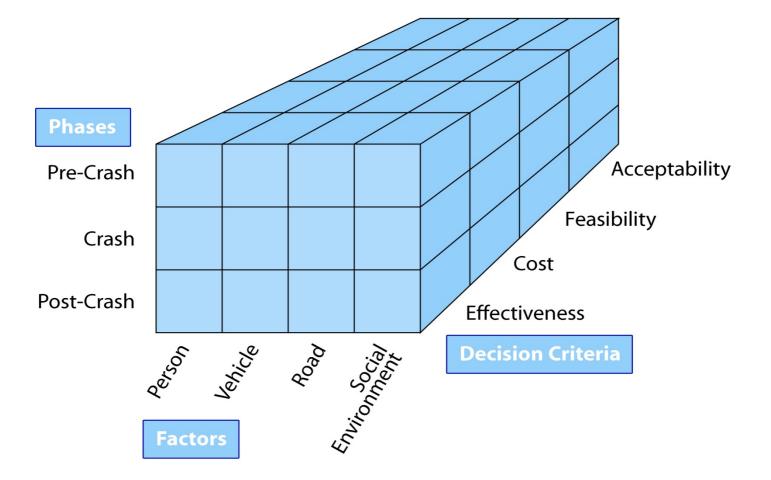
and use rating and assessment (eg: iRAP)

to monitor and improve the safety performance of the road network.



#### **Deciding RTI Priorities - Haddon's Matrix Updated**

Adapted from Runyan, CW. Injury Prevention 1998(4): 302-307



#### Progress toward 'Vision Zero' on the road...

must take account of 'Third Dimension' decision factors:

Effectiveness Cost Feasibility Acceptability



We must also recognise that there is a persistent lack of demand for Safety on the world's roads.

Road users tolerate sub-optimal levels of system safety because they are unaware of the risks or cost effective solutions.

We need to overcome this structural lack of demand through consumer awareness campaigns that promote road users rights and their reciprocal responsibilities to others.

# People are not Dummies...Beyond the Active/Passive Safety Paradigm

We know that reducing road user's 'active' response generally enhances safety whilst 'passive' safety engineering of vehicles and roads save lives.



But the 'passive bias' risks a remote and elitist 'top down' policy approach.

Consent and understanding of the need for safe systems design requires active participation and engagement with the public.

An integrated approach will use the traditional three E's of Engineering, Enforcement and Education to achieve a safe system that aims to promote Crash Avoidance, Protection and Response.

#### What Can de done to Make Roads Safe?... Act Global!

### The Growth of RTIs in Low & Middle Income Countries

| World Bank Region          | % Change<br>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%                     |

#### Global Road Safety & the Millennium Development Goals

Eradicate Extreme Poverty & Hunger Achieve Universal Primary Education Promote Gender Equality & Empower Women Reduce Child Mortality Improve Maternal Health Combat HIV/AIDS, Malaria and Diseases Ensure Environmental Sustainability Develop A Global Partnership for Development

The transport sector is a 'missing link' in achieving the MDGs.

And road safety is a 'cross cutting' issue that has been overlooked as an issue of sustainable development.



#### Twelve leading causes of mortality, 2002

| Rank<br>Deaths | Cause                                 | Proportion of total (%) |
|----------------|---------------------------------------|-------------------------|
| 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                     |

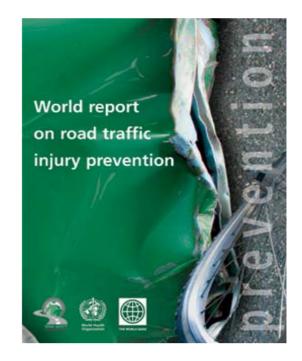
Eliminating TB and Malaria are recognised as key objectives of the Millennium Development Goals (MDGs) and receive \$billions in donor support. In contrast road safety does not feature in the MDGs and is not counted in measures of Official Development Assistance.

Landmark report on global road safety issued by the WHO & the World Bank in 2004.

First ever global assessment recognising that road traffic injuries (RTIs) are a growing but preventable public health crisis.

Identifies key injury risk factors:

non use of seat belts, helmets excessive speed, drink driving and poor road infrastructure;



Recommends national prevention strategies based on a 'lead agency' responsible for developing a multi-sectoral 'safe systems' approach.

#### **United Nations General Assembly**

Resolution 58/289 14<sup>th</sup> April 2004 Resolution 60/5 26<sup>th</sup> October 2005

Provide a strong mandate for action on global road safety;

Creates the UN Road Safety Collaboration;

Endorses the recommendations of the World Report on Road Traffic Injury Prevention;

Calls for more financial commitment to road safety action programmes;



Mandates first ever UN global road safety week (23-29 April 2007);

Will debate the issue again during the 62<sup>nd</sup> GA Session.

In November 2005 the World Bank announced the creation of the Global Road Safety Facility – the first ever worldwide funding mechanism for road traffic injury prevention;



The Facility aims to increase funding and technical assistance to enable low and middle income

countries to develop their own road safety action plans, and to implement the recommendations of the World Report;

The Global Facility received an initial donation of \$5 million from the World Bank, \$5 million from the FIA Foundation and €1 million from the Dutch Government. It has since received SEK20 million from the Swedish International Development Cooperation Agency (Sida) and Sida will be seconding a road safety specialist to the Facility.

The Facility has published its Strategic Plan (see: www.worldbank.org/grsf);

Over \$3.8 million in grants have been disbursed to global, regional and country partners;



An informal meeting of donors was held at the World Bank Transport Forum earlier this year to discuss the way ahead;

The Facility Executive Board has met twice and will be meeting again at the PIARC Conference in Paris later this month. The first Annual Facility Consultative Meeting will also be held at this conference to seek input and advice from road authorities from around the world.

#### **About the Commission**



 An independent High Level Commission under the Chairmanship of the former NATO Secretary General Lord Robertson with a member from each of the G8 countries and all major world regions;



- Supported by an expert advisory group including representatives from the WHO, World Bank, OECD, UNECE and NGOs;
- Funded by the FIA Foundation a UK registered charity established to promote road safety, the environment and sustainable mobility

#### Make Roads Safe



### **Key Recommendations:**

1. A \$300 million, 10 year Action Plan to promote multi-sector national



road safety capacity building in low and middle income countries should be funded by donor governments and private sources, and implemented by the World Bank Global Road Safety Facility;

- 2. At a minimum 10% of all road infrastructure projects should be committed to road safety;
- 3. A Ministerial Conference on Global Road Safety should be held in 2009 under auspices of UN;

### **Global Road Safety Action Plan**



#### **Key Objectives**

 To encourage countries to implement the recommendations of the World Report on Road Traffic injury Prevention;



- To demonstrate measurable success in reversing RTIs at a country level;
- To increase local technical capacity in low and middle income countries;
- To ensure that road safety management becomes self-sustaining over the long term;

#### **Global Road Safety Action Plan**



#### **Illustrative Share of G7 donors**



|         | % share of Total ODA (2004) | Amount per year over 10<br>years (US\$) |
|---------|-----------------------------|---|
| Canada  | 3.27                        | 654,000                                 |
| France  | 10.66                       | 2,132,000                               |
| Germany | 9.48                        | 1,896,000                               |
| Italy   | 3.10                        | 620,000                                 |
| Japan   | 11.20                       | 2,240,000                               |
| UK      | 9.91                        | 1,982,000                               |
| USA     | 24.78                       | 4,956,000                               |

### **Pro-Poor Growth, and Achieving the MDGs**



#### The Role of Investment in Road Infrastructure

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 access to an all weather road should be just two kilometres.

But new road investment will also increase exposure to the risk of road traffic deaths and injuries unless a coherent action plan for road safety and improved road design is also put in place.

### **Boosting Investment in Safer Roads**



The 10% road safety funding rule...

The Make Road Safe Report's 10% recommendation is based on World Bank



internal guidelines (from 1979) suggesting that traffic safety funding should constitute 10 per cent of total road project costs, not to exceed US\$ 10-12 million per project.

Today the World Bank and the Regional Development Banks invest over \$4 billion per annum in road projects. At least \$400 m of this should be dedicated to road safety. Country and regional capacity to implement these funds would be built and sustained by initiatives promoted and supported by the World Bank Global Road Safety Facility.

A target for the road safety input of infrastructure projects must also be supported by more systematic appraisal and assessment of the safety performance of the road network.

#### Africa – Road Infrastructure Safety and the MDGs

Africa has the world's most dangerous road network With a fatality rate is 28 deaths per 100 000 population. Road traffic crashes are the second leading cause of death for the 5 to 44 age group with economic costs of US\$10 bn or 2 percent of GNP.

In 2005 African Transport Ministers adopted MDG related goals to:

- Halve the proportion of rural population living beyond 2 kilometres of an all season road by 2015.
- Reduce the rate of accident fatalities from road and other transport means by half by 2015.

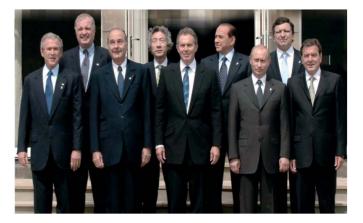
The New Partnership for Africa's Development (NEPAD) has proposed a road investment programme of US\$ 1.2 b with a road safety component of just US\$ 20 m. Applying the 10% rule this should be \$120 m.

# Africa – Road Infrastructure Safety and the MDGsAid for Africa's Infrastructure

The Gleneagles G8 Summit agreed to double aid to the region by \$25 billion a year by 2010.

The G8 also launched the 'Infrastructure Consortium for Africa' which will support investment in roads.

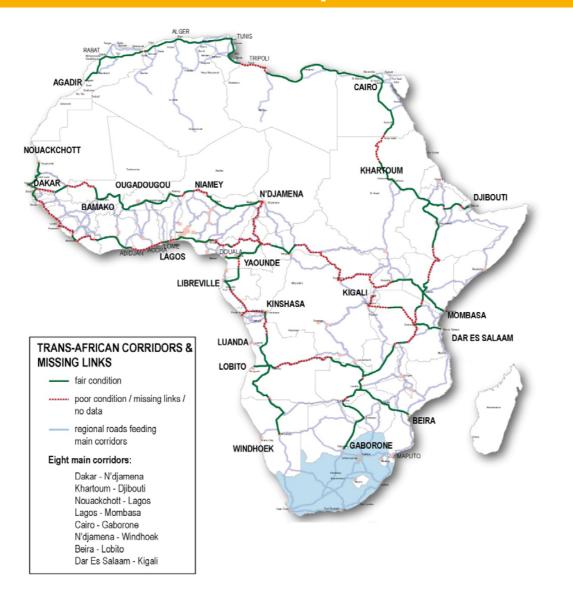
The ICA will meet in Tunis on 3rd and 4th December to discuss transport Infrastructure.





The European Union has also launched the EU Africa Infrastructure Partnership and the World Bank also supports the Sub Saharan African Transport Programme. None of these initiatives feature road safety to any significant extent.

#### **Trans-African Road Transport Corridors**



#### 4<sup>th</sup> African Road Safety Congress

United Nations Economic Commission for Africa

Held in Ghana in February and adopts 'Accra Declaration' endorsed by Ministers of Transport and Health;



Confirms goal proposed by Transport Ministers to halve the region's toad traffic fatalities by 2015;

Endorses the key recommendations of the Make Roads Safe report and calls on the G8 to ensure that road safety is integrated into new road and road rehabilitation projects;

Calls on the Infrastructure Consortium for Africa and the World Bank Sub Saharan African Transport Programme to include road safety in their work on Africa's road network.

In 2005 number of fatalities was 440,000 and injuries estimated at between 20-30 million.

Only 1 in 5 of the world's motorised vehicles are in the region and yet more than half of the world's traffic crashes happen here.



Deaths forecast to rise to 660,000 by 2020 (two thirds of world total).

Region with the world's fastest growing motor vehicle fleet.

Japan will host the G8 in 2008.

#### **UNESCAP** Ministerial Conference on Transport 2006





MCT 2006 Emblem

Held last November in Busan, South Korea and adopted a Ministerial Declaration on Improving Road Safety in Asia and the Pacific;

Endorses the concept of 'forgiving roads' and sets goal to reduce fatalities by 600,000 between 2007 and 2015;

Recognises that road safety must be included in the development of the Asia Highway (2005 Intergovernmental Agreement) agreed by 32 countries covering more than 141,000 kilometres.

### Map of Asian Highway



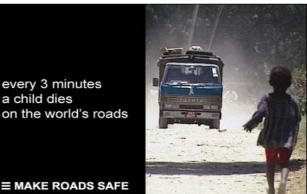


### A global campaign for safer roads

## $\equiv$ MAKE ROADS SAFE

 Supports the key recommendations of the Commission for Global Road Safety

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Global petition to UN Secretary General Ban Ki-moon – with a target of 1.2 million signatures in time for the UN General Assembly debate in March 2008.

Road deaths are a hidden global epidemic. Someone is killed in a road crash every 30 MAKE ROADS SAFE seconds. Support our campaign and send a ABOUT. TAKE ACTION ISSUES FILMS NEWS message to UN Secretary General Ban Ki-moon calling on the UN to support the following actions TAKE ACTION Take Action Navie at its next General Assembly in October: Take Action Home > Road deaths are a hidden global epidemic. Email Hilary Benn MR 3 Someone is killed in a road crash every 30 W Your Support > · Safer roads: spend at least 10% of overseas aid money earmarked seconds. Support our campaign and send a for roads on road safety: message to UN Secretary General Ban Ki-moon Global Action: support a ten year global action plan for road safety in calling on the UN to support the following actions at its next General Assembly in October: A Child Dies Every 3 Mi developing countries; · UN summit: hold a ministerial-level UN summit on road safety in 2008. spend at least 10% of overseas aid money earmarked road safety) is support a ten year global action plan for road safety i and why you should get involved. 3---ninisterial-level UN summit on road safety i Firstname Lastname Email Email -- Please Select a Country --~ Disasa Salart a Co Country: lick this box to Tick this box to receive campaign updates and information on forthcoming events and e-petitions: **Privacy Policy** Submit

To sign on line go to: www.makeroadsafe.org

## $\equiv$ MAKE ROADS SAFE

Support for the campaign is growing.

It has been welcomed by former UK Prime Minister Tony Blair, and Japanese Prime Minister Shinzo Abe.

The global petition was launched by Michael Schumacher during the UN Global Road Safety

Week in London and also supported by Nobel prize winner Archbishop Desmond Tutu.



The rising toll of global road death and injury is predictable and preventable

# $\equiv$ MAKE ROADS SAFE

Today we have:

A mandate from the United Nations Recommendations from the World Report A funding facility from the World Bank A Global Road Safety Action Plan

Now we need political and funding commitment by the G8 and others to Make Roads Safe.

Thank You.





#### **FIA Foundation**



Registered as a charity in the UK and established in 2001 by the Federation International de l'Automobile (FIA), the world federation of motoring clubs and the governing body of motor sport, with the aim to promote:

> Road safety Sustainable mobility

Environmental protection Safety in motor sport



For more information visit: www.fiafoundation.com