A Road Safety Decade - The Case for Action

Presentation by Dmitry Sambuk

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- Warns that 1.2 million deaths and 50 million injuries occur annually on the road, mainly affecting vulnerable road users, and will more than double by 2030.

- Shows that low and middle income countries account for 90% of global deaths from road traffic crashes.

- Identifies key injury risk factors (non use of seat belts, helmets, excessive speed, drink driving, and poor road infrastructure);

- Calls for greater international effort to reverse trend of rising RTIs;

- Recommends national prevention strategies based on a ‘lead agency’ responsible for developing a multi-sectoral ‘safe systems’ approach.
The ‘Safety Systems’ Approach

Effective road injury prevention requires action across three areas that make up a dynamic system:

• The road user
• The motor vehicle
• The road infrastructure

Rather than ‘blaming the victim’ for causing crashes, the risk of human error should be 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.
E=\frac{1}{2}mv^2 - What is Kinetic Energy?

A moving object has kinetic energy and the faster it goes the more kinetic energy it has.

In a road crash kinetic energy is converted into sound, heat and deformation of other objects including car occupants or pedestrians. Kinetic energy increases, not linearly, but exponentially as the square of the speed. So if you travel twice as fast you will have four times as much kinetic energy. A car travelling twice as fast therefore requires four times the distance to stop. For a pedestrian hit by a motor vehicle the chances of survival depend on the speed at the point of impact...

20 mph: 2 out of 10 will be killed
35 mph: 5 out of 10 will be killed
40 mph: 9 out of 10 will be killed.
What Happens in a Car Crash?

How many impacts are there in a car crash?

1) The car collides with a road-side object, such as a tree, wall or car.

2) The car occupant collides with the interior of the vehicle.

3) The internal organs of the occupant collide with other organs and the skeleton.
OECD – International Transport Forum

‘Towards Zero – Ambitious Road Safety Targets & the Safe System Approach

Key Recommendations:

• Adopt a highly ambitious vision for road safety
• Set interim targets to move systematically towards the vision
• Develop a safe system approach
• Exploit proven interventions for early gains
• Conduct data collection and analysis
• Strengthen the road safety management system
• Accelerate knowledge transfer
• Invest in road safety
• Foster commitment at highest levels of government
CHANGE IN THE ANNUAL NUMBER OF FATALITIES
# Regional Forecast for Growth in Road Traffic Fatalities

<table>
<thead>
<tr>
<th>World Bank Region</th>
<th>% Change 2000 - 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Asia</td>
<td>144%</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>80%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>80%</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>68%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>48%</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>18%</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>83%</strong></td>
</tr>
<tr>
<td>High-income countries</td>
<td>-28%</td>
</tr>
<tr>
<td><strong>Global total</strong></td>
<td><strong>66%</strong></td>
</tr>
</tbody>
</table>
The United Nations and Road Safety

Resolution 58/289 14th April 2004
Resolution 60/5 26th October 2005
Resolution 62/244 31st March 2008

The UN General Assembly has adopted a series of resolutions that mandate action on global road safety by:

• Supporting the recommendations of the World Report on Road Traffic Injury Prevention;

• Creating the UN Road Safety Collaboration – coordinated by the WHO;

• Approving the first ever global Ministerial Conference on road safety to be held in Moscow November 2009.

The General Assembly will debate road safety again during its 64th Session in early 2010.
UN Good Practice Manuals

The UN Road Safety Collaboration has produced good practice manuals for the key risk factors of:

- Non use of helmets
- Non use of seat belts
- Drink and Driving
- Excessive and inappropriate speed

Police enforcement of relevant legislative standards combined with public awareness campaigns have proved effective in reducing road fatalities and injuries in low and middle income countries. Successful examples include helmet wearing in Vietnam and seat belt use in Costa Rica.
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 receives an initial donation of $5 million from the World Bank, $5 million from the FIA Foundation and further support from the Australian, Dutch and Swedish Governments.
The Commission for Global Road Safety

In 2006 the Commission for Global Road Safety chaired by Lord Robertson, (former NATO Secretary General) published the Make Roads Safe report with three major proposals:

- A $300 million, 10 year Action Plan should be launched to promote national road safety capacity building in low and middle income countries;
- A minimum 10% of road infrastructure project Costs should be committed to road safety;
- A Ministerial Conference on global road safety should be held in 2009.
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.
International Road Assessment Programme (iRAP) - Creating Vaccines for Roads

Building on successful programmes in the EU, USA, and Australia, iRAP is an innovative system of road inspection to encourage governments to apply safer road design countermeasures that promote forgiving and self-explaining roads using a toolkit that includes:

• Risk Mapping – to determine current outcomes
• Star Rating – maps which present safety scores
• Performance Tracking – to measure progress

It has run pilot projects in Chile, Costa Rica, Malaysia & South Africa showing positive cost benefit ratios. A new phase of pilots is now underway in Africa, Latin America & Asia but demand exceeds current capacity. iRAP is funded by the FIA Foundation and the World Bank Global Road Safety Facility. For more details visit: http://www.irap.net/
Building Safer Roads is Cost Effective – Results of the iRAP pilots

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated cost to build and maintain (20 years)/ US$</th>
<th>KSIs saved (20 years)</th>
<th>Value of safety benefit (20 years)/ US$</th>
<th>Cost per KSI saved/ US$</th>
<th>Average programme Benefit-Cost Ratio</th>
<th>Casualty reduction on the roads inspected</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>52 m</td>
<td>6,900</td>
<td>0.6 bn</td>
<td>7,600</td>
<td>12</td>
<td>12 %</td>
</tr>
<tr>
<td>Malaysia</td>
<td>181 m</td>
<td>31,800</td>
<td>2.9 bn</td>
<td>5,700</td>
<td>16</td>
<td>32 %</td>
</tr>
<tr>
<td>Chile</td>
<td>74 m</td>
<td>19,400</td>
<td>2.3 bn</td>
<td>3,800</td>
<td>32</td>
<td>44 %</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>53 m</td>
<td>14,700</td>
<td>1.2 bn</td>
<td>3,600</td>
<td>22</td>
<td>17 %</td>
</tr>
</tbody>
</table>

Comparing Risk of Road Infrastructure – Relative fatality risk/km/year

![Comparing Risk of Road Infrastructure – Relative fatality risk/km/year](image)
Launch of Make Road Safe campaign

The Make Roads Safe campaign was launched in 2007 to obtain over 1 million signatures to be presented to the UN Secretary General in 2008. The petition was launched by Michael Schumacher during the first UN Global Road Safety Week in April 2007.

Campaign events are held in London, Geneva, Berlin, Cape Town, Paris, St Petersburg, Kampala, and New York.

Archbishop Desmond Tutu is joined by President Oscar Arias, and former President Jimmy Carter as three Nobel prize winners backing the campaign. Other supporters include the former Irish President Mary Robinson, Tony Blair, musicians.

Visit:  www.makeroadssafe.org
Russian Federation Offers to Host UN Ministerial

- 62-th Session  - Resolution #62/244
- November 19 – 20, 2009
- 1000- 1200 participants
- Visit: [www.1300000.net](http://www.1300000.net)
# Leading Causes of Mortality, 2004

<table>
<thead>
<tr>
<th>DISEASE OR INJURY</th>
<th>DEATHS (MILLIONS)</th>
<th>PER CENT OF TOTAL DEATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ischaemic heart disease</td>
<td>7.2</td>
<td>12.2</td>
</tr>
<tr>
<td>2 Cerebrovascular disease</td>
<td>5.7</td>
<td>9.7</td>
</tr>
<tr>
<td>3 Lower respiratory infections</td>
<td>4.2</td>
<td>7.1</td>
</tr>
<tr>
<td>4 Chronic obstructive pulmonary disease</td>
<td>3.0</td>
<td>5.1</td>
</tr>
<tr>
<td>5 Diarrhoeal diseases</td>
<td>2.2</td>
<td>3.7</td>
</tr>
<tr>
<td>6 HIV/AIDS</td>
<td>2.0</td>
<td>3.5</td>
</tr>
<tr>
<td>7 Tuberculosis</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>8 Trachea, bronchus, lung cancers</td>
<td>1.3</td>
<td>2.3</td>
</tr>
<tr>
<td>9 Road traffic accidents</td>
<td>1.3</td>
<td>2.2</td>
</tr>
<tr>
<td>10 Prematurity and low birth weight</td>
<td>1.2</td>
<td>2.0</td>
</tr>
<tr>
<td>11 Neonatal infections</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>12 Diabetes Mellitus</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>13 Hypertensive heart disease</td>
<td>1.0</td>
<td>1.7</td>
</tr>
<tr>
<td>14 Malaria</td>
<td>0.9</td>
<td>1.5</td>
</tr>
<tr>
<td>15 Birth asphyxia and birth trauma</td>
<td>0.9</td>
<td>1.5</td>
</tr>
</tbody>
</table>
DALYS in Developing Countries (Children Age 5-14)

(DALYS = Disability Adjusted Life Years)
The new report contrasts the commitment’s already made by the international community to the eradication of malaria. These include:

- The UN Decade to Roll Back Malaria 2001-2010
- A Global Fund launched by G8 with US $2.8 billion funding approved to date.
- Appointment of a UN Special Envoy for Malaria

And yet today road traffic fatalities kill and injure on a greater scale than malaria…and is forecast to be come the world’s leading cause of death and disability for children above the age of five by 2015.
So why not a Decade of Action for Road Safety?

Recommendations for the Moscow Ministerial Conference:

• Support an action plan of $300 million to invest in capacity building in road injury prevention and implement recommendations of the World Report on Road Traffic Injury Prevention.

• Invest in safer roads by committing at least 10% of project finance to safe road assessment and design.

• Support a Decade of Action for road safety with a global target to reduce road fatalities by 50% from their forecast level for 2020...which would save five million lives and avoid 50 million injuries.
The Goal for a Decade of Action...Saving 5 Million Lives
Join Us...in calling for a Decade of Action

Thank You!

MAKE ROADS SAFE