

**ADB Transport Forum
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Improving Road Safety in Asia

**R. Alexander Roehrl
United Nations Economic and
Social Commission for Asia and
the Pacific (ESCAP)**



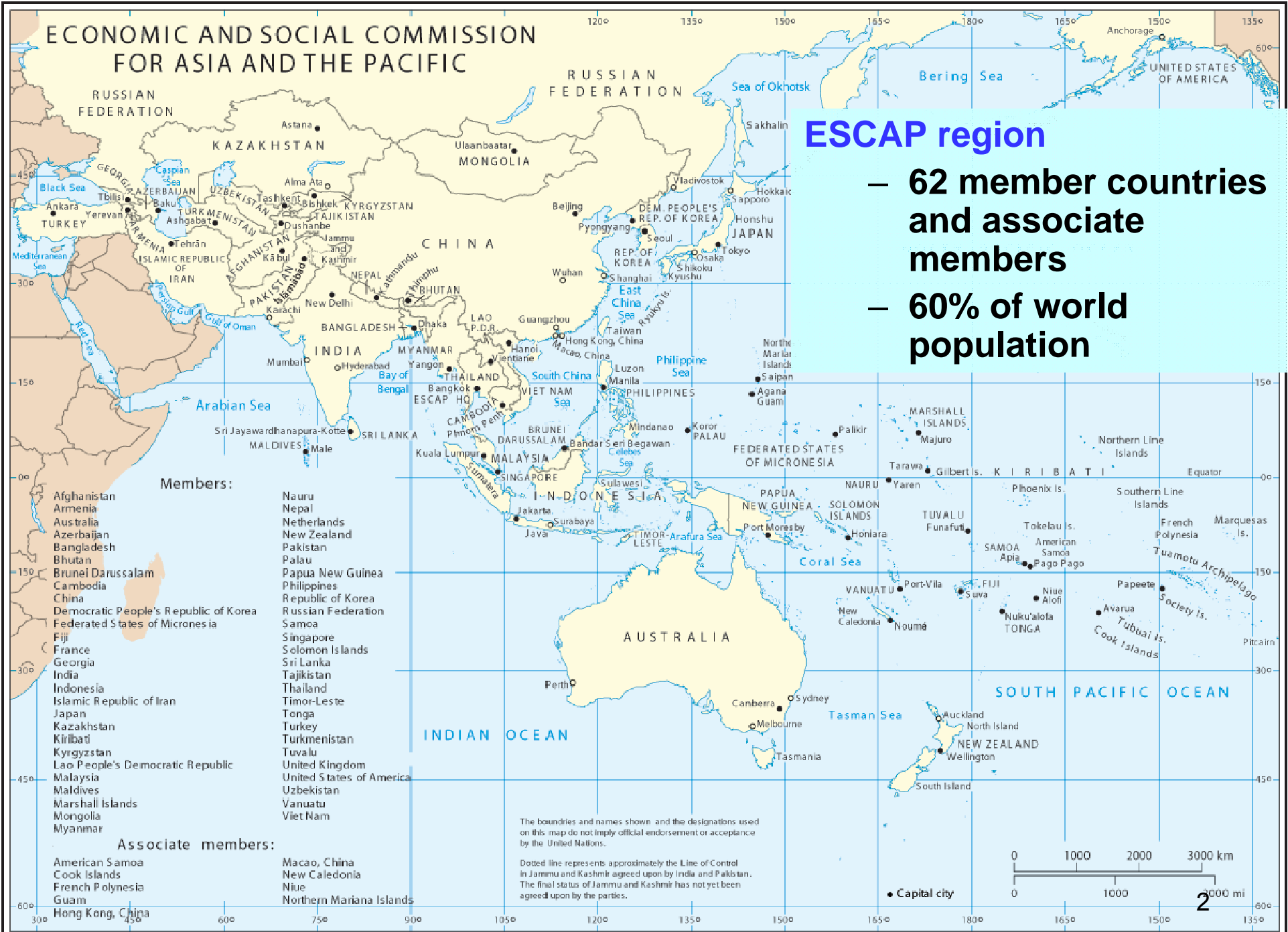
**UNITED NATIONS
ESCAP**

Economic and Social Commission for Asia and the Pacific

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

ESCAP region

- 62 member countries and associate members
- 60% of world population



Members:

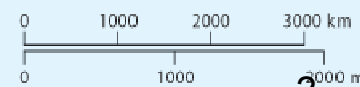
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|---------------------------------------|--------------------------|
| Afghanistan | Nauru |
| Armenia | Nepal |
| Australia | Netherlands |
| Azerbaijan | New Zealand |
| Bangladesh | Pakistan |
| Bhutan | Palau |
| Brunei Darussalam | Papua New Guinea |
| Cambodia | Philippines |
| China | Republic of Korea |
| Democratic People's Republic of Korea | Russian Federation |
| Federated States of Micronesia | Samoa |
| Fiji | Singapore |
| France | Solomon Islands |
| Georgia | Sri Lanka |
| India | Tajikistan |
| Indonesia | Thailand |
| Islamic Republic of Iran | Timor-Leste |
| Japan | Tonga |
| Kazakhstan | Turkey |
| Kiribati | Turkmenistan |
| Kyrgyzstan | Tuvalu |
| Lao People's Democratic Republic | United Kingdom |
| Malaysia | United States of America |
| Maldives | Uzbekistan |
| Marshall Islands | Vanuatu |
| Mongolia | Viet Nam |
| Myanmar | |

Associate members:

- | | |
|------------------|--------------------------|
| American Samoa | Macao, China |
| Cook Islands | New Caledonia |
| French Polynesia | Niue |
| Guam | Northern Mariana Islands |
| Hong Kong, China | |

The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.



• Capital city

Paris-Madrid Race in 1903

“The Race to Death”



France/UK 1903



Then and now

- “Battle” for road space
- Roads, Vehicles and Knowledge
- Speed of change: ~10 times
- Scale: ~10-100 times



India 2007

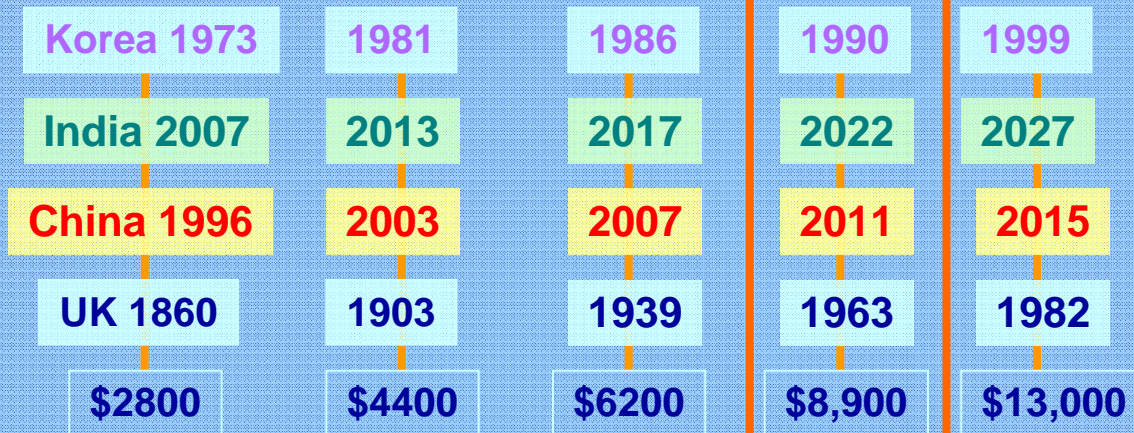


China 2003

Fatalities Peak if well managed!

What would we do differently, if we had a second chance?

GDP per capita (1990 GK\$)



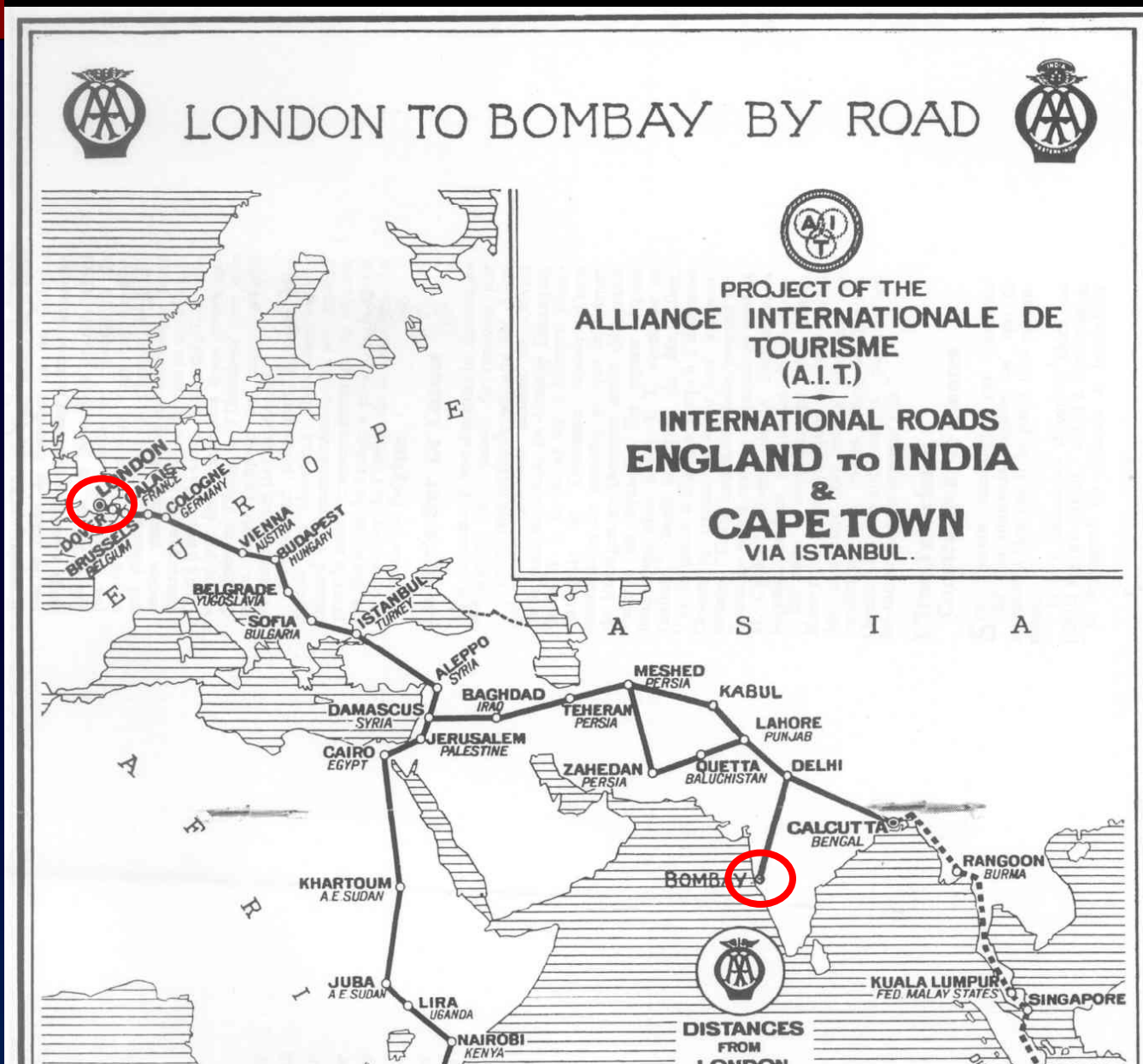
France 1903

Source: Maddison (2004)

Road safety in Asia and the Pacific: a development issue

- 440,000 persons killed
- 20-30 million injured
- Annual cost of US\$ 100 billion
- US\$ 170 billion spent for Asian roads per year

Dream of personal mobility



Source: Western India Automobile Association brochure, Bombay (1938). From London to India – By Road!

ESCAP regional cooperation for road safety

- **Intergovernmental Agreement on the Asian Highway Network (since 2005)**
 - 140,000 km of trunk roads through 32 countries
 - Road safety commitment
 - Working Group, GIS Database
- **Ministerial Declaration on Improving Road Safety in Asia and the Pacific (Busan, 11 Nov. 2006)**
 - 62 UNESCAP member countries and associate members
 - Builds on Asian Highway Agreement and ASEAN road safety framework
 - Endorsed by ESCAP resolution 63/9 (May 2007)
 - Overall goal: *“Save 600,000 lives and prevent a commensurate number of serious injuries on the roads of Asia and the Pacific over the period 2007 to 2015”*
 - Achieving this would save US\$15 billion per year! (compare: “10% Asian road investment” ~ US\$ 10 billion)

Ministerial Declaration on Improving Road Safety in Asia and the Pacific

<p>b) Reduce the rates of serious road injuries by twenty percent from 2007 to 2015.</p>	<p>5) Number of anticipated serious injuries on roads (baseline) 6) Number of serious road injuries (and injury rate per 10,000 motor vehicles, and per motor vehicle-km)</p>
<p>Goal 1: Make road safety a policy priority</p> <p>a) Create a road safety policy/strategy, designate a lead agency and implement it</p> <p>b) Allocate sufficient financial and human resources to improving road safety</p>	<p>7) Documents of road safety policy, strategy, and plan of action etc. Information on their actual implementation. 8) Name of designated lead agency. Description of responsibilities of local, regional and national government organizations. 9) National road safety reports or impact evaluation reports of government programmes 10) Amount of public financial and human resources allocated to road safety 11) Amount of private sector contributions, as well as special funds, from donors, or relevant financial institutions. 12) Road safety programs and activities conducted. At least one major national road safety campaign</p>
<p>Goal 2: Make roads safer for vulnerable road users: children, pedestrians and motorcyclists</p> <p>a) Reduce by one third the pedestrian death rate in road accidents (or reduce it to less than 1 per 10,000 motor vehicles).</p> <p>b) Increase the number of safe crossings for pedestrians (e.g., with subway, overhead crossings or traffic signals).</p> <p>c) Make the wearing of helmets the norm and reduce the number of deaths by one third (or reduce it to below the average rate)</p> <p>d) Ensure minimum child safety measures, in order to reduce the number of deaths by 10,000 motor vehicles).</p> <p>e) Equip all school children with basic road safety knowledge</p>	<p>13) Pedestrian deaths per head of population and per 10,000 motor vehicles 14) Number of safe crossings, or information on programmes for constructing or improving crossings. 15) Motorcyclist deaths 16) Law or administrative measures to reduce the number of deaths 17) Death rate of children and motorcyclists 18) (Survey) information on road safety education 19) Existing measures for road safety education 20) Road safety education part of the school curriculum (Yes/No) 21) Existing education programs on road safety (qualitative indicator)</p>
<p>Goal 3: Make roads safer and reduce the severity of accidents ("forgiving roads")</p> <p>a) Integrate road safety audit in all stages of road development, carry out necessary improvement works and improve hazardous locations.</p> <p>b) Increase separate/secure road space for pedestrians and cyclists</p>	<p>22) Number of road safety audits (or kilometres audited), and number of blackspots where measures already taken. 23) Road Safety Audit is mandatory for new road construction and major improvements (Yes/No). 24) Programmes to make roads "forgiving" by removing or cushioning roadside obstacles 25) National or local programmes. Existing length of pedestrian and bicycle tracks in kilometres (along highways and city roads).</p>
<p>Goal 4: Make road vehicles safer</p> <p>a) ...</p> <p>b) ...</p> <p>Goal 5: Develop the Asian Highway as a model of road safety</p> <p>a) Reduce the number of fatalities on the Asian Highway per number of accidents.</p> <p>b) Reduce the fatal collision rate on all Asian Highway segments to below 100 per billion vehicle-km (EuroRAP "medium")</p> <p>c) Increase resource allocation for road safety-related measures along the Asian Highway.</p> <p>d) Improve Asian Highway road segment to be forgiving to road users if a crash occurs. Demonstrate best practise.</p>	<p>26) ...</p> <p>27) ...</p> <p>28) ...</p> <p>29) ...</p> <p>30) ...</p> <p>31) ...</p> <p>32) ...</p> <p>33) ...</p> <p>34) ...</p> <p>35) ...</p> <p>36) ...</p> <p>37) ...</p> <p>38) ...</p> <p>39) ...</p> <p>40) ...</p> <p>41) Total number road fatalities and accidents on the Asian Highway in each country in each year. 42) Fatal collision rate per billion vehicle-kilometres on the Asian Highway each year. 43) ... 44) Amount of safety-related grants for Asian Highway segments from international sources. 45) Develop a road safety rating program based on onsite road inspection (EuroRAP star rating)</p>
<p>8 Goals</p> <p>24 Targets</p> <p>45 Indicators</p> <p>Road goals:</p> <ul style="list-style-type: none"> Making roads safer for vulnerable road users... Making roads safer and reducing the severity of accidents; Developing the Asian Highway as a model of road safety; <p>Goals on policy, vehicles, systems, cooperation, and education, etc.</p> <p>http://www.unescap.org/ttdw/roadsafety/countrydata.html</p>	

Asian Highway follow-up to the Ministerial Declaration

• Investment needs and priorities

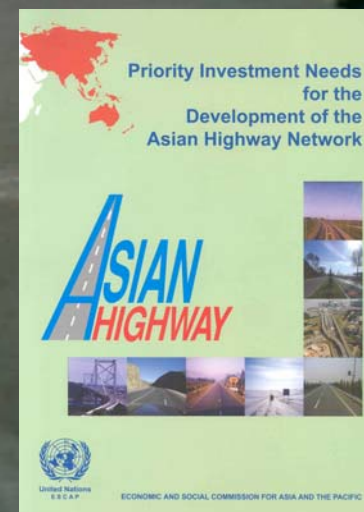
- Gov's identified 121 priority road projects in 25 countries with a financing shortfall of US\$ 18 billion
- Promote road safety components/projects, through joint missions with interested donors
 - Armenia, Bangladesh, Uzbekistan, Mongolia, Myanmar, Nepal, Pakistan,...
- Social returns: ~100 to 1000% for improved crossings in South Asia

• AH road safety meetings

- Working Group, Investment Forum, EGM (next: 27-28 Oct. 2008)

• UNDA project of the UN regional commissions, 2008-2010

<http://www.unescap.org/ttdw/PubsDetail.asp?IDNO=187>

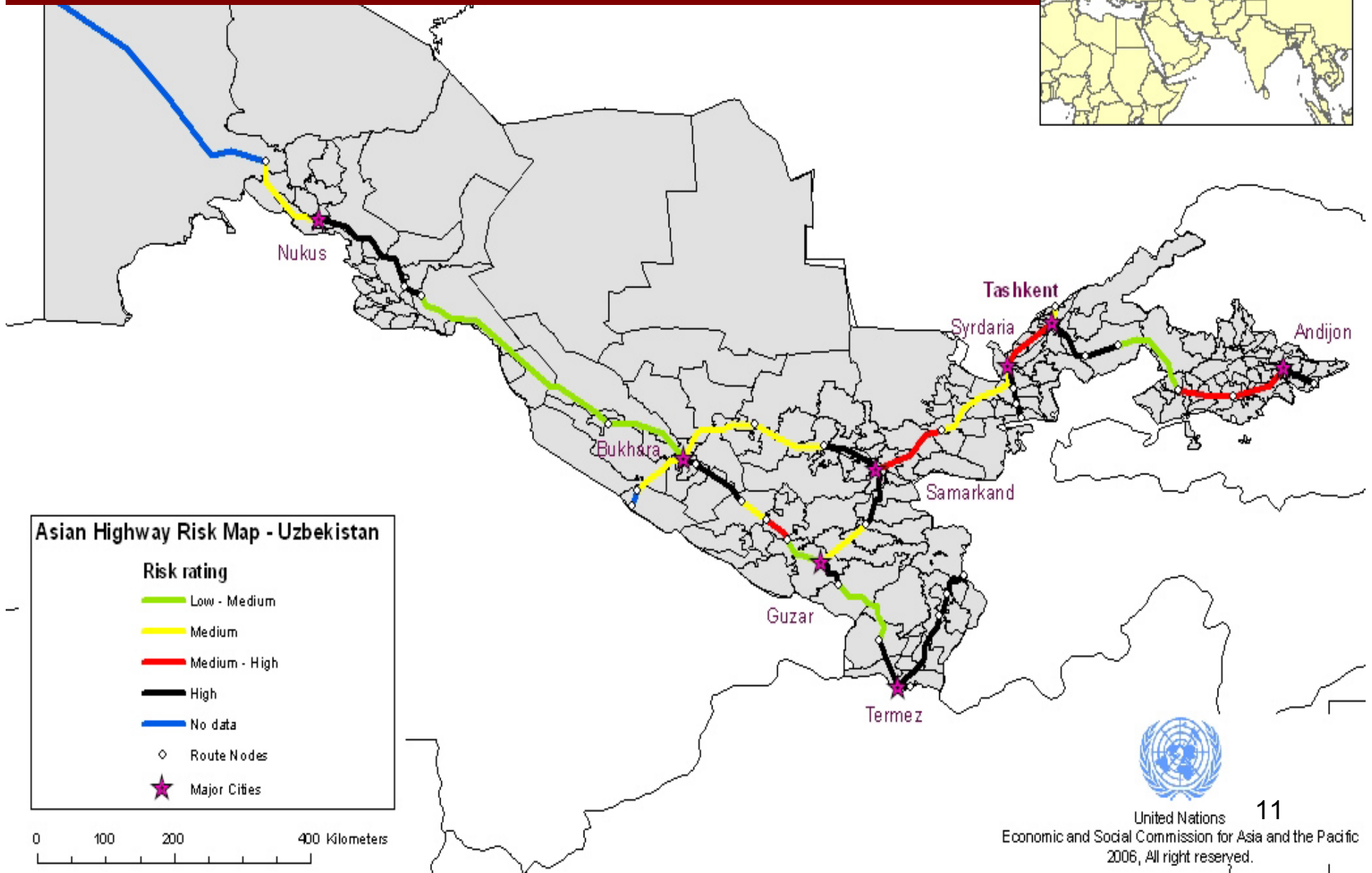


Upgrading of the Asian Highway and road safety

- Asian Highway is safer than other Asian roads
 - 19,000 fatalities and 125,000 crashes in 2006
 - 10% of segments: above Busan target of 100 fatalities/bln.vehicle-km
 - Worst: two-lane roads with mixed traffic and many motorcycles
- Upgrading 2004-2006 → improved safety
 - 9,700 km upgraded to minimum AH standard → on average doubled fatality rate. Safety measures needed!
 - 8,400 km upgraded to “primary class” (access-controlled, 4+ lanes) → on average decreased fatality rate by 80%
- IRAP assessments of the Asian Highway → prioritization
- Public-private partnerships for safe road design



Example: Fatality rates on the Asian Highway in Uzbekistan



Priority investments and potential sources of funds

<i>Unit: billion US\$</i>	All Asian roads (10 million km, annual numbers)	Asian Highway Network (140,000 km)
Current investment	103 plus maintenance needs: 67	25 (committed or ongoing, 28% loans from donors) 18 (investment shortfall)
Road safety needs (10%)	10	2.5
Global Road Safety Facility and donors	< 0.3 worldwide	0.7 would be needed for AH donor projects (10% criteria)
Road safety cent (US\$0.01 fuel surcharge)	4.5	?
Asian SPV (10% of excess foreign exchange reserves committed, private company owned by Asian governments, RIS/ESCAP suggestion, similar set-up to IIFC in India)	15 (expected profits)	?

3 9 2006

Asian Ministers have made a commitment to save 600,000 lives in Asia and the Pacific by 2015

- **Political commitment, but need for support!**
- **Needs**
 - High-level commitment (global conference, Lord Robertson's 10%)
 - Financing (SPV, GRSF, Road Safety Cent)
 - Public-private partnerships for road safety
 - We do have a “second chance” in Asia, but time is running out! Rights-based approach?
- **Most road fatalities will be in Asia!**
- **Let's work together to save 600,000 lives!**

Thank you.

R. Alexander Roehrl
roehrl.unescap@un.org

Tel: 66-2-288 1402

Fax: 66-2-280-6042

www.unescap.org/ttdw/roadsafety/