A wide-angle photograph of the Angkor Wat temple complex in Cambodia. The temple's five main towers are visible against a blue sky with scattered white clouds. The foreground is a body of water reflecting the temple and sky, with some green vegetation and palm trees on the sides.

***Second Regional EST Forum,
11-12 December 2006 , Yogyakarta, Indonesia***

***Environmental Sustainable Transport
in Cambodia***

By Cambodian Delegates

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1. Introduction
 2. Negative Impacts caused by Transport Sector
 3. Existing Legislations
 4. Transport Development Policy and Action Plan
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-

1.0 Introduction

- Transportation is one of the major sectors to contribute the socio-economic development.
 - It is recognized to be inadequate support comparing to the current high demands reflecting to prioritized sectoral development of Cambodia.
 - Emerging issues like air pollution, traffic congestion, etc. caused by sectoral development are threatening the economy itself.
-

1.0 Introduction (cont.)

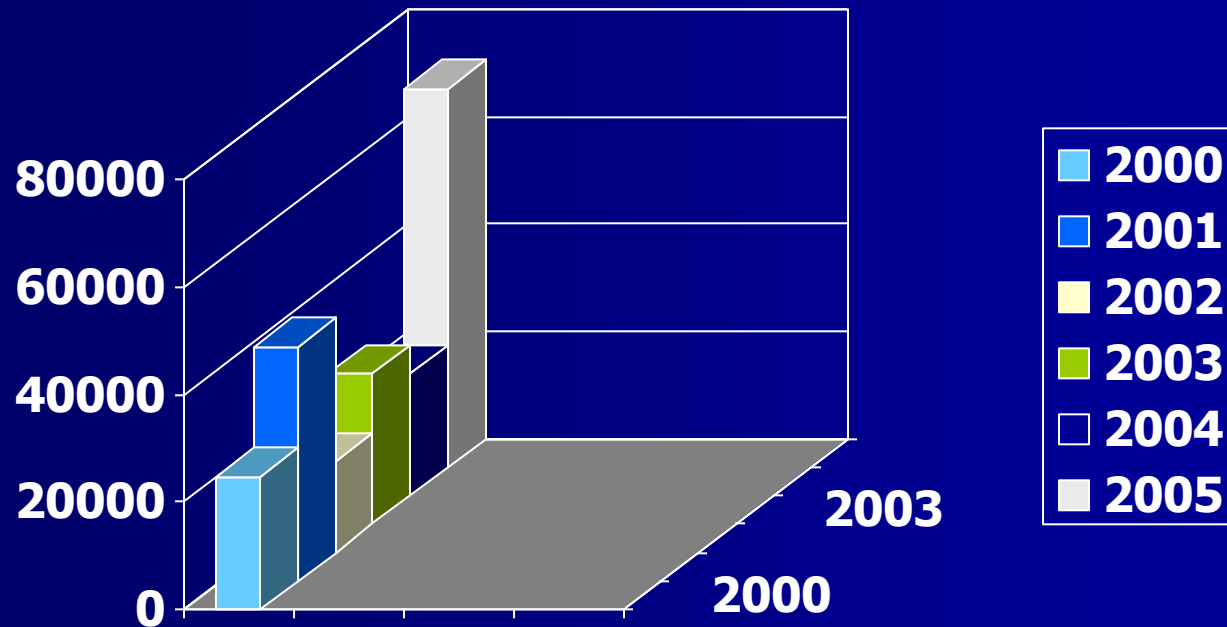
- ➡ High traffic accident is another major concern, and being taken in action by the Royal Government of Cambodia in consistent with public awareness (e.g. driving, traffic legislation) and their participation seem to be limited.
 - ➡ Therefore, EST Policy should be transparently set up and broadly disseminated by other enable means throughout the country.
-

2. Negative Impacts caused by Transport Sector

a) *Atmospheric Pollution*

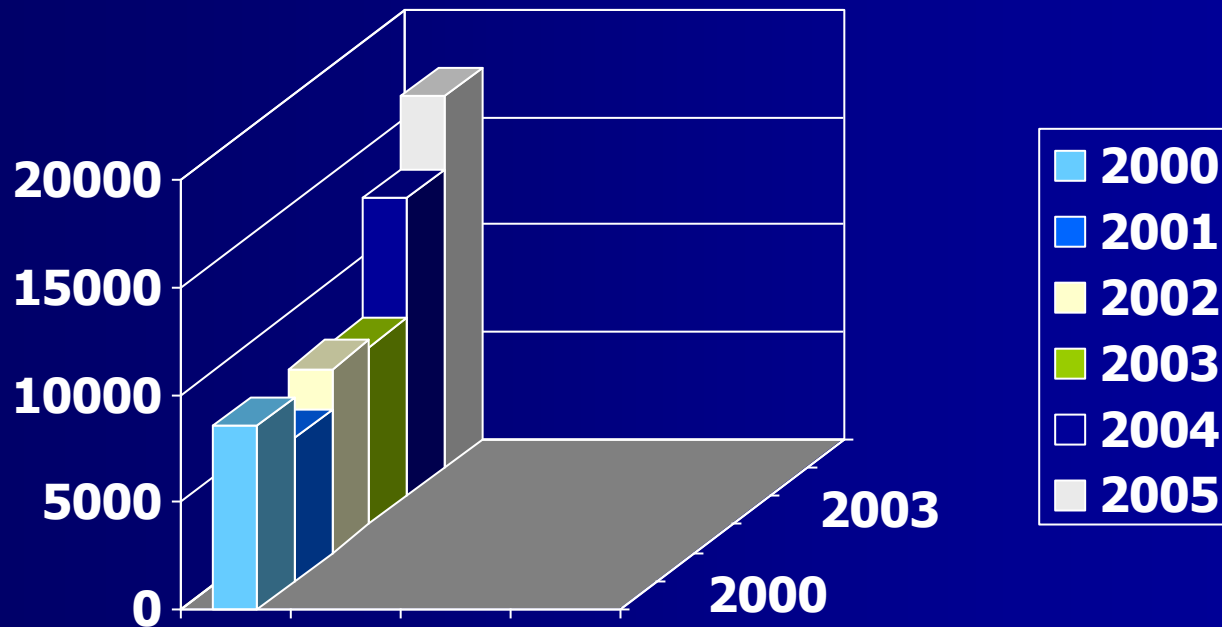
- ➡ Transport sector is identified a major source of atmospheric pollution, including ambient air pollution like industrial sector.
 - ➡ The trend of imported vehicles (mostly second hand) and using is increased from year after year, including the consumption of some uncontrolled fuel oils.
-

2. Negative Impacts caused by Transport Sector (cont.)



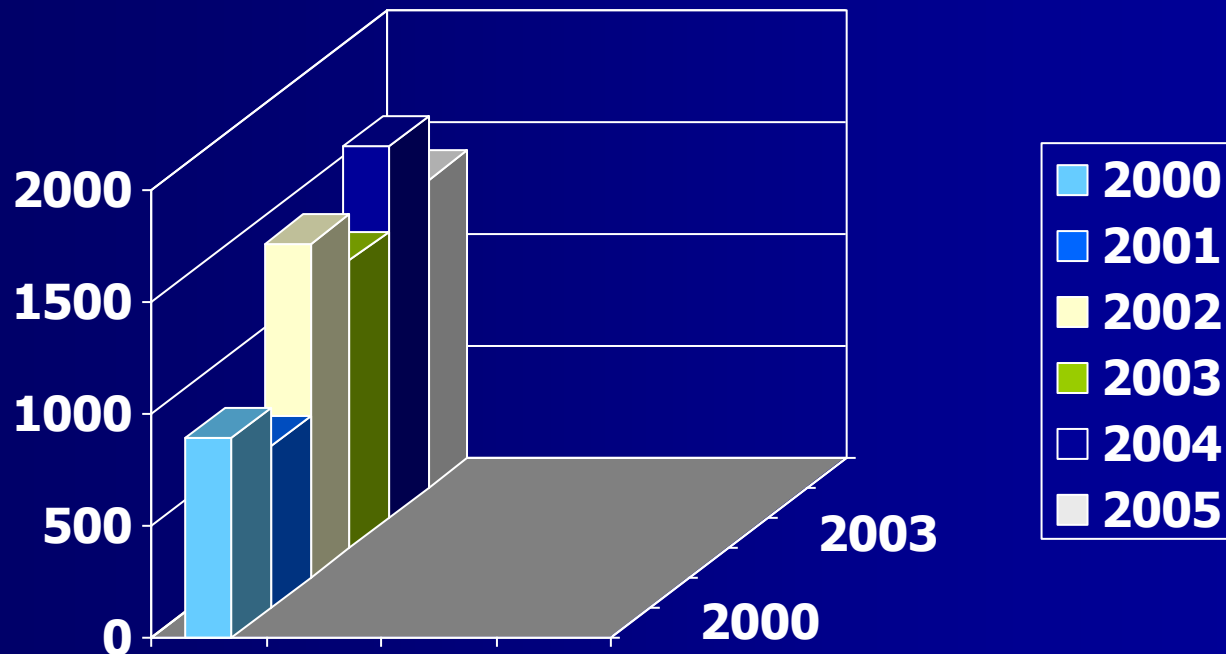
Registered Motorcycles between 2000 and 2005, MPWT

2. Negative Impacts caused by Transport Sector (cont.)



Registered light vehicles between 2000 and 2005, MPWT

2. Negative Impacts caused by Transport Sector (cont.)



Registered heavy vehicles between 2000 and 2005, MPWT

2. Negative Impacts caused by Transport Sector (cont.)

- ➡ Climate change, acid deposition, etc., is being considered and concerned in Cambodia and countries in the region resulted emission of pollutant smoke and/or releasing of pollutant substances into the atmosphere, which caused severe obstacles to the socio-economic development.
 - ➡ Urban people are confronted to ambient air pollution in their daily living, that is a harmful effect to inhalation system. However, health impact caused by transport sector has not surveyed/studied yet.
-

2. Negative Impacts caused by Transport Sector (cont.)

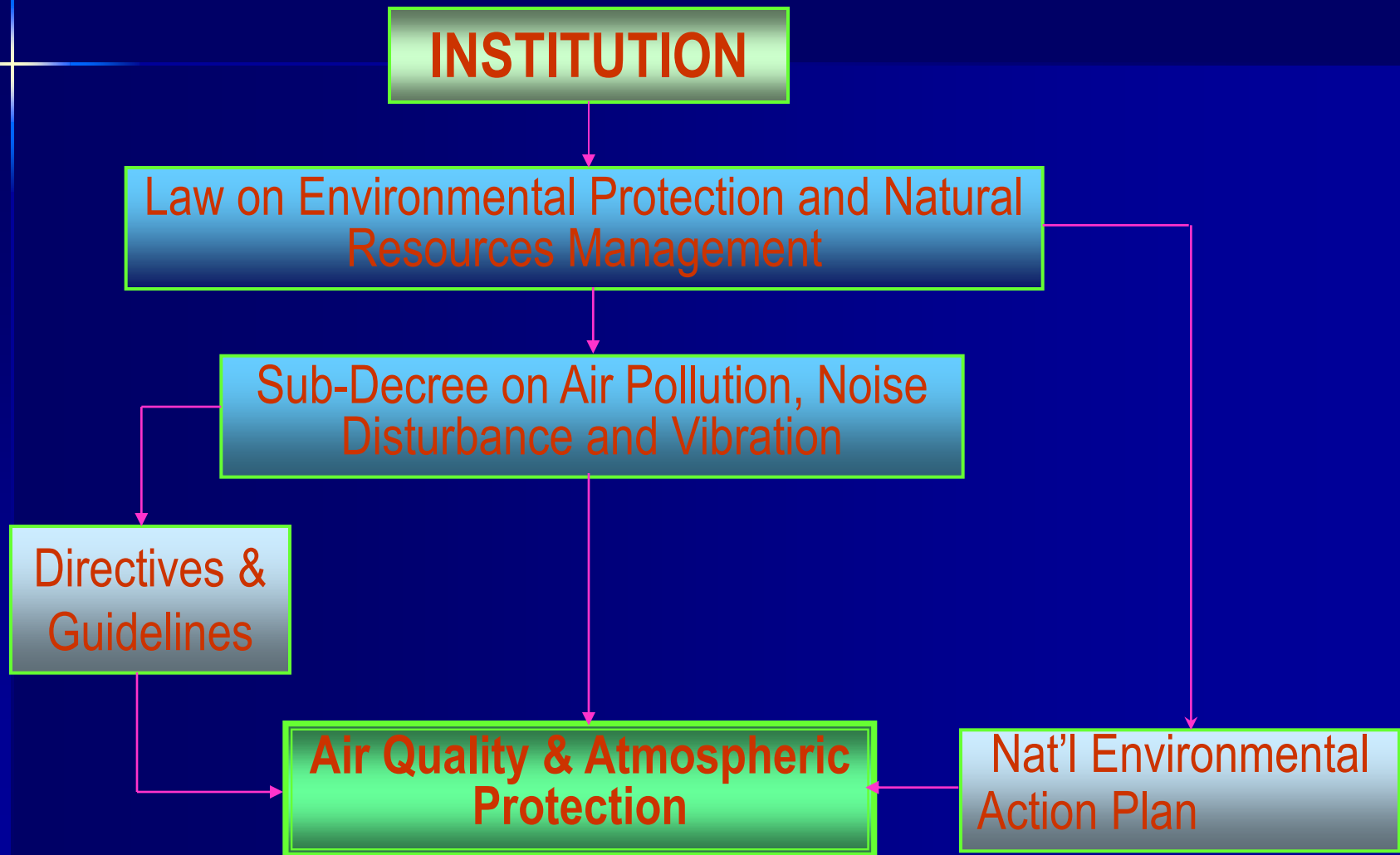
b) Traffic Accidents

- ➡ The road network is rapidly improving, developing, and allowing speed increases, meanwhile an inadequacy of driving awareness – that is a reason of traffic accidents.
 - ➡ The happening of undesirable/worst events is recognized by the Royal Government, and appropriate countermeasures are being set up applied.
-

2. Negative Impacts caused by Transport Sector (cont.)

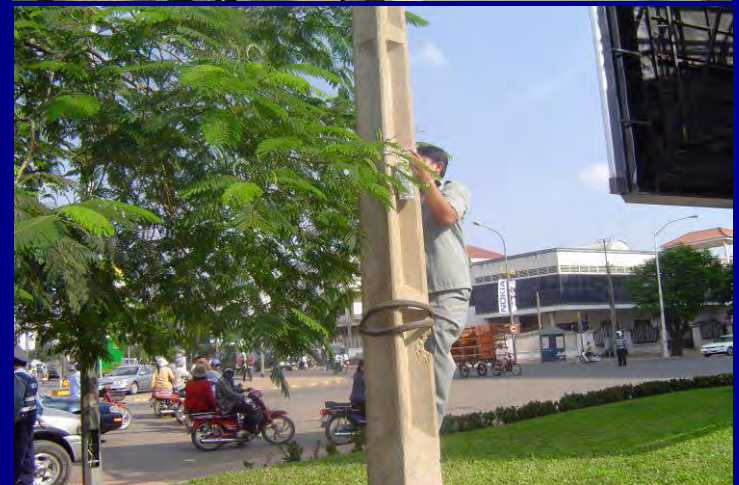
- ➡ What consequences will be happened during and after the worst event?
 - ➡ Every day, 3 persons were died and more than 100 are injured. This statistic has increased double comparing to the last five years.
 - ➡ The total economic loss resulted from road traffic accidents is estimated at *116 million US\$ annually (ADB)*.
-

3. Existing Legislation and Its Application



3. Existing Legislation and Its Application (cont.)

👉 Officers of the Ministry of Environmental have followed up to control ambient air quality in major areas of Phnom Penh Municipality and Siem Reap Province.



3. Existing Legislation and Its Application (cont.)



3. Existing Legislation and Its Application (cont.)

- ☞ The results indicated that ambient air quality at sampling points still have a good condition comparing to the national standard.
-

4. Transport Development Policy and Action Plan

- ➡ The National Transport's policy is to ensure that the transport industry and infrastructure is properly managed and developed in full support of the Government's *National Economic Development Plan*.
 - ➡ The development of transport sector cannot sustained, unless its strategy and action plan is integrated into other major sectoral development plan.
-

4. Transport Development Policy and Action Plan (cont.)

- ➡ Major action plans to achieve the transport development policy include as follows:
- ❑ comfortable public transport
 - ❑ efficient urban infrastructures land use planning
 - ❑ use of efficient and non-polluting vehicles technology
 - ❑ road safety/maintenance, roadside air quality assessment, knowledge base
 - ❑ Reduction of fossil fuel consumption and emissions through efficiencies and demand management
 - ❑ Promotion of use of alternative and renewable energy
-

5. Road Safety and Its Application

☞ The goal of Cambodian road safety aims at:

- ❑ Decreasing of death rate less than 10 persons per vehicles 10,000 units up to 2004;
 - ❑ Decreasing of death rate less than 05 persons per vehicles 10,000 units up to 2010; and
 - ❑ Decreasing of death rate less than 02 persons per vehicles 10,000 units up to 2020.
-

5. Road Safety and Its Application (cont.)

- ☞ To achieve road safety goals, many activities have been done:
- ❑ Developing an accident reporting system
 - ❑ Costing of accidents
 - ❑ Developing an school education
 - ❑ Applying a driving training
 - ❑ Controlling a vehicle safety
 - ❑ Conducting a police training (first aid response)
 - ❑ Carrying out the public awareness campaign by other means
 - ❑ Separating the traffic systems
 - ❑ Developing and improving the partnerships with private and non-governmental organizations
-

6. EST Initial Step in Cambodia & Future Needs

- ➡ EST is still a new theme for Cambodia, although some activities have been done by responsible institutions.
 - ➡ EST National Training Workshop was initially opened in Siem Reap of Cambodia, 26-28 June 2006.
 - ➡ Representatives of government institutions, local authorities, academic institution and NGOs were attended this crucial training workshop.
-

6. EST Initial Step in Cambodia & Future Needs (cont.)

- ☞ The finding of the workshop provided:
- ❑ Concept of revitalizing of the National EST WG.
 - ❑ Understanding on the roles of respective line Ministry/Agency in the formulation and application of National EST Strategy.
 - ❑ Improving of interagency coordination and/or cooperation in addressing environment & transport issues.
 - ❑ Identification of key concerns/priority areas to be addressed in the National EST Strategy.
-

6. EST Initial Step in Cambodia & Future Needs (cont.)

- ➡ To strengthen and promote the application of EST in an effective way, Cambodia still firmly require technical assistances from UNCRD, Government of Japan, International organization and other donors.
-

A photograph of a stone archway in a forest. The archway is constructed from large, grey, rectangular stones. The surrounding area is filled with lush green foliage and trees. The lighting is soft, suggesting a shaded forest environment. The text "MANY THANKS" is overlaid in orange, outlined letters in the lower-left quadrant of the image.

MANY THANKS

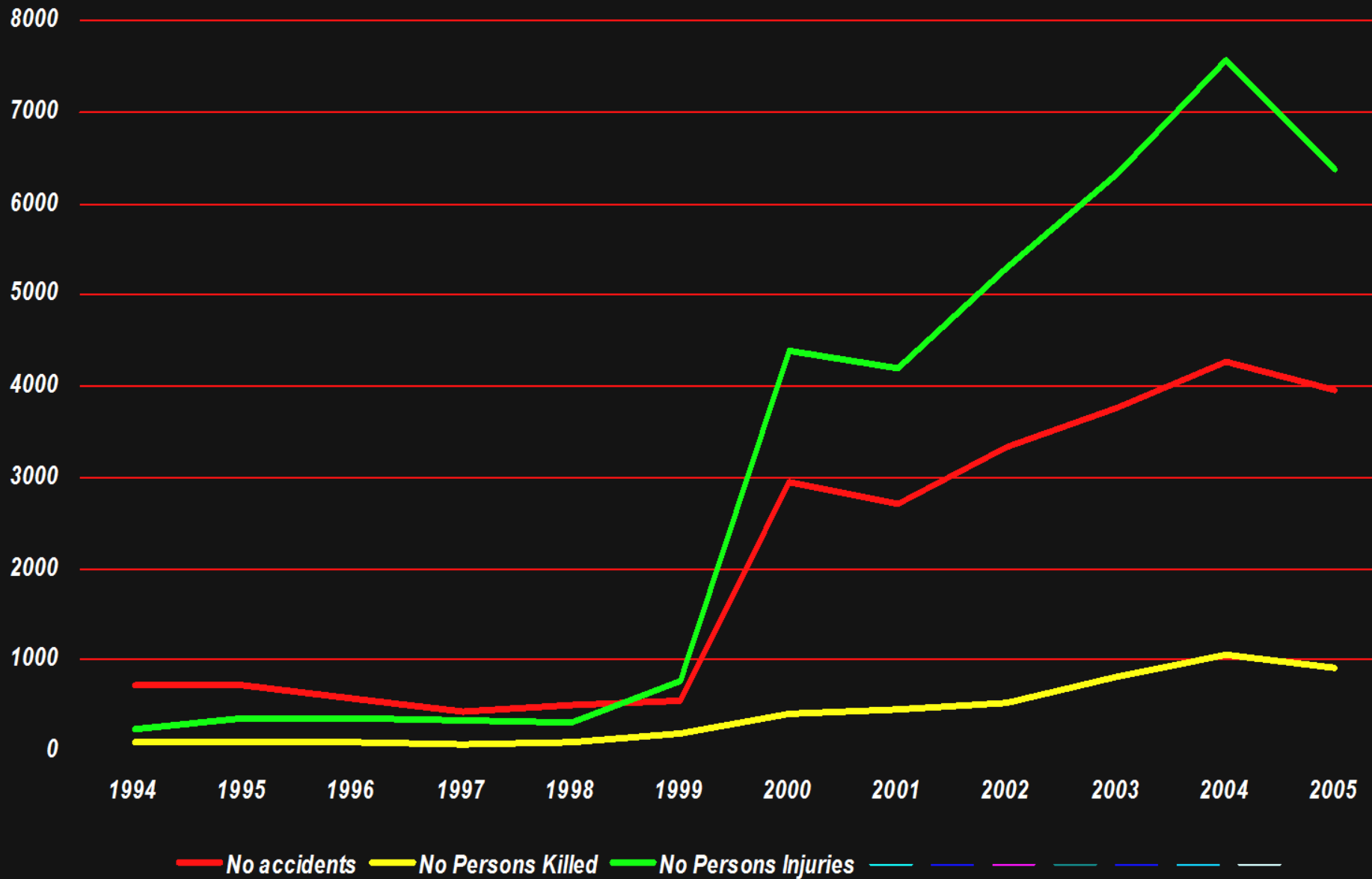
FOR YOUR KIND ATTENTION

Traffic Accident

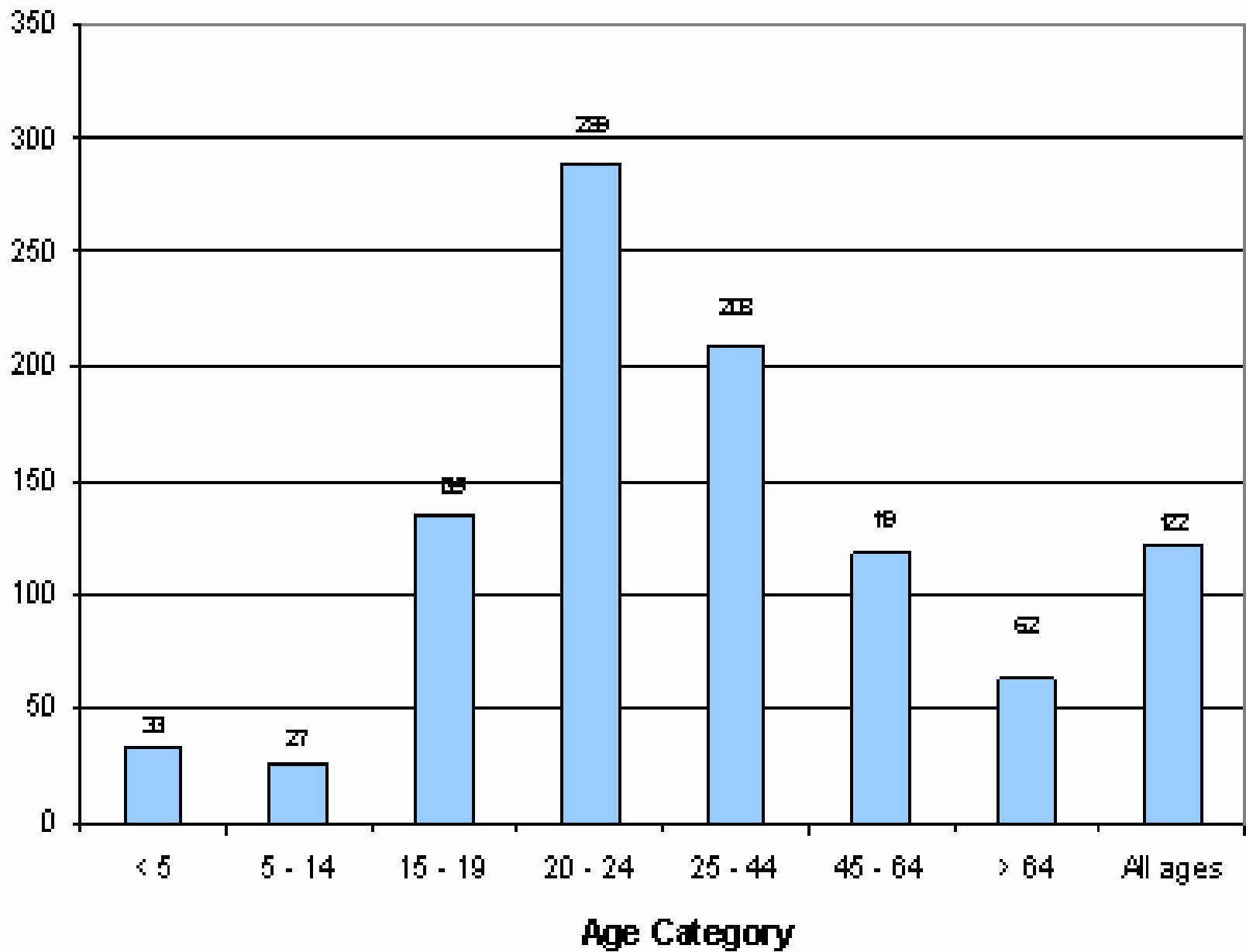


24 9:54

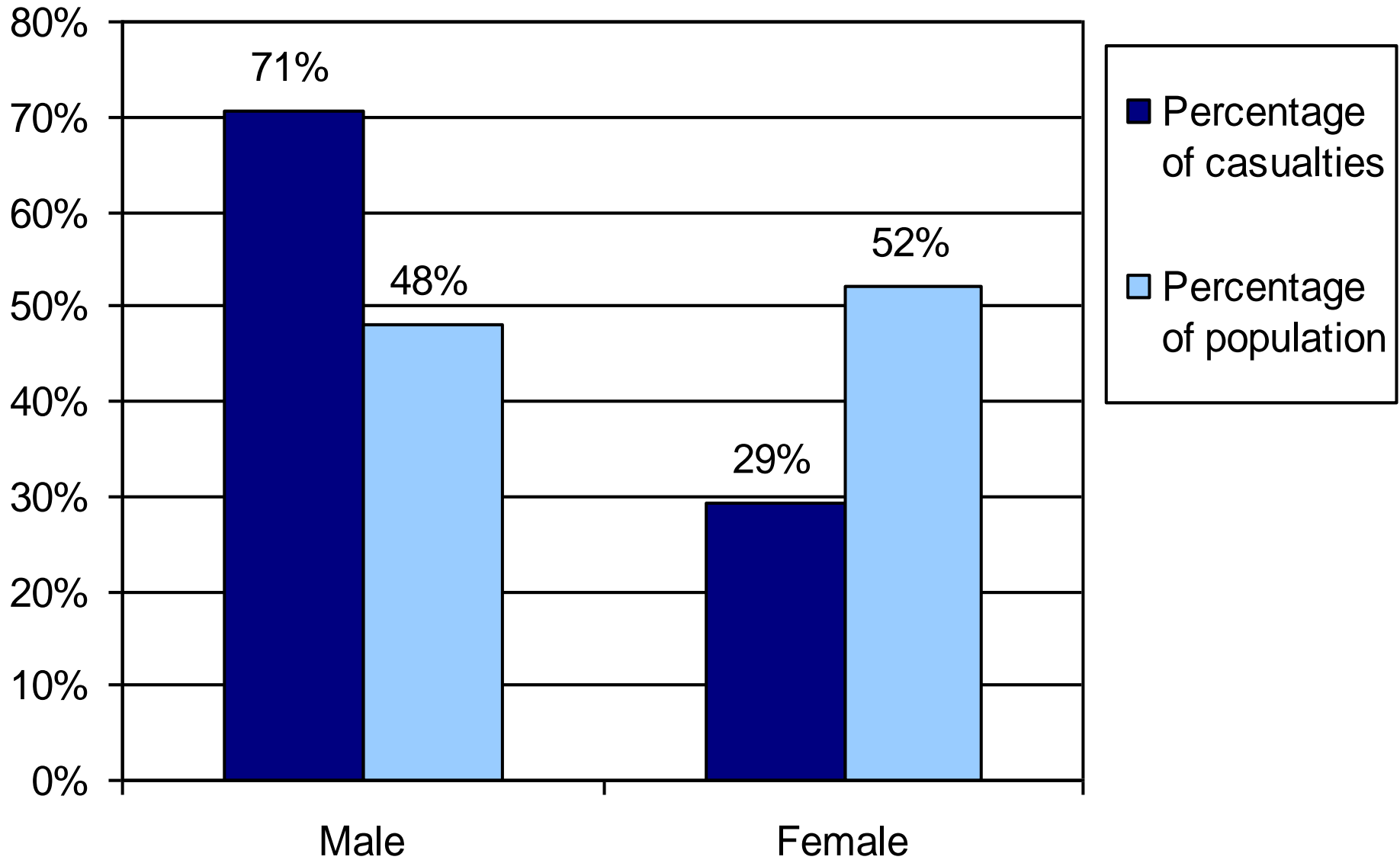
Statistics of Road Traffic Accidents



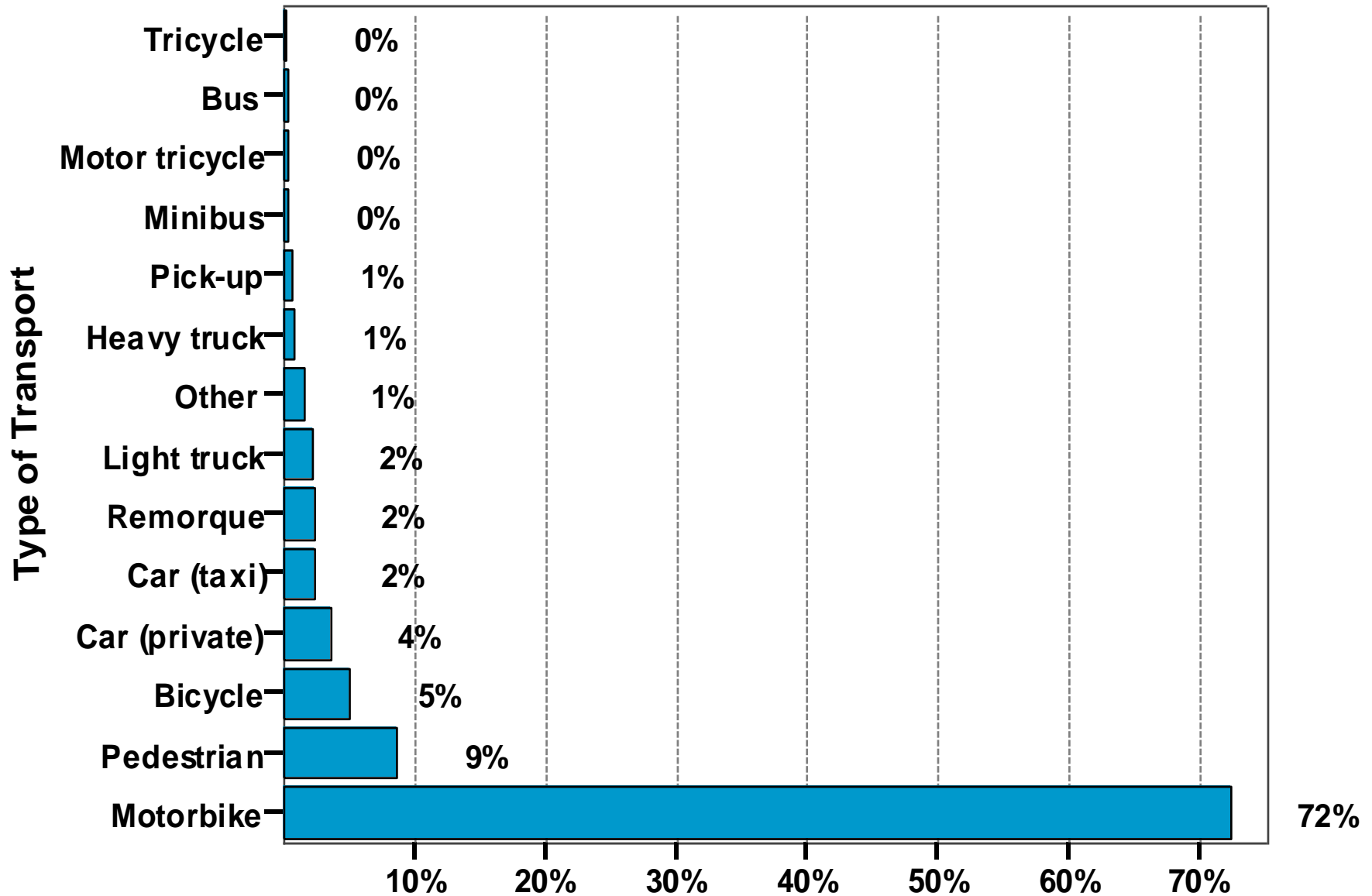
Number of Casualties per 100,000 inhabitants



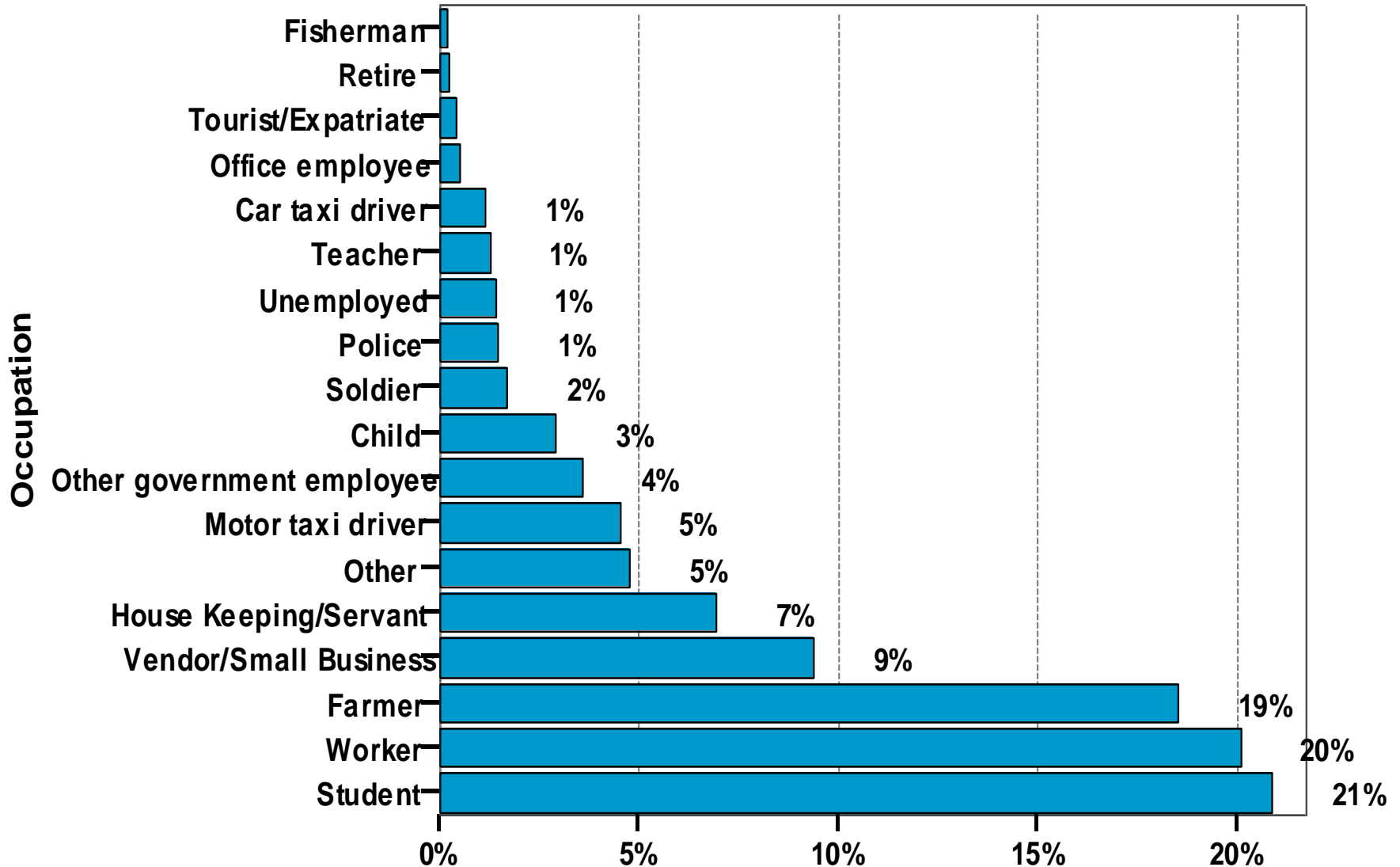
Traffic Casualties Comparison between Male and Female, 2005



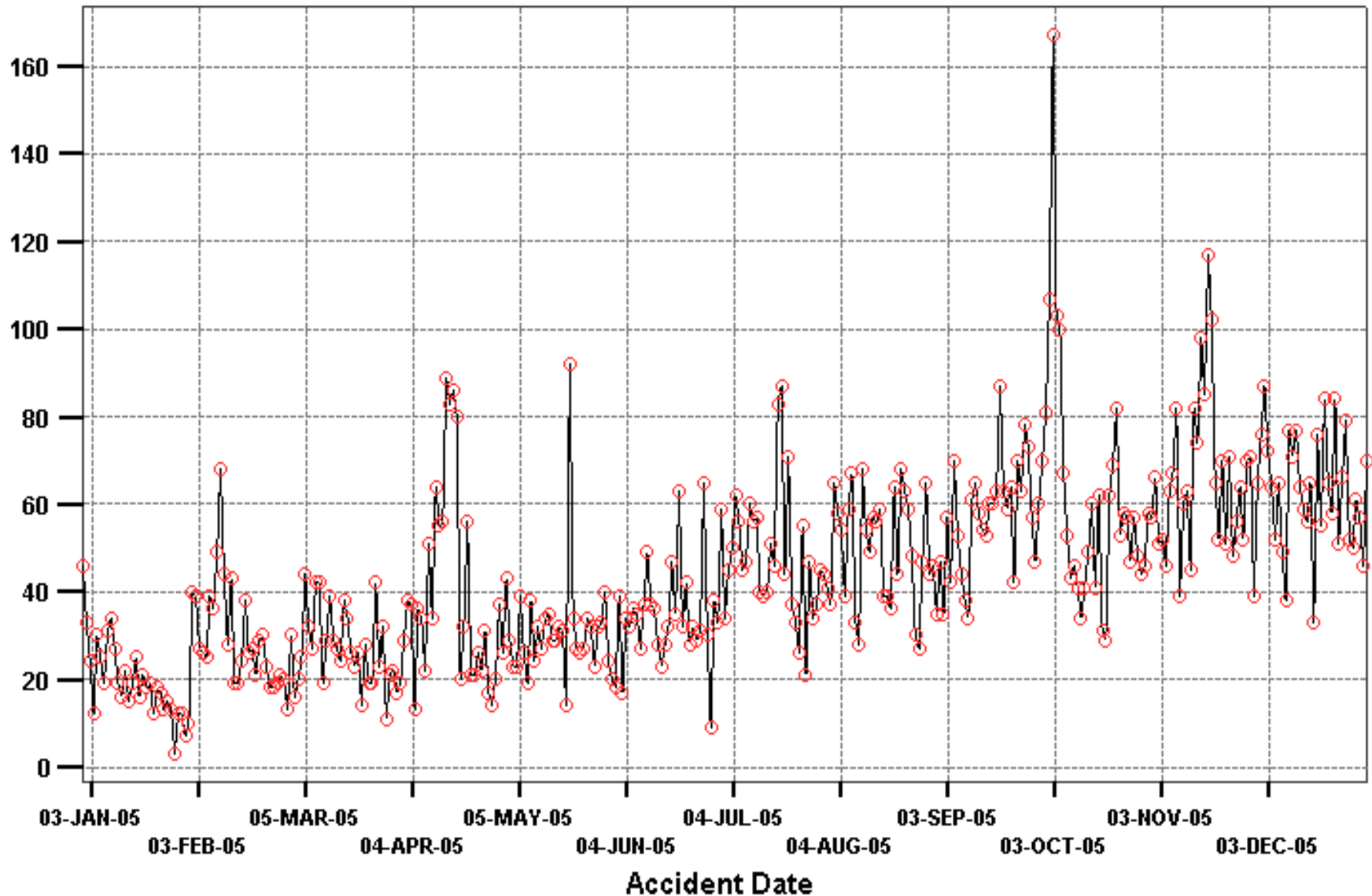
Different Level of Casualties' Types in Cambodia, 2005



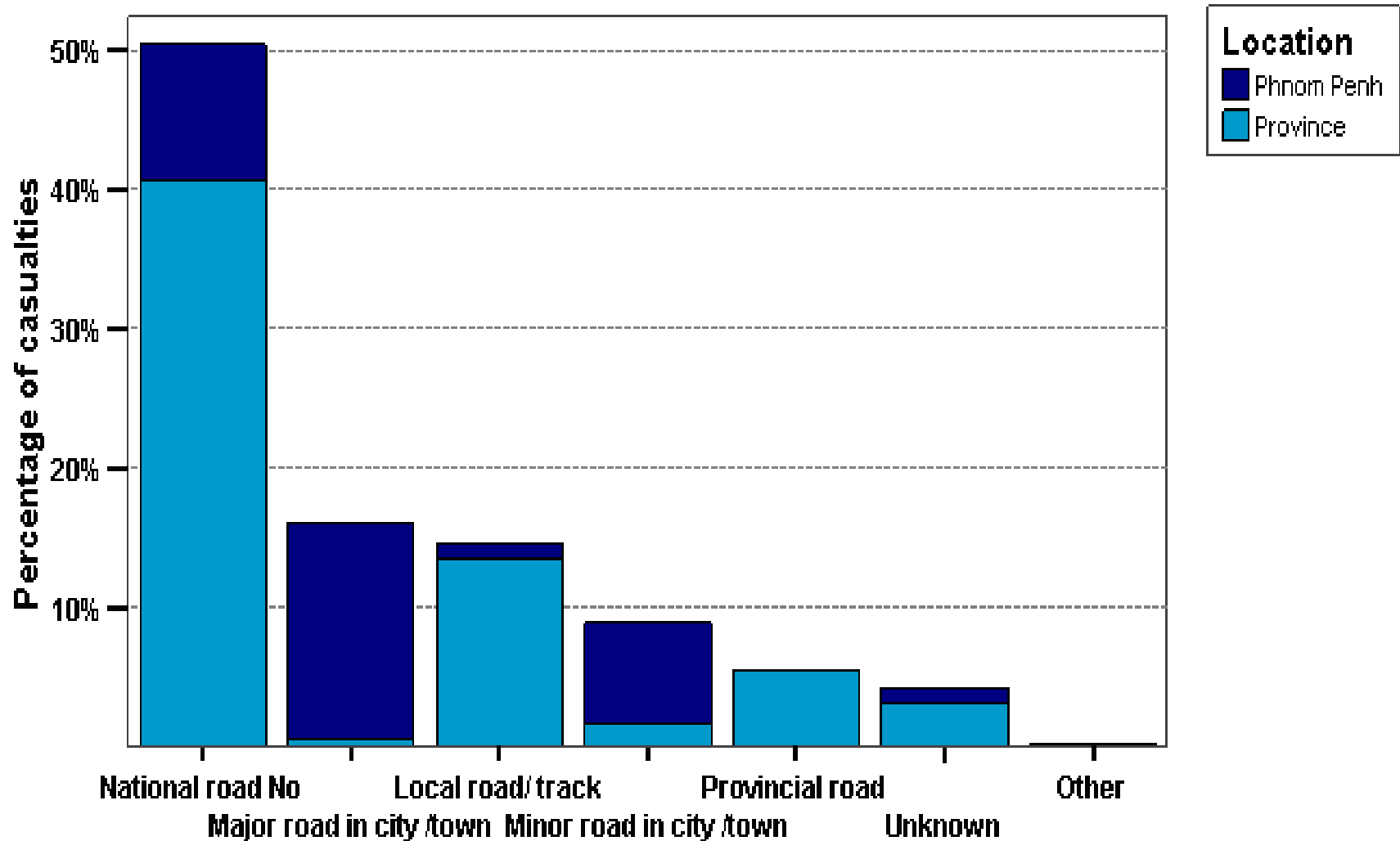
Percentage of People Casualties in Traffic Accidents, 2005



Number of Casualties Count: Several peaks (up to 150 casualties a day) are noticed, corresponding mainly to Khmer national holidays



Location of Accidents: 50% of casualties are injured in accidents occurring on national/provincial roads



Vehicle Checking



Smoke Tester and Speedometer



Side Slip Tester



1:30.0 1:35.0
0000 J

FOFEN

Head Lamp Tester



Brake Tester

School Education







ការពារជីវិតអ្នក ពាក់មួកសុវត្ថិភាព ត្រឹមត្រូវ



បូណា ស្ថាប័ក្ខដក្រោះថ្នាក់

ចរាចរ នៅទីនេះ សូមកុំ

សម្លាប់មិត្តរ័ាទេវ័ត

HANDICAP INTERNATIONAL



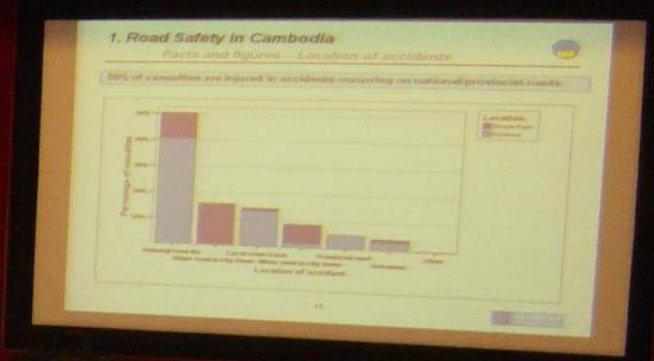
National EST Policy Dialogue-
cum-Training Workshop
in Siem Reap, Cambodia

19-21 June, 2006


សិក្ខាសាលាបណ្តុះបណ្តាលជាតិ
"នយោបាយដឹកជញ្ជូនប្រកបដោយចីរភាពបរិស្ថាន"
ថ្ងៃទី 26 ខែ មិថុនា ឆ្នាំ 2006
សណ្ឋាគារភីស៊ី 165 ផ្លូវលេខ 100 ភ្នំពេញ
NATIONAL DIALOGUE-CUM-TRAINING WORKSHOP ON
"ENVIRONMENTALLY SUSTAINABLE TRANSPORT POLICY"
26 June 2006
Ind Angkor Hotel, Phnom Penh



26 8:28



27 12:07



Shared issues

Where much of the poor people's movement relies on foot and bi-cycles, NMT receives very low priority in the conventional transport planning and infrastructure design and management, which is most often oriented to promote motorized transport rather than to support people movement

As a consequence thousands of pedestrians and cyclists are killed by accidents each year in developing countries!

World Bank Institute for Transport Development (ITD)

26 10:45



26 15:30





 គម្រោងសហប្រតិបត្តិការបណ្តុះបណ្តាលស្តីពីការងារ

"នយោបាយដឹកជញ្ជូនប្រកបដោយចីរភាពបរិស្ថាន"

 ថ្ងៃទី ២៦-២៨ ខែមិថុនា ឆ្នាំ២០០៦

 អគ្គនាយកដ្ឋានផ្លូវគោក វិស័យ ទេសចរណ៍ និង ប្រាសាទសម្រាប់ភ្ញៀវ

 NATIONAL DIALOGUE-CUM-TRAINING WORKSHOP ON

"ENVIRONMENTALLY SUSTAINABLE TRANSPORT POLICY"

 June 2006

 Phnom Penh, Cambodia



28 17:35






 សិក្ខាសាលាបណ្តុះបណ្តាលស្តីពី
 “នយោបាយជីវិតឆ្នាំស្របកម្រៃដំណើរការ”
 ថ្ងៃទី ២៦-២៨ ខែមិថុនា ឆ្នាំ២០០៦
 អគ្គនាយកដ្ឋានសិប្បកម្ម និង រ៉ែ សេដ្ឋកិច្ច និង ហិរញ្ញវត្ថុ
 ក្រសួងធនធានធម្មជាតិ និង ការពារព្រៃឈើ
 DIALOGUE-CUM-TRAINING
 “ENVIRONMENTAL POLICY FOR SUSTAINABLE TOURISM”
 26-28 June 2006
 Ministry of Natural Resources and Environmental Conservation

28 18:22



សិក្ខាសាលាបណ្តុះបណ្តាលថ្នាក់ជាតិ
 ក្នុងការយល់ដឹងពីការប្រកួតប្រជែងយុទ្ធសាស្ត្រ
 ថ្ងៃទី ២៦-២៨ ខែមិថុនា ឆ្នាំ២០០៦
 វិទ្យាសាលាជាតិបណ្តុះបណ្តាល រាជធានីភ្នំពេញ

INTERNATIONAL DIALOGUE-CUM-TRAINING WORKSHOP ON
 ENVIRONMENTALLY SUSTAINABLE TRANSITION
 26-28 June 2006
 Day Inn Angkor Siem Reap, Cambodia



28 18:23