4. Development of Countermeasures for Thailand

4.1 General

One of the main principles stated in "The Australian National Road Safety Strategy is that "the road toll should not be accepted as inevitable". In other word road crashes can be prevented. Strategy and action plan can be prepared and implemented to tackle this burgeoning problem of road crashes facing Thailand. Over the past 4 decades, Europe, particularly the UK; Australia and USA have managed to significantly reduce road fatalities. In the 1960s the number of deaths per 100,000 population in the UK was about 15, it now about 6. Fatality rate in Australia was around 25 deaths/100,000 in the 1960s, it was 9.3/100,000 in the 1999 and the Australian Road Safety Strategy aims to further reduce it by 40% to no more than 5.6/100,000 by 2010. In the USA, the rate was about 26 deaths/100,000 population in the 1970s, it was reduced to about 15/100,000 in the 2000s. These figures clearly show that road crashes and their consequences can be reduced or prevented.

4.2 The Need for a Thai Road Safety Strategy

With road toll hovering around 13,000 deaths per year for the past few years, the Thai government has put road safety as a national priority. There have been much efforts made to try to reduce the road tolls particularly during festive seasons like Songkran (Thai New Year) and New Year when all out attempts were made to cut down the number of deaths. However, there is still no clearly spelt out document for all to see and follow. There is a need to prepare such document to address the problem on a long term basis rather than the annual basis, as practiced in many developed countries with success. The Thai strategy should address the risk factors which influence exposure to crash risk, crash involvement, crash severity and severity of post-crash in juries. Following the guideline of the WHO 2004 World report on traffic injury prevention the following risk factors should be addressed.

4.2.1 Major risk factors influencing road crashes

Factors influencing exposure to risk

- economic, demographic factors
- land use, travel modes, road design

Risk factors influencing crash involvement

- speed, alcohol & other drugs, fatigue
- vulnerable road users
- defective vehicles
- defects in road design

Risk factors influencing crash severity

- human tolerance factors
- speed, alcohol & other drugs
- not using seat-belts, child restraints, helmets
- insufficient vehicle crash protection
- unforgiving roadside objects / environment

Risk factors influencing severity of post-crash injuries

- chain of medical care from prehospital to rehabilitation

4.3 Recommended Countermeasures

From the review of Australian strategy and action plan, good engineering practice, analyses of road user's attitude toward safety and the nation's chronic problems of enforcing speed limit the following effective and cost-efficient counter measures are recommended.

Engineering

- Introduce properly designed roundabout where appropriable the device has been proven to reduce crashes and crash severity. Even inadequately designed roundabouts have proven to be effective in cash reduction in Hat Yai.

An inadequately designed roundabouts has proven to be effective in cash reduction in Hat Yai.

- Implement properly designed speed calming device e.g. road humps, raised pedestrian crossing and pedestrian refuge.

- Implement channelisations particularly at junctions as they will help deter violation of traffic rules particularly by vulneral roadusers like motorcyclists.

- To reduce speed in city area, reduce width of lanes at specific road sections (on section longer than 50 meters)

- Introduce a fatigue edge lining pilot project.

- Accident blackspot treatment.

- Introduce mandatory road safety audit.

Education

- Promote the wearing of safety helmet for both rider and pillion passengers.

- Promote visibility of vulneral roadusers e.g. daytime running light for motorcyclists. Wearing o f bright and reflective m aterial for pedestrians at night time.