

Application Form of EASTS IRG (International Research Group)

Date of Submission: 2012/10/05

1. Name of IRG: Developing Safe and Green Urban Corridors in Asian Cities
2. List of research members 1) a) Name of representative: Prof. Dr. Nan Zou b) ID number: CN-12-13-0097 c) Affiliation: Shandong University, China d) E-mail: nanzou[at]sdu.edu.cn e) Mailing Address: 1768 Xinluo Avenue, Suite A511, Gaoxin District, Jinan, Shandong Province, China 2) a) Name: Prof. Dr. Jason S. K. Chang b) ID number: TW-95-11-0011 c) Affiliation: National Taiwan University, Taipei d) E-mail: skchang[at]ntu.edu.tw d) Country/Region: Taiwan 3) a) Name: Prof. Dr. Jie Yu b) ID number: CN-12-13-0098 c) Affiliation: Shandong University, China d) Country/Region: China 4) a) Name: Dr. Fei Deng b) ID number: None c) Affiliation: The World Bank d) Country/Region: The United States 5) a) Name: Dr. Prof. Lihua Xie b) ID number: None c) Affiliation: Nanyang Technological University, Singapore d) Country/Region: Singapore 6) a) Name: Dr. Kyeongpyo Kang b) ID number: None c) Affiliation: The Korea Transport Institute d) Country/Region: Korea
3. Name of contact person other than representative: Prof. Dr. Jason S. K. Chang
4. Keywords (Maximum: 5 words) Traffic Safety; Green Transportation; Urban Corridor; Transportation Engineering, Traffic Control

IRG - -

*for secretariat use

5. Purpose and Mission of IRG:

With more than sixty percentage of the world's population, Asia has been experiencing a rapid growth in economy and motorization. The growth in motor vehicles has brought a significant increase in road traffic accidents over the past couple of decades. In recent years, both international, regional, and national transportation/highway agencies are dedicated to introduce policies and measures for improving safety and efficiency of Asian transportation systems. However, despite the significant progress of these programs, accidents in Asia have not been significantly reduced over the past decades.

The main purpose of this study intends to propose innovative strategies and approaches for developing safe and green urban corridors in some Asian countries/regions, to be responsive to local conditions and ambitious in terms of desired improvements in road safety performance. The proposed study shall consist of the following critical issues:

- What kinds of travel demand patterns and travellers' behaviors along urban corridors among different developing Asian countries/regions?
- How to identify and rank high accident urban corridors in a more comprehensive and systematic manner without overlooking any contributory factors or characteristics?
- How to design important design principals of all elements in the Safe and Green Urban Corridors in Asian countries?
- How to assist traffic agencies/policies in best understanding and applying the comprehensive traffic management intervention strategies and robust enforcement of road traffic laws taking into account the special context of different developing Asian countries/regions?

6. Target year for completion (Research period is suitable within four years.): Sep, 2016

7. Research plan:

(Oct, 2012 - Sep, 2013):

- Conduct In-depth review on international best practice for identifying high-accident urban corridors and evaluating effectiveness of safety improvement plans;
- Collect and analyze comprehensive traffic safety related data among different Asian countries including crash data, traffic offence data, vehicle type, mix and volume data, existing infrastructure data, pedestrian data, speed survey data, speed limit data and hospital road crash injury data; and
- Hold local workshop to collect information from stakeholders and public participation of local communities.

(Oct, 2013 - Sep, 2014):

- Investigate the critical factors or characteristics that significantly contribute to the accident risks along urban corridors among different developing Asian countries/regions
- Develop multi-criteria framework for identifying and ranking high accident urban corridors among different Asian countries/regions; and
- Design important design principals of all elements in the Safe and Green Urban Corridors among different Asian countries/regions.

(Oct, 2014 - Sep, 2015)

- Provide technical assistance to legislative and regulatory changes to improve

IRG - -

*for secretariat use

enforcement effectiveness and driver behaviors on urban corridors that meet with the urgent and specific needs among different Asian countries/regions, and

- Provide technical assistance to local police for traffic enforcement techniques, standard operating procedures and use of enforcement technology;
- Provide technical assistance to local communications agencies responsible for the development of content and delivery of social marketing campaigns to support enforcement programs and community relations initiatives designed to advise the purpose and benefits of intensified enforcement campaigns to the public; and
- Propose traffic safety education programs for local schools including awareness programs about safe pedestrian use of the roads and safe motor vehicle use, including seat belts, child restraints and helmet wearing.

(Oct. 2015 – Sep, 2016):

- Hold a set of international and local workshops/symposiums to discuss the results and publications in referred journals and books as well.

8. Expected research funds (ex. ICRA (Research grant of EASTS), etc.

Research grant of EASTS

All applications are to be delivered to:

Dr. Tetsuo YAI, Secretary-General
Office of EASTS Secretary General
E-mail: irg@eastst.info

IRG - -

*for secretariat use