

公益財団法人国際交通安全学会

International Association of Traffic and Safety Sciences

FY 2022

IATSS Research Project Reporting and Award Ceremony



Kazuhiko Takeuchi

President, IATSS President, The Institute for Global Environmental Strategies (IGES)

I would like to extend my heartfelt greetings to you as well as my gratitude for your understanding and support of this Association.

High-quality transportation and its culture contribute to the development of industrial and social activities, support the convenience and richness of life, and play an important role in the rapidly advancing information society. Particularly, the development of automobile transportation has brought about the qualitative and quantitative expansion of public and private mobility.

However, there are many serious problems such as traffic accidents and energy and resource consumption, as well as social issues such as ageing and the decline of urban and rural areas. Consequently, decarbonisation due to global warming is becoming an urgent issue. Furthermore, the automotive industry is said to be at a once-in-a-century turning point, with the emergence of e-mobility, contrasted against existing mobility, already about to commence. There is a need for the further establishment of grand design principles, survey research and proposals for practical problem solving, and continuous educational support activities for the realisation of a sustainable and excellent mobility society.

The International Association of Traffic and Safety Sciences has been conducting research and survey activities with the belief that it is an important responsibility to address traffic and its safety and security from an interdisciplinary and international perspective. We sincerely ask for the continued support and cooperation of all parties concerned.

We would like to inform everyone that we will be holding our regular research and investigation report meeting and award presentation ceremony. We would appreciate it if you could make arrangements to attend in spite of your busy schedule.



Takeshi Tanigawa

IATSS member Chair, Planning Committee, Research Department Professor, Juntendo University

I would like to extend my heartfelt congratulations to all during this bright spring season. I would also like to express my sincere gratitude for your continued understanding of and support for IATSS research and investigation activities.

Thank you very much for attending today's IATSS research survey report meeting and the award presentation ceremony.

Research and investigation are core IATSS activities. Such endeavours are led by our members, and their activities in various fields are presented and summarised in reports. In our approach, we emphasise interdisciplinarity and internationality, and in our output, we emphasise practicality and foresight, which are directly linked to the achievement of the purpose. Based on these four characteristics, in research and investigation projects, we work on various themes aiming to realise an ideal transportation society.

This year (2022), we worked on 10 research and investigation projects. In this meeting, we will report on the results of the research and investigation projects on four of these themes. This year, the meeting will be held in the type of hybrid format that is becoming common due to the COVID-19 pandemic. Please take this opportunity to attend the meeting and engage in a lively discussion.

In addition, following this meeting, we plan to hold an academic award presentation ceremony to celebrate the achievements and excellent writing and papers recognised for their significant contributions to traffic and safety. We sincerely look forward to your participation despite your busy schedule.

International Association of Traffic and Safety Sciences



FY 2022 IATSS Research Project Reporting Projects Introduction

2207A Project

Development and Implementation of a Program for Transforming Traffic Safety Behavior in Cambodia

《Background and aims》

As developing countries in Asia undergo rapid economic growth, motorisation, and the development of major national roads, people in suburban and rural areas are suffering more traffic accidents as better transport infrastructure allows drivers to travel at higher speeds. Similar problems affect Cambodia with improvements of National Road 5, which prompted transit safety education and behavioural change programmes as government action plans, and the start of the JICA Transport Safety Technology Cooperation Programme.

A behavioural change programme team started as a collaborative project of the IATSS Forum, Cambodia IATSS Alumni Association (CIAA), and JICA. Based on recent local data and trends in behavioural change theory, a novel and interdisciplinary conceptual behavioural change programme and survey methods (of school and pre-school-aged children) will be developed in preparation for implementation with the team



Scenes of commuting to school on National Road 5

《Achievements of FY2022 (Year 1) and outlook》

- Organised a behavioural change programme with CIAA, JICA, local government, and education experts
- Survey on traffic safety education and commuting by interviewing and video-surveying local elementary, middle, and high schools.
- Constructed a behavioural change hypothesis based on the newest behavioural modification models
 and implemented a pilot study to collect data on the behaviours of students before implementing the
 programme.

⇒Completion of preparatory steps for implementing the programme the next year

- The behavioural change programme and impact assessment method were developed, as well as implemented and evaluated at several middle schools located on National Road 5.
- Planned a sustainable support system led by the local team.



Collaboration of CIAA, JICA and IATSS

2203C Project

Development of Walkable City Assessment Method

《Background and aims》

The rapid population decline and ageing in Japan has urged urban areas to be redeveloped into compact cities. However, making cities compact alone is insufficient, as the appeals and activities of cities must continue to thrive. Plans for city redevelopment that encourage a "comfortable and walker-friendly downtown" has been proposed by a committee organised by the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) in 2019, and was formally started as the "Walkable Downtown Promotion Programme" in FY2020. Currently, 346 cities in Japan (as of end of Jan, 2023) have come forth as promoters of walkability. This study aims to elucidate methods for cross-sectional evaluations of walkable cities in Japan using examples in European and American cities as models.

《Overview》

Accomplishments as of FY2022 (third year)

- The perspective of walkability assessments may and should be modified according to the outcomes set as goals responding to social challenges.
- A walkability index can be organised by social, economic, or environmental sustainability, health, and city, and may also depend on the scale of the space.
- A walkability index can be categorised by methods using an objective or subjective approach, and newer methodologies are also proposed.
- This study researched examples representing sustainability, health, city, spatial scale, and objective and subjective methods, as well as proposed additional new methodologies.
- The MLIT is assessing city walkability by subjective methods at district levels, but also plans to experiment with a mixed method that combines it with the objective and novel methods explored in this study.

Outlook

• We aim to publish the results of research to date and implement the use of this assessment method with the cooperation of the MILT.



FY2022 Local surveys

2208C Project

Study on the development of a safe and comfortable road environment under mixed electric mobility

Small electric (e-) mobility devices such as electric scooters have been introduced in Europe and the US, and are similarly anticipated in Japan for transport support and travelling the Last Mile. This study performs multifaceted analysis of user psychology and behaviours, safety assessments, and legal systems to identify the challenges associated with the safe and harmonious introduction of new e-mobility devices with existing means of transportation, and seeks to discuss road rules to achieve it.

Activities for this study were conducted in six working groups (WG). WG1 performed an international comparative survey which showed that the structure of awareness may differ according to the level of popularity of e-mobility, and that developing legal systems and improving operation services will increase social acceptance, especially in the transition period. WG2 discussed the survey of legal aspects to identify the challenges of ensuring safety education and parking, for example, for users without a driver's license. WG3 and WG5 examined surveys on e-scooter safety and potential problems that are of concern based on user behaviours, and discussed safety measures for mixed traffic on sidewalks and roads, as well as road structures. WG4 conducted a survey on local governments, and showed that the type of e-mobility demanded differs depending on community objectives. WG6 held an international workshop to list topics of interest for the promotion of micro-e-mobility in Japan with reference to previous attempts in European cities.



International workshop in Vienna



Road structures and traffic management in Vienna



Electric scooter road test

2220 Project (Social Responsibility)

Providing information on the actual situation and case studies of roundabouts in Japan based on the database development

《Background and aims》

Over the last two years, the International Association of Traffic and Safety Sciences (IATSS) Survey Project has re-structured the database (DB) of 100 items on the 140 round-abouts (RABs) in Japan and of case data to describe the history, introduction, and consensus-building related to RAB, and the characteristics of their applications, structures, and challenges. This project aims to hold seminars and develop websites based on these findings to provide information on Japanese RAB and numerous interesting case studies. Information on real-world needs and challenges will be collected through opinion exchange in seminars to provide feedback on the DB content. IATSS will accomplish its roles in social responsibility through these activities aiming for the favourable widespread introduction of RAB that contribute to road safety and sustainable city-building.

《Outline》

While an increasing number of RABs are being introduced in various parts of Japan, the data and "whole picture" of RABs in this country were unclear. We made it possible to become aware of examples of introduction in Japan by developing an RAB DB and online publication system. Providing data on geometric structures and good examples through this system is expected to demonstrate the effective application of this support tool for RAB planning and design at various locations.

A lecture and poster presentation on the achievements of this project was conducted at the Round-About Seminar in Nagai held in Nagai City, Yamagata Prefecture. Furthermore, a seminar titled "Round-Abouts for Effective City and Community-Building" was held in Kumamoto City for more information sharing and opinion exchange. These events reaffirmed the importance of persistently disseminating information on challenges associated with the introduction of RABs and solutions for them to accelerate the widespread use of RABs.



Spatial distribution of RAB in Japan

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Developing a website of RAB DB



Round-about seminar (Kumamoto city)



FY 2022 IATSS Research Project Reporting and Award Ceremony Program

Date

14th April, 2023 (Fri) 13:00-18:00

Event Format

Hybrid (on-site + remote delivery)

Venue

Keidanren Kaikan Keidanren Hall

	FY 2022 IATSS Research Project Reporting	Program
13:00	Opening Remarks	Kazuhiko Takeuchi President, IATSS
13:05	Report Theme ① [2207A] Development and Implementation of a Program for Transforming Traffic Safety Behavior in Cambodia	Kenji Doi
13:50	Report Theme @[2203C] Development of Walkable City Assessment Method	Tomohiro Ichinose
14:35	[Break] 15 min	
14:50	Report Theme ③[2208C] Study on the development of a safe and comfortable road environment under mixed electric mobility	Koji Suzuki
15:35	Report Theme $\P[2220]$ Providing information on the actual situation and case studies of roundabouts in Japan based on the database development	Hideki Nakamura
16:20	Concluding remarks	Takeshi Tanigawa Chairperson, Research Department, Planning Committee
	The 44th (FY 2022) IATSS Award Ceremony	Program
16:40	Introduction of distinguished guests	MC
16:43	Opening Remarks	Kazuhiko Takeuchi President, IATSS
16:48	Selection Progress Report	Kazuhisa Ogawa Chairperson, Awards and Grants Department, planning committee
16:55	Presentation of Awards	
	Achievement Award: The Power of Snow Removal to Protect Runways -Passing on snow removal skills to fight against heavy snowfall-	Hokkaido Airports Co., Ltd. CHIZAKIDORO Co., Ltd. Hokkaido Branch
	Paper Award: The Shipping Industry Regarding Awashima located in the Seto Inland Sea and Hayase in Wakasa Bay in the Early Modern Period of Japan	Norifumi Kawahara
	Paper Award: The Socio-Cultural Background of the Differential Charges System in French Inter-City Railways	Keiko Kurita
	Paper Award: International and intercultural differences in arguments used against road safety policy measures	Wouter Van den Berghe Nicola Christie
17:11	congratulatory address	Yasuhiro Tsuyuki Commissioner General of the National Police Agency
		Kanji Takizawa Deputy Director-General, Cabinet Office
17:21	Acknowledgments	Norifumi Kawahara Keiko Kurita Wouter Van den Berghe Nicola Christie
17:33	Presentation of achievements: The Power of Snow Removal to Protect Runways - People tackling heavy snowfall and passing on snow removal skills -	Hokkaido Airports Co., Ltd.
17:43	Closing Remarks	Nobuyuki Kawai Managing director, IATSS

Registration;

https://secure.hondanet.co.jp/iatss/ja/entry_society_presentation/

We plan to hold a hybrid of on-site and remote sessions. Please register as soon as possible to avoid overbooking. Please note that we may hold the event remotely only, depending on the status of COVID-19 infection.



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For inquiries, please contact to;

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