



公益財団法人 国際交通安全学会

International Association of Traffic and Safety Sciences

FY 2025

# IATSS Research Project Reporting and Award Ceremony



## Kazuhiko Takeuchi

President, IATSS  
Institute for Global Environmental Strategies (IGES)  
Board chairman

I would like to extend my sincere greetings to all of you and express my gratitude for your continued support of our Society's activities.

High-quality transportation and the culture surrounding it contribute to the advancement of industrial and social activities, support the comfort and quality of daily life, and continue to play a vital role in today's rapidly advancing information society. In particular, the development of automobile transportation is undergoing rapid transformation, driven by the evolution of artificial intelligence, autonomous driving technologies, and the rise of electric vehicles.

While these technologies have significant potential to reduce traffic accidents and improve mobility efficiency, they also introduce new risks and ethical challenges. Addressing these issues requires that technological innovation go beyond improving convenience and instead contribute to the safety and sustainability of society, as well as to the enhancement of human well-being. There is a growing need for the further development of guiding principles for a comprehensive mobility society, as well as for research and proposals addressing practical challenges, and for the continued promotion of the continued promotion of education and support activities.

The International Association of Traffic and Safety Sciences (IATSS) regards it as a fundamental responsibility to engage with transportation and its safety and security from an interdisciplinary and international perspective. On September 17, 2024, our Society celebrated its 50th anniversary, on which occasion we disseminated the IATSS Vision 2024 both within and beyond the organization. Based on this Vision, we will continue to advance our research activities toward the realization of a safe and sustainable mobility society. We sincerely ask for your continued support and cooperation.

We are pleased to announce that the Society's annual Research Report Conference and Awards Ceremony will again be held this year, and we cordially invite you to attend. Despite your busy schedules, we would be most honored if you could attend.



## Tomohiro Ichinose

IATSS member  
Chair person, Research Committee,  
Professor, Faculty of Environment and  
Information Studies, Keio University

With the arrival of spring, I would like to extend my sincere greetings to all of you and wish you continued health and prosperity. I would also like to express my heartfelt appreciation for your continued understanding and support of the research activities of the International Association of Traffic and Safety Sciences (IATSS).

Research activities constitute one of the core undertakings of our Society. IATSS brings together members and special research fellows from a wide range of academic and professional fields, including traffic engineering, urban engineering, economics, education, law, public administration, psychology, information systems, mechanical engineering, environmental and energy, medicine, regional and social studies, and culture and the arts. Drawing on this diverse expertise, a variety of research projects are conducted within the Society.

These projects are led by our members and involve multi-year investigations and studies related to transportation and its safety, the results of which are compiled into research reports. In conducting these research activities, we place particular emphasis on interdisciplinarity and international perspectives. In terms of research outcomes, we also value practical relevance and forward-looking insight that directly contribute to achieving our objectives. Based on these four guiding principles, we pursue a variety of research themes aimed at realizing an ideal mobility society.

This year, a total of 17 research projects were undertaken. At this conference, we will present the results of four of these projects, along with one project conducted under the ATRANS program.

Although this year's conference will be held in a hybrid format, we warmly encourage you to join us in person and to take part in active discussions.

Following the Research Report Conference, we will also hold the Society's Awards Ceremony to honor outstanding achievements, distinguished publications, and excellent papers that have made significant contributions to transportation and safety. Despite your busy schedules, we sincerely hope that you will be able to join us.

**Date** 10th April, 2026(Fri) 13:00 - 18:00

**Event Format** Hybrid (on-site + remote delivery)

**Venue** Keidanren hall, Keidanrenkaikan 2nd floor

## FY 2025 IATSS Research Project Reporting Program

13:00	Opening Remarks	Kazuhiko Takeuchi President, IATSS
13:05	<b>Report Theme ① [2502A]</b> Research into the Best Way to Disseminate Traffic Safety Information to Increase the Use of Junior Seats	Rumiko Iwasada
13:40	<b>Report Theme ② [2503C]</b> Empirical Study on Encouraging Vehicles to Yield at Pedestrian Crossings Without Signals	Satoru Kobayakawa
14:15	[Break] 20min	
14:35	<b>Report Theme ③ [2509C]</b> Research on Accelerating the Dissemination of Japanese-style Roundabouts	Hideki Nakamura
15:10	<b>Report Theme ④ [2514C]</b> Should Cities Become Walkable? -A Cross-Disciplinary Discussion Based on Data	Akinobu Murakami
15:45	<b>ATRANS Project</b> Escalating Punishment for Habitual Drunk Drivers:A Study on Legal Reforms and Data System Optimization	Waiphot Kulachai
16:25	Concluding remarks	Tomohiro Ichinose Chair person, Research Committee

## The 47th (FY 2025) IATSS Award Ceremony Program

16:40	Introduction of distinguished guests	
16:43	Opening Remarks	Kazuhiko Takeuchi President, IATSS
16:48	Selection Progress Report	Kazuhisa Ogawa Chair person, Awards and Grants Committee
16:55	<b>Presentation of Awards</b>	Ishikawa General Construction Association Oku-Noto General Civil Engineering Office, Ishikawa Prefecture Ministry of Land,Infrastructure,Transport and Tourism Hokuriku Regional Development Bureau Noto reconstruction office
	<b>Achievement Award</b> : Guardians of Road Infrastructure in Noto's Satoyama Voices from the Frontlines: Emergency Road Restoration and Reconstruction	
	<b>Achievement Award</b> : A Vibrant Space Where People and the Town Become One The Story of Namba Station Plaza: Building a Safe and Secure Community	NAMBA Community Development Council for Safety, Security and Vibrancy
	<b>Literature Award</b> : Organizational mechanisms of inheritance and selection in technological systems: The case of Japan's National Railways and the development of the Shinkansen	Hiroki Kikuchi
	<b>Paper Award</b> : Current Legal Framework and Future Challenges of Ridesharing	Hirofumi Taniguchi
	<b>Paper Award</b> : Analysis of land-use and POIs contributing to traffic accidents around intersections	Satoshi Nakao Koshi Sawada Andreas Keler Jan-Dirk Schmöcker
17:15	Congratulatory address	Koichi Tachikawa Director General of the National Police Agency Koju Matsubayashi Deputy Director-General, Minister's Secretariat, Cabinet Office
17:25	Acknowledgments	Hiroki Kikuchi Hirofumi Taniguchi Satoshi Nakao
17:34	<b>Award Achievements</b>	Ishikawa General Construction Association Oku-Noto General Civil Engineering Office, Ishikawa Prefecture Ministry of Land,Infrastructure,Transport and Tourism Hokuriku Regional Development Bureau Noto reconstruction office
	<b>Achievement Award</b> : Guardians of Road Infrastructure in Noto's Satoyama Voices from the Frontlines: Emergency Road Restoration and Reconstruction	
	<b>Achievement Award</b> : A Vibrant Space Where People and the Town Become One The Story of Namba Station Plaza: Building a Safe and Secure Community	NAMBA Community Development Council for Safety, Security and Vibrancy
17:59	Closing Remarks	Nobuyuki Kawai, Executive Director, IATSS

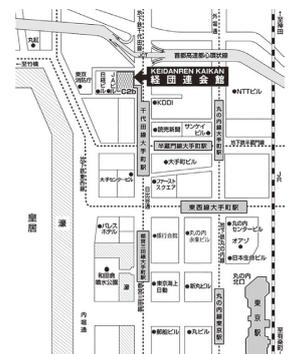
Program contents are subject to change.

### Registration

<https://event.iatss.or.jp/en/>



[For inquiries, please contact to]  
International Association of Traffic and Safety Sciences  
Secretariat : starts,inc  
E-mail : jimukyoku@starts.co.jp



## 2502A Project

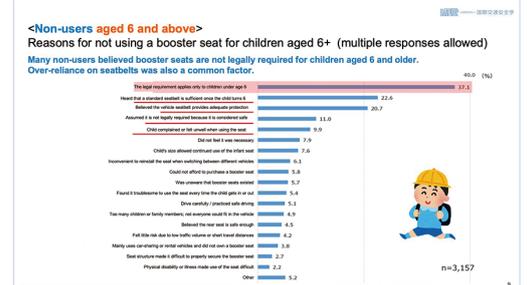
### Research into the Best Way to Disseminate Traffic Safety Information to Increase the Use of Junior Seats

#### 《 Background and Objectives 》

In recent years, traffic accidents resulting in child casualties inside vehicles have remained a persistent and tragic issue. A primary factor is the failure to effectively communicate critical traffic safety information. While the rise of the internet has enabled government agencies, municipalities, and corporations to disseminate information through their own media channels, the landscape of information delivery is shifting rapidly due to user-generated content and the emergence of AI. This has created a paradoxical situation where vital safety information fails to reach its intended audience. Taking junior seat usage as a case study, this project proposes a practical framework to ensure necessary information reaches the right people at the right time. Our ultimate goal is to protect children's lives and well-being, contributing to a sustainable society in an aging Japan with a declining birthrate.

#### 《 Overview 》

We conducted a comprehensive online survey involving 10,000 parents of children of elementary school age or younger, alongside a control group of 3,000 individuals without children. The results confirmed a widespread misconception that "a standard seatbelt alone provides sufficient safety," which significantly hinders junior seat adoption. Furthermore, while government and public institutions are highly trusted as information sources, many respondents expressed frustration over the difficulty of locating the specific information they need. These issues stem from a failure on the part of information providers to fulfill their core responsibility: delivering unified, up-to-date, and accurate information through repeated outreach. Information loses its value if it does not reach the user at the critical moment of need. Based on these insights, we propose a new model for information provision tailored to the AI era.



## 2503C Project

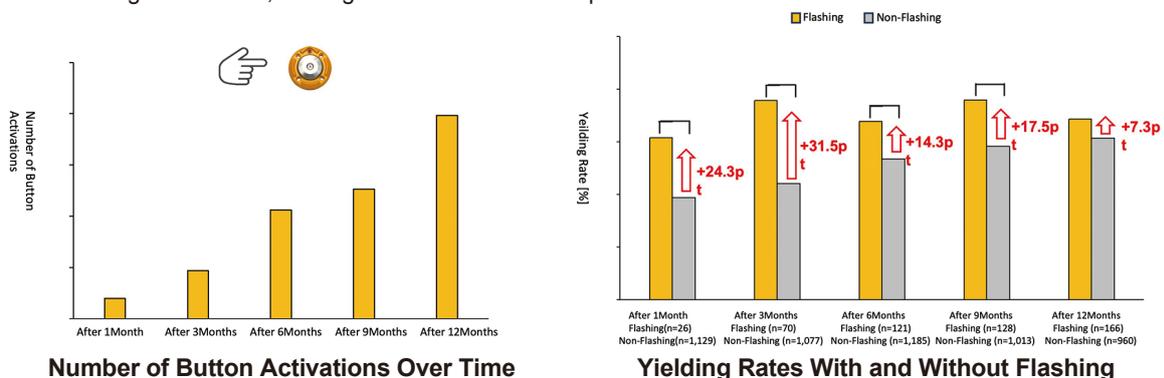
### Empirical Study on Encouraging Vehicles to Yield at Pedestrian Crossings Without Signals

#### 《 Background and Objectives 》

As sustainable traffic management faces increasing challenges regarding the maintenance and operation of traffic signals, there is a growing expectation for the strategic use of unsignalized crosswalks that do not rely on signal control. However, low driver yielding rates at these crossings remain a critical issue, necessitating effective countermeasures. Internationally, Rectangular Rapid Flashing Beacons (RRFB)—devices designed to alert drivers via high-intensity flashing lights—have been implemented as an infrastructural solution to enhance safety and convenience for pedestrians.

This study aims to review global and domestic infrastructural strategies and regulatory frameworks for improving safety at unsignalized crosswalks. Specifically, it evaluates the impact of RRFBs as "nudge-based" behavioral devices in the Japanese context, focusing on their effectiveness in triggering driver yielding behavior.

The results demonstrated a significant increase in vehicle yielding rates during both active (flashing) and inactive periods, suggesting that the mere presence of RRFB infrastructure may contribute to a baseline improvement in yielding compliance. Furthermore, longitudinal observation showed growing usage and support from pedestrians over time. The findings indicate that visualizing a pedestrian's intent to cross effectively prompts behavioral changes in drivers, leading to safer and more cooperative traffic interactions.



## 2509C Project

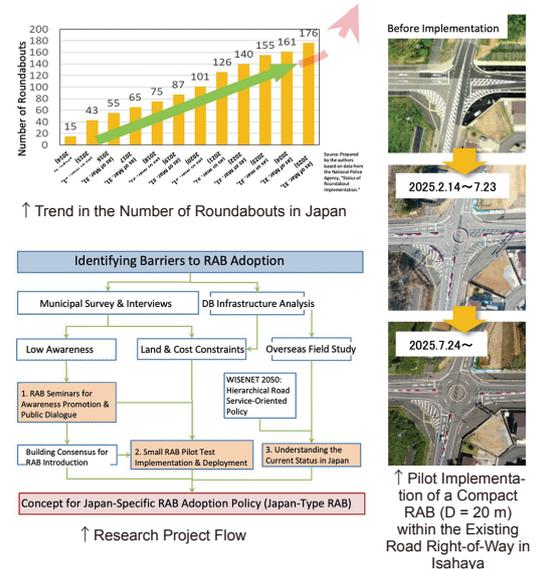
### Research on Accelerating the Dissemination of Japanese-style Roundabouts

#### 《 Background and Objectives 》

Since IATSS launched its initial roundabout (RAB) project in 2009, continuous research has driven steady progress through every stage of development—from feasibility studies and social experiments to full-scale social implementation and legislative reform. While more than 170 roundabouts have been established across Japan to date, the level of adoption remains in its infancy compared to other developed nations. From an international perspective, there is a pressing need to accelerate the deployment of roundabouts tailored to the Japanese context. This research project identifies the barriers to RAB adoption in Japan through nationwide surveys and interviews with local municipalities, empirical analysis of domestic data, and international field studies. Based on these findings, we propose a "Japanese-style RAB" concept designed to overcome these obstacles and actively disseminate these insights through seminars and professional outreach.

#### 《 Overview 》

1. Surveys and interviews with local governments revealed a significant lack of awareness and understanding of RABs, alongside a strong demand for space-saving and cost-effective designs.
2. Conducted interactive seminars in three prefectures with limited RAB experience. These efforts successfully led to at least four new social experiments or full implementations.
3. In Isahaya City, Nagasaki Prefecture, we conducted a social experiment using a compact roundabout (outer diameter  $D = 20\text{m}$ ) to verify its functionality. By collecting user data across different geometric configurations at the same intersection, we gained valuable insights for developing future design guidelines for small-scale roundabouts.
4. Building on database analysis developed by the IATSS project and international benchmarks, we defined the core concept for Japanese RAB implementation. Our research highlights that while domestic efforts have focused on compact designs, there is a need for both further deployment of cost-efficient small-scale RABs and new research into larger, flow-oriented roundabouts suitable for higher-tier road networks.



Functional Road Hierarchy	Road Type Examples	Large (incl. Turbo)	Compact	Small	Mini
A	Expressways & Multi-lane Freeways				
B	Regional High-spec & 2-lane Freeways	Future Research			
C	Arterial Roads		Installed: 3/4 of total		
D	Sub-Arterial Roads			Installed: 1/4 of total	Center Island Unavailable? Currently unclear
E	Residential & Local Roads				

↑ Functional Road Hierarchy and RAB Types

## 2514C Project

### Should Cities Become Walkable? -A Cross-Disciplinary Discussion Based on Data

#### 《 Background 》

In contemporary urban development, "walkability" is positioned as a desirable vision for the future, leading to numerous proposals aimed at making city centers more pedestrian-friendly. However, a fundamental question remains: What kind of walkability is truly beneficial, and why?

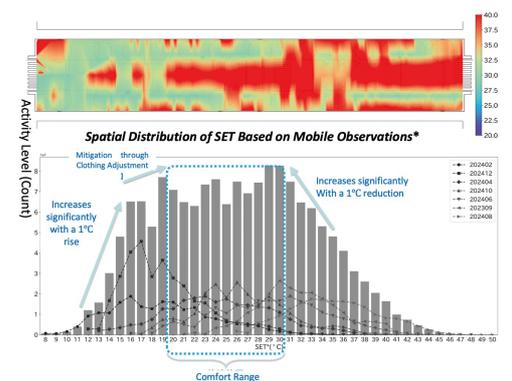
This study addresses this question by integrating objective data with cross-disciplinary discussions among diverse stakeholders. Our goal is to identify critical factors for promoting walkability and to establish methodologies for creating higher-quality urban spaces.

#### 《 Overview 》 Summary of FY2025 Results — Year 3

- Through the analysis of human flow data, quantitatively demonstrated that improving thermal comfort effectively encourages pedestrian activity.
- Findings suggest that "pleasurability" encompasses not only direct benefits—such as relaxation, enhanced concentration for outdoor work, and the discovery of personal "favorite spots"—but also the shared awareness of these effects, which fosters a deeper sense of attachment to the city.
- Case studies from Japan and abroad revealed that while walkability is often seen as a symbol of the shift from "top-down urban planning" to "bottom-up community development," the coordination between both approaches is essential for scaling these initiatives city-wide.
- A joint research project was launched in Thailand. While physical factors such as safety and pavement quality carry more weight there, we established a shared recognition of the necessity to incorporate "pleasurability" into their urban design.

#### Future Outlook

In addition to publishing these results in academic journals, we have secured funding from a Thai national fund to commence a collaborative research project. Furthermore, we aim for social implementation through partnerships with Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and local municipalities



## ATRANS Project No.1

### Escalating Punishment for Habitual Drunk Drivers: A Study on Legal Reforms and Data System Optimization

#### 《 Background and Objectives 》

Driving while intoxicated (DWI) remains a serious global public safety issue, with repeat offenders disproportionately involved in road injuries and fatalities. Effective international strategies combine graduated penalties, rehabilitation, technological enforcement, and integrated offender tracking systems.

In Thailand, alcohol-related crashes remain high, with over 80,000 offenders placed under probation in 2022, many of them repeat violators. However, fragmented data systems across agencies hinder consistent identification and sanctioning of recidivists, weakening deterrence. This study examines legal and technological gaps in managing repeat DWI and evaluates public support for graduated penalties.

Using a mixed-methods approach, it applies SEM and Delphi techniques to develop evidence-based policy recommendations to reduce DWI recidivism.

#### 《 Outline 》

This study examines legal reforms and data system optimization to address habitual drunk driving in Thailand. Using a mixed-methods design, it integrates a nationwide survey of 1,500 road users, analyzed using SEM, with a Delphi study involving 30 experts. Findings reveal that legal awareness, perceived risk of detection, trust in law enforcement, and perceived enforcement effectiveness significantly influence public support for graduated penalties, with perceived fairness acting as a strong moderator. Qualitative results identify fragmented databases, inconsistent enforcement, and limited inter-agency coordination as major barriers. The study proposes standardized nationwide enforcement, structured graduated sanctions with rehabilitation, and the establishment of an integrated cross-agency DWI offender database supported by modern technologies such as ignition interlocks and ALPR systems.



Panel Discussion at the Royal Thai Police



Panel Discussion at the Royal Thai Police



Survey Data Collection

## IATSS Award

### 《 Achievement Award 》

**Guardians of Road Infrastructure in Noto's Satoyama  
Voices from the Frontlines:  
Emergency Road Restoration and Reconstruction**

Ishikawa General Construction Association  
Oku-Noto General Civil Engineering Office, Ishikawa Prefecture  
Ministry of Land, Infrastructure, Transport and Tourism Hokuriku Regional  
Development Bureau Noto reconstruction office

**A Vibrant Space Where People and the Town Become One  
The Story of Namba Station Plaza: Building a Safe and Secure Community**

NAMBA Community Development Council  
for Safety, Security and Vibrancy

### 《 Literature Award 》

**Organizational mechanisms of inheritance and selection in technological systems:  
The case of Japan's National Railways and the development of the Shinkansen**

Hiroki Kikuchi

### 《 Paper Award 》

**Current Legal Framework and Future Challenges of Ridesharing**

Hirofumi Taniguchi

**Analysis of land-use and POIs  
contributing to traffic accidents around intersections**

Satoshi Nakao  
Koshi Sawada  
Andreas Keler  
Jan-Dirk Schmöcker