

# International Technical Conference on the Enhanced Safety of Vehicles (ESV 2023)



# Outline of the ESV 2023

4 / 3	4 / 4	4 / 5	4 / 6	4 / 7
<ul style="list-style-type: none"> <li>• Opening Ceremony</li> <li>• Plenary Panel</li> <li>• Special Session</li> <li>• Welcome Reception</li> </ul>	<ul style="list-style-type: none"> <li>• Technical Session</li> <li>• Lunch Session</li> </ul>	<ul style="list-style-type: none"> <li>• Technical Session</li> <li>• Lunch Session</li> <li>• Gala Dinner</li> </ul>	<ul style="list-style-type: none"> <li>• Technical Session</li> <li>• Closing</li> <li>• Technical Tour</li> </ul>	<ul style="list-style-type: none"> <li>• Technical Tour</li> </ul>

- Place: Yokohama, Japan
- Venue: Pacifico Yokohama North
- Organizer:
  - The United States, Department of Transportation, National Highway Traffic Safety Administration (NHTSA)
  - Japan, Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
  - Japan, Ministry of Economy, Trade and Industry (METI)
- Date: April 3<sup>rd</sup> - 6<sup>th</sup>, 2023  
(Technical tour : April 6<sup>th</sup> afternoon & April 7<sup>th</sup>)
- Style:
  - The ESV 2023 will be held as an On-site conference (i.e. not Hybrid).

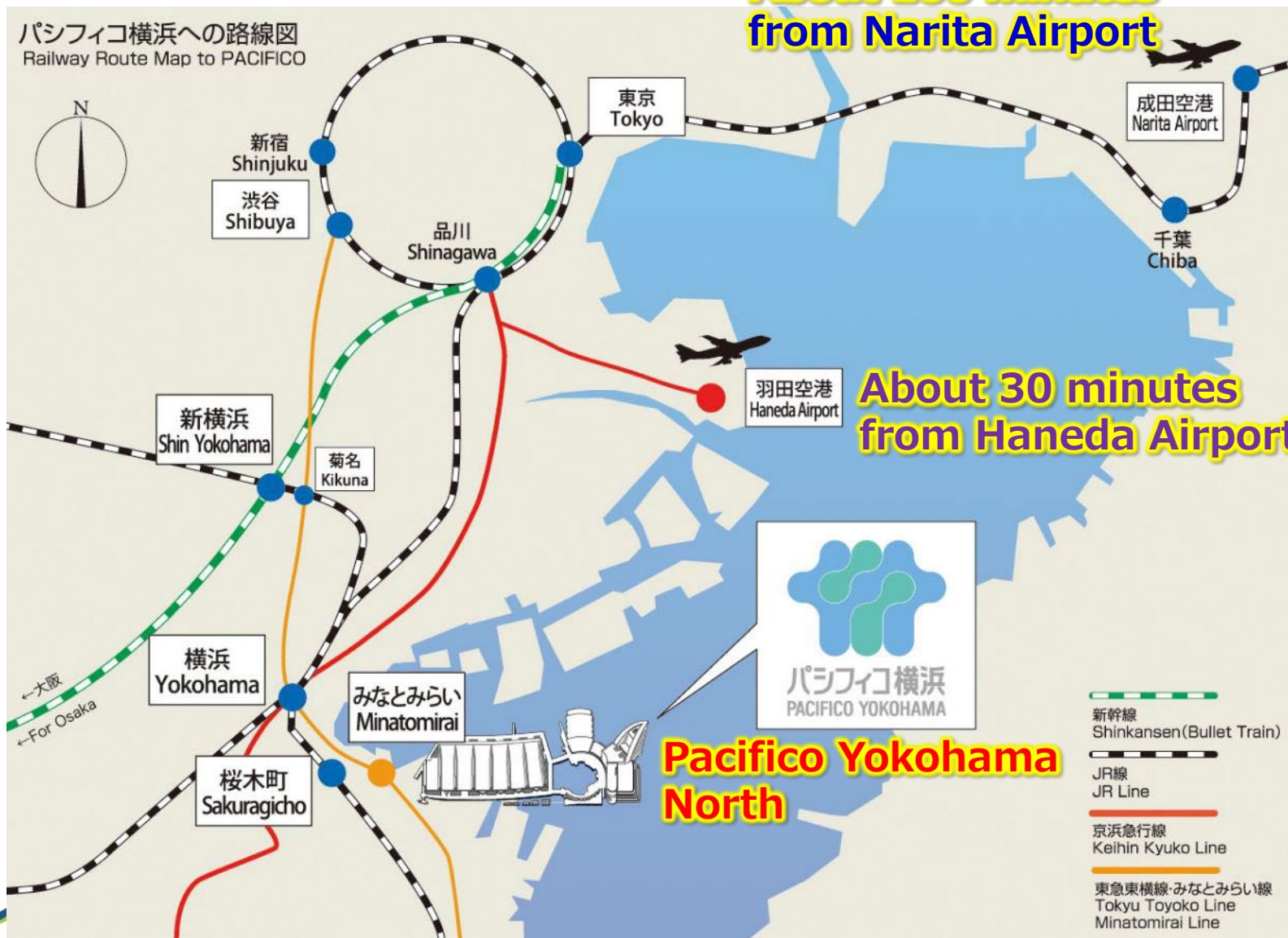


Pacifico Yokohama North

# Location - Pacifico Yokohama North

About 100 minutes  
from Narita Airport

About 30 minutes  
from Haneda Airport



Pacifico Yokohama  
North

# Plenary Panel (4/3 13:00-14:30)

## ○Theme : Aging Society

【Moderator】 Ibrahima Sow (Executive Director, Road Safety and Vehicle Regulations, Transport Canada)

### 【Panelist (Executive level)】

- ✓ Masao Notsu (Director-General for Engineering Affairs of Road Transport Bureau of MLIT)
- ✓ Takashi Yoshizawa (VP, Alliance Global VP, EE and Systems Engineering Division NISSAN MOTOR Co., Ltd. (Member, JAMA Safety technology and policy committee) )
- ✓ Pierre-Olivier Milette (Director, Smart Mobility, European Automobile Manufacturers' Association (ACEA))
- ✓ Anne Dickerson (Professor in East Carolina University's Department of Occupational Therapy and Director of the Research for the Older Adult Driver Initiative (ROADI))



# Special Session (4/3 ①15 : 00-16 : 00、②16 : 30-17 : 30)

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## ○Theme① : Vehicle Cybersecurity

【Moderator】 Cem Hatipoglu (Associate Administrator for Vehicle Safety Research, National Highway Traffic Safety Administration (NHTSA))

### 【Panelist】

- ✓ Tetsuya Niikuni (Director of Cyber Security Type Approval Test Center, Automobile Type Approval Test, Department of National Traffic Safety and Environment Laboratory. (NTSEL))
- ✓ Ir. Andre (A.C.M.) Smulders (Strategic Advisor Cyber Security, TNO)
- ✓ Josh Davis (Group Vice President and Chief Cybersecurity Officer (TMNA), Senior Vice President and Chief Information Security Officer (TCNA), and Senior Advisor- Global Enterprise Security, TMC)
- ✓ Norma M. Krayem (VP & Chair, Cybersecurity, Privacy & Digital Innovation, Van Scoyoc Associates )

## ○Theme② : SAFE SYSTEMS APPROACH

【Moderator】 Tim Johnson (Vehicle Research and Test Center, National Highway Traffic Safety Administration (NHTSA))

### 【Panelist】

- ✓ Hyoung Gu, Kim (Team Leader, International Regulation Team, KATRI, Korea)
- ✓ DeReece Smither (Research Psychologist, National Highway Traffic Safety Administration (NHTSA) )
- ✓ Luciana Iorio (Senior Legal Officer, Italian Ministry of Infrastructure and Transportation; Chairperson of United Nations Global Forum for Road Safety (WP.1))
- ✓ Dr. Sunneväng (Vice President Research, Autoliv)

# Technical Session①



- 14 technical sessions of 4 hours each (with a break)
- Researchers will present state-of-the-art papers on collision safety, collision avoidance, automated driving and AI.
- And Oral presentations of the Student Safety Technology Design Competition will be also held.

DATE	TRACK A	TRACK B	TRACK C
2023/ 4/4 AM	Protection of Vulnerable Road Users and Child Occupants <i>Chair: Suzanne Tylko (Canada)</i> <i>Co-Chair: Yasuhiro Matsui (Japan)</i>	Safety Performance in Frontal and Rear Crashes <i>Chair: Stephen Summers (United States)</i> <i>Co-Chair: Younghan Youn (Korea)</i>	Active Safety Systems for Crash Avoidance: New Systems and Technologies <i>Chair: Jost Gail (Germany)</i> <i>Co-Chair: Genya Abe (Japan)</i>
2023/ 4/4 PM	Advances in Experimental and Mathematical Biomechanics and Human Injury Research <i>Chair: Matt Craig (United States)</i> <i>Co-Chair: André Eggert (Germany)</i>	Safety Performance in Side Impact and Rollover Crashes <i>Chair: Thomas Belcher (Australia)</i> <i>Co-Chair: Cecilia Sunnevang (Sweden)</i>	Driving Automation Systems: Product Evolution; Safety Performance Assessment; and Real-World Deployment Challenges <i>Chair: Lori Summers (United States)</i> <i>Co-Chair: Philippe Vezin (France)</i>

# Technical Session②

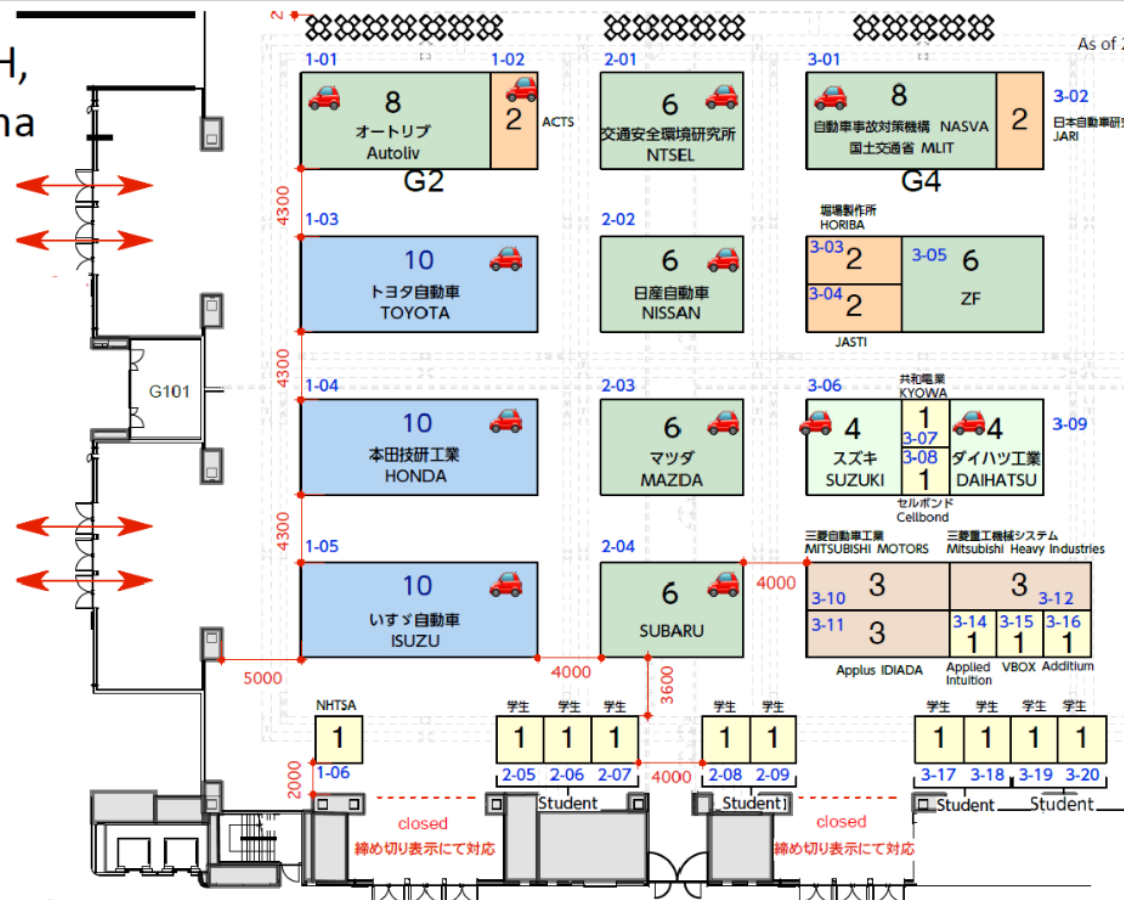
<p>2023/ 4/5 AM</p>	<p>Advances in Crash Test Dummies, Instrumentation, and Data Analysis <i>Chair: Kevin Moorhouse (United States)</i> <i>Co-Chair: Atsuhiko Konosu (Japan)</i></p>	<p>One Step Ahead Integrated Vehicle Safety Technologies <i>Chair: Jac Wismans (The Netherlands)</i> <i>Co-Chair: Matteo Rizzi (Sweden)</i></p>	<p>Human Factors Considerations for ADAS and ADS Technologies <i>Chair: Peter Burns (Canada)</i> <i>Co-Chair: Stacy Balk (United States)</i></p>
<p>2023/ 4/5 PM</p>	<p>Student Safety Technology Design Competition. Finalist Oral Presentations <i>Whitney Tatem (United States)</i> <i>Peter Striekwold (The Netherlands)</i></p>	<p>Consumer-Focused Approaches to Promote Vehicle Safety in the Automotive Market <i>Chair: Andre Seeck (Germany)</i> <i>Co-Chair: Michiel van Ratingen (The Netherlands)</i></p>	<p>Opportunities and Challenges of Applying Artificial Intelligence (AI) and Machine Learning Techniques to Enhance Vehicle Safety. <i>Chair: Marcus Wisch (Germany)</i> <i>Co-Chair: Dee Williams (United States)</i></p>
<p>2023/ 4/6 AM</p>	<p>Developing and Adapting Safety Assessment Approaches for Vehicles with ADS (SAE Levels 3, 4 and 5) <i>Chair: Peter Striekwold (The Netherlands)</i> <i>Co-Chair: Toshiya Hirose (Japan)</i></p>	<p>Restraint System Design and Performance Challenges: Addressing the Needs of Diverse Populations (Age, Gender, Stature) <i>Chair: Jim Hand (United Kingdom)</i> <i>Co-Chair: Nils Lubbe (Sweden)</i></p>	<p>New and Improved Field Data Collection, Analysis, and Benefits Assessment Methods <i>Chair: Rikard Fredriksson (Sweden)</i> <i>Co-Chair: Tetsuya Niikuni (Japan)</i></p>

# Exhibition

G1-G4, 1F, NORTH,  
PACIFICO Yokohama

As of 2022.12.05

Blue number:  
Booth number

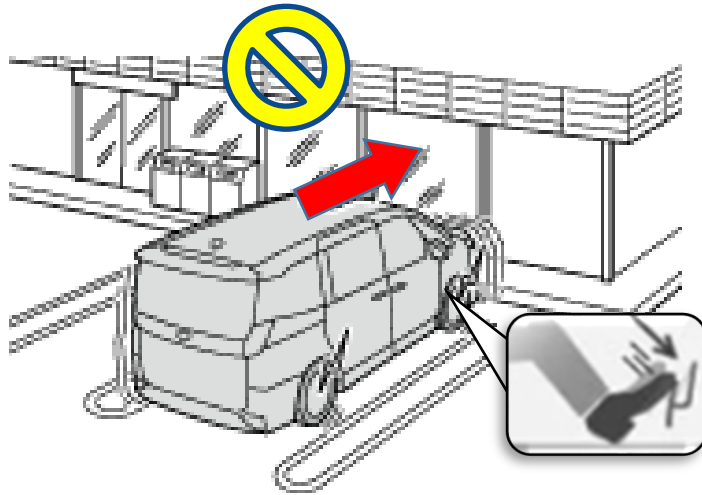


- 26 companies/organizations applied to the call for exhibition by the end of August 2022
- Application has been closed and each company/organization initiated to develop their booth based on the booth layout as shown above



# Experience of Latest Safety Technology

## Acceleration Suppression System to help avoid collision caused by pedal misapplication



### 1. Parking Support Brake

Suppress acceleration and apply braking when sensors detect obstacles such as vehicle, wall or glass



### 2. Plus Support (TBD)

Suppress acceleration when abnormal pedal operation is identified even though there is no obstacles around vehicle

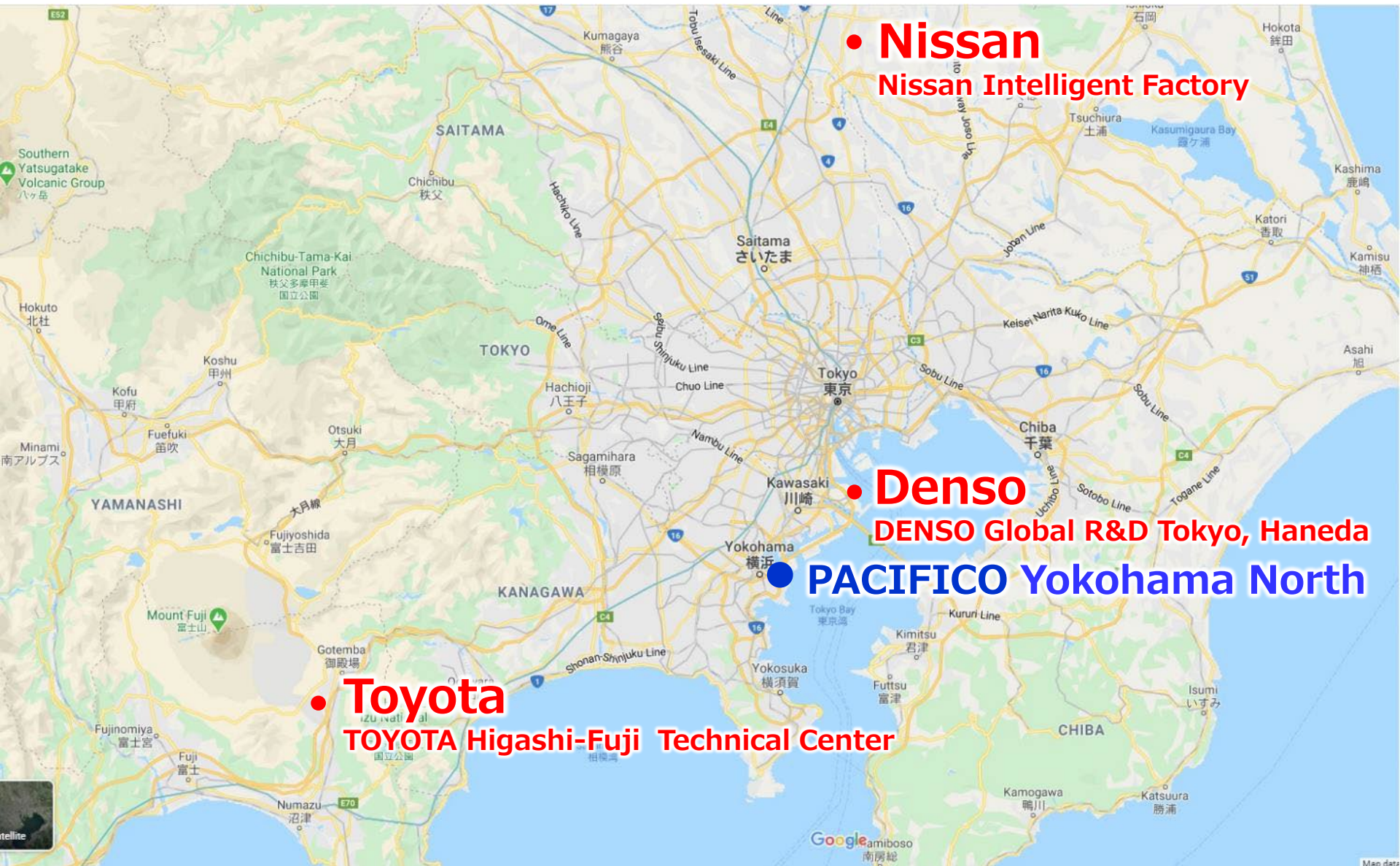
- Toyota will demonstrate their latest safety technologies (1. Parking support brake, 2. Plus support (TBD)) at "Piloti" (see next slide) adjacent to the Pacifico Yokohama North from the afternoon of April 3 to April 6, 2023
- Due to safety reasons, Demonstration driving will be done by professional driver prepared by TOYOTA, i.e. ESV participants can only experience as passenger

# Technical Tour (General information)

Date	Destinations	Place	Tour time at destination	Fee (Tax excluded)	Travel time from Pacifico Yokohama - One way - (about)
April 7th	<u><a href="#">Toyota</a></u>	<u><a href="#">TOYOTA Higashi-Fuji Technical Center</a></u>	10:40 - 15:00 (4h, 20min)	10,000 yen (includes lunch)	1h, 30 min
	<u><a href="#">Nissan</a></u>	<u><a href="#">Nissan Intelligent Factory</a></u>	12:30 - 15:00 (2h, 30min)		2h, 30 min
April 6th (p.m.)	<u><a href="#">Denso</a></u>	<u><a href="#">DENSO Global R&amp;D, Haneda</a></u>	15:00 - 17:00 (2h)	8,000 yen (without lunch)	30 min

Technical tours will be held at Toyota, Nissan and Denso

# Technical Tour (Locations)





REGISTRATION NOW OPEN

27<sup>th</sup> ESV 2023  
YOKOHAMA, JAPAN

27th International Technical Conference on the Enhanced Safety of Vehicles  
Date: April 3-6, 2023  
Venue: PACIFICO Yokohama North

Register Now!

<https://www.27esv.org/>

REGISTRATION IS NOW OPEN!

- ▶ Standard-Registration: Dec. 15, 2022 - Apr. 1, 2023
- ▶ On-site Registration: Apr. 2 - Apr. 6, 2023



- ESV international conference for the first time in four years
- The Conference in Japan for the first time in 20 years
- 50th Anniversary of ESV international Conference

## Please join ESV2023 !

# For more detail

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➤ **Official Website :**

<https://www-esv.nhtsa.dot.gov/>

➤ **Registration :**

<https://www.27esv.org/contents/registration.html>

➤ **Program (tentative) :**

[https://www-esv.nhtsa.dot.gov/images/Updated\\_2023ESVProgram%20-%20v4.pdf](https://www-esv.nhtsa.dot.gov/images/Updated_2023ESVProgram%20-%20v4.pdf)

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Thank you  
ありがとうございました