

# Agenda

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13 August 2024

## 8:00 am - 9:30 am Arrival Coffee

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Break - [Break](#) - Pyrmont Theatre Foyer

Pick up your name badge, grab a barista coffee and make your way to this morning's opening plenary

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13 August 2024

## 9:30 am - 10:30 am Plenary 1: Welcome to Summit 2024/Opening Keynote Address

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Plenary - [ITS 2024](#) - Pyrmont Theatre

Join Session Chair Adele Beachley, Transport for NSW and ITS Australia CEO Susan Harris as we set the scene for three engaging days at Summit 2024. This session will also feature our International Keynote Address from Dr Steve Dellenback - Vice President R&D at the Southwest Research Institute in the US.

Welcome from Program Committee Co-Chair: **Adele Beachley**, Executive Director SCATS - Transport for NSW

Welcome to Country: Speaker **Uncle Michael West**, Elder, Metropolitan Local Aboriginal Land Council

Welcome from Summit Host: **Susan Harris**, CEO - ITS Australia

International Keynote Address: **Steve Dellenback**, Vice President R&D - Southwest Research Institute (US)

Welcome from ITS Asia Pacific: **Akio Yamamoto**, Secretary General - ITS Asia Pacific

9:30 am

[Welcome to Country](#)

[Michael West](#)

Welcome to Country

9:40 am

[Official Conference Opening](#)

[Susan Harris](#)

9:45 am

[Keynote Address](#)

[Steve Dellenback](#)

Presentation from South West Research Institute

10:05 am

[Welcome from ITS Asia Pacific](#)

[Akio Yamamoto](#)

Welcome from ITS Asia Pacific

10:10 am

[Closing Remarks](#)

[Adele Beachley](#)

Closing Remarks

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13 August 2024

## 10:30 am - 11:30 am Morning Tea Break

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Break - [Break](#)

Head to the Exhibition Hall to mingle with fellow delegates over morning tea and interact with an exciting array of exhibitors.

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13 August 2024

## 11:30 am - 1:30 pm A Roundtable Discussion: The Future of Connected Truck Data and its Impact Across the Industry

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Roundtable Discussion - Invite Only - [ITS 2024](#) - C4.9/C4.10

Invitation only event sponsored by [Directed Technologies](#).

Facilitated by Samantha Taylor, Head of Transport Analytics at Transurban, this **invitation only event** will bring together representatives from across the industry, including OEMs, freight providers and related associations, to discuss the current and future applications of connected truck data, data sharing for public good, the challenges and the opportunities.

### Roundtable Sponsor



11:30 am  
[Heavy Vehicle Round Table](#)

## 11:30 am - 12:30 pm BreakOut Session 01: C-ITS Now and into the Future

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Session - [Electric, Connected, Automated Transport](#) - C2.1

Join this session for an update of Australia's Cooperative Intelligent Transport Systems (C-ITS) journey. Featuring a big picture of overview of where the nation stands, A deep dive into Western Australia's strategy and roadmap for the next three to four years and a case-study of the collaborative initiative by Lexus Australia and Ohmio to trial C-ITS and AVs in Sydney's Darling Harbour.

11:30 am  
[Safer, Accessible Transport: Unifying C-its & Automated Driving](#)  
[Ada Lin](#)

In Sydney's Darling Harbour, a collaborative initiative by Lexus Australia leverages C-ITS and AVs to enhance urban mobility, focusing on safety and inclusivity for the elderly and disabled. Incorporating Intersection Movement Assist, VRU protection, and Collective Perception, it aims to create a safer, more accessible transport system.

11:45 am

## [Main Roads Western Australia C-ITS strategy and Deployment Plan](#)

[Meifang Lai](#)

This presentation will focus on the challenges and vision for C-ITS, outline key use cases, deployment strategy and a road map for next 3-4 years. The deployment strategy focusses on leveraging national activities to meet the specific needs of Western Australia, providing a base to deliver the outcomes sought.

12:00 pm

## [C-ITS and wider vehicle data ecosystem](#)

[Scott Benjamin](#)

Cooperative Intelligent Transport Systems (C-ITS) is a harmonised approach to data and communications that allows vehicles to talk with each other and with road infrastructure, to share information and help drivers and road operators make better real-time decisions. Such enhanced decision making has the potential to benefit community safety, productivity, sustainability, and journey experience. This presentation shares the current state of C-ITS in Australia and the potential opportunities for Australia.

**11:30 am - 12:30 pm**

## **BreakOut Session 02: Future Mobility - Leveraging data and models for safer more efficient networks**

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Session - [Future Mobility](#), [ITS 2024](#) - C2.2

Large language models, Artificial Intelligence and Machine Learning as well as Connected Transport are integral to future mobility. Presenters in this sessions will unpack real world examples from across the globe where these evolving technologies are being leveraged to deliver safer, connected and efficient transport networks.

11:30 am

## [Integrating Large Language Models for Traffic Incident Severity Classification](#)

[Artur Grigorev](#)

We present an innovative approach to traffic incident modelling through the integration of large language models (LLMs) with established machine learning techniques. This method enhances the classification accuracy of traffic incident severity, leveraging the nuanced understanding of unstructured text provided by language models.

11:45 am

## [Practical applications of AI and Vision systems](#)

[Simon Ryley](#)

This topic focuses on how ai can assist in the betterment of key community assets, leading to positive safety outcomes. We will present real life instances from around the globe of how this technology is enabling efficiency and optimum safety outcomes for citizens including monitoring of roads to provide support for automated detection of road conditions to help direct maintenance services more effectively, detecting vehicles parking or driving in bus and bike lanes illegally.

12:00 pm

## [Built For Connection – How To Enable A Connected Transport Ecosystem](#)

[Gerrald Mateo](#)

Connected transport merges digital tech for safer, efficient, and sustainable systems. It includes Connected Vehicles, ITS, and data analytics for informed planning. Integration offers unified management. Cybersecurity is vital amid increasing connectivity. Overall, it revolutionizes transportation, promising safer, more accessible mobility with ongoing technological advancements.

**11:30 am - 12:30 pm**

## **BreakOut Session 03: Governance Frameworks - Cybersecurity, Systems Thinking and Asset Management**

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Session - [Governance Frameworks](#), [ITS 2024](#) - C2.3

The rollout of ITS tech innovations can only succeed if they're supported by standards and governance frameworks that underpin their use in our transport networks. Three interesting presentations unpack important issues such as aligning with international standards to enhance cybersecurity, a systems thinking approach to distracted driving, and the future of automatic fare collection.

11:30 am

[Securing Public Infrastructure: Navigating Cybersecurity with IEC 62443 Standards](#)

[Angie Chen](#)

Given the potential impact of cyberattacks on public infrastructure, the Asset Standard Authority from TfNSW recommends aligning industrial automation and control systems with IEC 62443. This session includes an overview of IEC 62443, the concept of defense-in-depth using the Purdue reference model and implementation strategies as a communication equipment supplier.

11:45 am

[Managing Distracted Driving: A Systems Thinking Approach](#)

[Zohre Abedi](#)

This research employed systems thinking to explore how the management of distracted driving could be improved. We developed a control structure model, identifying driver distraction stakeholders, controls, and feedback mechanisms. Stakeholder interviews were then used to identify seven requirement categories for effectively addressing distracted driving, emphasising a multifaceted, coordinated approach.

12:00 pm

[Emerging trends in PT Fare collection](#)

[Neil George](#)

Join us for an enlightening presentation on the future of transit with Automatic Fare Collection (AFC). Discover the latest trends revolutionizing public transportation, from seamless contactless payments to personalized mobile ticketing solutions. Learn how AFC systems are enhancing user experience, optimizing operations, and shaping the future of urban mobility. Explore cutting-edge technologies like biometric authentication and blockchain for secure transactions. Don't miss this opportunity to stay ahead in the ever-evolving world of transit. Join us and be part of the discussion towards a more accessible, efficient, and interconnected public transportation system.

**11:30 am - 12:30 pm**

**BreakOut Session 04: Future Mobility - Door-to-Door Transport**

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Session - [Future Mobility](#), [ITS 2024](#) - C2.4

From on-demand public transport that works better for travellers, to transport networks that better cater for micromobility and multimodal solutions, this session examines the last mile/first mile challenge - how can we deliver seamless door-to door services for our customers?

11:30 am

[Integrated offer of on-demand and public transport for seamless door-to-door journeys](#)

[Bulent Yilmaz](#)

Demand-responsive transport (DRT) is a vital component of intermodal travel using public transit. Siemens, a leader in MaaS and DRT technology, presents a case study of Île-de-France Mobilités, showcasing innovative multi-operator DRT integration with an intermodal trip planner for accessible journey planning, booking and payment.

11:45 am

[Making sense of micromobility](#)

[Dean Economou](#)

Micromobility, especially electrified micromobility, may become the most effective way to radically reduce transport emissions, provide equitable and sustainable transport, and reduce or eliminate road congestion. Every time an eScooter or an eBike replaces an SUV on a short trip there are a multitude of benefits. Here we examine the benefits of widespread micromobility, friction points like safety from accidents and batteries, the role of ITS, urban renewal, and make a call to action for policy makers.

12:00 pm

[Conceptualization Of Multimodal Travel Through The Lens Of Systems Thinking Approach](#)

[Ishani Shehara Pitigala Liyana Arachchi](#)

The cascading behaviour of components of multimodality can be effectively visualized through system-level mapping using system dynamics. This visualization method, particularly through Causal Loop Diagrams, will be adopted in this study to deliver a holistic view of the interconnected variable components within the multimodal system, denoting its complexities.

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**12:30 pm - 1:30 pm**

**Lunch Break**

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Break - [Break](#)

Join colleagues for lunch in the Exhibition Hall to unpack the interesting learnings from the morning's sessions. Be sure to visit our exhibitors during the break to build important business connections.

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13 August 2024

**1:30 pm - 3:00 pm**

**BreakOut Session 05: Connected and Cooperative ITS - Trials and Case Studies**

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Session - [Electric, Connected, Automated Transport](#), [ITS 2024](#) - C2.1

Delivering our transport future relies on putting great ideas into practice and then assessing the success of pilots and trials to deliver the best possible transport solutions. This session includes a series of insightful presentations from government (Transport NSW), industry (Kapsch TrafficCom Australia) and academia (UTS and University of Newcastle).

1:30 pm

[Learnings From A Decade Of Field Research Into Connected Vehicles And Road Safety](#)

[John Wall](#)

In 2012, NSW Centre for Road Safety (NSWCRS) established the Cooperative Intelligent Transport Initiative (CITI). The testbed focused on connected vehicles receiving safety related messages using dedicated short-range communications (DSRC) in the 5.9GHz band of the radio spectrum. Analysis of the data was unable to demonstrate a road safety benefit of the use cases tested. The Centre for Road Safety will now shift its focus to the development of cloud-based safety applications.

1:45 pm

[A hybrid approach to scaling up C-ITS technology](#)

[Jessica Tong](#)

Cooperative Intelligent Transport Systems (C-ITS) has long been viewed as a key technology to achieve safety and emissions targets for governments in Australia and around the world. Challenges include equipping extensive road infrastructure and aging vehicle fleets. To address these challenges, Kapsch has worked globally with agencies to leverage a hybrid approach combining physical roadside and in-vehicle infrastructure with virtual environments to reduce the barrier for entry into the world of C-ITS.

2:00 pm

[Where and why risky driving behaviour occurs: a New Zealand case study](#)

[Adriana Simona Mihaita](#)

The World Health Organization reports that around 1.3 million people die each year from road traffic crashes, predominantly affecting young adults and teenagers known for riskier driving behaviors. This study employs machine learning to analyze risky driving behaviours in Auckland, New Zealand. Utilizing Compass IoT Data, it aims to identify key factors like road geometry and community influence on risky driving,

through data analysis, categorization of bike lanes and clustering of suburbs.

2:15 pm

[Driving Adoption Of Connected Technology](#)

[Alex Ramsay](#)

Connected technology plays a crucial role in enhancing road safety and improving efficiency by reducing the demands on the driver through real-time data monitoring, information, and intervention. Real-time traffic signal information (signal phase and timing) has largely been excluded from connected vehicle offerings. This presentation will examine some of the reasons and, more importantly, a path to widespread adoption. It will cover the role of government, vehicle manufacturers, and industry sectors.

[Pursuing our strategic goals through vehicles and technology](#)

[Joanne Vanselow](#)

The Austroads Vehicles and Technology program aims to harness the benefit of vehicles and technology and manage the risks. Key technologies: C-ITS, vehicle automation and low and zero emission vehicles are essential to achieving our targets for net zero, zero road deaths and a reduction in serious injuries and creating a productive and equitable transport network. The Vehicles and Technology program is delivering an exciting program to enable technology solutions on our roads.

**1:30 pm - 3:00 pm**

**BreakOut Session 06: Freight Futures - Enabling Seamless Movement of Goods**

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Session - [Freight and Services](#), [ITS 2024](#) - C2.2

Transport of goods is a critical element of our sector and offers many challenges in a country the size of Australia. Join this sessions to see what technology can offer to enable more efficient and seamless delivery of goods and enhance the safety for drivers and other road users.

1:30 pm

[Reduction in Over-height Truck incidents in Sydney](#)

[Niroshan Jeyarajah](#)

Before June 2023, New South Wales experienced significant numbers of over-height vehicle incidents and detections, disrupting the road network, impacting the economy, and posing safety risks to tunnel and bridge infrastructure and road users. To tackle over-height vehicle incidents in New South Wales, a taskforce was formed mid-2023, including Transport for NSW, the National Heavy Vehicle Regulator, and NSW Police. A 32% incident reduction and 67% closure minute reduction were achieved in six months through collaborative strategies and improvements, with further enhancements planned.

1:45 pm

[Main Roads Freight Signal Priority Trial](#)

[Meifang Lai](#)

Freight Signal Priority (FSP) is a critical traffic management strategy aimed at enhancing the efficiency of freight movement through signalised intersections. This presentation will provide the outcomes of our first study, which focused on the implementation and evaluation of FSP through a trial utilising the Telstra C-ITS (Cooperative Intelligent Transport System) platform interfacing with the SCATS Priority Engine.

2:00 pm

[Enhancing Last-mile Delivery Planning: Understanding Drivers' Preferences With Machine Learning](#)

[Zahra Nourmohammadi](#)

In last-mile delivery logistics, drivers often choose routes based on personal preferences, favoring familiar roads over the shortest distance. This study proposes an innovative approach to learning drivers' routing preferences by integrating Adaptive Large Neighborhood Search (ALNS) with a sampling technique and a Machine Learning (ML)-based optimization technique. Our method, validated with real-world data, offers superior solutions that align with drivers' preferences, advancing ML-powered last-mile delivery planning.

2:15 pm

[An Integrated Traffic Signal Priority Solution For Emergency Vehicles In Darwin](#)

[James Smith](#)

Led by NT Government Department of Infrastructure, Planning and Logistics (DIPL), Micro Connect and

TfNSW SCATS worked to design, build, integrate, test and commission a Traffic Signal priority request solution for Emergency Vehicles incorporating Micro Connect's VPriority platform and the TfNSW SCATS Priority Engine (SPE) products. In the presentation, Micro Connect will outline the business drivers for the NT Government, how the project was approved and how the solution worked in practice along with real-world examples of the signal priority ecosystem in action and benefits realised.

**1:30 pm - 3:00 pm**

## **BreakOut Session 07: Enabling MaaS - Payments, Modes, and Customer Experience**

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Session - [Future Mobility](#), [ITS 2024](#) - C2.3

The future of Mobility as a Service was a significant talking point at our Mobility 2024 conference in May and this important session will drive the conversation forward by combining academic expertise with practical industry insights. Featured presenters include University of Sydney's Professor John Nelson making a case for the scalability of MaaS, and Cubic Transportation Systems, Vice President of Innovation Ellory Monks examining the future of transportation payments.

1:30 pm

[Establishing a Framework of Support to Scale in Mobility as a Service](#)

[Thiranjaya Kandanaarachchi](#)

Only a few MaaS schemes have proceeded beyond trials and the recent high-profile collapse of MaaS Global underlines the need for more robust policy frameworks and organisational models. This presentation explores the complexities of building a sustainable and scalable MaaS ecosystem. Drawing on current research we aim to identify the optimal MaaS framework that benefits both users and providers whilst contributing to sustainability goals.

1:45 pm

[Facilitating Customer Mobility Via A Multimodal Transport Solution](#)

[Faiq Gazdhar](#)

Introducing a pioneering multimodal transport solution to enhance customer mobility. Aimed at improving the end-to-end journey, our platform seamlessly integrates real-time data from diverse transport providers to offer comprehensive route options to individual travellers. It prioritises convenience, accessibility, and sustainability to streamline urban travel and promote eco-friendly transportation choices.

2:00 pm

[Improving the Regional Mobility Customer Experience](#)

[Ivan Kladnig](#)

How to improve the customer experience for regional passengers is an ongoing issue that many operators face, how can technology enable operators to improve outcomes for regional customers. In addition to having reliable regular scheduled services, operators need modern, integrated and customer friendly systems in place to help them operate their services and to better serve their customers.

2:15 pm

[Seamless Customer Journeys](#)

[Sarah Capstick](#)

Translink was created to deliver seamless customer journeys, and from our inception in 1993, we have continued to deliver innovative customer solutions aimed at making travel easy. From a phone number assisting customers find out more service information, we have grown our customer service offering to include integrated ticketing, real-time passenger information, new modes and most recently integration with third party services. We continue to test new ideas and technology through customer focused trials many of which have been subsequently implemented across our network. With the inclusion of our MaaS program into Translink, we continue to test new ideas to improve mobility options for Queenslanders. Today's talk will focus on some of our recent customer trials and where we plan to go next.

2:30 pm

[TRIPS – A national database for trip generation surveys](#)

[Sam Zareh Andaryan](#)

In transportation engineering and planning, land-use-based trip and parking generation data inform



significant decisions such as rezoning of land, infrastructure contribution schemes and designs/upgrades of public spaces that ultimately shape our environment.

**1:30 pm - 3:00 pm**

## **BreakOut Session 08: Pricing the Networks**

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Session - [Governance Frameworks](#), [Smart Infrastructure and Data Ecosystems](#), [ITS 2024](#) - C2.4

Transport access pricing is a critical and complex question to improve congestion on our road networks and encourage greater uptake of public transport and other mobility solutions. This session unpacks the role of technology in pricing out networks - from international case studies of road user charging to macroeconomic modelling to understand multimodal trip demand, and more.

1:30 pm

[Road User Charging – Lessons From Europe](#)  
[Lance Brand](#)

Many European counties already have road user charging for trucks designed to make longhaul freight vehicles pay for road usage in the country they drive. With the proliferation of electric battery vehicles, governments see decreasing fuel excise income and are looking for new ways to collect tax for road usage.

1:45 pm

[Creating Seamless Passenger Journeys in NSW - Apple Express Transit](#)  
[Tania Page](#)

In mid 2023, Transport for NSW (TfNSW) deployed Apple Express Mode for our Opal ticketing systems. Express Mode for Apple Pay offers a more seamless experience with the ability to tap on and tap off with an Apple iPhone or watch without having to 'unlock' or authenticate it. This upgrade means most users of Apple devices no longer unlock their device when tapping on and tapping off. By continuing to enhance the customer experience, TfNSW is leveraging technology and partnering with industry leaders, to improve a passenger's end-to-end journey.

2:00 pm

[Econometrics of Unimodal vs. Multimodal Trip Demand Mechanisms](#)  
[Ishani Shehara Pitigala Liyana Arachchi](#)

Multimodality entails situational combination of different modes within a trip and encourages higher adoption of sustainable travel. Thus, understanding the multimodal demand mechanism is essential to design strategies, such as successful community need-focused MaaS deployment. The study will apply the advanced econometric models to examine the demand mechanism of multimodalism.

2:15 pm

[Tech Meets Tarmac: How Digital RUC Schemes Create Seamless Driver Experiences](#)  
[Marinos Tsiplakis](#)

Electric vehicle sales are booming in Australia, rising 161 per cent in 2023 compared with the previous year. A total of 87,217 electric vehicles were sold around the country in the past 12 months. But the transition to electric vehicles poses a challenge for existing government revenue streams - how you do fairly and equitably tax electric vehicle drivers since they no longer pay fuel excise at the pump? How do you build a resilient, sustainable, and seamlessly integrated road user charging system?

2:30 pm

[How might congestion pricing be implemented in Auckland?](#)  
[Scott Wilson](#)

The recently elected New Zealand Government has committed to progressing congestion pricing in Auckland, which would be the most car dependent city in the world to have congestion pricing if it is implemented. This presentation will explain the challenges Auckland has had with transport and congestion over the past 25 years, highlight how New Zealand seemed to bypass the widespread political resistance seen in other countries and explain the main options for congestion pricing in Auckland and the technologies that will support it.



**1:30 pm - 3:00 pm**

## **SIS 01: Connecting The Dots: Building Australia's Electric Freight Network**

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Special Interest Session - [ITS 2024](#), [Freight and Services](#), [Sustainable and Inclusive Transport](#) - C2.5/C2.6

Australia's transport system contributed 21% of our overall emissions in 2023. It is our fastest growing source of emissions—a major culprit being energy intensive road freight. Rigid and articulated trucks contributed over 10% of all transport emissions. This figure is set to increase in the years ahead.

The transition to zero tailpipe emissions vehicles is a critical step in Australia's ambition to achieve Net Zero in 2050. Freight and logistics operators are spearheading this charge, with significant investment into (primarily electric) middle-mile freight and last-mile delivery vehicles to meet consumer demands. Vehicle manufacturers are also heavily investing in vehicle and battery technology innovation. However, like passenger vehicles and the roll-out of supporting super charging highways, shared-use charging is both central and critical to achieving the scale needed to support a connected network for these larger vehicles. This approach is already being adopted globally and planning is underway for the east coast of Australia, with the first site to be in operation in Melbourne by 2025.

1:30 pm

[Defining the Need and Opportunity](#)

[Richard Savoie](#)

Connecting the dots: building Australia's electric freight network: Presentation 1

1:50 pm

[Sustainability, Scalability and Commercial Drivers for the Network Approach](#)

[Anthony Headlam](#)

Connecting the dots: building Australia's electric freight network: Presentation 2

2:10 pm

[Development of Universal EV Truck Charging Guidelines](#)

[Abseen Anya](#)

Connecting the dots: building Australia's electric freight network: Presentation 3:

2:30 pm

[Panel Discussion](#)

[Abseen Anya](#), [Anthony Headlam](#), [Richard Savoie](#)

Panel Discussion

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13 August 2024

**3:00 pm - 4:00 pm**

## **Afternoon Tea Break**

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Break - [Break](#)

Recharge for the day's final plenary session with a coffee and snack over afternoon tea in the Exhibition Hall.

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13 August 2024

**4:00 pm - 5:30 pm**

## **Plenary 2: AI and Advanced Technology for New Mobility**

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Plenary - [Future Mobility](#), [ITS 2024](#) - Pyrmont Theatre

AI is one of the dominant issues of the 2020's, with every major industry looking to leverage its capabilities to enhance performance, increase productivity and deliver greater solutions. Beyond the hype, what does AI offer the ITS sector and what can it do to deliver on the common goals of enhancing safety, sustainability and efficiency? In this panel discussion, hear from experts across industry and government on how AI is being used right now in the transport sector and how to ensure security, privacy and accessibility remain forefront considerations to ethically deliver the technological benefits from AI.

Keynote Address:

**Niloo Karimi**, Director Transport Systems, Department of Transport and Planning Victoria

**Jennifer Loake**, Head of Partners and Key Accounts - TomTom

Panellists:

**Jeremy Hulse**, Executive General Manager Cybersecurity – SAGE Group

**Julie Gee**, Executive Director, Transport Strategy – Transport for NSW

**Roy Moser**, Chief Remote Pilot and Manager Field Technology Innovation – Transport for NSW

**Meead Saberi**, Co-founder and CEO, Footpath.ai

**Channa Seneviratne**, Executive – Technology Development and Innovation – Telstra

Moderator:

**Damian Garnham**, National Sector Leader Transport and Mobility - Deloitte

4:00 pm

[Keynote](#)

[Niloo Karimi](#)

AI and New Mobility

4:10 pm

[Keynote](#)

[Jennifer Loake](#)

Update from TomTom

4:20 pm

[Own Perspective](#)

[Roy Moser](#)

Drone in a Box

4:25 pm

[Own Perspective](#)

[Channa Seneviratne](#)

Network Resilience and Integration

4:30 pm

[Own Perspective](#)

[Julie Gee](#)

Update from TfNSW

4:35 pm

[Own Perspective](#)

[Jeremy Hulse](#)

Compliance, Risk

4:40 pm

[Own Perspective](#)

[Meead Saberi](#)

Footpath.ai

4:45 pm

## [Panel Discussion and Q&A](#)

[Channa Seneviratne](#), [Jeremy Hulse](#), [Meead Saberi](#), [Niloo Karimi](#), [Roy Moser](#), [Simon Hunter](#)

Panel Discussion and Q&A

5:20 pm

## [Welcome Reception](#)

Sponsors Note | Acknowledgement

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13 August 2024

**5:30 pm - 7:30 pm**

## **Welcome Reception**

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Social Event - [Social Event](#) - Expo Hall

Proudly sponsored by AWS.

Finish day one of Summit 2024 by joining colleagues and friends for refreshments at the Official Welcome Reception, held in the Exhibition Hall.

The Welcome Reception is a great opportunity to expand your professional network and meet with more than 40 exhibiting organisations.

### **Event sponsor**



5:30 pm

## [Welcome Reception in the Expo Hall](#)

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14 August 2024

**7:30 am - 9:30 am**

## **VIP Breakfast: Trends in the Use of AI in transport infrastructure and asset management**

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Roundtable Discussion - Invite Only - [ITS 2024](#) - C4.9/C4.10

This **invitation only** breakfast, hosted by NEC, will include a short panel discussion on trends in the use of AI in transport infrastructure and asset management.

### **Breakfast Event Sponsor**



### **Panel speakers:**

- **Professor Vinayak Dixit**, Professor of Transport Systems, School of Civil and Environmental

Engineering - UNSW Sydney

- **Mark Messenger**, Head of Smart Transport ANZ / Global Centre of Excellence Lead - NEC
- **Chris Nielsen**, Senior Account Executive, Transport - Amazon Web Services
- **Stacey Ryan**, Policy Manager - ITS Australia (Moderator)

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14 August 2024

## **8:00 am - 9:00 am** **Arrival Coffee**

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Break - [Break](#)

You'll need your morning coffee ahead of our packed day 2 agenda. Visit the TomTom Coffee Cart in the Exhibitor Hall and grab this opportunity to meet the exhibitors before your busy day.

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14 August 2024

## **9:00 am - 10:30 am** **BreakOut Session 09: Smart Infrastructure - AI, Analytics and Connected Vehicle Data**

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Session - [Smart Infrastructure and Data Ecosystems, ITS 2024](#) - C2.1

New data sources are enabling huge breakthroughs in safety and connectivity. How are these data being used to improve road safety for workers, AI for transport management and more...

9:00 am

[Lessons learned on data quality management in a large scale \(C-ITS\) deployment](#)

[Gary Lin](#)

The Dutch Talking Traffic program contributes significantly to the discourse on Intelligent Transport Systems (ITS) by addressing the critical aspect of data quality control in deploying Cooperative Intelligent Transport Systems (C-ITS) services at scale. This presentation highlights a three-year journey of the Dutch Talking traffic Program, where data quality control evolved from initial quality arrangements to continuous data quality control including KPIs, quality control policies, and diagnostics within the program's ecosystem.

9:15 am

[Road Safety Program Evaluation Using Connected Vehicle Data](#)

[Sarah Dods](#)

In 2023 GHD were engaged by DTP to evaluate Safe Travel in Local Streets (STiLS) installations in Corio-Norlane and South Geelong to confirm if the program had indeed delivered "safe travel". Connected Vehicle Data (CVD) was used to evaluate the program comparing driver behavior before and after traffic calming devices were installed. The approach was able to measure safety improvements from installations and residual risk, providing a powerful new way to prioritise limited road safety funding.

9:30 am

[Advanced Perception AI in Transport](#)

[Paul Milazzo](#)

A revolutionary approach creates a realtime digital replica of your road network, fueling AI-enhanced ITS applications, ensuring your traffic management is at the forefront of innovation and efficiency. There are three pivotal objectives: 1. Optimize Traffic Flow by providing deep insides of road user movements and analysis in real-time 2. Increase Road Safety especially for vulnerable road users (VRU) like pedestrians and cyclists 3. Enhance Autonomous Driving by providing an extended environmental cognition from the road-side perspective.

9:45 am

[Asset AI®](#)

[Brooke Knox, Joshua Devitt](#)

Traditionally, inspections of the road network occur 2-3 times per year or in response to customer complaints. This approach means council repairs are reactive, often leading to road defects going undetected and increasing the cost of repair. Asset AI® is a new digital tool being trialled by New South Wales councils. Asset AI® enables councils to detect road defects early, and to streamline and accelerate road maintenance, improving the safety of road users.

**9:00 am - 10:30 am**

## **BreakOut Session 10: Smart Infrastructure - Data Analytics and Applied Technology**

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Session - [Smart Infrastructure and Data Ecosystems, ITS 2024](#) - C2.2

Safer and more efficient transport networks can be powered by data analytics and AI - these experts are presenting on the work they're doing now to make our roads safer and more efficient.

9:00 am

[Leveraging tools, data and platforms to provide world class ITS service delivery.](#)

[William Taroni](#)

ITS Service Technicians today keep our roads and technology running smoothly, safely and more efficiently than ever. A world class service team is enhanced even further by world class, industry specific service tools, platforms, best practice and data analysis. In this talk we explore how private service organizations and public entities can leverage data, tools and platforms to facilitate faster, more efficient, safer and better informed ITS maintenance and services delivery.

9:15 am

[Optimizing Traffic Management: Harnessing Floating Vehicle Data Analytics By German Road Authorities](#)

[David McIver](#)

The Talbrücke Rahmede bridge in Germany was demolished in 2021, causing disruptions. This case study explores how Autobahn GmbH and Strassen NRW use data analytics, including INRIX's floating vehicle data and xyz.ai visual analytics, to monitor and manage traffic. This approach negates the need for expensive traditional traffic measurement infrastructure.

9:30 am

[Improving Flow and Safety at Tidal Flow Site Using Enhanced Portable Traffic Signal Solution](#)

[James Cox](#)

Portable traffic signals can be used to control tidal flow worksites, however, locations with high traffic volumes often need staff to manage queues and minimise all-red times. Addinsight, with SAGE Automation, both SAGE Group companies, developed an automated solution for a client tasked with a 600-metre-long bridge refurbishment project.

9:45 am

[Artificial Intelligence-based Audio Signal Processing Applied To Intelligent Transportation Systems](#)

[Hossein Parineh](#)

This paper explores the efficiency of acoustic sensors in Intelligent Transportation Systems (ITS), emphasizing their cost-effectiveness and ability to capture diverse data types. Using AI based audio signal processing for tasks like speed estimation and vehicle classification, it highlights their potential for enhancing ITS operations and suggesting avenues for future research.

10:00 am

[Next-Generation Disruption Management](#)

[Jill Thomson](#)

Disruptions to road networks are inevitable. Disruptive events cause frustration, long delays, dangerous road conditions and confusion. No two disruptions are the same and there is no easy fix. Transmax is working with state government road agencies to build a next-generation disruption management tool for safer roads and quicker recovery from disruptions.

**9:00 am - 10:30 am**

## **BreakOut Session 11: New Technologies for Sustainable, Inclusive and Efficient Networks**

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Session - [Smart Infrastructure and Data Ecosystems](#), [Sustainable and Inclusive Transport](#), [ITS 2024](#) - C2.3

From massive international trials for automated freight to AI assisted network management new technologies are delivering safer more equitable transport opportunities now - these presentations show how it can be done.

9:00 am

[Global Urban Evolution: Pioneering the Digital Twin Revolution for Sustainable Cities.](#)

[Marco Marechal](#)

In today's rapidly urbanizing landscape, Hilversum, Netherlands, pioneers the Digital Twin, a tool that revolutionizes urban planning. Integrating machine learning with data, it creates a dynamic, interactive city map, providing a real-time, detailed view of the urban environment. This innovation is a blueprint on street level for sustainable city-making, reflecting the collective will of its citizens, garnered through active participation and market research.

9:15 am

[Corridor Optimisation - a strategic approach](#)

[Anne-Marie Smith](#)

In constrained urban environments it is critical to effectively balance competing demands from various modes of transport. The Corridor Optimisation project is proving to be a low-cost high benefit operating solution utilising the existing asset base to maintain and improve 'Efficiency & Reliability' while addressing changing conditions on the network.

9:30 am

[Origin-Destination Matrix Estimation for Public Transport: A Multi-Modal Weighted Graph Approach](#)

[Dong Zhao](#)

This study addresses challenges in estimating Origin-Destination matrices for multi-modal public transport networks. By integrating various data sources like boarding-alighting data and GTFS, we propose a novel "Entropy-weighted Ensemble Cost Features" method to enhance the performance of the Gravity model when OD matrices estimation for public transport networks.

9:45 am

[A new lens on equitable travel models](#)

[Brittany Croft](#)

What is distance charging? What is Road User Charging (RUC)? What is time of use charging? What is the difference and what is the best approach? Brittany Croft will discuss how road user charging can look, feel and function in many different ways and is adaptable to serve the needs of a city or geographical region. RUC can adapt to city needs, as demonstrated by Kapsch's experience. Bulgaria's system showcases RUC's ability to meet policy, social, and environmental objectives for cities.

10:00 am

[Modi – A Lead Towards Sae L4 Automated Driving In Europe](#)

[Silje Troseth](#)

This presentation will be in update on the European MODI project, which has 30 partners from 8 countries, and aims to pave the way for the mass adoption of highly automated freight vehicles. This is done through demonstrations and by resolving barriers to the rollout of automated transport systems and solutions looking at the major supply chain links in Europe. The goal is containers can be put in a truck in Rotterdam harbour and driven to Oslo using Electric L4 CCAM heavy duty transport.

**9:00 am - 10:30 am**

## **BreakOut Session 12: Safer Transport Through Advanced Technologies**

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Session - [Electric, Connected, Automated Transport](#), [ITS 2024](#) - C2.4

As governments grapple with the ambitious 'Towards Zero' targets by 2050, the industry continues to develop tech based solutions that will be critical to reaching this important national goal. This session

presents a range of pilots, programs and policy solutions - from virtual hazard warning systems, to a real-time driver safety tool for buses using telematics data, automated video analytics to test the safety of school zones, and the NSW Government's collaboration with 124 LGA's to deliver the One Road program.

9:00 am

[Honda and Telstra: Driving the Future of Telematics](#)

[Jason Battye, Peter Cleary](#)

Honda Australia has partnered with Telstra to enable the next generation of data-driven telematics technology. At this session, we'll touch on the connected transport ecosystem and the various safety, regulatory, security and compliance implications. We'll then discuss the Telstra and Honda partnership which sets a new standard for connected car technology, starting with the newly launched Honda Accord, utilising Honda Connect (enabled by Telstra), whilst being the first Honda model to offer Google built-in. Join us as we take a drive into the future where mobility is smarter, safer, and more enjoyable for everyone.

9:15 am

[Predicting Bus Accidents Using Live Telematics Data](#)

[Matt McInnes](#)

In response to the increasing need for safer public transports systems, Lynxx has pioneered a transformative approach with its real-time Driver Safety Tool. Deployed for a prominent bus operator, this innovative solution integrates seamlessly with the fleet's telematics system to monitor driving behaviour in real-time. This discussion summarises the pilot of the tool that Lynxx has built and tested (a statistical model, some might call it "AI") to monitor the telematics feed from a bus in real time and alert the control room about when accidents are more likely to happen.

9:30 am

[OneRoad Program for Transport for NSW](#)

[Richard Palmer, Pahlia Kenny](#)

OneRoad is a collaborative effort between state and local governments, providing accurate and timely road information to enhance safety in NSW. With 124 LGAs actively using the system, road users benefit from unified and reliable real-time traffic information, reducing fragmented information sources, aiding efficient and safer journeys for NSW road-users. This customer-centric approach underscores the commitment of NSW authorities to enhancing road safety and user experience through innovative technology and collaborative partnerships.

9:45 am

["Saving Our Future: Enhancing Safety In School Zones Through Advanced Safety Analytics"](#)

[Ashutosh Arun](#)

This pilot study focused on assessing the safety of children in school zones through automated video analytics as an improvement over legacy exposure-based methods. Three school zones in Southeast Queensland were selected for analysis. This study champions AI-powered video analytics as a game-changer for vulnerable road user safety, particularly children in school zones. Unlike traditional crash and exposure-based methods relying on macroscopic metrics, advanced safety analytics pinpoints the critical conflicts between pedestrians, cyclists, and vehicles, enabling targeted safety interventions.

10:00 am

[Lighting The Path: See.Sense's Data-driven Revolution In Urban Cycling And Micromobility](#)

[Irene McAleese](#)

As cities globally strive for sustainable mobility, cycling and micromobility stand out as key solutions to reduce congestion and promote environmental well-being. See.Sense connected sensor data insights are making sustainable travel safer and more attractive. Global case studies are presented, and a successful iMOVE project conducted in Melbourne involving 800 cyclists will be highlighted. Real-time ITS applications, for cycling priority and Green Light Optimized Speed Advisory techniques will also be explored.

**9:00 am - 10:30 am**

**SIS 02: C-ITS National Harmonisation and Pre-deployment Project**

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Special Interest Session - [ITS 2024](#) - C2.5/C2.6

Co-operative Intelligent Transport Systems (C-ITS) technology enables road users and infrastructure to



communicate with each other, sharing information about road conditions, disruptions, traffic flow, and safety incidents.

C-ITS has been proven to have the potential to provide significant safety benefits by detecting and providing advanced warning to drivers to prevent incidents and improve efficiency of transport networks. C-ITS needs alignment amongst governments and industry for harmonised deployment to realise these benefits in Australia.

This project involves uplifting around 30 intersections across five key corridors within the Australian Integrated Multimodal Ecosystem (AIMES) testbed (Melbourne, Victoria) with the advanced sensing and communication capability to continually transmit live information about traffic and safety for road users.

9:00 am

[Introduction and Presentation](#)

[Nicholas Brook](#)

Physical integration for pre-deployment

9:10 am

[Pre-deployment program](#)

[Amit Trivedi](#)

Digital Infrastructure

9:20 am

[Application and Research component](#)

[Majid Sarvi](#)

Vehicle station and Integration

9:30 am

[C-ITS Pathway for Main Roads WA](#)

[Scott Fennelly](#)

Roadmap for C-ITS

9:40 am

[Policy and Roadmaps](#)

[Mike Makin](#)

C-ITS Principles and CAV Strategy

9:50 am

[Communications and Engagement](#)

[Stacey Ryan](#)

Importance of engaging public, industry, collaborating

10:00 am

[Panel Discussion](#)

[Majid Sarvi](#), [Mike Makin](#), [Scott Fennelly](#), [Stacey Ryan](#), [Nicholas Brook](#), [Amit Trivedi](#)

Panel Discussion

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14 August 2024

**10:30 am - 11:30 am**

**Morning Tea Break**

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Break - [Break](#)

The generous one hour morning tea break this morning is the perfect opportunity to meet and greet our fantastic exhibiting organisations, demonstrating the latest transport technology.

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14 August 2024

**11:30 am - 1:00 pm**

**Plenary 3 - CAVs and C-ITS for Safe and Sustainable Transport**

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Plenary - [Electric, Connected, Automated Transport](#), [ITS 2024](#) - Pyrmont Theatre

Improving safety of transport systems always has and will remain a primary goal of ITS deployments, while making transport more sustainable is increasingly critical as governments and industry grapple with reducing carbon emissions. How can these two significant ambitions be realised and enhanced through the introduction of connected and automated vehicles into Australia's transport system and the growth of Cooperative ITS in our vehicles, infrastructure and networks. Additionally, how can we ensure the policy settings are right and cohesive nationally to support the adoption of these new technologies.

Hear from national and international leaders in transport technology who will discuss how we can deliver the connected and cooperative vehicles, infrastructure and transport networks that will save lives and fulfil critical environmental sustainability obligations now and into the future.

Keynote Address:

**Michael Hopkins**, CEO and Commissioner – National Transport Commission (New laws for Automated Vehicles in Australia)

Presenters

**Scott Fennelly**, A/Director Real Time and ITS Operations – Main Roads Western Australia (CITS in WA)

**Carla Hoorweg**, CEO – ANCAP SAFETY (C-ITS Harmonisation)

**Lee McKenzie**, Manager Future Transport – Waka Kotahi NZ Transport Agency (Future Transport for New Zealand Aotearoa)

**Dr William Sabandar**, President – ITS Indonesia (5Ps; Invitation for others to join)

Moderator:

**Dean Zabrieszach**, CEO, HMI Technologies/Ohmio

11:30 am

[Opening Keynote](#)

[Michael Hopkins](#)

New laws for Automated Vehicles in Australia.

11:45 am

[Own Perspective](#)

[Lee McKenzie](#)

Future Transport for New Zealand Aotearoa

11:50 am

[Own Perspective](#)

[Scott Fennelly](#)

CITS in WA

11:55 am

[Own Perspective](#)

[William Sabandar](#)

5Ps; Invitation for others to join

12:00 pm

[Own Perspective](#)

[Carla Hoorweg](#)

C-ITS Harmonisation

12:05 pm

## [Panel Discussion and Q&A](#)

[Carla Hoorweg](#), [Lee McKenzie](#), [Michael Hopkins](#), [Scott Fennelly](#), [William Sabandar](#)

Panel Discussion and Q&A

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14 August 2024

**1:00 pm - 2:00 pm**

**Lunch Break**

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Break - [Break](#)

Wednesday is Summit's longest day so make sure you refuel with a delicious lunch in our Exhibition Hall.

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14 August 2024

**2:00 pm - 3:00 pm**

**BreakOut Session 13: Electrifying the Fleet - Australia's Journey to EVs**

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Session - [Electric, Connected, Automated Transport](#), [ITS 2024](#) - C2.1

As the rollout of electric vehicles in Australia gathers pace, there are challenges and opportunities that require innovative thinking and advanced technological solutions to speed up the nation's transition to a green fleet. This session presents three interesting perspectives from our journey to date: a study with multi-year insights from an extensive connected electric vehicle dataset; a complete guide to transitioning mobility fleets to electric; and managing the impact of the growing volume of retired EV batteries.

2:00 pm

[The Teslascope Dataset: Insights from Connected Electric Vehicles](#)

[Kai Li Lim](#)

This presentation summarises multi-year insights from an extensive connected electric vehicle dataset, revealing emerging real-world usage patterns and region-specific behaviours to inform infrastructure planning, energy management, and policymaking across diverse contexts.

2:15 pm

[The A, B, C, Of Fleet Electrification Planning & Transitioning To An EV Fleet Without Compromise](#)

[Akshat Chawla](#)

This session is about sharing our practical experience in helping mobility operators manage and operate a working EV fleet. This session is chock full of real world examples of the challenges of creating and managing a working EV fleet, do's and don'ts of building a robust charging strategy, and practical tips on planning for the transition.

2:30 pm

[Managing the impact of the growing volume of retired electric vehicle batteries in Australia](#)

[Shawn Ticehurst](#), [Iftekhhar Ahmad](#)

Rising from the Wreckage: Redefining Value from Total Loss Electric Vehicles. Even in wreckage, EV batteries spark opportunity. Let's salvage, innovate, and drive sustainability. Join the revolution for a greener, wealthier future. Act fast, transform today's loss into tomorrow's gain.

**2:00 pm - 3:00 pm**

**BreakOut Session 14: Automating the Network - New Tools and Safety Systems**

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Session - [ITS 2024, Smart Infrastructure and Data Ecosystems](#) - C2.2

Asset management and maintenance are the backbone of the transport sector - how can AI and ML tools be used to optimise your assets and support up to date reporting?

2:00 pm

[Safe Systems & Tunnel Infrastructure Integration For Incident Management - O-height Vehicles](#)

[Lachlan Gray](#)

Safe Systems & Tunnel Infrastructure Integration For Incident Management - O-height Vehicles

2:15 pm

[Optimise your transportation network with AI visual analytics](#)

[Michael Swanander](#)

Uncover the transformative impact of real-time computer vision on transportation. Explore AI Use Cases spanning Roads, Public Transport, Smart Cities, and Planning, optimising operational efficiency, elevating safety, and enriching the commuter experience. From counting vehicles to achieving net zero, delve into a future shaped by innovative technology.

2:30 pm

[Environmental Sensor Networks for Smart Monitoring of Transport Infrastructure](#)

[Iain Russell, Cameron McKenna](#)

Climate change sees more natural disasters like floods, storms and bush-fires occurring. This impacts critical infrastructure and communities across Australia. Roads are particularly impacted through such damage especially in regional, rural and remote locations. Smart sensor hardware, software and intelligent mobile networks are critical ingredients for more effective incident response.

**2:00 pm - 3:00 pm**

**BreakOut Session 15: Smart Infrastructure - Safety, Enforcement and More**

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Session - [ITS 2024, Smart Infrastructure and Data Ecosystems](#) - C2.3

Tolling, network optimisation, enforcement and more can be achieved with lower cost infrastructure through smart sensors and data collection - these projects from around the world will show you how.

2:00 pm

[Gantry-less, Zone-based Video Tolling](#)

[Andreas Goldhorn](#)

Currently, the core roadside tolling technology is dependent on RFID tags, but there is strong appetite to move away from this technology to remove the need to issue aftermarket tags, reduce the roadside footprint, and improve customer experience through Video Tolling. Transurban will share the results of an on-road technical trial where a network of commodity cameras were leveraged to read licence plates, the data aggregated and performance compared to a traditional solution.

2:15 pm

[Smart Infrastructure Monitoring with advanced Fibre sensing and Artificial Intelligence](#)

[Henry Wu](#)

Optic fibre sensing technologies have been in use throughout defense, security industries for decades. With the substantial technological advancements in both optic fibre technologies (e.g. laser) and Artificial Intelligence (e.g. Machine Learning - ML) this paper presents an industry update including key lessons learnt and operational use cases.

2:30 pm

[NIMS Irelands Journey to a Connected Future](#)

[Daniel Hoyne](#)

Transport Infrastructure Ireland (TII) has undertaken a behemoth sized project with ambitious goals for its future. Kapsch is proud to be the partner of TII and this presentation will outline what TII is aiming to achieve in their approach to smart infrastructure and how Kapsch end to end capabilities are enabling this

project.

## 2:00 pm - 3:00 pm

### BreakOut Session 16: Urban Mobility Advancements

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Session - [ITS 2024](#), [Future Mobility](#), [Sustainable and Inclusive Transport](#) - C2.4

Shared mobility and public transport can reduce emissions and increase the sustainability of our networks - these presentations showcase how we transition to a more sustainable transport future.

2:00 pm

[Shifting Gears with GoGet: Justifiable professional carshare as parking replacement in developments.](#)  
[Darcy Lechte](#)

The more people that share the one car, the fewer cars we require within our communities. What sort of replacement rates (professional carshare parking to private resident parking) can be justified for multi-unit residential and mixed-use developments where GoGet is available, and how does this affect congestion and affordability? GoGet's Professional Carshare network has an important role to play in shifting vehicle trips to other modes, reducing car use and replacing private cars which take up precious space in urban residential areas.

2:15 pm

[SkedGo Emissions Impact Report](#)  
[Adrian Schoenig, Claus Von Hessberg](#)

Dive into the latest SkedGo Emissions Impact Report: 14 million trips analysed over six years reveal digital mobility solutions as a viable tool to slash 200+ tonnes of CO2, reduce congestion, and advance green transportation. Vital findings for sustainable urban mobility advocates and innovation seekers. The report emphasises transportation as a key sector for immediate action due to its significant emissions reduction contributions.

2:30 pm

[Advancing Melbourne's Tram Network: The Smarter Trams Program](#)  
[Anthony Daff](#)

Advancing Melbourne's Tram Network: The Smarter Trams Program

## 2:00 pm - 3:00 pm

### SIS 03: The Future of Community Transport

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Special Interest Session - [ITS 2024](#), [Future Mobility](#), [Sustainable and Inclusive Transport](#) - C2.5/C2.6

Community transport plays one of the most important roles in the transport ecosystem - caring and providing for some of our most vulnerable communities. This session will hear from passionate professionals doing that work and how technology is starting to work for them.

2:00 pm

[Future of Community Transport](#)  
[Bethany Langford](#)

Technology for our Sector

2:10 pm

[Future of Community Transport](#)  
[Ben Whitehorn](#)

Partnering for Success

2:20 pm

[Future of Community Transport](#)  
[John Nelson](#)

NSW Strategy

2:35 pm

[Panel Discussion](#)

[Ben Whitehorn](#), [Bethany Langford](#), [Kiki Paul](#)

Panel Discussion

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14 August 2024

**3:00 pm - 4:00 pm**

**Afternoon Tea Break**

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Break - [Break](#)

Another all important networking opportunity to build those relationships with old and new colleagues you've met at this year's Summit.

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14 August 2024

**4:00 pm - 5:00 pm**

**BreakOut Session 17: Innovation in Action - Drones and Universally Designed AVs**

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Session - [ITS 2024](#), [Electric](#), [Connected](#), [Automated Transport](#), [Future Mobility](#) - C2.1

While much of the focus for the rollout of autonomous vehicles focuses on cars, where is the industry at when it comes to utilising technology for other important facets of our transport industry? The first presentation will provide a fascinating snapshot of the Advanced Air Mobility industry in Australia; followed by a case study of drones in NSW for incident, congestion and event management; and finally a thought provoking presentation on universally designed accessible autonomous people movers.

4:00 pm

[Drones for Roads-integrating drones technology for incident, congestion and event management](#)

[Troy Green](#), [Roy Moser](#)

The program has enabled Transport for New South Wales (TfNSW) Transport Management Centre (TMC) to expand their use of drones to improve incident response, emergency management and special events management, while supplementing existing roadside detection systems, closed circuit television (CCTV) and other devices. The Drones Program has improved incident response, congestion and event management, via the widespread provision of enhanced real-time and situational information to the TMC.

4:15 pm

[Benefit Cost Analysis of Universally Designed Accessible Autonomous People Movers](#)

[Alexander Bubke](#)

Ensuring equitable and inclusive access to transport services and activities will be paramount for the overall well-being of everyone. Universally designed accessible autonomous people movers (UD APMs) have the potential to provide transport service services for everybody thereby contributing to an enhanced quality of life and greater productivity. Benefit cost analysis of a universally designed accessible autonomous people mover including job creation, government subsidies, and the ability to facilitate additional trips for work, education, medical, and other purposes due to improved accessibility.

4:30 pm

[Pedestrian Trajectory Prediction for Autonomous Vehicles via Context-Augmented Transformer Networks](#)

[Khaled Saleh](#)

In this presentation, I will discuss the challenge of forecasting pedestrian trajectories in shared urban traffic environments using non-invasive sensor modalities in both autonomous vehicles and smart infrastructure domains. I will also show how proposed innovative AI based framework could help in overcoming some of those challenges.

**4:00 pm - 5:00 pm**

## **BreakOut Session 18: Monitoring the Network - From Operation to Enforcement**

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Session - [ITS 2024](#), [Future Mobility](#), [Smart Infrastructure and Data Ecosystems](#) - C2.2

Computer vision, ML / AI and data analytics can be valuable tools in the transport planner and network managers toolbox - these presentations will explain how across a range of issues and jurisdictions.

4:00 pm

[Case Study: Wellington City Council City Wide Active Transport Computer Vision Monitoring Network](#)  
[Ben Rippingale](#)

Wellington City Council is delivering a massive increase in active transport infrastructure over the coming decade, with work underway to upgrade their network from 23Km as of 2021, to 166km of connected cycleways. To deliver the necessary insights, Wellington has chosen to deploy a novel Computer Vision monitoring network of over seventy Smart Sensors across the city. This case study will review the impact of novel data sets from computer vision sensors is having on management and decision making for their transport infrastructure; plans for next steps, and lessons learnt from the project to date.

4:15 pm

[Bridging the gap: Joint optimisation of traffic safety and efficiency using video analytics](#)  
[Ashutosh Arun](#)

This study investigates the potential for video analytics to bridge the gap between traffic safety and efficiency. Combining AI-powered safety analytics with edge computing could result in powerful adaptive signal phasing optimisation algorithms to jointly optimise safety and efficiency at signalised intersections in real time. Opportunities arise to eliminate "ghost traffic jams" by smartly deciding between protective and permissive phasing and reducing right-turn conflicts by 90%.

4:30 pm

[Initial Findings From Road Safety Investigation Camera \(rosiicam\) Trial](#)  
[Vanessa Vecovski](#)

The Road Safety Technology team at Transport for NSW used AI to develop a mobile Road Safety Incident Investigation Camera (ROSIICAM) to detect nearmisses. ROSIICAM was deployed at ten sites in 2022 and 2023 in various road settings, including a roundabout, a high-speed highway and urban locations with vulnerable road users and light rail. This technology can assist in the development of customised and effective road safety treatments at specific locations to help reduce road trauma.

**4:00 pm - 5:00 pm**

## **BreakOut Session 19: Supercharging Public Transport - Building Better Services**

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Session - [ITS 2024](#), [Future Mobility](#), [Sustainable and Inclusive Transport](#) - C2.3

Making public transport better will increase patronage, reduce carbon emissions and make our networks more efficient. These subject matter experts will explain how they are utilising these technologies now to provide improve customer experience and more.

4:00 pm

[How Special are Special Events](#)  
[Lisa Boucherway](#)

Effective management of major events is paramount for Public Transport Authorities (PTAs), Public Transport Operators (PTOs), and event managers to ensure smooth operations and customer satisfaction, as these events exert immense pressure on transportation infrastructure. Success in managing such events can bolster public trust and encourage repeat ridership. Critical to achieving this is creating a commuter experience that is efficient and above all else, safe. Transdev's holistic approach optimizes Light Rail services through planning, prevention, and performance pillars, ensuring peak safety and efficiency of the network.

4:15 pm



## [Does your Public Transport have Superpowers?](#)

[David Panter](#)

Effective use of contract management tools and processes, backed up by tools to track monitor and control the vehicles are superpowers that deliver enhanced customer experiences. We look at world best practice and show how this experience can be applied in the ANZ region to the benefit of all.

4:30 pm

## [The power of Artificial Intelligence in optimising the first- and last-mile passenger experience](#)

[Silas Wong](#)

Artificial Intelligence (AI) is transforming the modern transportation landscape, not only reshaping how mobility is planned and orchestrated, but also transforming the way people travel and interact with transport services. This presentation explores AI's pivotal role in addressing first-and-last mile connectivity challenges and enhancing intermodal transport planning. Siemens showcases its international case studies, revealing how AI-driven insights from passenger app data optimises routes and traveller experience.

**4:00 pm - 5:00 pm**

## **BreakOut Session 20: ITS Integration, Training and More**

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Session - [ITS 2024](#), [Electric, Connected, Automated Transport](#), [Governance Frameworks](#) - C2.4

Future of ITS - integration into legacy systems, workforce pipelines and more. This session will explore how we build the existing ITS sector and prepare for the future.

4:00 pm

## [Integration of Intelligent Transport Systems infrastructure into existing networks](#)

[Mark Henaway](#), [Linh Truong](#)

Integration of ITS infrastructure into existing networks offers significant advantages in heavily congested brownfield sites where traditional capacity build approaches may not be feasible or desirable. By capturing and implementing knowledge related to site limitations, projects can realise enhanced efficiency, cost-effectiveness, and sustainability in their smart brownfield infrastructure initiatives.

4:15 pm

## [Main Roads Intelligent Transport Systems Graduate Scheme](#)

[Scott Fennelly](#)

The Main Roads ITS Graduate Scheme, now in its third year, immerses graduates in cutting edge ITS projects, from Smart Freeways to C-ITS and Autonomous Vehicle integration. Through hands-on experience and research opportunities, graduates gain expertise in ITS and how we have refined the scheme for quicker readiness without sacrificing excellence.

4:30 pm

## [ITS Management Framework - Combining Asset management and Systems Engineering](#)

[Pascal Labouze](#), [Danny Van Loon](#)

The ITS management framework combines systems engineering and asset management and integrates in the organisation of the client. The framework describes the systems, the organisation, the lifecycle stages, and includes the information items required per stage. The framework strengthens the assurance that technology serves the business objectives supports informed decisions.

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14 August 2024

**5:00 pm - 7:00 pm**

## **ITS Australia NextGens: Summit Networking Reception**

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Session - [ITS 2024](#) - Pumphouse Sydney

Proudly sponsored by Transurban.

Join the ITS Australia NextGens and other young professionals for an evening of networking and drinks.

Held immediately before the Summit Social Night, the conversation and theme for the evening will centre on the contribution that young professionals can make to the industry. Come along to meet other like-minded people in the ITS industry.

**Attendance:** Registration is complimentary. We welcome everyone to register for this event, however, places are strictly limited and first priority will be given to young professionals under 35 years. [Register here](#)

**Event Sponsor**



5:00 pm

[NextGens Event](#)

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14 August 2024

**7:00 pm - 10:00 pm**  
**Summit Social Night**

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Social Event - [ITS 2024](#) - Pier One

**Separately Ticketed Event - held offsite at Pier One.**

Proudly sponsored by Cubic Transportation Systems.

Join us for an unforgettable evening of networking at the Summit Social Night, the premier social function of the ITS Summit. Network, connect, and relax in a vibrant atmosphere with fellow conference delegates. Engaging conversations, DJ entertainment, and premium Sydney produce await.

**About the Venue:** Water @ Pier One is situated at the Northern end of the pier with unrivalled views of Sydney Harbour, Luna Park and the Sydney Harbour Bridge. The lights of North Sydney and the harbour's sparkling waters create a breathtaking backdrop to soak up during the evening.

**Attendance:** This is a ticketed function and is not included with registration. Purchase tickets via the [ITS Australia Portal](#).

**Tickets:** \$225 Member / \$247 Non Member (inc GST)

**Dress Code:** Business casual

*Partners and other ITS professionals welcome.*

**Event Sponsor**



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15 August 2024

**8:00 am - 9:00 am**

## Arrival Coffee

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Break - [Break](#)

The final day of Summit 2024. Recharge after the fun of last night's social event and plan your participation in the final day's program. Today we also host the inaugural Careers Expo - meet 150 current university students - all exploring dynamic careers in Australia's ITS sector.

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15 August 2024

**9:00 am - 10:30 am**

### **BreakOut Session 21: Embedding Sustainability in Future Transport Planning**

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Session - [ITS 2024](#) - C2.1

Sustainability must be at the forefront of transport planning decisions in order for our sector to contribute to emissions reductions. In this session, presentations examine how sustainability forms part of the design and delivery of a range of ITS programs and projects.

9:00 am

[Building The Dream - How Analytics Can Shape Our Future, Not Just Understand The Current-state.](#)

[Nicholas Kerameas](#)

Agencies worldwide are shifting focus towards sustainable and inclusive transport. However, suppressed demand in modal choice can obscure future possibilities. By shifting focus from historical data we can unlock future potential. This presentation addresses this gap and introduces a novel methodology in transport planning.

9:15 am

[Benefits of integration between utilities design and ITS projects](#)

[Afrida Mamun](#)

The relationship between utilities design and ITS projects highlights the interconnected nature of urban infrastructure and the importance of holistic planning to create sustainable and resilient communities. The integration between these two enhances the effectiveness of transportation systems and is essential for creating smart, interconnected, and resilient urban environments.

9:30 am

[National Approach To Tunnel Management - Switzerland](#)

[Radha Krishnan](#)

The Federal Roads Office (FEDRO) has expanded ITS/tunnel equipment on Swiss national roads and significantly improved operational traffic management. However, the operation of the equipment is not yet fully automated and, in addition, is distributed across decentralised systems.

9:45 am

[Sustainable Alternatives For Greener Gantries](#)

[Justin Justiniano](#)

Kapsch introduces the eco-friendly "green gantry," made of renewable materials like GluLam, reducing carbon footprint while meeting European standards. Benefits include vibration reduction and high bearing load. Join the presentation to learn about weight, fire resistance, gantry resilience, circular economy, and local availability for sustainable and reliable solutions.

10:00 am

[Video SVO Traffic Counting](#)

[Fiona Swan](#)

Traffic counting systems provide real-time data of vehicle speed, volume and occupancy. Transurban and various transport partners use this data to ensure situational awareness, operate ramp metering systems, produce travel time information, support ventilation systems and determine future traffic models. Video traffic counting is an infrastructure-lite alternative, using side of road cameras along the road network. Transurban will share the results of a trial of Video Traffic Counting solution across 7-days on

Citylink, showing that video is a suitable alternative to in-pavement sensor data.

**9:00 am - 10:30 am**

## **BreakOut Session 22: Smart Infrastructure - New Technologies Solving Age Old Problems**

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Session - [ITS 2024](#) - C2.2

As we see technology enhancing our vehicles, infrastructure and transport networks - companies continue to push the boundaries of innovation to solve longtime aged old problems. In this session, be inspired by innovative tech solutions enhancing traffic management, tolling and public transport networks.

9:00 am

[LiDAR adaptive traffic signals revolution](#)

[Christian Chong-White](#)

The ITS industry is on the verge of a traffic signal revolution. Emerging LiDAR technology will provide significant improvements in safety, efficiency and the environmental impact of traffic at our intersections. Christian Chong-White, will use his experience in traffic algorithm design & evaluation to demonstrate a practical and visual case study, and engage the audience with the roadmap to replace incumbent traffic sensors. Christian will show that LiDAR is the robust path to Vision-Zero that is privacy conscious and fundamentally multi-modal.

9:15 am

[Anomaly Detection in Urban Traffic Data: Tackling the Ground Truth Problem](#)

[Iman Taheri Sarteshnizi](#)

In this presentation, an introduction is first given on the Temporal Positioning of Flow-Density Samples (TP-FDS concept). Then, it is shown how TP-FDS can simply represent any type of anomaly in urban traffic data. Benefiting from this capability, an anomaly detection framework is presented which is able to outperform existing solutions using real-world datasets.

9:30 am

[Improving Safety At Intersections Using Real Time Video](#)

[Ashutosh Arun](#)

Improving intersection operation using real-time video analytics involves leveraging advanced technologies to analyse video data and extract valuable insights for traffic management. Real-time adjustments leads to the application of dynamic pedestrian timing which is essential for protecting vulnerable road users (VRUs), preventing road crashes, and creating urban environments that are conducive to active and sustainable modes of transportation.

9:45 am

[The Journey To High Performance Video Based Tolling And Key Success Factors](#)

[Daniel Shaw](#)

Join Daniel Shaw as he gives an in depth look at the nation wide video based tolling that Kapsch have implemented in globally. Using state of the art technology that Kapsch have implemented an approach to tolling using only video detection methods which allow for reduced cost and footprint. The presentation will focus on comparisons between radio detection and video only tolling and where cities around the world can utilise this technology.

10:00 am

[Bird Lasers, NaviLens & more, Innovation & CX on the world's largest tram network](#)

[Nick Daly](#)

Melbourne's tram network is unique as the largest tram network in the world with over 250km of track, 480 trams, 1680 stops and with 74% shared network. Innovating in this environment brings about unique challenges and opportunities. At Yarra Trams we've taken a novel approach to innovation, with a first principle of focusing on the people within our business and our passengers. This has led to a diverse portfolio of Innovation initiatives that stretch accross the entirety of our operations.

**9:00 am - 10:30 am**

## BreakOut Session 23: A Safer Transport Future - Fresh Approaches Towards Zero

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Session - [Smart Infrastructure and Data Ecosystems](#) - C2.3

How can our sector respond and support the national road safety targets that aims for zero fatalities by 2050? This session will present a variety of solutions - from retrofitting older vehicles with ADAS, to better understanding the crash and injury trends from larger vehicles such as SUVs, and update on the rollout of C-ITS technology across Australia.

9:00 am

[Challenging Epidemic of Sri Lanka - Road Traffic Accidents](#)  
[Sudamma Chandrasiri](#)

Road traffic accidents are becoming the most critical health problem in the world. One person loses their life in ten traffic accidents in Sri Lanka every three hours. Traffic police released that, on average, eight people have died in traffic accidents every day. The research paper presents plan to implement a traffic crash monitoring and intelligent traffic monitoring system to country with support of overseas traffic management agents. This will covered by introduction of traffic monitoring cameras inbuilt with automated vehicle and driver identification system link with DMT and DRP data.

9:15 am

[Retrofit Advanced Driver Assistance Systems in Australia](#)  
[Johann Tay](#)

Well-built older cars with lots of life remaining but without any active safety systems could be made safer with retrofit active safety upgrades. A study on the feasibility of Retrofit ADAS products available in Australia focuses on those that contribute towards improved road trauma outcomes. RADAS is one way for drivers to either retain their existing car or buy an older car and equip it with some of the technology of the latest models.

9:30 am

[Modelling Vehicle Ownership through the Lens of Emerging Vehicle Technologies](#)  
[Shams Yasmin](#)

The motor vehicle industry has seen significant advancements in Connected and Automated Vehicle (CAV) and Alternative Fuel Vehicle technologies, driven by reducing crashes and air pollutions. These technologies are becoming increasingly accessible to consumers through cost-reduction efforts and the implementation of supportive policies. This study will develop a vehicle ownership model as a composite choice of vehicle ownership, fuel type and availability of different CAV features.

9:45 am

[Safety of Trends in Passenger Vehicle Size and Types](#)  
[Brian Fildes](#)

The vehicle fleet is changing dramatically. Traditional passenger cars are rapidly being replaced by Sports Utility Vehicles (SUVs) and Light Commercial Vehicles (LCV) in Australia. These vehicles are larger and heavier and likely to impact more severely with a traditional passenger car. An analysis of current crash and injury patterns between traditional passenger cars with SUVs and Light Commercial Vehicles in Australia, is currently in progress that will show any likely safety benefits or disbenefits from these trends and will be reported in the paper if accepted.

10:00 am

[Update on International C-ITS Collaboration Initiatives](#)  
[David Alderson](#)

Cooperative Intelligent Transport Systems (C-ITS) is a harmonised approach to data and communications that allows vehicles to talk with each other and with road infrastructure, to share information and help drivers and road operators make better real-time decisions. Such enhanced decision making has the potential to benefit community safety, productivity, sustainability, and journey experience. This presentation shares an update on C-ITS initiatives and the potential opportunities for Australia.

This presentation shows the current activities in Australia and then focuses on two key initiatives driving C-ITS and vehicle data sharing in Europe: C-Roads and Data for Road Safety. C-Roads are near completing there first stage of activities and this presentation shares what's next under C-Roads Extended. Data for Road Safety are nearing exponential growth into large scale road safety data sharing after a period of proving the ecosystem.

**9:00 am - 10:30 am**

## **BreakOut Session 24: Predicting the Future - Leveraging Machine Learning, Artificial Intelligence and Data**

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Session - [ITS 2024](#), [Electric, Connected, Automated Transport](#), [Smart Infrastructure and Data Ecosystems](#) - C2.4

In this session, take a deep dive into some real world case studies where AI, ML and data enhancing roads, vehicles and networks including predictive analytics to improve efficiency on Melbourne tram network, solutions to the challenge of telematics data sharing, and using AI to enhance the management of ITS standards and guidelines.

9:00 am

[Predictive Analytics For Efficiency In Melbourne's Tram Network Management](#)

[Faiq Gazdhar](#), [Anthony Daff](#)

We'll share a case study that delves into the successful implementation of predictive analytics and automated decision-making processes to increase the efficiency of Melbourne's tram management. Yarra Trams, overseeing the extensive tram network covering 250 kilometres, collaborated with Portable to innovate their operational procedures. We'll share how we were able to help them decrease manual workload, improve incident management, and analyse over 2000 monthly trips with an 80% accuracy rate.

9:15 am

[From Fragmentation To Integration: PathStack's Solution For Telematics Data Sharing And Access](#)

[Sebastian Jezierski](#)

Sharing vehicle tracking data between independent parties and systems is increasingly required in commercial transport but remains challenging due to the variety of devices, access methods and data structures. We introduce PathStack, a solution that simplifies these processes for data providers and consumers while adding privacy and analytics capabilities.

9:30 am

[How AI Large Language Models Can Assist With Quality Management For ITS Standards And Guidelines.](#)

[Sarah Dods](#), [Bita Charehjoo](#)

Road authorities typically manage large numbers of standards and guidelines, which are relied upon not just by their own technical staff, but also industry and local government authorities. With the advent of generative AI Large Language Models (LLMs), Main Roads Western Australia asked the question – Can LLMs enable the automation of identifying document cross references and assist with prioritising key document updates? We present the results of a trial on various road design and operation documents where LLMs were able to identify document cross references, custodians and key dates with 95% accuracy.

9:45 am

[The Modular Approach to Delivering Large Scale ITS Systems Using Standards for Public Transport Today and Tomorrow.](#)

[Paul Gwynn](#)

This presentation investigates and critically discusses potential models and methodologies for using standards which can allow public transport authorities to specify standards that lead providing improved services and operations, with increased benefit from ITS data and take it to the next level, we will highlight some of the latest research thinking that will bring new benefits in the next 5 years.

**9:00 am - 10:30 am**

## **SIS 04: Pathways For Careers in ITS - Employer Pitch**

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Special Interest Session - [ITS 2024](#) - Pyrmont Theatre

What does a career in ITS look like? What education, skills and experience is required to embark on a career in intelligent transport. In this session, leaders working in the field will highlight the career pathways available in their organisations and across the industry, including Graduate program in the government

sector.

This session has been specially curated for the 150 current students attending the final day of Summit 2024 as part of the Careers Expo.

9:00 am

[Presentation](#)

[Scott Fennelly](#)

Presentation

9:10 am

[Presentation](#)

[Adriana Simona Mihaita](#)

Presentation

9:15 am

[Presentation](#)

[Kurt Brissett](#)

Presentation

9:20 am

[Presentation](#)

[Gillian Kidson](#)

Presentation

9:25 am

[Q&A](#)

Panel Discussion

## **9:00 am - 10:30 am**

### **SIS 05: International Leaders Forum**

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Special Interest Session - [ITS 2024](#) - C2.5/C2.6

Asia Pacific leaders will convene for an International ITS Leaders Forum, where participants will delve into the shared transport challenges faced across the Asia Pacific region and highlight the developing solutions happening at a country level that have potential for expansion across the region and globe.

The leaders from Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Singapore, Taiwan, and Thailand - representing all current members of ITS Asia Pacific - will participate in Australia's largest annual transport technology event.

9:00 am

[Presentation](#)

[Fred Kalt](#)

Presentation

9:05 am

[Presentation](#)

[Silje Troseth](#)

Presentation

9:10 am

[Presentation](#)

[Tongkarn Kaewchalermtong](#)

Presentation

9:15 am

[Presentation](#)

[Ismail Saleh](#)



Presentation

9:20 am

[Presentation](#)

[Mike Rudge](#)

Presentation

9:25 am

[Presentation](#)

[William Sabandar](#)

Presentation

9:30 am

[Presentation](#)

[Murphy Sun](#)

Presentation

9:35 am

[Presentation](#)

[Steven Lui](#)

Presentation.

9:40 am

[Current Status and Planning of ITS in Korea](#)

[Jooil Lee](#)

Update from ITS Korea

9:45 am

[Q&A](#)

[Fred Kalt](#), [Ismail Saleh](#), [Mike Rudge](#), [Murphy Sun](#), [Silje Troseth](#), [Steven Lui](#), [Tongkarn Kaewchalermtong](#), [William Sabandar](#)

Q&A

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15 August 2024

**10:30 am - 11:30 am**

**Morning Tea Break - Women In Transport Networking Reception**

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Break - [Break](#)

**Join us at the ITS Australia hosted National Women in Transport Networking Reception in the exhibition hall.**

The objective is to showcase, support and increase the number of Australian women working in transport. Join us as we collectively hear stories and share best practices from women leaders and work towards developing strategies to overcoming barriers. ITS Australia is the nation's peak body for advancing transport technology in Australia. Supporting diversity in the ITS industry is a shared responsibility amongst ITS Australia Board of Directors, our employees, our members, and stakeholders.

ITS Australia is delighted to be hosting this event under the umbrella of [Australia's National Women in Transport Initiative](#).

The National Women in Transport Initiative brings government and industry together to increase the number of Australian Women working in Transport. This reception continues ITS Australia's tradition of supporting women in the industry to connect with each other and to build international networks.

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15 August 2024

**11:30 am - 12:30 pm**

## **BreakOut Session 25: Inclusive and Seamless Journeys - New Applications of Existing Models**

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Session - [ITS 2024](#), [Sustainable and Inclusive Transport](#) - C2.1

As mobility solutions continue to rollout across the ITS sector, we continue to enhance and refine those offerings to improve access for transport users and enhance the quality of the journey. Attend this sessions to learn about enhancements to Queensland's Park 'n' Ride program, Cubic's frictionless travel ticketing innovations, and Transdev's 'Way of Network Design'.

11:30 am

[Park 'n' Ride Role in Public Transport System](#)

[Samira Namin](#)

With more than 40 million customer journeys travelled yearly, Queensland Rail is dedicated to improving customer experience and has a large program of works to support this. In accordance with State Government's Queensland Infrastructure Plan, QR are undertaking extensive works to deliver new lines, stations and introduce new trains to the network. Park 'n' Ride program, delivered by TMR, within South-East Queensland (SEQ) transport network supports relieving pressure on nearby arterial roads and minimise local traffic impacts.

11:45 am

[Transdev's Way of Network Design](#)

[Joseph Yurisich](#)

The decentralised approach to manage the evolution of Transportation networks prohibits strategic design opportunities. Operators are best positioned to adopt structured approaches using feedback and data for sustainable networks. Transdev's 'Way of Network Design' exemplifies this, integrating global insights into regional contexts for effective, equitable, and reliable solutions.

**11:30 am - 12:30 pm**

## **BreakOut Session 26: Smart Infrastructure - Tech Enhanced Vehicles and Road Networks.**

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Session - [Smart Infrastructure and Data Ecosystems](#) - C2.2

New data and technology is allowing ongoing enhancements to the infrastructure that support our transport networks. Learn about a Traffic Signal priority request solution for Emergency Vehicles in Darwin, research on traffic radar technology to enhance overlength vehicle detection and a case study on autonomous driving solutions.

11:30 am

[Overlength Vehicle Detection & Classification Using Tracking Radar](#)

[Alastair Wiggins](#), [Victor Deville](#)

Accurate vehicle length measurement and classification is essential for road safety and traffic management policy implementation. This is especially true where heavy vehicles are concerned, as restrictions on their movement may be limited only to certain lengths or classes. Sensys Gatso Australia and iMOVE has sponsored a University of Melbourne PhD project to research and develop a non-invasive axle-based vehicle classification system using tracking radar technology. The system can be used to detect, classify and measure the speed and/or length of vehicles, for both ITS and traffic enforcement applications.

11:45 am

[Task-specific autonomous driving applications](#)

[Murphy Sun](#)

Task-specific autonomous driving applications presented by Turing Drive.

**11:30 am - 12:30 pm**

## **BreakOut Session 27: Intelligence Through Data**

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Session - [Smart Infrastructure and Data Ecosystems](#) - C2.3

In this session, it's all about data, and the power of leveraging data sources to enhance all aspects of our transportation systems. Featuring a 12-month case study of an electric bus network, a research project developing a national central database for land use-based trip and parking generation surveys, and a big picture view on how to leverage connected vehicle data into the future.

11:30 am

[What can we learn from a year of ZEB data?](#)

[Jonathan Anderson](#)

Keolis Downer has completed over 12 months of electric bus operations at our North Lakes depot in Brisbane, yielding a wealth of intriguing data. This presentation provides a summary of our analysis, highlighting insights crucial for the transition of the national bus fleet towards electrification. The examination encompasses various aspects including the variability in energy consumption across the fleet, as well as its daily, weekly, and seasonal fluctuations.

11:45 am

[Navigating Noise and Nuance: Extracting Targeted Value from Connected Vehicle Data](#)

[Nick Karahlis](#)

Connected vehicle data has emerged as a transformative technology for road transport and infrastructure projects, offering unique opportunities for improved safety, efficiency, and resilience. By 2027, it's estimated there will be over 300 million connected vehicles across the globe. Such an expansive scale could disrupt the way we approach transport and infrastructure challenges, the questions we ask, and the speed at which we solve them. This presentation will cover key use cases and how vehicle-generated data has enabled new insights and generated targeted value.

**11:30 am - 12:30 pm**

## **SIS 06: Pathways For Careers in ITS - Young Professional Perspectives**

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Special Interest Session - [ITS 2024](#) - Pyrmont Theatre

What better way to learn about careers in intelligent transport than by hearing directly from young professionals working in the sector. This sessions features current and former members of the ITS Australia NextGens - a group of young and [early-career transport professionals who connect online and in-person to promote knowledge sharing and networking](#).

This session has been specially curated for the 150 current students attending the final day of Summit 2024 as part of the Careers Expo.

11:30 am

[Panellist](#)

[Kalan Ralph](#)

Own Perspective

11:40 am

[Panellist](#)

[Shayna Elley](#)

Panellist

11:45 am

[Panellist](#)

[Timothy Hudson](#)

Panellist

11:50 am

[Panellist](#)

[Emily Bobis](#)

Own Perspective

11:55 am

[Panellist](#)

[Jordan Hutchinson](#)

Own Perspective

12:00 pm

[Panellist](#)

[Alex Moody](#)

Own Perspective/Next Gens intro to students

12:05 pm

[Panel Discussion](#)

[Emily Bobis](#), [Harrison Kraus](#), [Kalan Ralph](#), [Shayna Elley](#), [Sherri Turi](#), [Timothy Hudson](#)

Panel Discussion

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15 August 2024

**12:30 pm - 1:30 pm**

**Lunch Break**

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Break - [Break](#)

The perfect opportunity to make those last minute professional networking connections over a wonderful selection of lunch items in the exhibition hall before the end of Summit 2024.

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15 August 2024

**1:30 pm - 2:30 pm**

**Closing Plenary 4: What's Next? 2025 and Beyond...**

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Plenary - [ITS 2024](#) - Pyrmont Theatre

Close our your Summit experience by attending our closing plenary session. Featuring two important keynote presentations as well as a preview of the upcoming ITS World Congress 2029 in Dubai - the first time the major international event has been held in the UAE.

Keynote Address: The **Hon. John Graham**, Minister for Roads, NSW Government

Presentation: **An Nguyen**, CEO, NorthEast Link Victoria

Presentation: **Mike Makin**, Assistant Secretary - Transport Market Reform and Technology, Dept. of Infrastructure, Transport, Regional Development, Communications and the Arts

ITS World Congress Preview: **Joost Vantomme**, CEO, ERTICO (ITS Europe)

Update on the 20th ITS Asia Pacific Forum in Suwon: **Jooil Lee**, Executive Director, ITS Korea

Closing Address and Thank you: **Silje Troseth**, President, ITS Australia

1:30 pm

[Keynote Closing of the Summit](#)

[John Graham](#)

An update from the Hon. John Graham, Minister for Roads, NSW Government on what's currently happening in NSW and what's next.

1:45 pm

[Keynote](#)

[An Nguyen](#)

North East Link Project Update

2:00 pm

[Keynote: National C-ITS Auto Vehicle Action Plan](#)

[Mike Makin](#)

Keynote presentation

2:10 pm

[Dubai World Congress Update](#)

[Joost Vantomme](#)

Dubai World Congress Update & Video presented by Joost Vantomme, CEO, ERTICO (ITS Europe).

2:15 pm

[Update on the 20th ITS Asia Pacific Forum in Suwon](#)

[Jooil Lee](#)

Asia Pacific 2025

2:23 pm

[ITS Australia Update & Summit Close](#)

[Silje Troseth](#)

Presented by ITS Australia President, Silje Troseth

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15 August 2024

**2:30 pm - 3:30 pm**

**Closing Networking Drinks**

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Social Event - [ITS 2024](#) - Pyrmont Theatre Foyer

Included with your registration, all welcome. Held in the foyer outside the Pyrmont Theatre directly following the closing plenary session.

Wrap up a successful week at the ITS Summit Closing Networking Refreshments - Farwell friends and colleagues, and consider the ideas and opportunities ahead for Australia's ITS sector before we gather again for Summit 2025 on the Gold Coast.

2:30 pm

[Closing Networking Drinks](#)

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