Smart Transportation Conference & Exhibition 2024

May 22 - 23, 2024 London, UK

Leveraging The Technology Innovation and Digital Revolutions

3 Ways to Register

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OFFICIAL AGENDA



The role of autonomy in the public transport system

• What challenges are we solving - overview of transport programme and how automated vehicles can help solve some of these challenges.

- An overview of the GCP's work on autonomy which has developed a pathway to deployment.
- Current Government funded project which will be an at scale public transport deployment.







12:30

Smart Transport and the Twin Transition

Daniel Clarke

- All sectors, including transport, are increasingly digitizing while trying to become sustainable (the twin transition)
- What is smart and sustainable transport (the ecosystem: public transit, freight, logistics, EVs, infrastructure, etc.); what tech is needed to propel it/optimize multi-modal transport, and how does technology make (or break) net zero goals (i.e., tech doesn't always have a low carbon footprint)
- What is the labour market landscape for the transport twin transition; supply/demand of workers; what jobs/skills are in-demand; how can current workers upskill/reskill to meet emerging needs and help businesses compete



Lunch & Networking Break





13:00 (1 hour)

14:00

Influencing Transport Lab – insights from our Demand Responsive Transport Behavioural Research

• Our presentation will discuss how the Influencing transport lab aims to address the challenges in delivering effective behaviour change locally, regionally, and nationally. It will also present our ambition to create an evidence base and share best practice around travel behaviour change.

• It will demonstrate how a behavioural approach can be applied to demand responsive transport (DRT). It will highlight what an investigation of users' and non-users' perceptions tells us about delivering a DRT service that meets their mobility needs.

Finally, it will present results from testing social modelling interventions in demand responsive transport, to understand how effective they are at increasing the uptake of DRT.



Prabs Johal Senior Future Mobility Developer-Behaviour Change. West Midlands Combined Authority



14:30

Investing in the Next Era of Climate-Smart Transportation Solutions

- Emerging Trends in Climate Tech: Highlighting innovative solutions shaping the transportation landscape and their impact on climate.
- The Role of Venture Capital: How early-stage VC can accelerate the deployment of sustainable transport technologies and solutions.
- Future Prospects and Challenges: Discussing anticipated hurdles, market opportunities, and the long-term vision for a sustainable transportation ecosystem.



16:30

SME approach to reducing carbon emissions

Being an SME in the current transition to decarbonisation presents tough financial and moral challenges. We know we need to achieve decarbonisation, financially it might not be possible right now to get to net zero. do not
overlook what you CAN do.

Do not overlook what you CAN do. Set out your business operations current format, identify what creates your carbon output, look at the alternatives that are financially viable to your business.

- Implement your new alternatives, review again, carry on evolving, improvement is key, end goal is not always achievable, steps and difference matters.
 - Craig Pennington





Navigating the Future: The Crucial Role of Police in Enhancing Community Safety within Smart Transportation Systems"

- Integrating Law Enforcement with Smart Transportation Technologies:** Exploring how police can utilize advanced technologies like AI, IoT, and data analytics for more effective traffic management and crime prevention.
- Building Trust and Collaboration: Strategies for fostering stronger relationships between law enforcement and communities, ensuring a more collaborative approach to safety in smart transportation environments.
- Addressing Privacy and Ethical Considerations: Balancing the use of technology in policing with respect for individual privacy and ethical considerations in surveillance and data collection.
- Training and Development for Modern Challenges: Emphasizing the importance of continuous training for police officers to adapt to the evolving landscape of smart transportation and its associated challenges.



Eddrick Williams Crime Analyst, Memphis Police Department



Drink Reception

Gala Dinner





- Internet of Things Embedded Security Guidance for Vendors is a new collection of security advice and best practices for IoT developers published by the Center for Internet Security (CIS) in collaboration with leading industry experts and key stakeholders.
- With the smart transportation market likely to surpass \$250 billion by 2030, the rise in integration of smart transportation technologies (cloud-based, vehicle-to-vehicle, etc.) raises the concern of the level of security that can be provided



Equitable electric vehicle carsharing in rural and mid-sized communities in California

Best practices in implementing mobility options in disadvantaged communities and technical assistance provided to educate communities on electric vehicles.



14:00 | SESSION SPONSOR

"There's more to life than a car". Powered Two, Three and Light 4 Wheel Vehicles (Powered Light Vehicles) can provide a more environmental efficient form of mobility as a serious alternative to the car

- Whilst electric cars & vans appear to be the solution to the climate challenges. Governments appear to be ignoring the climate impacts these solutions have on the wider environment. The objective for Western Governments must not be to displace the problem elsewhere.
- Energy security is becoming a major concern, with this in mind battery electric and the raw materials needed in battery production will create new risks and environmental impacts not yet fully understood or ignored.
- Powered Light Vehicles from a Life Cycle Analysis perspective is far more environmentally efficient to manufacture, operate in life and manage waste at end of life. This vehicle type will provide mobility solutions for both people and goods in the urban and sub-urban setting, requiring less road space, reducing congestion and in many cases zero emissions at the tailpipe.



Tony Campbell Chief Executive, Motor Cycle Industry Association Ltd

14:30

Exploring how connected and autonomous mobility can help deliver economic growth

- Set out the Commission's progress on its study on the opportunities offered by automation and connectivity for delivering improvements to road safety, reducing congestion, improving the reliability and accessibility of transport services, and increasing productivity, and consider the implications for how the UK operates and maintain its road infrastructure.
- Explore emerging findings and insights from the first phase of the study and identify the areas where the Commission is likely to focus its recommendations, outlining what interventions in the country's road and other infrastructure (including data) may be required to realise the benefits from this emerging technology.
- Consider the policy and governance challenges that will need to be overcome to do this, within the context of uncertainty about the direction of future technological development.



Sophie Donaldson Assistant Director, National Infrastructure Commission, National Infrastructure Commission

Greg McClymont tant Director, National Infrastructure Commission, National Infrastructure Commission

NATIONAL INFRASTRUCTURE COMMISSION

15:00

Digital corridors or benefits and challenges of smart junction technology at a regional road network scale.

- England's Economic Heartland commissioned City Science to understand the potential for Intelligent Transport Systems (ITS). in particular smart signalised junctions or smart junctions within the EEH road region. This technology trailed by City Science. VivaCity and others have demonstrated the role that new algorithms could play in easing traffic flow or supporting the shift to more sustainable modes of transport (eg., public transport, cycling and walking).
- The main conclusions drawn from the work include there is a lack of local authority knowledge and gaps in understanding the benefits and challenges of smart junction technology, opportunities for smart junction technology look promising when considering the relatively lower costs and carbon impacts compared to traditional infrastructure upgrades (as there is a reduced reliance on large new infrastructure) and there is a need to undertake microsimulation and/or the observation of live trials of smart signal junction technology on corridors should be considered, to further support deployment.



Transport Markets Director, Worldline UK&I

Martin Howell



15:30

EVs within the contect of smart cities; perspectives from industry ; relative challenges

- Acceleration of decarbonization of the transportation sector within the EU context. The role of innovation and Research in achieving NetZero targets.
- Research areas of HELLENiQ ENERGY in regards to low carbon fuels as well as electrification of fleet
- Research projects and results- in regards to production of low GHG emissions



Eva Nanaki New Technologies & Innovation Analyst, HELLENIQ ENERGY



Networking Break

16:00 (30 mins)

16:30

Exploring the Impact of Autonomous Taxis on People with Disabilities Over the past two decades, transportation has become more accessible, but people with disabilities still face significant barriers to accessing these services

- Impact of autonomous taxis on people with disabilities, an area that has seen limited improvement
- How do traditional taxi experiences shape expectations of autonomous taxis in terms of disability accessibility?
- To what extent does the autonomy of self-driving taxis contribute to a perceived increase in travel freedom?



Shravani Sharma PhD Researcher, WMG, University of Warwick



17:00

In the realm of transportation, autonomous vehicles (AVs) signify a revolutionary leap, promising unparalleled safety, efficiency, and accessibility.

- Documented AV collisions underscore the need for rigorous testing before widespread deployment
- Virtual simulations provide a crucial solution, creating a secure environment for extensive AV testing, emphasizing a 400% increase in computational power when processing the entire environment
- Additionally, the addition of just 1 lane raises the burden by 15%. Analysis of road geometry reveals vertical curves escalating processing demands by up to 7%, and horizontal curves necessitate an average 14% additional processing power.
- These findings, supported by rigorous statistical testing, enrich AV developers' understanding of environmental impact. Government agencies and organizations can utilize this research to assess existing infrastructure readiness for AV deployment, ensuring a seamless integration into our evolving transportation landscape.



Mohamed Abohassan Research Assistant, Universtiy of Alberta





