MODaaS
Committee on Mobility on Demand and as a Service

e-NEWSLETTER

In This Issue

Our Mission:

The ASCE Committee on Mobility on Demand and as a Service (MODaaS) e-Newsletter aims to highlight and recognize the research and activities of the members and friends of the committee.

The e-Newsletter also serves as a forum for any announcements for upcoming conferences, job opportunities, and educational opportunities.

Moreover, the e-Newsletter serves as a tool to connect committee members, friends, and related professional communities.

Committee Overview

The ASCE T&DI Committee on Mobility on Demand and as a Service (MODaaS) was formed in November 2020 and our Strategic Plan states our purpose to:

- Develop a forum for the exchange of ideas and knowledge among transportation researchers, engineers, and planners from academia, industry, and government with interest in developing and promoting infrastructure, platforms, policies, regulations, and operating systems for innovative mobility with both practical and research applications.

- Serve as a connector for bridging strengths in academia, industry, and government to promote innovative technologies and services, regulation and standards development, and deployment in transportation systems.

- Provide a forum for transportation professionals, infrastructure owners and operators, public transit agencies, private transportation service companies, original equipment manufacturers, academic researchers, consultants, and federal, state, regional, and local government entities to discuss today's and tomorrow's needs in Mobility as a Service (MaaS) and Mobility-on-Demand (MOD) services, performance analytics methods to evaluate their integration into smart and connected transportation systems and their impacts on the traveling public.

Within our committee we have three focus groups:

1) **Setting the standard for how MaaS projects are evaluated**

2) **MOD/MaaS's role in reviving public transportation**

3) **Equity implications of emerging mobility options**

If you are interested in joining the MODaaS Committee, please contact us.

ITS Australia Mobility 2021

ITS Australia Mobility 2021 Conference

Professor John D. Nelson
The University of Sydney

ITS Australia's Mobility 2021 conference was held from 1 - 2 September 2021. Originally planned as a face-to-face event in Melbourne, the Delta variant outbreak in New South Wales and Victoria meant that the conference moved fully on-line.

The overarching theme of Mobility 21 was to showcase initiatives which are building on the immediate challenges and opportunities in a COVID-19 world. In Australia, and worldwide, cities are taking the current circumstances as an opportunity to redesign their mobility services to better support community needs.

The strong programme offered a menu of plenary sessions and concurrent sessions and a series of on demand presentations for delegates to view at their leisure.

Plenaries addressed topics including the future of public transport; technology solutions for customers and operators; and the vital challenge of delivering new mobility now. The concurrent sessions covered a rich variety of topics themed under headings such as Agile and responsive public transport; Data and digital evolution; Shared, active mobility; Inclusive and equitable transport and frameworks; and Governance and market models.

Of direct interest to this committee was the plenary talk by Andy Taylor (Cubic) on "MaaS/MOD – An International Perspective" in which he argued that the MaaS market is at a crossroads and could fail if it doesn't change course, including putting cities and public agencies firmly in the "driving seat" of MaaS apps. A similar warning was sounded by Prof John Nelson from Institute of Transport and Logistics Studies at the University of Sydney who posed the question "MaaS – Going Somewhere or Nowhere?" He argued that while MaaS remains a compelling concept, without evidence of MaaS contributing to sustainability goals, the multimodal future may be limited to customer-oriented Apps offering potential convenience but with no provision for bundling mobility services.

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2021 ITS World Congress

MOD/MaaS at the 2021 ITS World Congress

Carol Schweiger
Schweiger Consulting

The 27th Intelligent Transport Systems (ITS) World Congress was held October 11-15, 2021 in Hamburg, Germany. Mobility as a Service (MaaS) and Mobility on Demand (MOD) topics were combined into one of the six topics covered at the Congress. The most popular discussions and presentations about MaaS and MOD made throughout the Congress were (1) standardization, data exchange, governance and platforms, impact on travel behavior, how to account for MaaS in transportation planning, the potential for MaaS to be self-sustaining, and definition of indicators, such as readiness for MaaS; and (2) rebalancing vehicles to optimize MOD service, fleet management systems, incorporating automated vehicles into MOD service, how to design MOD services, and the role of urban air mobility. Subtopics that were covered included were (1) how equity and inclusivity are addressed in MaaS/MOD, how each impacts the environment, using living labs to design these services, using human-centered design in developing these services, and the need for open data and open data exchange within these services; and (2) new MaaS business models and architectures, and the need for public agencies to become more agile in developing and offering MOD, MaaS and other digital mobility services.

Fig. 1. Real-time Transit Information at Bus Stop in Hamburg

Many new aspects of MaaS and MOD were covered in the Congress, including (1) development of a comprehensive framework for MaaS scheme indicators, including those that measure the readiness of cities for MaaS; (2) MaaS Linking-of-Services (LOS) concept employing a decentralized, fully-distributed and standardized architecture; (3) two novel MaaS data governance frameworks: User Centered Trusts and Unified Mobility Management Model; (4) using augmented emission maps to give data-driven advice, to engage and encourage drivers to modify their behavior, and thereby reduce pollutant emissions; and (5) introduction of "Nano-mobility" which is any section of a journey where a traveler has to cover a distance of less than 800m (approx. 0.5 miles) – one that cannot be serviced by micro-mobility solutions.

Stay tuned for more information regarding MaaS/MOD at the 27th ITS World Congress!

Related Organizations

- Institute of Transportation Engineers MaaS/MOD Steering Committee
- ITS America Mobility on Demand Committee
- SAE Shared and Digital Mobility Committee
- TRB Committee on Innovative Public Transportation Services and Technologies
- MaaS Alliance (ERTICO — ITS Europe)

Conferences and Meetings

- ITS America 2021 Annual Meeting, December 7-10, 2021, Charlotte, NC, USA
- TRB 101st Annual Meeting, January 9-13, 2022, Washington D.C., USA
- ASCE T&DI MODaaS Committee Workshop *Setting the Standard for How MaaS Projects Are Evaluated,* February 14, 2022 (tentative), Online
- ITS European Congress, May 30-June 1, 2022, Toulouse, France
- ASCE International Conference on Transportation & Development (ICTD), May 31-June 3, 2022, Seattle, WA, USA
- National Rural ITS Conference, July 31-August 3, 2022, New Orleans, LA, USA
- Thredbo International Conference Series on Competition and Ownership in Land Passenger Transport, September 4-9, 2022, Kobe, Japan
- 28th ITS World Congress 2022, September 18-22, 2022, Los Angeles, CA, USA

The MODaaS e-Newsletter is looking to expand! Please contact us if you have anything you would like to share in an upcoming issue. Subjects may include, but are not limited to, the following:

- *Relevant conferences, workshops, seminars you have participated in;*
- *Interesting research projects you have been undertaking (recently completed or ongoing);*
- *Other related organizations focusing efforts on the advancement of Mobility on Demand and as a Service;*
- *Announcements on upcoming conferences, workshops, etc.*