



Newsletter - Issue 8

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CIHT Dubai Annual General Meeting 2024/25

In our formal Annual General Meeting held online on 16th April 2024, we reviewed our progress over the last year, re-elected existing members in their roles or new roles and elected new members to the committee. The AGM was also attended virtually by Christopher Flattery, Regional Engagement Officer from CIHT Headquarters, Britannia Walk.

Achievements

In his Chair's Review, Martin Tillman provided a summary of the achievements attained by the committee over the last year:

- There are currently 102 CIHT members with Dubai registered as an address.
- Increasing the registrations for CIHT seminars by 29% and attendance art events by 11% over the previous year.
- Over 900 registrants were attracted to five seminars throughout the year.
- Over 500 people registered for the Big Data webinar in October 2023, given by the world renowned thought leader Luis Willumsen.
- Successfully organising and running the inaugural CIHT Dubai hackathon at the University of Wollongong and Heriot-Watt University in March 2024.

Key Objectives for 2024-2025

Martin outlined some key objectives for the coming year, noting these are not exhaustive, but the most pertinent:

- Complete organisation registration and trade licensing process.
- Expanding educational events from 5 to 8 annually.
- Establishing a bank account.
- Facilitating social networking for members.
- Increasing membership numbers.

Committee Membership

The following office bearers confirmed their commitment to remain their roles:

- Martin Tillman Chair
- Richard Lewis Vice Chair
- Mohamed Al-Mansi Secretary
- Stephen Wilkinson Event Coordinator
- Brindha Sankari Communication, Web and Data Officer
- Michelle Wood Professional **Development Officer**
- Samar Nasser Emerging **Professional Chair**

Prathyush Mukkadekkat, a seasoned committee member was elected to the office bearing position of Recruitment Officer.

Re-elected committee members include:

- Jonathan Spear Former Chair
- Khalid Nur
- Robin Miller-Stott
- Kashyap Shukla
- Sherif Rashad

Newly elected committee members include:

- Mohamed Al Taleb
- Toni Adeyemi
- Nitish Kalyanpad
- Apoorva Mahajan
- Mohamed Al Khatib
- Nandeesh Kestur
- Ahmed Bassyouny

The committee are appointed to represent CIHT members and are committed to do so. To learn more about CIHT or for any inquiries, please reach out.

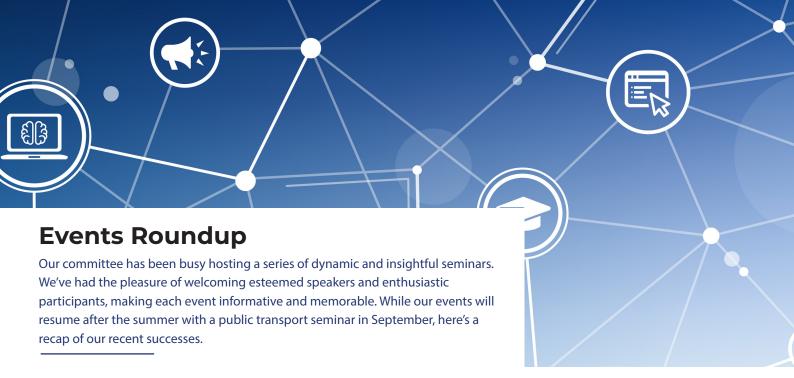
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Contact us:



CIHT Dubai Group





Unlocking the Road to Better Signage: Exploring Middle Eastern Road Sign Design



23 April

Presented by **David George** IEng FIHE MCIHT FSoRSA RegRSA (IHE). He leads road safety initiatives in Al Ain, Abu Dhabi, UAE, specializing in collision investigation, prevention, and road safety audits. With global experience in both public and private sectors, he develops training courses, speaks at conferences, and serves as an expert witness.

In this session, David George explained the pitfalls and challenges in designing navigational aids. Road signs are silent guardians of safety and efficiency on our highways. Yet, many regions, including the Middle East, struggle with subpar design processes. From confusing layouts to inconsistent messaging, the flaws in road signage are impactful.

David highlighted the critical issue of substandard road sign and marking designs submitted to local authorities. In the Middle East, CAD technicians often produce road marking and sign drawing packs, unlike European norms. The design process for road markings and signs has

been neglected, with many drafters lacking driver's licenses, leading to errors. Overuse of signs diminishes their effectiveness, and incorrect usage is prevalent.

David discussed site-specific issues in the Emirates, particularly Al Ain and Abu Dhabi, highlighting the misuse of double chevrons in low-speed residential areas and the incorrect use of the blue roundabout sign as a warning sign.

David explored the root causes behind poor road sign design, shedding light on systemic issues such as excessive implementation, incorrect placement, and maintenance. Real-world examples from the region illustrated these problems.

While similar inconsistencies are seen in neighboring areas, David noted ongoing revisions to Abu Dhabi's design guidance. Common mistakes like incorrect arrow markings, inappropriate stop and turning signs, and confusing directional signage were discussed. Issues like zebra crossings on three-lane roads or their excessive use at every dropped curb were also mentioned.

In closing, David advocated for a "more with less" approach through safety in design, citing studies showing a reduction in traffic accidents by removing lane line markings, benefiting all stakeholders.



STEAM+ Modelling & Analytics Framework: Latest Advancements

21 May

Presented by:

- Aysha Ahmed AlKhazraji is a Transport Design & Modelling Specialist at Abu Dhabi Mobility with 5 years' experience in Mobility Planning & Modelling.
- Brindha Sankari is a Transport Economic Expert in Abu Dhabi Mobility with over 17 years of experience in transport planning and modelling across India, Singapore, and the UAE.
- Bharath Paladugu is a Transport Planning & Modelling Specialist at Abu Dhabi Mobility. He has over 15 years of global expertise spanning the USA, UAE, Oman, and India.

The speakers shared insights on advancements in the STEAM+ modelling framework, developed by the Abu Dhabi Integrated Transport Centre (ITC), including a new micromobility model and enhancements to the FUSION Engine. They highlighted how STEAM+ uses big data, advanced models, and Al-driven tools to understand mobility patterns and transport needs. Innovative data sources including mobile phone data and water/electricity consumption data offer a comprehensive view of urban mobility. The speakers also explained how the data warehouse addresses transportation issues and improves Abu Dhabi's quality of life, showcasing how data-driven approaches can drive positive change in urban planning and transport solutions.

Ideas for a Life and Career You Love - Perspectives on INWED



2 July

Presented by **Rachel Smith**, Associate Director at Jacobs, a transport planner with 24 years of experience in the UK, Australia, and New Zealand. Described by News Ltd as "one of the brightest thinkers on urban planning," Rachel is known for her innovative solutions, including Cycling Superhighways and research on behavior change during the COVID-19 lockdown.

To celebrate International Women in Engineering Day, transport planner Rachel Smith shared six insights for a fulfilling life and career, based on her own experiences and observations. Drawing from Susan Boyle's inspiring story, Rachel highlighted the power of storytelling and introduced her "APPLES" principles: Self, Act, Prize, Passion, Learn, and Events. These principles encourage embracing individuality, seizing opportunities, following passions, continuous learning, and proactive networking. Rachel's journey, marked by innovative urban planning and behavioral change initiatives, exemplifies the importance of taking action, maintaining a positive mindset, and building strong networks. Her insights left a lasting impression on attendees, motivating them to apply these principles in their own careers.

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Building for the Future: How Dubai is Addressing the Threat of Severe Weather

By: Stephen Wilkinson, FCIHT, FGS, FRMS, DIC, Applied Sustainability Researcher in the UAE

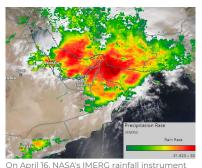


Dubai's new Dh30 billion Tasreef project aims to significantly expand the city's drainage infrastructure to handle future severe storms, reflecting a growing need for climate resilience in urban planning.

In a remarkable turn of events in June 2024, Hurricane Beryl emerged as the first North Atlantic Ocean Category 5 hurricane to form in June, setting a new precedent for early-season hurricanes. This phenomenon is primarily attributed to the warming of ocean waters due to climate change. As a result, the world is witnessing increasingly severe storms, necessitating that infrastructure built on historical drainage requirements now accommodate significantly larger water volumes.



Tankers clearing waterlogged roads near Discovery Gardens metro station in Dubai on April 22 (The National)



recorded a rainfall rate of 1.32 inches per hour over the Gulf of Oman (AccuWeather).

On April 16th and 17th, Dubai and various parts of the Middle East experienced an unprecedented storm, with rainfall levels surpassing all records within a 24-hour period since 1949. Models from World Weather Attribution suggest that the storm's intensity was 10-40% greater than what would have been expected in the absence of human-induced climate change. Despite the region's history of rare intense rainfall, the certainty of attributing this specific storm to climate change remains low. Nonetheless, the anticipation of more frequent and larger storms in the future is a growing concern.

In response to these challenges, the Emirate of Dubai has greenlit the Tasreef project, an ambitious initiative to bolster the city's drainage infrastructure against future storm events. Dubai's unique challenges include highly permeable soil and high groundwater levels, where even minimal rainfall can cause groundwater to rise above the surface, quickly overwhelming the city's older drainage systems.

The Dubai Deep Tunnel Storm Water System, announced in 2017 and completed in 2021, stands as the largest existing infrastructure for stormwater management. Serving Dubai South and the Expo 2020 site, this system covers

up to 40% of Dubai's urban area. Areas within the system's coverage experienced prompt water clearance during the recent storm, thanks to its capacity to handle and store 6.5 million cubic meters of water, which is then transferred 1km offshore in the Jebel Ali area. However, older drainage systems in the northern parts of the city and certain communities were less effective, resulting in significant flooding. Low-lying coastal areas, including Dubai International Airport, were particularly affected as the water table rose. Geographic depressions without adequate drainage saw water retention, causing ponds and lakes to expand. Additionally, soil displacement during the storm led to blocked drains, further exacerbating the flooding.

The Tasreef project, with a projected cost of Dh30 billion, aims to expand the Dubai Deep Tunnel Storm Water System's capacity to 20 million cubic meters of water daily. This expansion will extend the drainage network to a larger area, including key road routes such as Sheikh Zayed Road and the northern and western parts of Dubai International Airport (E11 and D83). The network will also reach the Abu Dhabi border. The project, set for phased completion by 2033, will employ large-gauge tunnel boring machines beneath the city. At the community level there have also been discussions of incorporating sustainable urban drainage systems (SUDS) in urban design. These can be incorporated into parks and gardens easily but can also be included as a part of roundabouts or central reservations of roads to increase the SUDS capacity. As the amount of green space in Dubai increases with the development of the Dubai 2040 Urban Master Plan significant opportunities for SUDS exist.

As climate change continues to alter weather patterns, Dubai's proactive measures through the Tasreef project demonstrate a commitment to protecting its infrastructure and residents from future storm impacts. This initiative not only highlights the necessity of innovative engineering and urban planning in mitigating climate risks but also serves as a potential blueprint for other regions facing similar challenges.

COMMITTEE MEMBER PROFILE

Martin Tillman

Martin is a global leader in mobility and transportation, providing strategic guidance on major projects. He focuses on sustainable urban design and mobility strategies, is a recognized thought leader, and serves as Chair of CIHT Dubai.

Can you briefly summarize your career to date?

I have always been drawn to the planning discipline and enjoyed geography at school, particularly the planning of cities and towns. I decided to pursue a degree in Geography which I studied at the University of Salford in Manchester which provided experience in geographical processes, master planning, and team After finishing I wasn't really sure what job to look for but found an advert for a transport planner vacancy which identified geography as one of the requirements and so I applied and got the job at Sir Alexander Gibb and Partners (now Jacobs) in Reading, in the UK. I enjoyed the mixture of analytical and creative elements of the profession and working on a wide variety of projects. This encouraged me to pursue a Masters Degree in Transport Engineering at the University of Newcastle upon Tyne.

I very much enjoyed the experience and with new contacts in the industry I continued my transport career to a new role at the MVA Consultancy (now Systra) in Woking, UK. This gave me my first experience of using my skills overseas with a secondment to the Hong Kong business and later Qatar as well as support to the French business. I was happy helping to shape cities with transportation planning and see the differences it made.

On my return I decided to move to a specialist transport planning consultancy, Steer Davies Gleave (now Steer) in London which gave me greater management responsibility and another overseas posting, this time to Puerto Rico in the Caribbean where I led the transport planning work with the Highway Authority. My favourite projects in the UK were working on the redevelopment of

Battersea Power Station and the Sheffield City Centre Master Plan

My experiences encouraged me to work on other overseas projects and I was fortunate to work on a wide variety of transport master planning projects in Kazakhstan, Turkey, Ireland, and the USA. During this time I was asked if I would like to lead a bid for a new transport master plan for Abu Dhabi and within a few weeks of submitting I was informed we had been successful and I was off to start the project.

It was an amazing project working with international planners and transport experts from around the world and I became convinced that working in the UAE was for me and made the move. Since relocating to the UAE I have been fortunate to have worked on some of the most awe inspiring projects in the region with colleagues and partners that I continue to learn from and help me to develop as a transport professional.

Why did you move to Dubai and what's the best thing about living here?

My role leading Strategic Planning and Advisory at AECOM in the UAE led to a higher workload of projects in Dubai and the northern Emirates. I took the decision to make the move from Abu Dhabi to help reduce travelling time and experience a change in lifestyle. For me, Dubai is a place of opportunity for the variety of projects and the ever-increasing options for education, healthcare, lifestyle, and of course transportation.

How do you find your involvement with CIHT Dubai rewarding?

As a founding member I have enjoyed helping to set up CIHT Dubai and working with transport professionals from other



I also enjoy the learning opportunities CIHT provides and always take away some new knowledge from our monthly seminars and encourage others to do the

organisations that I most likely would not have interacted with otherwise. I also enjoy the learning opportunities CIHT provides and always take away some new knowledge from our monthly seminars and encourage others to do the same.

same.

What do you consider to be the great mobility opportunities here in the Middle East?

Dubai, UAE and wider Middle East are all making major advancements in provision of multi-modal transportation, transitioning from private car dominance. We as transport professionals can assist through support for walking and cycling, noting that heat is one factor we need to counter but safety should be the top priority.

What advice would you give to new transport professionals in Dubai?

Get a mentor in the transport field you are interested in, say yes to more opportunities, especially if it is working with people that inspire you, and keep learning – CIHT Dubai seminars are a great way to boost your knowledge and network!

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Education & Professional Development



Two seminars are delivered annually on Education and Professional Development by the CIHT Dubai Group: one on transport planning qualification (Transport Planning Professional) and the other on engineering (Chartered Engineer, Incorporated Engineer, and Engineering Technician).

The Dubai Group supports applicants through a set of local mentors in region who are professionally qualified either as Chartered Transport Planning Professional or Chartered Engineers. Our current mentors are Jonathan Spear, Michelle Wood, Andrew

Jenkins, Fergal Hands, Sreeram Kollipara and Herve Etave. We would be delighted to hear from senior professionals who are professionally qualified and willing to act as mentors to others.

Not sure what qualification is right for you? Reach out directly to Michelle Wood, the Professional Development Officer of CIHT Dubai Group and reviewer for the Transport Planning Professional qualification, or any other committee member who can direct you further. More information can also be obtained on the CIHT Professional Development page.

Why Become Professionally Qualified?

- National and international recognition as a professional
- Greater influence within your organisation and industry
- Assists career progression
- Recognition of your knowledge and expertise by colleagues and clients
- Evidence of your commitment to professional standards

What can CIHT Offer?

- Professional Qualifications
 - Transport Planning Professional (TPP)
 - Chartered Engineer (CEng)
 - Incorporated Engineer (IEng)
 - Engineering Technician (EngTech)
 - Road Safety Auditing Certificate of Competency (CoC)
- Continuing Professional Development (CPD)



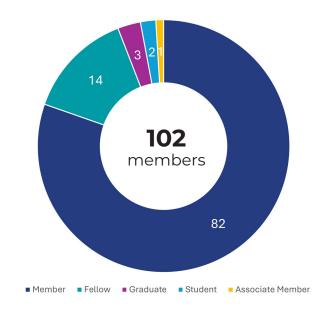






Membership & Recruitment July Committee Social

CIHT Dubai is working hard to grow overall interest and application for CIHT Membership, including a more equal gender balance and encouraging diversity across ages, membership levels, skills and between the private, academic and private sectors. For more information on how to register for the institution, please visit the CIHT Membership page.



The committee members recently enjoyed an evening of camaraderie and discussion over dinner. This outing provided an excellent opportunity to strengthen professional relationships and exchange valuable insights in a relaxed setting. They also discussed ideas for the upcoming year for the Dubai group, focusing on new initiatives and strategies to enhance the group's impact and outreach.





CIHT Dubai Group Committee

The current CIHT Dubai Committee, reappointed in May 2024, is comprised of 22 professionals, mainly from private sector consultancies, but with additional representation from academia and public agencies.



This newsletter is published twice a year by the Dubai Group of the Chartered Institution of Highways and Transportation (CIHT). To subscribe to our newsletter, receive notifications of upcoming seminars, provide feedback, or learn more about CIHT activities, membership and qualifications, contact us via:

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