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ONLINE SEMINAR

CIHT Dubai Evening Seminar (Online) – Bulletin

Edward Forrester
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Mott MacDonald in Dubai

FUTURE – A New Approach to Transport Planning in the Age of Uncertainty



About the Speaker

Edward Forrester is the Future Mobility Lead for Mott MacDonald in Dubai. A Chartered Civil Engineer, he is passionate about future mobility and sustainable transport, and has worked extensively with clients in the public and private sectors in such fields as connected and autonomous vehicles, low-carbon and net zero transport, and Next-Generation ITS.

Ed is leading the roll-out of FUTURES in UAE, an approach developed with the UK University of West of England (UWE) & sponsored by CIHT. He is a member of the Institution of Civil Engineers & holds a Master's degree from University of Liverpool.

Presentation

This was the Dubai Group's second seminar and the first held online, made necessary by the restrictions on gatherings as part of the UAE's COVID-19 response. The meeting was organised on Zoom and attended by 67 participants, including some coming from outside Dubai from as far afield as UK, Malaysia and Australia. The technology, presentation and management online were a great success!

Ed introduced himself and explained his background and interest in future mobility and cities. He explained that even before COVID-19, the world of transport, mobility and city planning was changing, the status quo being challenged by the advent of new technology and ways of working, with autonomous vehicles, smart highways, electrically powered-trains, shared mobility and aerial transit. We face the imminent transformation of society as the digital age collides with, and disrupts, the motor age.

This has all been brought into sharp focus by the impact of COVID-19, the restrictions on travel and consideration of how and when we return to a 'new normal' in terms of transport and city planning.



Ed's presentation described FUTURES (Future Uncertainty Toolkit for Understanding and Responding to an Evolving Society) which helps transport planners consider the full range of mobility options ahead and to develop a resilient future-proofed strategy to get there. It is based on scenario planning and outcome-based stories describing alternative paths through which the future might develop, and which can be used flexibly to test new trends, policies, technologies and business models. The scenarios inform a series of tools and techniques which explore change drivers, unpack associated opportunities and build potential solutions. This approach supports decision making based on desired outcomes for cities, economies and societies.

Ed made clear the FUTURES offers a very different approach to the historic 'predict and provide' philosophy in transport planning which uses past data and travel behaviour to plan for more of the same. This has led to the dominance of the car and road traffic in cities with other goals such as green space, urban form and clean air of secondary consideration.

FUTURES has been developed jointly between Professor Glenn Lyons at the University of the West of England and Mott MacDonald, and its development was also endorsed by CIHT. It is a toolkit which allows authorities and professionals in the transport and planning industry to plan for the future, and arrive at the outcomes we want. Solutions are tailored to suit these outcomes. The question moves from 'what do we think will happen?' to 'what do we want to happen?', from 'predict and provide' to 'decide and provide.'

Six stages of the toolkit process were outlined:

Gearing Up

Introducing the FUTURES approach and concepts, engaging with stakeholders and gauging their appetite for change.

Preferred Futures

Collaboration with stakeholders to create a shared vision which triangulates between land use systems, transport systems, telecommunications systems and accessibility.

Opening Out

This stage opens out uncertainty and focuses on the drivers for change. This allows the development of future scenarios which feed through to the vision. What are the trends? What is the balance between individual freedom and greener communities? How can technology be unleashed? The keys steps for Opening Out relate to identifying critical uncertainties and developing scenarios.

Options

This is where option scenarios are developed that fit the vision and meet the challenges identified.

Closing Down

The scenarios are then stress tested against a multi criteria evaluation framework. This is termed ‘wind tunnelling’ and enables the development of a preferred scenario.

Review

Finally, a plan needs to be put in place for monitoring and review of the scenario in the future. This enables performance against criteria to be assessed and allows for the adaptability of the scenario and strategy to an ever-changing future.

Ed made clear that the FUTURES approach is valid and actively used beyond transport planning and relates to all aspects of planning and development. It also takes into account digital connectivity as well as physical connectivity and change.

Questions	
How do you take account of the economic impact of COVID-19 in the scenario planning?	There has been an extreme shut down in travel and the economy. Traditional forecasting tools do not take into account pandemic responses on this scale and FUTURES scenario planning can be focused on post COVID, taking into account the risks and uncertainties for the future, and what the desired outcomes are.
How do you get all stakeholders to agree to a vision when they have competing visions of their own?	The approach is explained and outcomes understood. It is about understanding the appetite for change and collaboration from different organisations at the start.
What are the key technological innovations of the future?	Connecting to people without the need to travel will be more prevalent. The use of digital technologies such as Zoom and Teams will be more important than autonomous vehicles.
How can institutions help to drive change?	Institutions can be part of the debate about the future of travel and mobility, how travel demand measures and technology can impact travel behaviours. Institutions can push for sustainable choices, help understand the future use of public transport post COVID and use their global resources to help understand the challenges and opportunities.
What is the link between scenario solutions and the economic planning context?	This depends on the vision that we want. The vision needs to be teased out in discussions and workshops where the drivers for change are addressed and priorities set. They can be economic, environmental, social and other.
What are the horizon years that are typically planned for?	This depends on the type of project and type of appraisal being addressed.
How would you get government entities to adopt this approach?	The FUTURES approach can be difficult to accept because it challenges preconceived ideas and practices. However, it depends on the priorities set by the entities and what they want to achieve. Once these priorities and the vision has been set then the scenarios can be developed and tested.
Are there any UAE or global regulations relating to global warming and planning for transport visions?	All such regulations affect transport and outcomes-based planning. Transport is one of the world’s biggest polluters. For example the UK has adopted Net Zero for Transport by 2050 which will drive significant change.

This Bulletin is issued by the CIHT Dubai Group. For further information, contact dubaigroup@ciht.org.uk.

