Editorial

Fidelis Emuze HND, MSc, PhD, PGDip, Pr. CM, MSAICE, GMICE

This latest issue of the ICE's *Municipal Engineer* is a collection of seven articles that showcase contemporary ideas on how to build, operate and maintain infrastructure. The infrastructure required for mobility and shelter forms the basis of the ideas shared in the articles where mobility goes through four of the articles.

In this first article, Williams (2019) presents a sound argument in support of lane rental as a viable option for local government authorities in the UK keen to limit traffic disruptions occasioned by road repair works. The critical success factor for the option is the appropriate use of technology that is fortified with informed decisions. The rental idea, when properly executed, is a viable option needed to address significant road repair backlog in most countries. Among other gains of its implementation, the lane rental option aims to mitigate hindrances to mobility. Still, on mobility, Faggi and Vida (2019) address the advantages of linear parks using two South American cities as case examples. The cities reinforced the notion that linear parks are chiefly used as a commuting route (mobility) and recreation. As such, linear parks in urban spaces tend to provide ecological, recreational, economic and cultural values for communities. Faggi and Vida (2019) thus suggest that concepts for a suitable linear park design should pay close attention to the environment, mobility and recreation.

Tekin and Atabay (2019) propose a strategic roadmap for building information modelling (BIM) adoption. BIM as an integrated project delivery technology has been around for some years, but its proliferation in construction in developing countries such as Turkey is constrained by resistance to change, lack of required expertise and the paucity of investment capital. The roadmap for BIM to be more extensively used provided by Tekin and Atabay (2019) speaks to multiple stakeholders, which include the clients, regulators, designers, consultants, educators and contractors. When the roadmap is executed, the argument is that increased BIM utilisation in the construction industry will enhance efficiency that is needed in the sector.

The next article in this issue addresses mobility as it concerns road pavement and its quality. Pradena and Houben (2019) highlight the need to arrest the presence of joint faulting that

reduces the ride quality on jointed plain concrete pavements (JPCPs). The authors contend that the radical reduction of crack width at joints could produce a vital increase in load transfer efficacy. In other words, JPCPs quality is better served by joint activation and adequate stiffness of the layers below short slabs. The article by Rahmati and Kash (2019) report on urban footpath analysis, which is related to the need to enhance pedestrian mobility. Through simulations, the article presents an investigation into the capacity of footpaths to determine whether it can meet expected demands. The analysis shows that individual sections of the route were below an acceptable level of service so much that pedestrians would be better served with improvements to it.

Sustainable Development Goal (SDG) 6 focuses on clean water and sanitation. SDG 6 calls everyone to work together to ensure the availability and management of water and sanitation for all. The next article in this issue is situated in this clarion call as García-Terán *et al.* (2019) assessed a strategy to adapt existing infrastructure to adverse effects due to climate change through sustainable urban drainage systems (SUDS). Using a case study approach that includes simulations, the authors suggest that when SUDS worked together, the benefits were higher as a drainage solution. One of the effects of climate change is heightened occurrence of natural disasters as opposed to human-made mishaps. The article by Rafi *et al.* (2019) presents a way to reduce seismic in disaster-prone areas, especially where non-engineered structures predominates. The article suggests that the existence of a significant number of non-engineered structures is a challenge from an earthquake safety perspective. The article provides insightful information required for seismic vulnerability assessment of existing building stock.

From mobility to technology, all the articles in these issues influence the state of municipal infrastructure and society by extension. These articles are published Ahead of Print on the ICE Virtual Library homepage. The Ahead of Print options allows the community faster access to new content. The knowledge and information shared in these articles are relevant to the civil engineering and related community of practice. On knowledge as a topic, the readers of this issue should look forward to two themed issues of the *Municipal Engineer*. The two themes issues are poised to provide cutting edge ideas on artificial intelligence (Machine Learning and Artificial

Intelligence in Municipal Engineering) and safety (Workplace Wellbeing, Health and Safety). The calls for contributions for these themed issues are now out. Readers of *Municipal Engineer* should look out for the issues in 2020.

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