Editorial

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In this second part of a two-part edition of *Municipal Engineer*, we explore some of the issues around accessibility and infrastructure, with a focus on cycling, walking and public transport design.

While these issues were always important, the growing urban populations around the world, and the increasing recognition of the importance of sustainable modes that also incorporate health and environmental benefits as well as providing high-volume transport solutions, arguably makes them more significant than ever.

Economic considerations have dominated the last decade; however, while economic growth remains very important, more individuals and jurisdictions are recognising that future economic growth must also be environmentally and socially sustainable. It may follow that, ultimately, future economic growth may be greatest in those economies that understand and implement the most successful inclusive and sustainable transport solutions.

The overarching question may be ‘Can we tame and moderate the capitalist imperative to embrace our humanity?’.

Velasco *et al.*’s (2015) paper surveys a sample of elderly cyclists in Spain and concludes that, from their perspective, segregated facilities are preferred while also noting issues around pedestrian conflict and use of cycle safety equipment.

Tralhao *et al.*’s (2015) paper examines the design of cycle maps for hilly cities, and will be of significant interest to those planning cycle networks in their jurisdiction. It provides excellent insight to the effect of gradients, and where routes with excessive gradients cannot be avoided, points to practical interventions such as the cyclocable; which if you have not seen it is worth viewing at: <https://www.youtube.com/watch?v5JtB8DX70ihM>.

Singapore has seen massive economic growth over many decades and, like many developed areas, faces the concurrent multiple challenges of a shortage of land, an increasing population and an aging population, while recognising the underlying challenge of achieving future growth in a sustainable way. Koh and Wong’s (2015) paper provides a method for prioritising urban transport schemes that will assist in promoting cycling and walking in densely populated urban areas.

While the paper focuses on Singapore, the challenges there are replicated internationally in every major city and conurbation and this paper may therefore be of wider use.

Jenny Donovan’s (2015) thoughtful paper examines some of the human factors that influence travel choice, and explores how sustainable travel modes can be made more relevant and attractive to individuals. I believe all urban designers could benefit from considering some of these wider human considerations when developing their design solutions. In my opinion, some of the best urban solutions may be achieved by building multidisciplinary teams, including landscape architects, architects and even artists, among others, and this paper provides useful insight into wider considerations that may not always be foremost in a design engineer’s mind.

Recognising the need to build inclusive public transport systems, Burdett’s (2015) paper proposes a tool that can be used to highlight where gaps occur, and, therefore, where interventions could be most beneficial. This tool may be useful to those who are prioritising accessibility expenditure.

Acknowledging that part of any journey on public transport is on foot, Chin and Menon’s (2015) paper describes the extensive work carried out to date to make this part of the journey easy, accessible and barrier-free in Singapore, and advocates further measures and improvement. The work to date and future efforts will be of wider international interest.

Edwards *et al.*’s (2015) paper notes the societal and legal importance of designing for older people and the disabled. The paper considers how mobile technology and intelligent transport systems can be used to improve journeys for these groups while noting the wider benefits for all users. This paper is important because individuals with disabilities often take greater time and effort to plan their journeys, and such initiatives could reduce planning time while also assisting in when the original plan becomes disrupted.

Platform humps are being installed by London Underground to reduce or remove height differences at the entrance threshold to trains. To be effective, these platform humps must of course at some point be resolved to the existing surrounding floor levels. This introduces secondary gradients that can potentially introduce other accessibility issues. Fujiyama *et al.*’s (2015)

useful and practical technical paper provides information that designers should consider when designing platform humps in order to optimise accessibility at stations. The paper may be of some use for those designing new station platforms, but will be of particular interest to those jurisdictions that are trying to improve their historic infrastructure.

Collectively, this issue provides some useful tools and information that may assist in the planning, use and implementation of cycle networks, pedestrian routes and public transport infrastructure. It will assist designers in ensuring that legal and moral obligations to provide accessible infrastructure are achieved and, in turn, I hypothesise that this will lead to more successful economies, which are by definition also inclusive and sustainable.

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