

## Editorial

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Welcome to this June issue of *Municipal Engineer* which contains a good cross section of papers.

In the first paper, Parry (2014) discusses the need to address climate change globally and shows in particular how the UK has addressed it in terms of critical infrastructure and the civil engineering profession. This paper sets out the UK government policy, strategic responses and legislation with regard to risk and infrastructure adaptation. It highlights some worldwide examples of climate change and the recent events in the UK such as storms, high winds and flooding, fluctuating temperatures and their high costs. Reference is also made to the historical events leading to the adaptation strategies of critical infrastructure in transport, energy and utilities. Current UK research programmes in climate change are discussed, as well as how the UK insurance and financial sectors have incorporated climate change into their business operations.

The second paper (du Plessis, 2014) presents a model to promote integrated water resources management in South African municipalities. This is in response to planning approaches that focus mainly on solving the water supply shortfall. The model is supported by the implementation of an effective participation process and provides six decision support systems that relate to the steps in the integrated water cycle, which are: water resources, water treatment, distribution, consumer demand, waste water treatment and institutional aspects. The role and responsibility of political decision making is also highlighted. The model is supported by a score card system that enables municipalities to assess their performance or readiness to promote water demand management in an integrated and sustainable way.

In the third paper, Adegun (2014) discusses a case study on stormwater management in an informal settlement in Johannesburg, South Africa. He notes that stormwater management infrastructure is generally lacking in informal settlements and that residents and community groups, with or without external assistance, have taken initiatives to provide it. The paper demonstrates that community-based initiatives are more effective than household-based strategies, which are often technically deficient. The author therefore sees an opportunity in community-based initiatives, coupled with state participation and an enabling environment, as an appropriate mix for promoting sustainable infrastructure in informal settlements.

The fourth paper (Yildirim *et al.*, 2014) reports a case study of street addressing in Turkey, in three stages. First of all, its effectiveness is examined. Second, the problems caused by organisations and individuals that use non-standard texts are addressed. In the third stage, statistical analyses of the different geocoding methods (which included one-range, dual-range, single field and the zoning improvement plan) were conducted and the most appropriate method was recommended.

In the fifth paper, Alsulamy *et al.* (2014) investigate the factors influencing construction project performance in 261 municipalities in Saudi Arabia, using a variety of techniques including a postal questionnaire. The information was derived from three key stakeholders, namely contractors, consultants and owners, to identify performance measures and critical success factors to design performance measurement systems. The review concentrated on critical success factors, performance measures and obstacles associated with their application. Statistical analysis was used and the results showed that the initial factors of 69 were reduced to 20, indicating their close interrelationship.

The review of the book *International Case Studies in Asset Management*, edited by Chris Lloyd and published by ICE Publishing (Parkin, 2014a), acknowledges that it covers 17 case studies in the fields of water supply, airports and ports, railways, civic services including utilities and cultural buildings, power supply and mining. The book starts with an introduction, followed by a section on organisational transformation to focus on asset management and finally a section on linkages between governance and delivery as well as technical and financial asset management. Parkin suggests that a clear message from all the studies is that success in managing large capital assets is a function of the availability of high-quality data and a clear understanding of the risk to service delivery of failures in any part of the asset. Overall it provides a useful set of interesting case studies.

In his review of the book *Pedestrian Facilities: Engineering and Geometric Design* (Parkin, 2014b), Parkin notes that it provides 15 chapters and is mainly based on the UK design manual for roads and bridges, which focuses on the road network and explicit assumptions that provision is based around functionality and solving accident problems. Parkin suggests that there are some useful comments on how a pedestrian can stay safe within a highway environment, including mini roundabouts, and concludes that overall the

book provides comprehensive guidance for engineering layout specification for pedestrians.

I hope that readers of this issue find the papers stimulating and relevant.

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