
Book review

The Elgar companion to urban infrastructure governance, innovation, concepts, and cases

Matthias Finger and Numan Yanar (eds)

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Finger and Yanar have assembled a comprehensive book of edited readings covering the challenges of providing, financing and managing urban infrastructure including energy, transportation, water, waste treatment, telecommunications, housing, brownfields and green space. It concludes by highlighting the role that digitalisation plays in making cities smarter and argues for the potential of digitalisation in urban infrastructure governance.

Chapters tackle the issues in less developed, as well as high-income countries around the world, including chapters on Detroit, Mexico City, Istanbul and Nairobi for examples. There are 22 chapters in total. The book makes clear the difficulty of infrastructure planning in both cities with rapid growth and those with population decline. For example, the chapter on Detroit addresses the fiscal challenges of infrastructure provision in an environment facing population shrinkage in a fixed service area, a budget deficit and bankruptcy. They also explore the challenges of fast growth cities such as Nairobi and Mexico City, where

rapid population growth, low income, expanding urban boundaries and informal settlements create special challenges.

The whole book is worth reading because it gives a view of the depth and breadth of infrastructure provision around the world. But if you cannot read the whole book, three excellent and vastly different chapters highlight the book's range and are especially worth reading. They are: 'Sustainable Community Design Amidst Social Challenges, Insights from Nairobi, Kenya', by Cherie Enns; 'Brownfield Infrastructure', by Gastaldi and Camerin; and 'Telecommunication Systems', by Faizura and Effendee.

Chapter 6, 'Sustainable Community Design Amidst Social Challenges, Insights from Nairobi, Kenya' makes clear the difficulty of providing safe, clean and sustainable infrastructure in cities of the developing countries. Nairobi is one of the fastest growing cities in the world at a population growth at over 4 per cent fuelled by immigration from Somalia, South Sudan, Congo and Ethiopia¹ and natural increase.² Although Nairobi is a city that hosts corporate headquarters,

luxury housing for a growing elite and services for an ex pat community, more than 60 per cent of residents live in informal settlements without access to potable water, sanitation, adequate housing, health care and security.³ In districts where no public services exist, the residents rely on private sector water provision paying exorbitant high prices for low quality water.⁴ Widespread poverty, irregular boundaries, lack of land ownership, socio economic segregation and a planning profession that focuses on serving the elites and ignoring the poor, must be resolved by city officials before Nairobi can become a more equitable modern city. The authors also use a case study of Dandora to illustrate local efforts by young residents to improve local conditions by improving a small sub-division's quality of life by cleaning up garbage, providing security, promoting community planning and promoting land tenure.⁵ This case, while encouraging, illustrates the difficulty of improving infrastructure services when major investments such as water plants, sewage facilities or electricity plants are necessary but still inadequate.

'Brownfield Infrastructure', Chapter 10, has important examples how cities can creatively adjust to the inevitable changes in infrastructure demand over time. In this chapter the change is where high value, centrally located rail lines, are now obsolete brownfield sites. These rail lines are being reconfigured and redesigned to build modern transportation connections, such new light rail routes, urban and suburban tram lines and new roadways. Chapter 10 has examples where city officials have redeveloped obsolete rail lines to create rail trails and greenways to promote tourism or leisure activities and redesigned former rail lines to establish parks, and public spaces, such as the successful New York High Line.

Chapter 12, 'Telecommunication Systems', brings into focus the need for high quality telecommunication infrastructure to undergird the modern global city. A strength of this chapter is that it makes clear that modern, efficient, and equitable telecommunications technology is key to a successful urban economy and globally competitive city. Cities require investments that support phones and computer connectivity, preferability with 5G service, as well as ancillary services such as cloud infrastructure, cyber security, digital services communication and big data availability and storage. Modern, efficient and professionally managed telecommunication infrastructure are the foundation of the city economy and critical to the creation and future of the smart city.

The Elgar Companion to Urban Infrastructure Governance, Innovation, Concepts, and Cases is a comprehensive book on the complexity of modern urban infrastructure and is worth reading for professionals and students in the urban planning field. However, I was never clear about what the book was a companion to as implied in the title. Nonetheless, I recommend this book to those interested in urban planning and urban economic development.

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References

1. Finger, M. and Yanar, N. (eds) (2022), *The Elgar Companion to Urban Infrastructure Governance, Innovation, Concepts, and Cases*, Edward Elgar Publishing, Cheltenham, p. 92.
2. *Ibid.*, p. 87.
3. *Ibid.*, pp. 94–96.
4. *Ibid.*, p. 96.
5. *Ibid.*, p. 100.