The main thrust of this chapter is to examine effective urban infrastructure governance in Africa: resolving the wealth-poverty paradox. The chapter is organized into five main sections according to the identified objectives with the introduction: infrastructure deficit and poverty nexus in urban Africa as section one. Section two is the background emphasizing Africa's poverty in wealth paradox. Section three focuses on urban revolution in Africa which is characterized by growing poverty instead of wealth and its implication for resolving infrastructure deficit. The nature of urban infrastructure demand and supply in Africa is the emphasis in section four while section five underlines the strategy for future infrastructure governance in Africa. Effective urban infrastructure governance in Africa is particularly challenging the strategies for dealing with the wealth-poverty nexus.