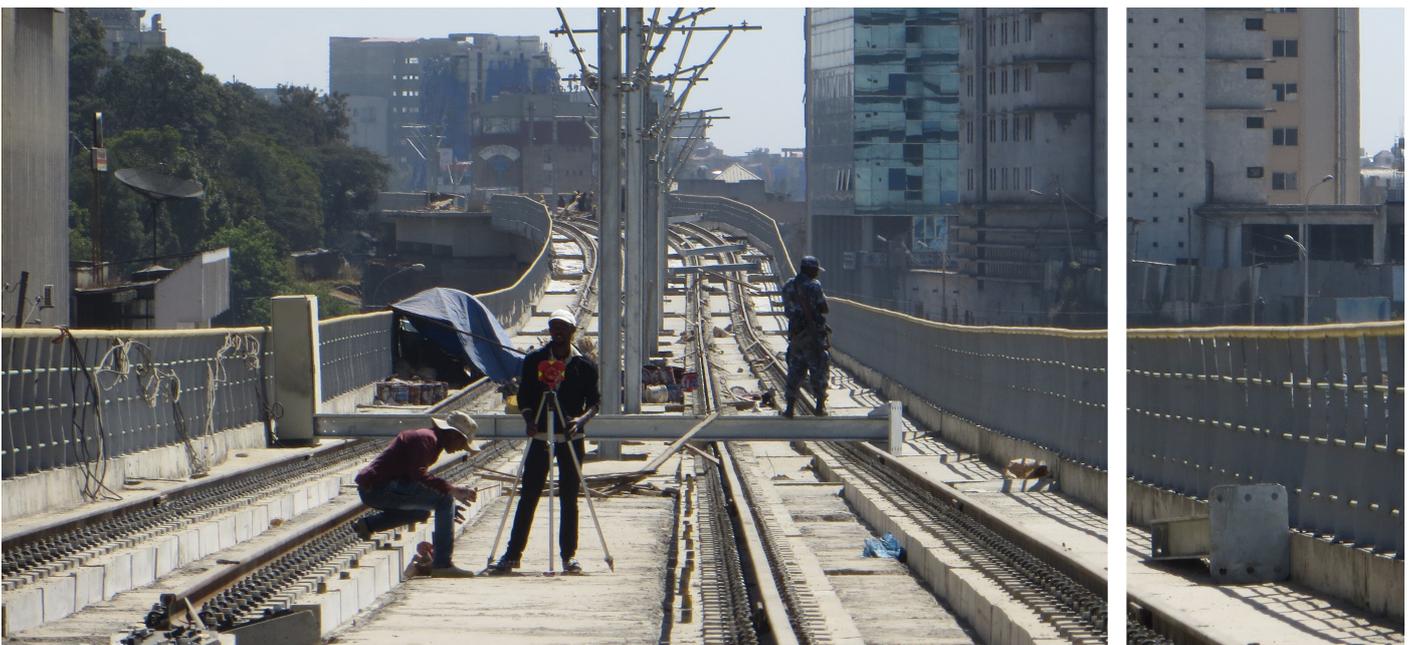


Connecting Systems of Secondary Cities: How Soft and Hard Infrastructure can foster Equitable Economic Growth among Secondary Cities.

This brief provides an overview of the book *Connecting Systems of Secondary Cities: How Soft and Hard Infrastructure Can Foster Equitable Economic Growth Among Secondary Cities* by Prof. Brian H. Roberts. It is a follow-up to his 2014 seminal publication *Managing Systems of Secondary Cities: Policy Responses in International Development*, which was commissioned by Cities Alliance. Both publications are part of Cities Alliance's continuing efforts to bring the role of cities of all sizes in rapidly urbanising countries to the attention of the international development community.

Secondary cities play a critical role as hubs of economic, government, cultural and education activities within national systems of cities. They also have a vital function within supply chains; secondary cities link smaller cities, towns and regional areas to their rural hinterlands and large metropolitan or regional economies, and vice versa.

While the importance of secondary cities is increasingly recognised, growing inequalities are emerging between systems of cities and regions, with metropolitan areas often prospering at the expense of smaller cities and rural areas. Small and medium-sized (or intermediary) cities are home to around 30 per cent of the world's population, but they generate little more than 15 per cent of global GDP. This gap will widen unless governments introduce policies to foster equitable economic growth within systems of secondary cities.



IMPROVING CONNECTIVITY FOR MORE EQUITABLE ECONOMIC GROWTH

The size, efficiency, management, functionality and connectivity of systems of secondary cities all have a significant impact on the economic development of nations and regions. More equitable growth paths require investment in hard and soft infrastructure, at all levels, to improve connectivity. The size and scale of these investments should be determined by future demand, technology, risk, and other anticipated changes.

If enhanced connectivity is to be used as a strategy to support the economic development of secondary cities, policy makers must understand the need for integration of hard and soft connectivity elements, and how governments can facilitate their development. Hard and soft connectivity infrastructure can be categorised in six distinct development areas (Table 1).

Table 1: Examples of hard and soft connectivity infrastructure, by development category:

	Hard Connectivity	Soft Connectivity
Physical	Road-rail sea and air infrastructure platforms and network	Information systems
Economic and Trade	Business exchange	Marketing and promotion
Social and Cultural	Cultural exchanges and events	Diaspora
Governance	Vertical and horizontal fiscal exchange	Political allegiance
Environmental	Environmental flows (water, air)	Environmental partnerships
Intrinsic	Physical identity	Experience, image, reputation

A TOOL FOR LOCAL GOVERNMENTS TO SUPPORT SYSTEMS OF SECONDARY CITIES

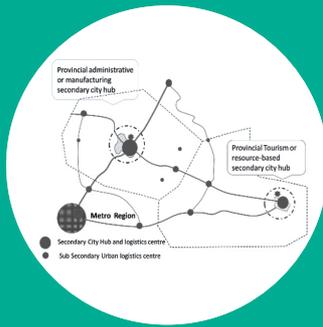
Until recently, the importance of secondary cities has been neglected in national urban and regional development policies and in public investment in infrastructure and services. As a result, their development potential has often been overlooked, especially in Sub-Saharan Africa, leaving significant spatial inequities in the growth of national systems of cities.

Connecting Systems of Secondary Cities features case studies that show how investments in hard and soft infrastructure and regional connectivity can foster equitable economic growth. Examples of case studies include China, the Danube region, New Zealand, and Rwanda.

This publication can help local governments:

- Assess and analyse the extent to which their cities are economically connected at both the national and international level;
- Implement cluster strategies to achieve economies of scale and foster greater collaboration among cities; and
- Plan investments on hard and soft infrastructure assets to foster strategic Local Economic Development.

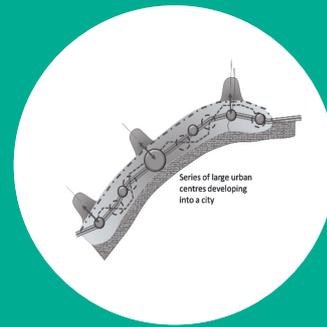
Figure 1: The three general spatial features of secondary cities, typically shaped by historical, infrastructure, economic, social, political, and environmental factors:



Regional Secondary City



Clustered Secondary City



Corridor Secondary City

BREAKING NEW GROUND IN SYSTEMS THINKING FOR SECONDARY CITIES

Connecting Systems of Secondary Cities seeks to spark a new way of thinking on approaches to developing systems of secondary cities. It argues for more systems-based thinking in how governments support the development of systems of cities, rather than a structured hierarchical approach.

In rapidly urbanising countries with one or more dominant megacity, many secondary cities have a high and expensive dependency on them for access to markets, goods, supply chains, transport, and advanced business and community services. Moreover, secondary cities often have low levels of lateral connectivity and trade between transportation corridors – making it hard to attract investments, jobs, or add value to exports due to economies of scale and high transaction costs. Networks are critical to improving the level of communications, exchange and movement among systems of secondary cities.

Figure 2: Networks of secondary cities



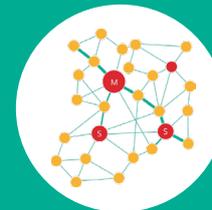
Hierarchical Networks comprise a series of secondary hubs and nodes which function mainly through a centralised hub. Hierarchical networks of cities are evident in many African, South American, and some Asian systems of cities.



Regular Networks are not homogeneous. The pattern can be a regular grid or other patterns where the links and separation of hubs and nodes tend to be uniform. This uniform spread tends to happen around a major hub within a country. This type of network is a feature of densely populated, decentralised countries.



Random Networks are nearly homogenous, with most nodes having approximately the same number of links. The road system for pre-industrialised countries with low levels of urbanisation fits this type of network model. Many of these are transforming into hierarchal or scale-free networks as a result of urbanisation.

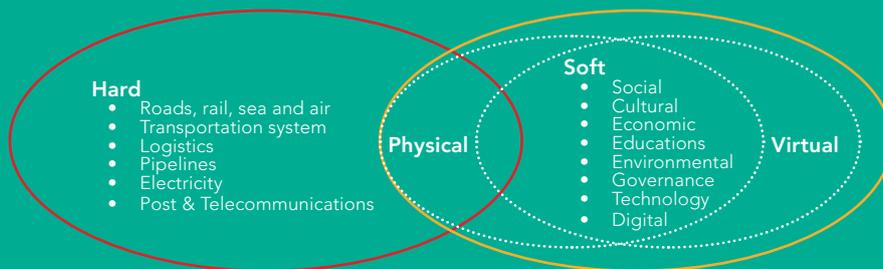


Scale-Free Networks are not homogeneous. Most nodes have two or three strong links, while a few highly-connected nodes (so-called hubs) have many links. This network pattern is reminiscent of North America, Brazil, and some Asian countries.

INVESTING IN HARD AND SOFT INFRASTRUCTURE

Many networks will require investment in hard infrastructure, such as transport and communications, and soft infrastructure to facilitate greater economic, social, cultural and governance exchange. This involves building city, industry and firm partnerships, as well as collaborative governance and economic development. Collaboration is also vital to finance such hard and soft strategic infrastructure, through arrangements to share revenue as well as development, operating and maintenance costs.

Figure 3: Overlapping investments in hard and soft infrastructure



FIVE KEY QUESTIONS FOR LOCAL GOVERNMENTS

Connecting Systems of Secondary Cities poses five fundamental questions that can be used as a starting point for identifying potential solutions to support more equitable development of systems of secondary cities:

1. How important is connectivity to the development and prosperity of systems of secondary cities?
2. How are systems of secondary cities connected?
3. What connectivity factors impede secondary cities from having access to markets, expanding trade, information, commerce, knowledge and improved flows within systems of cities?
4. What approaches have some secondary cities taken to improve connectivity that has increased their prosperity and competitiveness?
5. What collaborative investment in hard and soft infrastructure can secondary cities make to support their development and prosperity (especially in the context of developing and post-industrialised economies)?

