

# National Infrastructure Commission: Call for evidence

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## Connecting northern cities

- 1. To what extent are weaknesses in transport connectivity holding back northern city regions (specifically in terms of jobs, enterprise creation and growth, and housing)?**
- 2. What cost-effective infrastructure investments in city-to-city connectivity could address these weaknesses? We are interested in all modes of transport.**
- 5. What form of governance would most effectively deliver transformative infrastructure in the north, how should this be funded and by whom, including appropriate local contributions?**

UK economic imbalance has grown steadily during the second half of the 1990s and despite recent attempts to reduce its negative effects, it continues still, and affects especially medium and small-sized cities (non-core cities, NCCs) across the Northern region of the UK. The growth and advantages to be gained through connectivity between cities requires us to step back from traditional urban/rural boundaries and to look more closely at regional resilience<sup>i</sup> in order to rebalance the economic and social space of the UK.<sup>ii,iii, iv.</sup>

Northern cities certainly have the potential to reduce the ecological, social and logistics diseconomies of scale presently affecting the largest urban conurbations, especially thanks to their NCC role as steward, and interaction with their less urbanised surroundings. Medium and small Northern cities, often acting as non-specialised hubs of services, are connectors of the landscapes between where humans dominate (urban areas) and where the human presence is still marginal (rural areas).<sup>v</sup> In addition, these hubs can serve as an alternative to the constant

cycle of agglomeration in the megalopolis, by offering an alternative with a more sustainable and spatially equitable future.<sup>vi</sup>

In a recent study developed for the World Bank on how to increase trade and economic growth in lagging regions, we implemented network analysis in order to examine interdependency and interaction. In our context, the interdependency and interaction of cities was interpreted as the spread and adoption of new information and improvements arising through connections. Coordination mechanisms and access were two of the main strategies we tested in our models of economic growth in relation to lagging regions.

The results from our WB study give insights for the Northern cities of the UK. Following the standard assumption in trade, that an improvement in transport infrastructure will increase trade and thus economic growth, we can demonstrate that, in so far as financial investments for fostering economic growth are concerned, it would be more effective and financially efficient to increase accessibility to information rather than to only address physical connectivity. A similar conclusion may be reached for UK's Northern cities. And indeed, in line with this conclusion is the staggering economic and social success of the city of Inverness. What has proved to be more important than close proximity to London is the idea that a successful city needs to be connected to the wider world.

Collaboration and coordination among Northern cities would therefore represent an essential first step. Common actions towards infrastructure development would involve strategies for sharing know-how and best practice, pooling resources, improving productivity and economies of scale, enhancing social and economic development, gaining access to larger markets, and increasing cohesion and trust. In the best case scenario, welfare is ultimately increased, as Inverness already demonstrates.

The collaborative approach matters most when building new infrastructures, as the net effect of a new infrastructure is strongly related to the existing ones. This is especially relevant if we consider that IT infrastructure is moving towards the paradigm of Big Data where, hopefully, most of our infrastructures will be monitored constantly, allowing for fast responses, for instance, to disasters and economic losses. New advances in technologies for road driving, renewable energy sources, and information economics are just a few of the trends that should convince us to shift to the *Interdependency Infrastructure Paradigm* which is certainly emerging; this paradigm interweaves economics and environmental, cultural, and social aspects with technological advances within the interdependency of the infrastructures. An opportunity to recognise and take advantage of the high level of interdependency between infrastructures and cities is now ripe for the taking. The values of infrastructure interdependency, as in a supply chain, can be the source of an additionality, compared to the single infrastructure benefit baselines, because

interdependent infrastructures can be linked to opportunity of the investments, e.g. value creation and value capture of investment costs.

We agree with Moss Kanter<sup>vii</sup> who recently remarked in relation to the necessity of changing government silos approach, however “to avoid getting stymied by silos reorganization .... A compelling vision needs to connect actions to a clear set of goals”. The vision that we propose for connecting Northern cities is to use the available financial resources to invest in infrastructure projects that achieve infrastructure interdependency of financial values and operations. We suggest that a possible tool for implementing the infrastructure interdependency multiplier is to establish a *Northern Infrastructure Bank*, which would mobilise additional finance for investment, remove non-financial barriers, open up to international investment, pool projects and funds, engage in joint ventures/ PPPs, and issue bonds.

The effects of the economic and financial crisis in 2008 are still being felt across the UK. A significant global tightening of credit has altered the roles of governments and the private sector and has also greatly impacted on Northern cities. But as we have discussed, solutions are possible, especially if financial channels are widened and flexible financial options for infrastructure investments are achieved. New trends such as information economics and new technologies have spurred the redefinition of citizens' perceptions of infrastructure asset ownership and public goods through e.g. crowdsourcing and peer-to-peer finance. Is an improved paradigm for infrastructure finance emerging just above the horizon? Yes, technologies and trends are shaking the foundations of established institutions, and some have already become obsolete. Perhaps now is the right time to create a new type of bank for the Northern powerhouse.

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<sup>i</sup> Fingleton, B., Garretsen, H. and Martin, R. (2012). Recessionary shocks and regional employment: Evidence on the resilience of UK regions. *Journal of Regional Science* 52(1): 109-133.

<sup>ii</sup> See Burger et al. (2014) and Martin et al. (2013).

<sup>iii</sup> Parr, J. (2014). The regional economy, spatial structure and regional urban systems. *Regional Studies* 48(12): 1926-1938.

<sup>iv</sup> Capasso, M., Stam, E. and Cefis, E. (2015). Industrial dynamics and economic geography. *Regional Studies* 49(1): 5-9.

<sup>v</sup> Abdel-Rahman, H.M. and Anas, A. (2004). Theories of systems of cities. In: Henderson J.V., Thisee J. (eds.) *Handbook of Regional and Urban Economics*, Amsterdam: Elsevier.

<sup>vi</sup> Helsley, R.W. and Strange, W.C. (2014). Co-agglomeration, clusters, and the scale and composition of cities. *Journal of Political Economy* 122(5): 1064-1093.

<sup>vii</sup> Moss-Kanter, R. (2015). *Move*. W.W. Norton & Company: New York.